

Item: 8

Policy and Resources Committee: 27 November 2024.

Heart of Neolithic Orkney World Heritage Site Management Plan.

Report by Corporate Director for Neighbourhood Services and Infrastructure.

#### 1. Overview

- 1.1. The United Nations Educational, Scientific and Cultural Organization (UNESCO) designated the Heart of Neolithic Orkney as a World Heritage Site (WHS) in 1999.
- 1.2. The Heart of Neolithic Orkney WHS covers four sites in Orkney and they are the settlement of Skara Brae, Maeshowe chambered tomb with the Barnhouse Stone, the Stones of Stenness with the Watch Stone and the Ring of Brodgar and associated mounds and the Comet Stone.
- 1.3. UNESCO and the Advisory Bodies recommend that each WHS completes an appropriate management plan which should contain an overall vision for the site, long-term aims, shorter term policies and objectives.
- 1.4. The present Management Plan for the World Heritage Site covers the period 2014 to 2019 and is out of date. Timescales associated with the review and drafting of a revised World Heritage Management Plan have been affected by the Covid pandemic.
- 1.5. Attached at Appendix 1 to this report, is a Consultative Draft Management Plan covering a ten-year period from 2025 to 2035 and has been developed by the management partners of Historic Environment Scotland (HES) and Orkney Islands Council (OIC).
- 1.6. A period of public consultation will be completed in early 2025, with the outcomes and an amended version of the Management Plan taking into consideration the appropriate outcomes will be reported to the Policy and Resources Committee in Spring 2025.

#### 2. Recommendations

- 2.1. It is recommended that members of the Committee:
  - i. Approve the consultative draft Heart of Neolithic Orkney World Heritage Site Management Plan 2025-2035, attached as Appendix 1 to this report, for public consultation.
  - ii. Instruct the Corporate Director for Neighbourhood Services and Infrastructure to report the outcomes of the consultation, together with an amended version of the Heart of Neolithic Orkney World Heritage Site Management Plan 2025-2035, to the Policy and Resources Committee in Spring 2025.

# 3. The Heart of Neolithic Orkney WHS Management Plan

- 3.1. The Heart of Neolithic Orkney (HONO) was inscribed on the UNESCO World Heritage List in 1999 as a Cultural World Heritage Site (WHS). WHS are places that are judged to have Outstanding Universal Value (OUV), transcending national boundaries and of importance for present and future generations.
- 3.2. The HONO WHS comprises the Skara Brae settlement, Maeshowe chambered tomb and the Barnhouse Stone, the Stones of Stenness and the Watch Stone, and the Ring of Brodgar and associated monuments. Individually, the sites are masterpieces of Neolithic design and stonework construction. Collectively, they represent one of the richest surviving Neolithic landscapes in Western Europe.
- 3.3. UNESCO requires that an appropriate management plan is completed for every WHS and should contain an overall vision for the site, long-term aims, shorter term policies and objectives.
- 3.4. Partnership WHS Management Plans have been agreed by the formal signatories, Historic Environment Scotland and Orkney Islands Council, for the periods 2008-13, and 2014-19.
- 3.5. The review and drafting of a management plan to replace the 2014-19 plan has been delayed by the pandemic. The Consultative Draft Management Plan attached as Appendix 1 covers a ten-year period from 2025 to 2035.
- 3.6. The Consultative Draft Management Plan identifies the signatory partners, the advisory partners and the steering group. The Steering Group is supported by a WHS Coordinator in HES to help ensure effective coordination between the Partners and to enable the implementation, monitoring and revision of the Management Plan and its Objectives.

- 3.7. Challenges and Themes are identified that affect the management of the WHS. These are:
  - i. The Climate Emergency
  - ii. Planning for Uncertainty
  - iii. Tourism and Access
  - iv. **Community Involvement**
  - v. **Sustainability**
  - vi. Research and Learning.
- 3.8. The Aims and Objectives of the Management Plan are set out. The Objectives will be delivered through more detailed actions in an Action Plan, attached as Appendix 2. Delivery will be monitored by the Management Plan Steering Group, which will meet at least twice per year, and an annual summary and set of recommendations will be produced to highlight priorities for action and / or funding requirements.
- 3.9. The draft Plan recognises the vital importance of the Orkney community in safeguarding the WHS. The Plan outlines values to ensure that decisions are the best they can be to increase public awareness, increase public enjoyment and belonging, public involvement and their role in the management and protection of the WHS.
- 3.10. In 2019 and 2022 community consultation exercises were undertaken at the West Mainland Agricultural Show. The following priority themes emerged:
  - i. **Communication** Improvements required in the communication between the WHS managers and Orkney residents and businesses.
  - ii. **Managing Visitors** Increases in visitor numbers raising mixed views towards tourism and visitors, and a more collaborative approach required to manage this.
  - iii. **Infrastructure and local facilities –** Improvements to infrastructure and local facilities.
  - iv. **Expanding educational opportunities –** Limited engagement of young people with the WHS after primary school.
  - v. Community involvement in the WHS
  - vi. **Climate change.**
- 3.11. The Consultative Draft Management Plan attached as Appendix 1 incorporates these themes. Once a further public consultation on this draft Management Plan is closed, comments and feedback will be used to prepare a Consultation Report.

- This will inform the final version of the Management Plan, to be submitted back to the Policy and Resources Committee in Spring 2025.
- 3.12. The Consultative Draft Management Plan has been assessed against the Habitats Regulations Appraisal and Strategic Environmental Impact Assessment and it is considered that there is no negative adverse impact of this plan and actions. Further assessment maybe required on individual actions undertaken during the period of the Management Plan.
- 3.13. The Strategic Environmental Assessment Report and the Habitat Regulations Appraisal are attached as Appendices 3 and 4 respectively, to this report.

#### 4. The Public Consultation

- 4.1. It is proposed to run a public consultation on the Management Plan for an eight week period in the New Year, with the Management Plan, Action Plan and associated assessments available online and hosted by HES.
- 4.2. Historic Environment Scotland and Orkney Islands Council will complete a joint press release to local and national media outlets and through the Council's social media. Locally posters will be distributed to locations such as OIC Offices and Libraries, WHS Visitor Centre and other locations considered to be appropriate to the consultation. These posters will provide clear information on where to find copies of the Management Plan and how to comment.
- 4.3. Paper copies of the Management Plan, Action Plan and associated assessments will be available at a number of Council and HES properties throughout Orkney.

#### For Further Information please contact:

Susan Shearer, Service Manager (Development and Marine Planning), Extension 2533, Email: <a href="mailto:susan.shearer@orkney.gov.uk">susan.shearer@orkney.gov.uk</a>

Paul Sharman, Islands Archaeologist (Development and Marine Planning), Extension 2535, Email: <a href="mailto:paul.sharman@orkney.gov.uk">paul.sharman@orkney.gov.uk</a>

#### **Implications of Report**

- 1. **Financial**: All resources associated with the draft and consultation has been shared by the signatory partners HES and OIC. For the Council these costs are mainly in staff time and are contained within the existing revenue budgets.
- 2. **Legal:** There are no direct legal implications arising from the recommendations contained in this report.

- 3. Corporate Governance: Not applicable.
- 4. Human Resources: None.
- **5. Equalities**: An Equality Impact Assessment has been undertaken and is attached as Appendix 5 to this report.
- 6. **Island Communities Impact**: This work has been assessed as being unlikely to have an effect on other communities (including other island communities) in Orkney, therefore a full Islands Communities Impact Assessment has not been undertaken.

#### 7. Links to Council Plan

The proposals in this report support and contribute to improved outcomes for communities as outlined in the following Council Plan strategic priorities:

- $\boxtimes$  Growing our economy.
- ⊠Strengthening our Communities.
- ☑ Developing our Infrastructure.
- ☐ Transforming our Council.

#### 8. Links to Local Outcomes Improvement Plan

The proposals in this report support and contribute to improved outcomes for communities as outlined in the following Local Outcomes Improvement Plan priorities:

- $\square$ Cost of Living.
- ⊠ Sustainable Development.
- ☐ Local Equality.
- 9. Environmental and Climate Risk: None.
- 10. Risk: None.
- 11. Procurement: None.
- **12. Health and Safety:** None.
- 13. Property and Assets: None.
- **14. Information Technology:** None.
- **15.** Cost of Living: None.

#### **List of Background Papers**

None.

#### **Appendices**

Appendix 1 – (Consultative Draft) Heart of Neolithic Orkney World Heritage Site Management Plan 2025-2035.

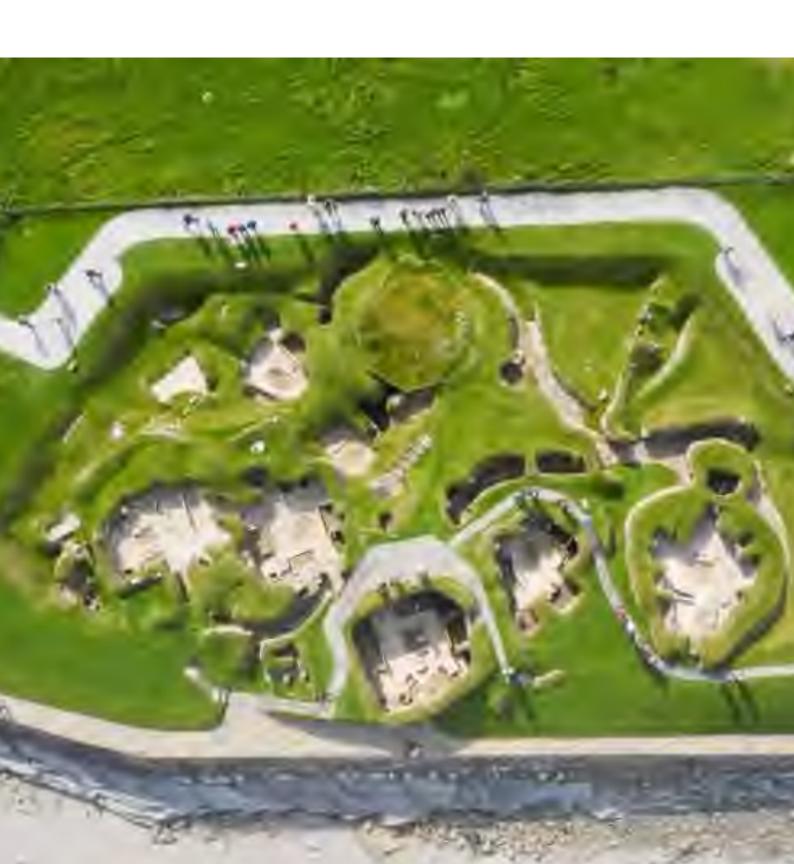
Appendix 2 - Action Plan.

Appendix 3 – Strategic Environmental Assessment Report.

Appendix 4 – Habitat Regulations Appraisal.

Appendix 5 – Equality Impact Assessment.

# Heart of Neolithic Orkney World Heritage Site Management Plan 2025-2035



#### Contents

S	ummar	у	1
	The V	ision: Our shared aspirations for the Heart of Neolithic Orkney 2025-2050	2
1	Woı	d Heritage and the Management Plan	3
	1.1	What is World Heritage and Why Does it Matter?	3
	1.1.	1 World Heritage Sites and The World Heritage Convention	3
	1.2	World Heritage in Scotland and UK	4
	1.2.	1 Key Organisations, Roles and Responsibilities	5
	1.3	Protecting World Heritage at HONO	6
	1.4	The Management Plan	7
	1.4.	1 The Orkney World Heritage Site Gateway Project	7
	1.5	Producing the Plan: Consultations and Assessments	8
	1.5.	5 Next Steps	9
2	The	Heart of Neolithic Orkney	9
	2.1	The World Heritage Site	9
	2.2	The Buffer Zone and Wider Context	11
	2.3	Outstanding Universal Value	13
	2.3.	1 Statement of Outstanding Universal Value	14
	2.4	The Attributes of OUV	16
	2.5	The Wider Values	22
	2.5.	1 Community Values	22
	2.5.	2 Natural Heritage Values	23
3	Peo	ple and the Plan: Partners, Stakeholders and Community	24
	3.1	The Management Plan Partners	24
	3.2	The Management Plan Steering Group	25
	3.3	Community and Stakeholders	26
	3.4	The Partnership Principles	29
4	Cha	ıllenges and Themes	30
	4.1	Climate Emergency	30
	4.2	Planning for Uncertainty	32
	4.3	Tourism and Access	32
	4.4	Community Involvement	33
	4.5	Sustainability	35
	4.6	Research and Learning	36
	4.6	1 Research	36

	4.6	5.2 Learning	37	
5	Ain	ns and Objectives	38	
	5.1	Long-Term Aims	38	
	5.2	Strategic Objectives 2025-30	38	
6	Мо	nitoring and Delivery	41	
	6.1 G	6.1 Governance		
	6.2 N	6.2 Monitoring and Evaluation		
	6.2.1 Monitoring the Condition of the WHS			
	6.2	2.2 Monitoring the Implementation of the Management Plan and Action Plan	42	
	6.2	.3 Mid-point Evaluation of the Management Plan	43	
	6.2	.4 Reactive Monitoring	43	
	Acror	Acronyms and Abbreviations Used in the Text		
	Appe	ndix 1: Key Documents and Links	46	
	Ke	y Policy and Guidance	46	
	Ke	y Supporting Management Documents	47	
	Appe	ndix 2: Statement of Outstanding Universal Value	48	
	Appe	ndix 3: Strategic Environmental Assessment and Other Assessments	52	
Strategic Environmental Assessment				
	Otl	ner Assessments	53	

# Summary

The Heart of Neolithic Orkney (HONO) was inscribed on the UNESCO World Heritage List in 1999 as a Cultural World Heritage Site (WHS). WHS are places that are judged to have <a href="Outstanding Universal Value">Outstanding Universal Value</a> (OUV), transcending national boundaries and of importance for present and future generations. This is a partnership WHS Management Plan agreed by Historic Environment Scotland and Orkney Islands Council.

HONO WHS comprises a group of sites on the island of Mainland in Orkney which date from 3000–2000 BC. The sites are Skara Brae settlement, Maeshowe chambered tomb and the Barnhouse Stone, the Stones of Stenness and the Watch Stone, and the Ring of Brodgar and associated monuments. Individually, the sites are masterpieces of Neolithic design and stonework construction. Collectively, they represent one of the richest surviving Neolithic landscapes in Western Europe.

This draft Management Plan sets out a ten-year framework for the partners to guide the protection and management of HONO. It encapsulates our shared <u>Vision</u> for the Site, sums up our understanding of the OUV and identifies the key issues that are affecting or will affect the Site and our management of it. It builds upon the results of two previous Management Plans and was informed by <u>consultation with the local community and other key stakeholders</u>. The development process was overseen by the <u>HONO WHS Steering Group</u>, who are also responsible for ensuring delivery of the Plan. The Steering Group is made up of representatives of HES and OIC, supported by the Advisory Partners: Highlands & Islands Enterprise, NatureScot, RSPB and Orkney College UHI Archaeology Institute.

The Plan includes six <u>long-term Aims</u> for the WHS which look beyond this ten-year management plan period to 2050. The Aims reflect the partner's aspirations for protecting and conserving the Outstanding Universal Value; inspiring and engaging people with the WHS, benefiting people and communities in Orkney and elsewhere, interpreting and presenting the Site to the highest standard, responsibly, sustainably and equitably enhancing access to and experience of the WHS, and facilitating a diversity of research which can in turn inform our pursuit of the Aims.

In the near term sixteen <u>strategic Objectives</u> have been designed to address the key challenges and themes facing the WHS and its management. The critical <u>challenges and themes</u> identified are the climate emergency, planning for uncertainty, tourism and access, community involvement, sustainability, and research and learning. To deliver the Objectives a flexible and regularly reviewed Action Plan allows the partners to respond to new challenges and opportunities.

Finally, this Plan also sets out <u>Partnership Principles</u> for its delivery. It also considers the <u>wider values</u> of the WHS in addition to the OUV, and sets out a <u>programme of monitoring</u> both for the delivery of the Plan and the state of conservation of the WHS.

Following public consultation on this draft a consultation report will be produced and a final version of the Management Plan prepared for ratification by HES and OIC.

# The Vision: Our shared aspirations for the Heart of Neolithic Orkney 2025-2050

The Heart of Neolithic Orkney and its exceptional testimony to the cultural achievements of the Neolithic peoples of northern Europe will be protected and conserved for present and future generations.

The World Heritage Site will bring social, cultural, environmental, and economic benefits to the wider community.

It will offer an exceptional responsible visitor experience, and inspire and catalyse research and learning, widening engagement through participation and discovery.

It will be managed sustainably in ways that contribute to reducing the causes of climate change and address its threat to the Site.

It will contribute to a thriving, sustainable and equitable future for Orkney residents, visitors, and communities of interest worldwide.



Heritage List in 1999



# 1 World Heritage and the Management Plan

# 1.1 What is World Heritage and Why Does it Matter?

# 1.1.1 World Heritage Sites and The World Heritage Convention

World Heritage Sites (WHSs) are exceptional places recognised by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) as having such importance that they belong to all the peoples of the world, irrespective of the territory on which they are located. Each WHS represents a unique, or the most significant or best, example of the world's cultural and/or natural heritage. This is their Outstanding Universal Value, which transcends national boundaries and is of importance for present and future generations.

The properties on the World Heritage List are assets held in trust to pass on to generations of the future as their rightful inheritance. Budapest Declaration on World Heritage, 2002

World Heritage Status is a high accolade that brings responsibilities and international scrutiny. Once a Site is added to the List, the government of the State where it is located has a duty to protect, conserve and present these Sites for future generations.

The UNESCO World Heritage Committee decides which Sites to inscribe on the World Heritage List. The World Heritage Committee also examines reports on the state of conservation of WHSs on the List and can request that State Parties take action to address conservation issues. It can also add Sites to the List of World Heritage in Danger or, in rare cases, remove them from the World Heritage List.

Three international organisations advise the World Heritage Committee. The most relevant for the Heart of Neolithic Orkney (HONO) is ICOMOS (the International Council on Monuments and Sites). This is an international, non-governmental organisation which works for the conservation and protection of cultural heritage places. ICOMOS evaluates cultural and mixed properties proposed for inscription on the World Heritage List.

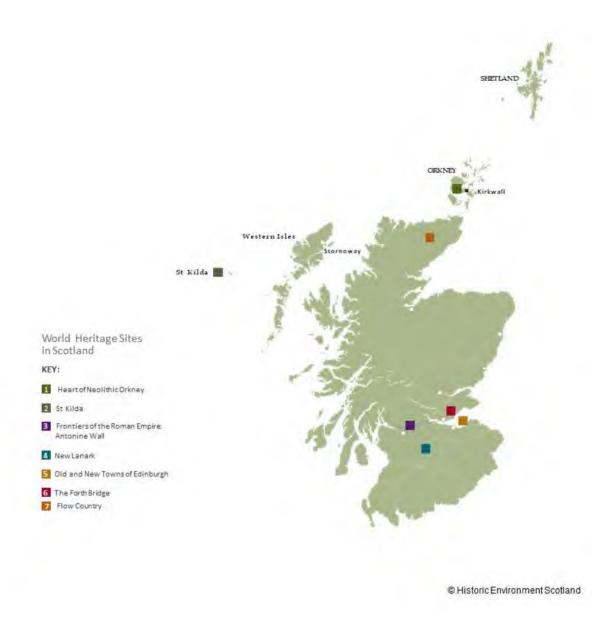
The overarching benefit of ratifying the World Heritage Convention is that of belonging to an international community of appreciation and concern for universally significant properties that embody a world of outstanding examples of cultural diversity and natural wealth.

The States Parties to the Convention, by joining hands to protect and cherish the world's natural and cultural heritage, express a shared commitment to preserving our legacy for future generations. <a href="UNESCO">UNESCO</a>

# 1.2 World Heritage in Scotland and UK

The UK currently has 35 WHS of which seven are in Scotland: Heart of Neolithic Orkney; New Lanark; The Forth Bridge; Frontiers of the Roman Empire: The Antonine Wall; The Flow Country; Old and New Towns of Edinburgh; St Kilda.

Five of Scotland's WHSs are inscribed under cultural criteria, while St Kilda is inscribed under both natural and cultural criteria and The Flow Country under natural criteria.



World Heritage Sites in Scotland.

#### 1.2.1 Key Organisations, Roles and Responsibilities

UK government and Scottish government: As an international convention, the <u>World Heritage Convention</u> is a reserved matter under the Scotland Act 1998 and the Department for Culture, Media and Sport (DCMS) acts as the UK State Party. Historic England advise them on international heritage issues, including World Heritage. However, heritage legislation, policy and guidance mechanisms are devolved matters and strategic responsibility for World Heritage in Scotland sits with the Culture and Historic Environment Division in the Scottish Government (CHED).

ICOMOS UK: The UK National Committee of ICOMOS is an independent charity with a UK-wide and international mission to promote and support best practice in the conservation, care and understanding of the historic environment. They advise on aspects of World Heritage across the UK.



World Heritage governance structure for HONO WHS

The formal signatories to the Management Plan are Historic Environment Scotland (HES) and Orkney Islands Council (OIC). These signatory Management Partners formally ratify the WHS Management Plan and share accountability for ensuring it is delivered. There are also several Advisory Partners that have important roles in supporting and advising on the development and delivery of the Management Plan where it intersects with their remits. See Section 3.1 for further information about the management and advisory partners for the HONO WHS.

HES is the lead public body for Scotland's historic environment. HES is a management partner for all six current Scottish WHSs and is also responsible for more than 300 properties in care that are of national importance and internationally significant collections. HES also has

statutory functions within the planning system and are responsible for determining consent for works to scheduled monuments, providing advice as a statutory consultee and for designating a range of historic assets and places, including Scheduled Monuments, Listed Buildings, Gardens and Designed Landscapes, and Battlefields.

Orkney Islands Council is the Local Authority. They are a key partner in the protection and management of the WHS, both through the development and implementation of planning policy and through their engagement with the Management Plan.

More detail can be found in section 3.1.

# 1.3 Protecting World Heritage at HONO

World Heritage designation does not result in additional direct legal protections. Instead, HONO is protected through the planning system and the designation of the component sites of the WHS as Scheduled Monuments.

The WHS is protected under the following policies (see Appendix 1 for more detail):

Scotland's National Planning Framework 4 (2023) requires that Development proposals affecting a WHS or its setting will only be supported where their OUV is protected and preserved.

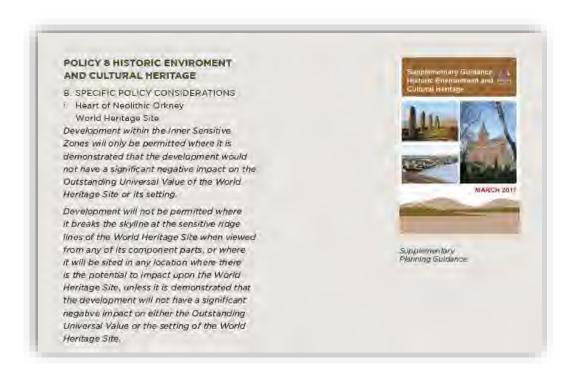
The Historic Environment Policy for Scotland (HEPS) (2019) sets out a series of principles and policies for the recognition, care, and sustainable management of the historic environment.

Scheduled Monuments Consents Policy (2019) sets out the HES policy for making decisions about consents at scheduled monuments and supports HEPS.

Managing Change in the Historic Environment should be used to inform local planning policies and to help make decisions about planning applications that could affect a WHS.

The Orkney Local Development Plan (2017) establishes policy to protect the WHS and its setting from inappropriate development. Further guidance is provided in OIC's 2017 Supplementary Guidance: Historic Environment and Cultural Heritage and 2017 Planning Policy Advice: Historic Environment.

The Orkney Development Plan Scheme 2024/2025 (DPS2024) provides a programme and schedule of work that will culminate in a new Local Development Plan by 2027. (See also 2.2. The Buffer Zone and Wider Context).



Policy 8 Historic Environment and Cultural Heritage from the Orkney Local Development Plan 2017 Supplementary Guidance. © Orkney Islands Council

# 1.4 The Management Plan

The <u>UNESCO World Heritage Centre's Operational Guidelines</u> require every WHS to have effective management structures in place to ensure its preservation and sustainable development and to safeguard the Site's Outstanding Universal Value (OUV) for present and future generations. A Management Plan is essential to guide decision making.

UNESCO and the Advisory Bodies recommend that World Heritage Site Management Plans should have an overall vision for the Site, long-term aims, and shorter-term policies and objectives. Timetabled action plans can be developed from these policies and objectives, informed by the aims and guided by the vision.

This Management Plan sets out how HONO WHS will be managed over the next ten years. It encapsulates the Partner's shared vision for the Site, sums up our understanding of the Site's Outstanding Universal Value (Chapter 2), identifies the key issues that are affecting or will affect the Site and our management of it (Chapter 4), and lays out the Objectives designed to address these issues from 2025-2035 (Chapter 5).

This Plan was developed by the management partners, HES and OIC, and the wider HONO WHS Steering Group (Chapter 3). Like all WHS Management Plans it depends on consensus and commitment from the different partners and stakeholders in the Site for its effectiveness,

## 1.4.1 The Orkney World Heritage Site Gateway Project

Orkney Islands Council in partnership with Shetland Islands Council and Comhairle nan Eilian Siar received commitment from both UK and Scottish Government through the <u>Islands Growth</u> <u>Deal</u> to support a range of projects amounting to £100M investment over a period of 10 years.

The Orkney World Heritage Site Gateway Project is one of these projects. Responding to the commitments within the 2014-2019 Management Plan, this project is led by OIC in partnership with HES and Highlands and Islands Enterprise (HIE) and is seen by the partners as an important opportunity to secure external funding to help realise the 10-year vision and shared aspirations set out in Management Plan. The Gateway Project includes improving opportunities for active travel and encouraging the transition to net zero, making improvements to the visitor experience at Skara Brae, improved interpretation, and digital platforms for managing visitor numbers and the creation of a new orientation centre to help safeguard the sites and surrounding area. In order for funding to be secured a Full Business Case is required as per the UK Treasury Green Book and all necessary consultation and legal and other requirements met, as well as reporting through the Management Plan Steering Group and securing approval through the Islands Growth Deal governance process.

# 1.5 Producing the Plan: Consultations and Assessments

In late 2019, independent consultants sought the views of local and wider communities. The results of this were published online in early 2020 as The Community View: Heart of Neolithic Orkney World Heritage Site Management Plan Review 2020. The summary report can be <u>downloaded from the HES website</u>. Two "<u>Place Standard</u>" exercises were also carried out at the West Mainland Agricultural Show, Dounby in 2019 and 2022.

Four community priorities emerged strongly from these consultation exercises:

- **Communication** Improvements required in the communication between the WHS managers and Orkney residents and businesses.
- Managing Visitors Increases in visitor numbers raising mixed views towards tourism and visitors, and a more collaborative approach required to manage this.
- Infrastructure and local facilities Improvements to infrastructure and local facilities.
- **Expanding educational opportunities** Limited engagement of young people with the WHS after primary school.

The Place Standard responses also highlighted:

- Community involvement in the WHS
- Climate change

A Climate Vulnerability Index (CVI) assessment undertaken in 2019 identified of key climate change risks to the OUV of HONO WHS. <u>Download the report here</u>. It also captured a series of significant values associated with the WHS generated by the participants, half of whom were Orkney residents, demonstrating the significance and value of the WHS to local people.

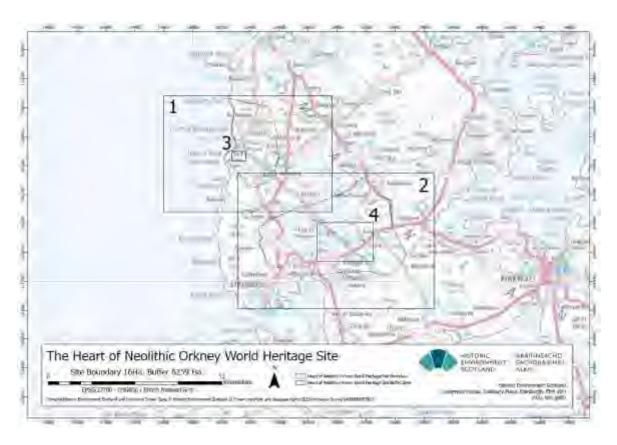
- Intangible
- Heritage Practice
- Biodiversity and Ecological
- Archaeological
- Economic
- Recreational
- Natural Systems
- Scenery/ Landscape and Seascape (Aesthetics and Experience)

A series of impact assessments were carried out as part of the development of the Management Plan. See Appendix 3 for information. One of these, the Strategic Environmental Assessment (SEA), will also be available for public consultation alongside this draft Management Plan.

# 1.5.5 Next Steps

Once the public consultation on this draft Management Plan text is closed, your comments and feedback will be used to prepare a Consultation Report. This will inform the final version of the Management Plan.

The Management Plan Partners will then ratify and adopt the Plan and a SEA Post Adoption Statement will also be prepared. These will be published online.



Map showing the location of the World Heritage Site and Buffer Zone.

# 2 The Heart of Neolithic Orkney

# 2.1 The World Heritage Site

Orkney is an archipelago of over 70 islands lying 15 km off the northeastern extremity of mainland Scotland where the North Atlantic meets the North Sea. The Heart of Neolithic Orkney World Heritage Site is in the west of Mainland, the largest island of the archipelago.

Four sites together make up the World Heritage Site:

 The settlement of Skara Brae, located on the Bay of Skaill on the north-west coast of the island of Mainland.

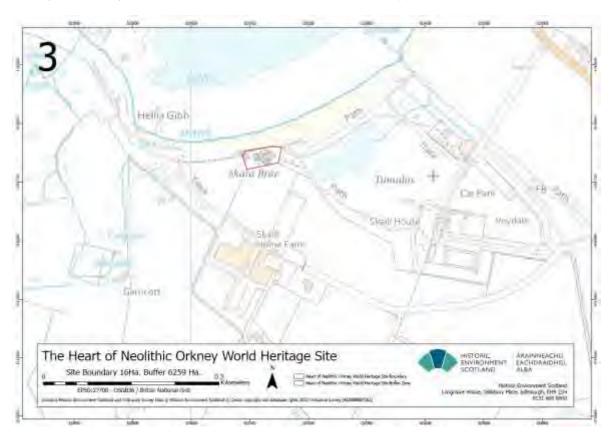
The other three monuments and their associated standing stones and mounds in central West Mainland about 7km south east of Skara Brae:

- Maeshowe chambered tomb and the associated Barnhouse Stone lie to the east of the south end of the Loch of Harray.
- The Stones of Stenness and the nearby Watch Stone are located near the shore of the Loch of Stenness just to the south of the Loch of Harray.
- The Ring of Brodgar and a series of associated mounds and a stone setting known as the Comet Stone lie a short distance to the north, on the peninsula that divides the Loch of Harray from the Loch of Stenness. The larger mounds are named Salt Knowe, Fresh Knowe, South Knowe and Plumcake Mound.

Between the Ring of Brodgar and the Stones of Stenness a causeway bridge links the two peninsulas and divides the lochs of Stenness and Harray.

All four sites are Properties in Care, which means they are managed by HES on behalf of Scottish Ministers. The World Heritage property boundary is the same as the boundary of these Properties in Care. Only these four main monuments and the associated standing stones and mounds described above are included in the Site that is inscribed on the UNESCO World Heritage List.

More information about the WHS and its monuments, including detailed descriptions, their history, discovery, how to visit and more can be found via Appendix 1.



Map showing Skara Brae and the boundary of the WHS inscription.



Map showing the Ring of Brodgar, Stones of Stennes, and Maeshowe and the boundary of the WHS inscription.

#### 2.2 The Buffer Zone and Wider Context

As defined in the <u>UNESCO Operational Guidelines</u>, a WHS Buffer Zone is "an area surrounding the World Heritage Site which has complementary legal restrictions placed on its use and development to give an added layer of protection to the World Heritage Site"

A two-part Buffer Zone surrounds the HONO WHS, one section centred on Skara Brae and the other on the central West Mainland group of monuments (see Figure 2). The Buffer Zone is recognised in the 2017 Orkney Local Development Plan, where it is referred to as the "Inner Sensitive Zone".

In addition to the Buffer Zone, the Local Development Plan recognises that the monuments on the Brodgar and Stenness peninsulas were deliberately situated in a vast topographic bowl formed by a series of visually interconnecting sensitive ridgelines that stretch across to Hoy. These ridgelines extend beyond the boundary of the Buffer Zone. The importance of these ridgelines is recognised in the Local Development Plan (as 'Sensitive Ridgelines'), and additional protection is provided to them through Policy; hence safeguarding a key aspect of the setting of the WHS. This landscape is one of the most sensitive in Scotland, forming part of the Hoy and West Mainland National Scenic Area (NSA) and comprising the setting for this collection of internationally significant monuments.

The monuments are also visually linked to other contemporary and later monuments around the lochs, and they are a fundamental part of a wider, highly complex, archaeological landscape. Because of this, large-scale or tall development outside of the Buffer Zone also has the potential to impact the setting of the WHS.

#### Policy 8 of the Local Development Plan states that:

"Development within the Inner Sensitive [Buffer] Zones will only be permitted where it is demonstrated that the development would not have a significant negative impact on the Outstanding Universal Value of the World Heritage Site or its setting.

Development will not be permitted where it breaks the skyline at the sensitive ridgelines of the World Heritage Site when viewed from any of its component parts, or where it will be sited in any location where there is the potential to impact upon the World Heritage Site, unless it is demonstrated that the development will not have a significant negative impact on either he Outstanding Universal Value or the setting of the World Heritage Site."

When developments are proposed in the Buffer Zones this should act as a trigger for consultation so that potential effects on the OUV of the WHS can be taken into account by developers and decision-makers, in line with national and local policy.

OIC has also developed Supplementary Guidance and Planning Policy Advice for the Historic Environment (including the WHS) as part of the 2017 Local Development Plan, this addresses the WHS, its Buffer Zone (titled Inner Sensitive Zone) and the wider Sensitive Ridgelines.



Map showing the boundary of the Buffer Zone around Skara Brae.



Map showing the boundary of the Buffer Zone around the Ring of Brodgar, Stones of Stennes, and Maeshowe.

# 2.3 Outstanding Universal Value

WHSs are inscribed on the World Heritage List because UNESCO considers that they have Outstanding Universal Value (OUV): that is, their cultural and/or natural significance is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. OUV is a cornerstone of the protection of WHS for UNESCO and for States Parties, and protection of OUV is now built into guidance for heritage protection across the UK.

The Statement of Outstanding Universal Value (SOUV) for HONO WHS can only be amended by UNESCO. This Statement provides a clear understanding of the reasons for the Site's inscription on the World Heritage List, and of what needs to be managed in order to protect and manage the Site to sustain the OUV for the long term.

For the World Heritage Committee and the Advisory Bodies, the SOUV is an essential reference point for monitoring, Periodic Reporting, possible inclusion on the List of World Heritage in Danger and deletion from the List.

There are ten formal criteria for OUV, six for cultural heritage and four for natural heritage. HONO fulfils criteria (i) to (iv):

- Criterion (i) to represent a masterpiece of human creative genius.
- Criterion (ii) to exhibit an important interchange of human values, over a span of time
  or within a cultural area of the world, on developments in architecture or technology,
  monumental arts, town-planning or landscape design.

- Criterion (iii) to bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared.
- Criterion (iv) to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.

World Heritage properties must possess *integrity* which means a Site must be of sufficient size, and its components must be sufficiently complete, to demonstrate OUV. Cultural WHS must also demonstrate *authenticity*: which relates to the credibility of evidence for meeting the above criteria, and an authentic representation of the historical record of the site's cultural and natural attributes. Effective *protection and management* measures to safeguard the OUV must be in place. This means implementing legal, regulatory and management frameworks to ensure the sustainable conservation and enjoyment of the WHS for current and future generations.



The "pillars" that support the OUV of a WHS: all three are in place for HONO.

# 2.3.1 Statement of Outstanding Universal Value

The following is an extract from the HONO WHS Statement of Outstanding Universal Value (SOUV). This was accepted by the WH Committee in 2013. See Appendix 2 for the full Statement.

The Orkney Islands lie 15 km north of the coast of Scotland. The monuments are in two areas, some 6.6 km apart on the island of Mainland, the largest in the archipelago. The group of monuments that make up the Heart of Neolithic Orkney consists of a remarkably well-preserved settlement, a large chambered tomb, and two stone circles with surrounding henges, together with a number of associated burial and ceremonial sites. The group constitutes a major relict cultural landscape graphically depicting life five thousand years ago in this remote archipelago.

The four monuments that make up the Heart of Neolithic Orkney are unquestionably among the most important Neolithic sites in Western Europe. These are the Ring of Brodgar, Stones of Stenness, Maeshowe and Skara Brae. They provide exceptional evidence of the material and spiritual standards as well as the beliefs and social structures of this dynamic period of prehistory.

The four main monuments, consisting of the four substantial surviving standing stones of the elliptical Stones of Stenness and the surrounding ditch and bank of the henge, the thirty-six surviving stones of the circular Ring of Brodgar with the thirteen Neolithic and Bronze Age mounds that are found around it and the stone setting known as the Comet Stone, the large stone chambered tomb of Maeshowe, whose passage points close to midwinter sunset, and the sophisticated settlement of Skara Brae with its stone built houses connected by narrow roofed passages, together with the Barnhouse Stone and the Watch Stone, serve as a paradigm of the megalithic culture of north-western Europe that is unparalleled. The property is characteristic of the farming culture prevalent from before 4000 BC in northwest Europe. It provides exceptional evidence of, and demonstrates with exceptional completeness, the domestic, ceremonial, and burial practices of a now vanished 5000-year old culture and illustrates the material standards, social structures and ways of life of this dynamic period of prehistory, which gave rise to Avebury and Stonehenge (England), Bend of the Boyne (Ireland) and Carnac (France).

The monuments on the Brodgar and Stenness peninsulas were deliberately situated within a vast topographic bowl formed by a series of visually interconnected ridgelines stretching from Hoy to Greeny Hill and back. They are also visually linked to other contemporary and later monuments around the lochs. They thus form a fundamental part of a wider, highly complex archaeological landscape, which stretches over much of Orkney. The current, open and comparatively undeveloped landscape around the monuments allows an understanding of the apparently formal connections between the monuments and their natural settings. The wealth of contemporary burial and occupation sites in the buffer zone constitute an exceptional relict cultural landscape that supports the value of the main sites.

**Criterion** (i): The major monuments of the Stones of Stenness, the Ring of Brodgar, the chambered tomb of Maeshowe, and the settlement of Skara Brae display the highest sophistication in architectural accomplishment; they are technologically ingenious and monumental masterpieces.

*Criterion (ii):* The Heart of Neolithic Orkney exhibits an important interchange of human values during the development of the architecture of major ceremonial complexes in the British Isles, Ireland and northwest Europe.

*Criterion (iii):* Through the combination of ceremonial, funerary and domestic sites, the Heart of Neolithic Orkney bears a unique testimony to a cultural tradition that flourished between about 3000 BC and 2000 BC. The state of preservation of Skara Brae is unparalleled amongst Neolithic settlement sites in northern Europe.

**Criterion** (iv): The Heart of Neolithic Orkney is an outstanding example of an architectural ensemble and archaeological landscape that illustrate a significant stage of human history when the first large ceremonial monuments were built.

#### 2.4 The Attributes of OUV

Attributes are elements, processes or features that convey the OUV. Identifying Attributes and understanding their interrelationships is crucial to understanding OUV and to ensuring it is protected and managed. They can be physical features, relationships, and linkages, and tangible or intangible aspects or processes.

At HONO, the Attributes are derived from the SOUV (see Appendix 2). The Brief Synthesis, Criteria for Inscription and the Statements of Authenticity and Integrity are the foundation of the Attributes.

UNESCO's <u>Operational Guidelines</u> state that Attributes can include: "form and design; materials and substance; use and function; traditions, techniques and management systems; location and setting; language, and other forms of intangible heritage; spirit and feeling; other internal and external factors".

Conservation of the OUV of a WHS is accomplished through the safeguarding, conserving, and effective management of its distinctive and unique Attributes. It is therefore important to identify and describe a Site's Attributes.

Attribute 1: The extensive physical remains of the four major monuments and their associated funerary and ceremonial sites.

The OUV lies not only in the individual monuments but also in their collective presence. It is located in the extensive physical remains and interconnected presence of the four major monuments and their associated sites, and in the way the ensemble of monuments represents the breadth of Neolithic life - ceremonial, funerary and domestic - in Orkney during this significant period in human history 5000-4000 years ago.

- The sophisticated Skara Brae settlement site is exceptionally well-preserved. Its
  features include two distinct, visible periods of construction and use, Neolithic
  carvings on the walls, as well as preserved remains of stone 'furniture'. The individual
  buildings are linked by covered passageways, set within a complex midden deposit.
- The great Ring of Brodgar stone circle with its 36 extant stones, two causeways, massive surrounding rock-cut ditch and henge, and the nine Bronze Age barrows and four large mounds that cluster around it: Plumcake Mound, Fresh Knowe, South Knowe, Salt Knowe, and a stone setting, the Comet Stone.
- The elliptical Stones of Stenness stone circle and henge with its four surviving monoliths standing up to six metres in height, single causeway, stone setting and central hearth, and the associated standing stone The Watchstone.
- The monumental Maeshowe chambered cairn with its 10 metre-long entrance
- passageway aligned on the midwinter sunset and associated standing stone the Barnhouse Stone, and the much later Runic inscriptions left inside by Norse travellers.



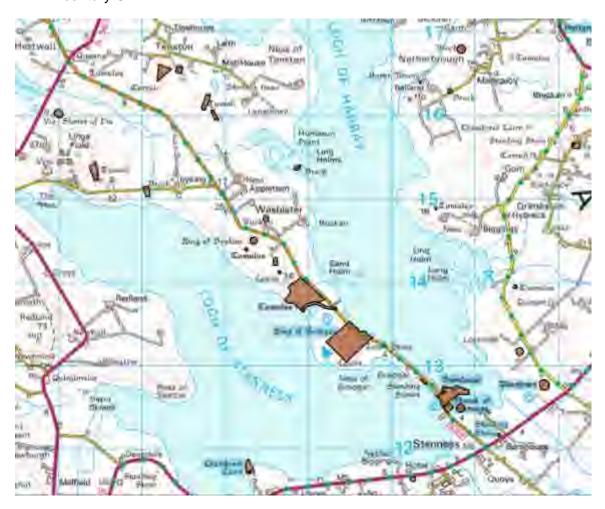
The four major HONO WHS monuments: Clockwise from top left - Ring of Brodgar, Skara Brae, Maeshowe, Stones of Stenness

Attribute 2: The intricate interplay between the monuments and between the monuments and the wider archaeological landscape forms a rich visual and archaeological narrative.

The monuments are part of the wider archaeological tapestry. The proximity of monuments and settlements, and what their remains reveal, tell stories of how people lived, and demonstrate the relationships between the domestic and ceremonial architecture. This interconnectedness offers invaluable insights into the social dynamics, cultural practices, and religious beliefs of the Neolithic inhabitants. The land reveals patterns of human activity, and the monuments not only stand as isolated structures but as integral components of a larger narrative.

- The WHS monuments understood at inscription as the best-preserved elements of a complex relict archaeological landscape, carefully located in the cultural/natural landscape by their builders.
- The striking visual interrelationship between the monuments on the Brodgar and Stenness peninsulas and between these monuments and other contemporary and later monuments around the lochs. This relationship forms a fundamental aspect of their importance without which none of the monuments can be fully understood.
- The relationship between the WHS monuments and an exceptionally rich archaeological landscape in the Buffer Zone and beyond, including the Barnhouse settlement, Ness of Brodgar site, and many contemporary and later archaeological

- monuments and sites in central West Mainland, including recent findings made via extensive geophysical survey.
- A specific relationship between the Stones of Stenness and the nearby settlement of Barnhouse suggested by similarities in the layout of interior features is evidence of a society whose domestic architecture and ceremonial sites were inextricably linked.
- The location of Skara Brae in the wider Bay of Skaill with its variety of archaeological sites, and the geophysical evidence for further areas of contemporary settlement adjoining the excavated settlement site itself.
- The longevity of the central West Mainland sites, which can be seen to exert an
  influence on archaeologically recorded activity through to the Iron Age and first
  century CE.



Scheduled monuments around Brodgar and Stenness. [placeholder image: to replace before consultation]

# Attribute 3: The relationship of the monuments with the surrounding landscape and environment.

The placement of each monument provides a striking visual relationship between them and the wider landscape, each being pieces of a larger visual picture and wider historical narrative. The three central West Mainland monuments sit within a topographical bowl, surrounded by sensitive ridgelines that offer striking views and evidence the strategic positioning of the monuments, emphasising their importance in the landscape. Amidst the rural countryside and bodies of water, they stand as prominent features, connecting past and present. Despite

environmental changes of thousands of years, the open landscape around the monuments remains relatively unchanged, with remaining phenomena such as the solar alignment still providing awe and intrigue.

- The deliberate location of the monuments on the Brodgar and Stenness peninsulas within a vast topographic bowl formed by a series of visually interconnecting sensitive ridgelines, including important view to the Hoy hills.
- The central West Mainland monuments as dominant features in the present-day rural landscape.
- The careful positioning of the monumental Ring of Brodgar so as to dominate the skyline from across different directions and over a considerable distance.
- The contribution to the sense that these monuments are situated at the centre of a highly significant cultural landscape informed by the connections to the physical landscape and waterscape.
- The present landscape around the monuments is comparatively undeveloped and open. This setting allows for an understanding of the connections between the monuments and their open landscape or waterscape, despite the extensive environmental and ecological changes since the Neolithic.
- The alignment of the Maeshowe passageway on the Barnhouse stone and beyond to the hills of Hoy and the midwinter sunset is a striking example of a solar alignment. This underscores the significance of seasonal change and corresponding astronomical alignments to the Neolithic builders of the Maeshowe and to their funerary, ritual and ceremonial practices.
- The contemporary sense of place evoked by the interrelationship of the monuments and the surrounding landscape and waterscape and the wider fauna, flora and associated soundscapes.



View west towards Hoy from within the entrance of the Maeshowe passageway. © Rob McDougall

# Attribute 4: The architectural sophistication and exceptional preservation of the monuments.

The monuments and settlements remain as remarkable feats of ancient engineering, demonstrating architectural brilliance and preservation. The archaeological remains are remarkably intact offering insights into ancient materials, craftsmanship and scale, each monument speak to the ingenuity and skill of their builders. Through centuries of change that these elements have endured, they stand preserved, offering a tangible link to past cultures.

- The outstanding preservation of the domestic architecture at Skara Brae due to its construction in stone and the range of artefacts found at excavation enable a unique insight into the realities of living in a Neolithic village.
- The Ring of Brodgar is one of the best preserved and finest truly circular Late Neolithic or Early Bronze Age henges known in the British Isles. It represents the architectural culmination of the dense and extended use of this part of Orkney for early prehistoric ceremonial and funerary purposes. Its construction involved considerable manpower and coherent organisation to excavate a massive rock-cut ditch, and quarry, transport and erect up to sixty stones.
- The high degree of preservation of the archaeological remains, including organic materials, below ground at the four sites, none of which have been completely excavated.
- The scale of Maeshowe, the refinement of its design, and the quality of its masonry and the construction of the mound being integral to the internal stone chamber, make it an outstanding architectural achievement.
- The nature and sophistication of the physical remains, including the materials chosen (stone, clay, earth and midden), the craft and skill exhibited, and the scale of undertaking as a testament of the ingenuity of the builders.
- The impressive height and sense of scale of the surviving stones at Stones of Stenness.
- The preservation of the central West Mainland monuments in a form that is attested to by antiquarian views made since the 17<sup>th</sup> century, and by the records made following the discovery and early excavations at Skara Brae in the 19<sup>th</sup> century.



L-R: Interior of Maeshowe, House 1 at Skara Brae (© Colin Keldie), the Stones of Stenness (© Claire Smith).

# Attribute 5: The role of the WHS monuments in the development of archaeology as a discipline.

The monuments played a pivotal role in the shaping of the field of archaeology over the centuries. From when antiquarians took interest in the 18<sup>th</sup> and 19<sup>th</sup> centuries, the emergence of archaeology as a scientific discipline became more well known, and the area defined as the WHS was at the forefront of archaeological thought and discoveries and research here influenced global considerations of ancient civilisations. As archaeology continues to evolve, so does our understanding of the WHS and the broader Neolithic landscape.

- The West Mainland sites served as a focus of antiquarian interest and investigation in the 18<sup>th</sup> and 19<sup>th</sup> centuries. The 20<sup>th</sup> century saw excavations at Skara Brae as archaeology developed as a scientific discipline. The sites thus played an important role in the development of archaeological thought. The Ring of Brodgar, Stones of Stenness and Maeshowe were amongst the first archaeological sites in Britain to be protected under the 1882 Ancient Monuments Protection Act.
- Skara Brae occupies an iconic position in popular knowledge, in part as a
  consequence of the work of the first Abercromby Professor of Archaeology,
  Professor Gordon Childe at Skara Brae in the early 20<sup>th</sup> century. Through his work
  Skara Brae came to occupy a foundational role in many considerations of the
  development of a farming society at a global level.
- The continuing refinement of understanding of the WHS and its monuments and of the broader Neolithic through research and new discoveries, within the WHS boundaries and in the Buffer Zone and beyond.





L-R: Excavations at House 2 Skara Brae in 1927 (© Crown Copyright: HES) and at the Ness of Brodgar in 2021 (© Laura Mackenzie).

#### 2.5 The Wider Values

#### 2.5.1 Community Values

In addition to OUV, all WHSs have many other associated values. UNESCO recognises that "These other values are part of the natural and cultural richness of the property, and the harmonious protection, conservation and management of all values is an objective of good conservation practice. Understanding local values means consulting local people [...] Local people are a primary source of information about local values." (UNESCO Resource Manual, Preparing World Heritage Nominations)

Effectively managing the HONO WHS presents the challenge of not only protecting the OUV but considering the wider range of values associated with the Site in a holistic manner. As demonstrated by the results of the community engagement (see Section 1.5), the people of Orkney, as the community inhabiting the landscape, feel a sense of ownership and stewardship over the Site, the presence of which contributes to the islands' sense of place and identity.

Local communities have clearly indicated that they value the intangible aspects of the WHS including its sense of tranquillity, presence in traditional songs and culture, its inspiration to artists, myths and stories related to the WHS and the memories and identity it inspires. Biodiversity, ecology, the natural environment and the scenery are also of value, as are the ongoing heritage practices such as archaeology, conservation and application of traditional skills. Also valued are the recreational activities including sightseeing, birdwatching, fishing and walking and cycling through the WHS.



Other Key Values of HONO WHS – categories identified by 2019 CVI workshop participants.

Engagement with local communities has also highlighted the need to continue to work to better understand the full range of values associated with the WHS and Buffer Zone, including through encouraging research. This is also important as we make decisions in the context of climate change adaptation and mitigation.

Incorporating these values and aspirations into the future management of the site is a priority for the partners.

### 2.5.2 Natural Heritage Values

The World Heritage Centre and advisory bodies increasingly emphasise the integration of cultural and natural heritage. While HONO was inscribed as a cultural WHS it is inextricably connected to the landscapes and habitats that surround it. Orkney has been inhabited for the past 9,000 years, and farming people were changing the landscape from their arrival 6,000 years ago. Management of the WHS must recognise the ways that natural and cultural heritage influence and interconnect with one another. Increasing pressures from climate change (Section 3.3 and 4.1) and nature loss on the landscapes and ecological and natural systems are so interwoven with the past and present of the WHS that it is critical that we do so.

There are multiple natural heritage designations within or partially within the Buffer Zone, recognising key habitats and geological heritage, and the RSPB Brodgar Reserve adjoins the Ring of Brodgar on three sides. Part of the WHS and Buffer Zone falls within the Hoy and West Mainland National Scenic Area. Harray Loch is a Site of Special Scientific Interest (SSI) and Stenness Loch is both an SSSI and a Special Area of Conservation (See Appendix 4 for a map showing natural heritage and landscape designations relative to the WHS and Buffer Zone).



Wildflowers at the Ring of Brodgar. © Claire Smith.

Biodiversity action plans have previously been carried out for all the WHS monuments, and management of the meadow at the Ring of Brodgar was developed in consultation with RSPB to encourage biodiversity, but much more remains to be done to ensure that we manage natural and cultural heritage interests holistically for the benefit of both. As landowners and managers, HES and OIC, plus advisory partners, have a duty to further the conservation of biodiversity under the Nature Conservation (Scotland) Act 2004, in line with the Scottish Biodiversity Strategy.

"By 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." World Heritage Convention

# People and the Plan: Partners, Stakeholders and Community

# 3.1 The Management Plan Partners

As stated in Section 1.2.1, the formal signatories to the Management Plan are HES and OIC who formally ratify the WHS Management Plan. They are supported by a number of Advisory Partners, who bring valuable input and insight in their respective areas.

#### **Signatory Partners**

Historic Environment Scotland (HES) is the lead body for Scotland's historic environment; a charity dedicated to the advancement of heritage, culture, education, and environmental protection. All four main monuments and the associated standing stones and mounds that make up the WHS are designated as Scheduled Monuments and are Properties in Care, managed by HES on behalf of Scottish Ministers, under the terms of the 1979 AMAA Act. This includes caring for the physical condition of the sites, managing visitors at the staffed and unstaffed sites, and providing interpretation and engagement. HES has a World Heritage Team which plays a lead role in all Scotland's World Heritage properties. The Coordinator for HONO is part of this team. HES is also responsible for determining applications for scheduled monument consent, providing advice to local planning authorities on listed building and conservation area consent and planning applications, and is a consultee for Environmental Impact Assessments and Strategic Environmental Assessments.

Orkney: its people, communities, culture, environment and economy, as set out in the Council Plan 2023 - 2028 (orkney.gov.uk). OIC has responsibility for a diverse range of services relevant to management of the WHS and owns and maintains the car parks at the Ring of Brodgar and the Stones of Stenness. It oversees various key services that are directly relevant to the management and protection of the WHS, including roads and public transport, marine services (which covers cruise ship access to Orkney), economic development, development management, and coastal protection. OIC also implements a range of statutory development planning and management

functions and employs a County Archaeologist to maintain the Sites and Monuments Record for Orkney and provide archaeological advice for development management. OIC manages several museums, including the Orkney Museum which holds a collection of artefacts from Skara Brae, and various visitor centres and sites, one of which is the reconstructed Neolithic settlement at Barnhouse in the WHS Buffer Zone.

#### **Advisory Partners**

Highlands and Islands Enterprise (HIE) is the economic and community development agency for the north and west of Scotland. Their purpose is to help build a prosperous, inclusive and sustainable economy across the Highlands and Islands, attracting more people to live, work, study, invest and visit here.

NatureScot (NS) is Scotland's nature agency. They work to enhance our natural environment and inspire the people of Scotland to care for it. NatureScot focuses on connecting people and nature and tackling biodiversity loss and the climate emergency with large and small-scale nature-based solutions. They advise local authorities and work with the Scottish Parliament and with public, private and voluntary organisations towards shared aims.

RSPB (Royal Society for the Protection of Birds) is the UK's largest conservation charity. One of the ways in which they deliver on their mission is to protect, restore and manage habitats for biodiversity. The RSPB has a network of 77 nature reserves in Scotland, of which 12 are in Orkney. This includes the Brodgar Reserve which surrounds the Ring of Brodgar on three sides.

University of the Highlands and Islands (UHI) Archaeology Institute is part of UHI Orkney, which is part of OIC and an affiliated college in the University of the Highlands and Islands. As a teaching and research organisation the Archaeology Institute is dedicated to advancing understanding of the historic environment through the creation, interpretation and dissemination of archaeological knowledge. The Archaeology Institute combines teaching, academic research, and commercial applied research and consultancy. The UHI Archaeology Institute has extensive research expertise in the HONO WHS, and with WHSs worldwide.



# 3.2 The Management Plan Steering Group

The Management Plan Steering Group provides strategic direction and oversight for the management of the WHS and is accountable for development and implementation of the Management Plan. The Steering Group monitors progress of the Action Plan and keeps both the Objectives and the overall Plan under review. It provides a forum to draw on, and share, the members' range of experience and expertise.

The core Steering Group is made up of representatives from OIC and HES. In addition, the Advisory partners are invited to join the Steering Group as Advisory members, with the aim of

ensuring a coordinated approach to management for the WHS. Advisory members may attend only when necessary and relevant to their organisational remit.

The members are the links between the Steering Group and their organisations and relevant and senior departments.

The Steering Group is supported by a WHS Coordinator to help ensure effective coordination between the Partners and to enable the implementation, monitoring and revision of the Management Plan and its Objectives. The coordinator also promotes awareness and understanding of the OUV and public benefit of HONO, and the value of World Heritage status more widely, to Partners, stakeholders and the public, and serves as a central point for information and advice about the Site.

The Steering Group will meet at least twice annually to review progress on the Management Plan and Action Plan, set priorities for the next six to 12 months, and discuss emerging issues and challenges.

An annual summary and set of recommendations will be produced by the Steering Group to inform their respective organisations and highlight any priorities for action and / or funding (see Section 6. Monitoring and Delivery).

# 3.3 Community and Stakeholders

WHSs have a role in the life of the community, contributing to quality of life and wellbeing. UNESCO recognises the importance of associated communities in understanding and management of WHSs. At the same time, as part of the inheritance of all humanity, a WHS can have stakeholders and communities of interest that are located far from the Site, so some consideration should also be given to their role. Individuals are often members of multiple groups and communities and so can be stakeholders in more than one way. It is important not to oversimply "community" and ignore the different interests in and connections to a WHS that different individuals and groups may have.

Local Resident Community are made up of multiple types and their stake in the WHS may be personal, professional, or both. They include:

- Immediate residents around the WHS and Buffer Zones.
- The wider population of West Mainland.
- Residents of all Orkney Mainland and isles.
- Community Councils represent immediate geographical communities.

Organisations like the Orkney Disability Forum represent the interests of parts of the community with specific needs. Orkney also has a rich range of membership organisations representing members with interests in heritage, local history and archaeology, culture, art, craft, natural heritage and outdoor recreation.

The local community also includes people who work at, in or in connection with, the WHS. This groups includes HES site and conservation staff; volunteers; members of Orkney's large community of archaeologists; OIC staff who manage and maintain key infrastructure; RSPB reserve wardens.



Peedie pottery session at the Maeshowe Visitor Centre.

Landowners and Land Managers both public and private, own and manage much of the Buffer Zone. The agricultural community is a vital component in rural stewardship and managing change around the WHS.

Tourism Stakeholders are important given the role that the WHS plays in Orkney's tourism economy, and the positive and negative impacts that tourism can have on the WHS. Stakeholders include VisitScotland, Orkney Tourist Guides Association, accommodation providers, restaurants, local tour guiding companies, coach operators, cruise liaison staff, transport providers, craftspeople and leisure activity providers.

Researchers, students and academics in archaeology and a wide range of related disciplines, both residents and visiting form a community of interest and are stakeholders in the WHS monuments and wider archaeological and historic landscape, both as individuals and as representatives of their institutions. The UHI and the Ness of Brodgar Trust have brought large numbers of archaeologists and volunteers into the heart of the Stenness and Brodgar Buffer Zone every summer for the past fifteen years to excavate at the Ness of Brodgar site.

Wider connections People with family connections to Orkney form one of the non-local, often international communities of interest. This also encompasses people who have no specific connection to Orkney but have a deep interest in and concern for the sites. Visitors, both regional, national and international are often part of this group, or become part of it after visiting Orkney.

The sites are spiritually important to many people, both residents and visitors. This includes practicing Pagans, people of other faiths and people of no formal faith. Marriage and other ceremonies are held at Ring of Brodgar and Stones of Stenness. Finally, the WHS and its landscape act as inspiration, influence or subject to artists, writers and poets both resident and visiting.



Green Space Dark Skies at the Stones of Stenness.  $\odot$  Green Space Dark Skies, Mark Ferguson

### 3.4 The Partnership Principles

These are the Partners' agreed ways of working that guide decision-making at every level.

# Cooperation and Collaboration

To protect and conserve the unique qualities of the WHS it is vital that different organisations and individuals come together with a common goal. Working together we are greater than the sum of our parts. We will collaborate and cooperate to safeguard the OUV of the Site and deliver our shared Vision. We will look for constructive solutions to our challenges and work with other organisations wherever possible to achieve shared goals. seeking to understand and to celebrate the full range of contributions that a diversity of people and groups can make.

# World Heritage Values

As custodians of a WHS. the Partners have committed to the values that underpin the **UNESCO** World Heritage Convention. The World Heritage Committee has adopted "Five Cs" to guide the implementation of the World Heritage Convention. These are: Credibility, Conservation, Capacity-Building, Communication, and Communities. Of these Conservation, Communication, and Communities are the most relevant to HONO, and we will strive to ensure our decisions are the best they can be to increase public awareness, increase public enjoyment and belonging, public involvement and their role in the management and protection of the WHS.

# Climate Action and Sustainability

Climate change is a global emergency that transcends national borders. It is an issue that requires international cooperation and coordinated solutions at all levels. Not only does it threaten HONO WHS it also threatens the people of Orkney, Scotland, the UK, and the international community. It is critical that in all our management decisions and actions we seek to reduce the greenhouse gas emissions that contribute to climate change, and to ensure that we are pursuing sustainable solutions for the future. We will be guided by the World Heritage Convention recognition of the way that people interact with nature, and the fundamental need to preserve the balance between the two.



# 4 Challenges and Themes

# 4.1 Climate Emergency

UNESCO recognises climate change as one of the most significant and increasing threats to WHSs worldwide and to their potential for contributing to economic and social development at the local level. In recognition of the severity of the climate emergency a commitment to Climate Action and Sustainability has been adopted by the Partners as one of our three guiding principles (Section 3.3. The Partnership Principles). In 2019 OIC declared a Climate Emergency and reaffirmed its priority with respect to working towards a carbon neutral economy with the Orkney Community Partnership (see Orkney Council Plan 2023-2028). An independent study to identify OIC net zero transition pathways is commencing in 2024 and will help to inform an OIC Climate Change Strategy. OIC is committed to making progress towards Net Zero and decarbonisation. HES is committed to supporting a green recovery from the COVID-19 pandemic and has a range of roles in understanding and addressing climate change and heritage for Scotland.

HES published a baseline Climate Change Risk Assessment in 2018 for all Scotland's Properties in Care, including the HONO monuments. In 2019 a <u>Climate Vulnerability Index (CVI) assessment for HONO WHS</u> was carried out (see Appendix 1 for the report). This assessment identified that HONO was extremely vulnerable to the impacts of three key climate drivers: Sea Level Change, Precipitation Change, and Storm Intensity and Frequency and that there is potential for major loss or substantial alteration to the OUV of the Site by 2050. The process also identified that Air Temperature Change was likely to be an important driver of change in the future. The results of the CVI assessment informed this Management Plan and underlined the need for further research to better understand current and future impacts.

HES 2020 Climate Action Plan 2020-2025 outlines HES' approach, setting out a programme of work and includes topics relevant to the Management of the WHS including Adaptation, Sustainable Tourism, Biodiversity, and Sustainable Travel.

All management of the WHS should consider the climate resilience planning already in place by HES including Climate Ready HES 2021, Climate Action Plan 2020-2025 and the Climate Change Risk Assessment 2018.

In recent years, the Ring of Brodgar has experienced increased footfall along with changes to precipitation patterns. This has consisted of increased rainfall, changes to rainfall patterns and periods of dry weather, all of which have led to increasing footfall erosion. Cumulatively, these factors threaten the fabric of the site and degrade the experience for all visitors. In response, an extensive programme of works has been carried out to create more resilient surfaces. Despite this, periodic closures of parts of the site have been necessary. In the past, the Stones of Stenness have proved more resilient, but climate impacts combined with changes in visitation patterns could potentially see increased footfall pressure cause similar issues.

At Maeshowe monitoring reveals that the Viking runic inscriptions on the interior stonework appear stable. However, there are potential impacts to the structure of the monument from changes to wetting/drying cycles and groundwater flooding that are not well understood at present.

At Skara Brae coastal erosion and sea level rise remain the predominant threat to the survival of the site in the longer term. This is being addressed in the short and medium-term by periodic monitoring and ongoing sea wall maintenance and repair, but in the longer term the threat will increase. There is also clear evidence of extensive further archaeological remains beyond the site as it is visible today, and these are also at risk. Finally, there is some potential for a single extreme coastal weather event to seriously damage the site.



Waves breaking against the seawall at Skara Brae.

There may also be changes over time to the landscape of the Buffer Zones driven by changes to the climate. For example, loss of some species, increases in invasive species, changes to vegetation cover and changes to farming practice in response to climate factors could eventually alter local ecosystems/habitat and landscape and affect the sense of place. Changes to flora and fauna on the monuments themselves could also be damaging.

Furthermore, policies set out in Scotland's National Planning Framework (NPF4) are likely to lead to a rise in renewable energy schemes to contribute to climate adaptation. While this may lead to additional pressures on the wider landscape and setting of the WHS, much as with any development, there are mitigations and protections in place to protect the OUV of the HONO WHS. Moreover, requirements for the protection of the historic environment are embedded in the NPF4.

Addressing the climate emergency at HONO must include both adaptation and mitigation:

Climate Adaptation: measures taken to adjust to changing climate conditions, reduce vulnerability, and increase resilience of heritage assets to climate-related risks.

Climate mitigation: these are actions taken to reduce the greenhouse gas emissions that contribute to climate change.

# 4.2 Planning for Uncertainty

The approach taken in this Management Plan is intended to allow for more flexibility in pursuing our shared Vision and Aims in the face of uncertainty, a key lesson learnt following the COVID-19 pandemic, allowing us to better respond to more predictable uncertainties. These include:

- Increasing visitor numbers and the physical impacts this has on the WHS.
- Economic pressures and departmental budgets potentially impacting the running of the WHS.
- Changes in community needs changing who visits the WHS and how.
- Cultural shifts and changing tourism patterns impacting visitor demographic and behaviour.
- Political change impacting management decisions and the running of the WHS.
- Climate change, natural disasters, extreme weather and environmental degradation impacting the WHS, its infrastructure and preservation and conservation efforts.

On an immediate level, resource uncertainty can often be an issue. While baseline resourcing to ensure protection and preservation of OUV is not at issue, delivery of individual objectives and actions can be affected if staff or financial resources are lost when organisations restructure, or if wider pressures on partners and stakeholders create conflicting priorities for action. To limit the chances of this happening, agreed Management Plan commitments should be realistic, measurable and embedded in Partner and departmental priorities.

#### 4.3 Tourism and Access

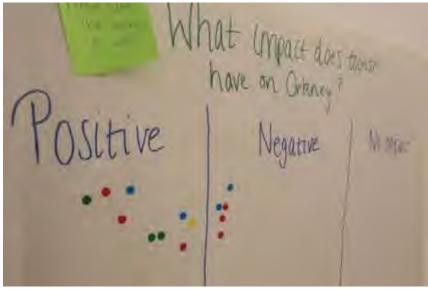
HONO plays a key role in Orkney's tourism economy being a major driver for visitation to the Islands. Many Orkney residents work in the sector, and make a significant contribution to the local economy, with OIC's Island Visitor Survey 2019 calculating that tourism was worth £67 million per year to Orkney, with 394,000 visitors to Orkney. This includes cruise passengers (132,000), and crew (50,000) as well as 28,000 other day visitors. The most visited sites were the Ring of Brodgar, Skara Brae and Skaill House (Orkney Tourism Strategy 2020-2030).

Finding the right balance between enabling access to the HONO for tourists and residents while preserving the OUV of the Site and managing the other values associated with it is a key issue for the long-term management of the Site.

Challenges to be addressed largely result from increasing numbers of visitors to the WHS, particularly to the open access sites at the Ring of Brodgar and Stones of Stenness. In 2022 it is estimated that 269,000 visits were made to the WHS monuments. This was less than the

estimated 2019 high of 327,000 but numbers of visits are projected to increase again for the coming years as the trend continues upwards.

These visits are not spread evenly across the year, and the majority are concentrated into the summer season and within that to specific periods of the day. This reflects the significant role that cruise passengers play in driving levels of visitation, as well as the highly seasonal nature of independent tourism in Orkney. As noted above, the combined impact of this pattern of footfall with climate change impacts has required increasingly major interventions, including periodic closures of parts of the Ring of Brodgar. It also creates visitor management issues at Skara Brae. It is therefore critical that measures are developed to address peak time footfall at the sites to prevent erosion and maintain the visitor experience.



(© K4 Graphics)

This must be achieved in a manner that reflects the fact that access to the WHS in the widest sense is a fundamental principle for the future management of the Site. This means not only physical access but also includes intellectual access through interpretation and research, and remote access to information and digital experiences for those who are unable to visit in person.

Responsible and sustainable tourism is not only about numbers: it is also about positive and negative impacts on the sites, on infrastructure, on local residents, and on the experience of the WHS for both residents and visitors. At present, high season peak day numbers can cause issues for residents and put pressure on existing facilities, infrastructure and the natural and historic environment. New approaches therefore need to be found to deliver benefits from tourism, while minimising any threats. This is a key driver for this Management Plan, and the Partners.

#### 4.4 Community Involvement

The UNESCO World Heritage Centre recognises the importance of ensuring that the communities local to WHSs are engaged in the management of the Site. They recommend an inclusive and participatory approach to planning and stakeholder consultation, hence the elected member representative for the West Mainland sitting on the Steering Group. Good communication is a challenge that persists at the WHS and is thus a particularly crucial step

in bridging the gap between the organisations protecting and managing the WHS and the surrounding community.

The community consultation work carried out as part of the Plan process (Section 1.5) was one way to understand how the Orkney community views the current management of the WHS, what their priorities are, and whether, and how, they would like to be further informed about and involved in future management planning and delivery. One of the most important findings was a strong desire for better communication between the organisations that manage the WHS and the surrounding area and the wider community, as well as the active involvement in planning and decision making. People were keen to have better understanding of what decisions are being made and why, as well as the assurance that future activity will involve them.



Consultation and quizzes at the Dounby Show,

Some voices in the local communities are heard less often than others. Sometimes called "less heard voices" it is often the case that they are "less listened to". There are opportunities to increase participation, inclusion and intellectual and physical access to the WHS through thinking about how our communication choices affect different groups. To do this well it is important to listen to what people need, through engaging with organisations like Disability Action Orkney, The Blide Trust and Voluntary Action Orkney. Young people are also often missing from these conversations and new ways of ensuring their voices are heard and their views are taken into account are important, not least as they will be the future custodians of the WHS.

Communication should be a two-way process: written reports and social media updates have an important role to play but the Partners should seek a wider variety of ways to communicate, led by community desires and best practice examples at other WHSs, to foster conversations about the management and values of HONO. An accessible plain-English summary of this Management Plan will be published along with the full plan, and the Partners will commit to providing more regular updates – both formal and informal – via local media, holding at least one community meeting event per year, and to exploring a better online presence for the WHS.

#### 4.5 Sustainability

UNESCO's Operational Guidelines emphasise the importance of sustainability at WHSs which, so long as the OUV is respected, "may sustain biological and cultural diversity and provide ecosystem services and other benefits, which may contribute to environmental and cultural sustainability. 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 concerned."

Sustainable management decisions take into account the environment (natural and cultural), the economy, and the needs of the present in ways that consider the needs of future generations. Decisions should consider if they might damage, deplete or degrade the WHS and its environment for future generations. In line with our shared Principles (Section 3.3) we should also consider the impacts of our decisions on sustainability more broadly – for example, when planning infrastructure changes we should be mindful of the climate impacts and try to avoid choices that constrain the choices of future generations through our actions today. Much of this will be guided by the existing organisational strategies and policies of Partners and stakeholders, and we should be mindful that the Actions we design to deliver this Plan align with these.

#### The United Nations Sustainable Development Goals

There are 17 UN Sustainable Development Goals (SDGs), part of the of the 2030 Agenda for Sustainable Development, adopted by all member states. These interconnected goals are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity and cover areas such as climate change, economic inequality, innovation, sustainable consumption, peace and justice. The crucial importance of heritage to societies and its great potential to contribute to social, economic and environmental goals are now recognised as an enabler of sustainable development. We are encouraged to harness the potential of World Heritage properties to contribute to sustainable development and increase the effectiveness and relevance of the World Heritage Convention.

Scotland's National Performance Framework (NPF) and the Sustainable Development Goals share the same aims. The NPF localises the SDGs. For this Management Plan the key NPF Outcomes and the most relevant of the SDGs they link to are shown below. They also connect through to the long-term Aims of this Management Plan (see Section 5.1 for the full Aims).

Scotland's National Performance Framework National Outcomes	Culture	Environment	Education	Communities	Fair work & business	International
United Nations Sustainable Development Goals	Sustainable Cities & Communities	Climate Action	Good health & Wellbeing  Quality Education	Sustainable Cities & Communities	Quality Education  Decent Work & Economic Growth	Partnership for the Goals
Management Plan: Long Term Aims	Aim 1, 2, 4, 5	Aim 1, 5	Aim 2, 4, 5, 6	Aim 1, 3	Aim 3, 6	Aim 1, 2, 3, 6

Table showing the connections between Scotland's National Performance Framework National Outcomes, the relevant UN Sustainable Development Goals, and the Management Plan Long Term Aims.

#### 4.6 Research and Learning

#### 4.6.1 Research

Most of the current research relating to the WHS is focused on archaeology and climate change. There is therefore an opportunity to broaden research into other fields.

The Heart of Neolithic Orkney World Heritage Site Research Agenda 2005 continues to serve as a key resource for guiding research linked to the HONO WHS. However, The HONO Research Strategy 2013-2018 is currently due for renewal. Scotland's Islands Research Framework for Archaeology (SIRFA) presents an opportunity to ensure the research needs of the WHS are embedded into a wider, more comprehensive framework. SIRFA is a four-year project to develop and disseminate a regional research framework for the Western Isles, Shetland and Orkney, set within a broader, island-wide archaeological research framework for Scotland. The third and final SIRFA was held in Orkney in March 2023, once the Framework is updated and complete it will inform future research at and around the WHS.

Opportunities exist to continue wider research on social context, community value, wellbeing, natural environment, and longer-term climatic factors to both deepen knowledge and improve the management of the WHS. This should include research into visitor motivations, experience and satisfaction, given the importance of the WHS to the Orkney economy.

Involving local communities in the research process can incorporate traditional knowledge, oral histories, and cultural perspectives, enriching interpretations and fostering collaborative relationships which can be addressed through Aims 2, 3 and 4 (see section 5.1).

#### 4.6.2 Learning

The WHS has the potential to be developed further as an exceptional resource for educational institutions. Schools, universities and further education organisations could include HONO as part of their learning programmes, as many of those in Orkney already do. To further a broad range of learning and research, there is a need for improved and better access to the associated collections and archive material, and to accurate information about the WHS. It is crucial to raise awareness with learning institutions about the research and learning opportunities made possible through the WHS.

The existing education and outreach programme delivered in the community by the HES Ranger Service is highly valued by the community and it is worth investigating ways to expand engagement with school pupils and young people, particularly secondary schools and youth groups. There is potential to increase engagement with young people and increase their involvement with the WHS and its future management.



Solstice art workshop with Stenness Primary School pupils. © Colin Keldie.

# 5 Aims and Objectives

## 5.1 Long-Term Aims

To deliver the agreed **Vision** the management partners agreed six long-term Aims. These are a revised version of the Aims that form the past two management plans (2008 and 2014). These Aims expand on the **shared aspirations** for the Heart of Neolithic Orkney World Heritage Site and look beyond this ten-year management plan period to 2050.

- **Aim 1** Protect and conserve the Outstanding Universal Value of the World Heritage Site for present and future generations.
- **Aim 2** Inspire and engage people with the Heart of Neolithic Orkney and deepen their understanding of the Site's values.
- **Aim 3** Benefit people and communities in Orkney and elsewhere.
- **Aim 4** Interpret and present the Heart of Neolithic Orkney to the highest standard.
- **Aim 5** Enhance access to and experience of the World Heritage Site responsibly, sustainably and equitably.
- **Aim 6** Facilitate a diversity of research connected to the Heart of Neolithic Orkney and draw on the results to pursue the Long Term Aims.

# 5.2 Strategic Objectives 2025-30

The strategic objectives outlined below are intended to achieve the long-term aims throughout the ten-year duration of this Management Plan. Further details on how these objectives will be accomplished can be found in section 6.3 Monitoring and Delivery and/or the Action Plan.

The Objectives will be delivered through more detailed actions in an Action Plan agreed, reviewed, and updated every year by the management partners. This will help us respond to new opportunities and issues as they come up and to focus our resources where they can have the greatest effect

#### **Strategic Objectives 2025-29**

- The WHS is protected, conserved, and maintained in accordance with national guidance and legislation, and international conservation charters; including both historic environment and natural environment considerations.
- 02 The boundaries of the Buffer Zone are suitable for purpose and included in future iterations of the Local Development Plan.
- Policy and guidance produced by the partners that affects the protection and management of the WHS, Buffer Zone and wider setting is up to date and fit for purpose.
- **04** Governance of the WHS is robust and transparent and is periodically reviewed (see Section 6. Monitoring and Delivery).
- The Management Plan remains relevant, is fit for purpose, and allows the partners to respond to new understandings and challenges.
- Decision makers and communities can access what they need to know about the WHS and Buffer Zone, understand the opportunities and obligations that come with WH status, and are engaged with the management of the WHS.
- Management of the WHS prioritises adaption to the effects of the Climate Emergency on the WHS and Buffer Zone, and mitigation of climate impacts by reducing emissions and contributing to a sustainable low-carbon society.
- A programme of monitoring is in place for both the state of conservation and the implementation of actions for the WHS and Buffer Zone and the results are used by the Partners to inform decision making and future management.
- The Partners are collaborating to identify and access new sources of funding to support new projects and programmes to deliver shared Objectives.

- Management and interpretation (onsite and offsite, including digitally) enhance awareness and understanding of the archaeological and historical heritage, the natural environment, the Buffer Zone and the WHS in its wider context, geographically and through time. All based on robust research and understanding.
- The WHS and its associated sites and assets, materials and records (physical and digital) are easily accessible for use in research, education and training and are used by a range of community and special interest groups and projects.
- Key stakeholders are involved in, informed about, and engaged with the decision-making process for managing the WHS and its associated infrastructure.
- 13 Tourism at and around HONO offers a world class responsible visitor experience while benefitting Orkney communities.
- 14 Strong connections between HONO and other WHSs and UNESCO designations are maintained and developed enabling development of shared solutions to common issues.
- Research needs for the understanding, interpretation, protection and management of HONO WHS are identified and integrated with relevant research frameworks at a regional, nation and international level.
- 16 The WHS delivers a wide range of measurable benefits social, economic, cultural, environmental, wellbeing to Orkney's communities.

# 6 Monitoring and Delivery

#### 6.1 Governance

A Management Plan Steering Group has been established to guide the future management of HONO WHS (see Section 3.2 for details).

The Steering Group meets at least twice per year, and an annual summary and set of recommendations will be produced to highlight priorities for action and / or funding requirements (see Section 6.2.2). The terms of reference, membership, governance and code of conduct will be set out in the HONO WHS Steering Group Governance Agreement.

### 6.2 Monitoring and Evaluation

Monitoring is a responsibility that comes with the inscription on the World Heritage List and to ensure continued management and partnerships are upheld. It includes the monitoring of the condition of the WHS and its OUV (see section 6.2.1), the monitoring of the implementation of the Management Plan and associated Action Plan (see section 6.2.2) and a mid-point Management Plan evaluation (see section 6.2.4).

#### 6.2.1 Monitoring the Condition of the WHS

UNESCO monitors the condition of World Heritage Sites through the Periodic Reporting Process. Every eight years all WHSs participate. The 3<sup>rd</sup> Cycle of Periodic Reporting for Europe and North America took place in 2022-23. Periodic Reporting is one of the core conservation monitoring mechanisms of the World Heritage Convention. Each State Party reports on the application of the World Heritage Convention in their territory. As part of this process each individual WHS submits a detailed Periodic report. The HONO report gives us a baseline to ensure the OUV of the Site is being properly protected and conserved.

Monitoring of key aspects of the physical Site and processes that affect it, and other related information. This includes the outcome of ongoing and one-off conservation actions, environmental and climate change impacts, proposed and active development proposals, and collection of data about visitor numbers, behaviour, impacts. The below provides an overview of what is monitored as part of the Periodic report:

- Physical site conditions: monitoring the structural integrity of buildings, monuments, and natural features. It involves assessing any signs of deterioration and damage due to environmental factors or human activities. Special attention is given to critical elements that contribute to the OUV.
- Environmental and climate change impacts: focused on understanding how environmental factors, including climate change, affect the components of the WHS and its OUV as well as assessing changes in biodiversity, habitat quality, water and air quality.
- Proposed and active development proposals: reviewing proposed development projects within or near the WHS boundaries to assess their potential impact on its OUV.
- Conservation related actions: monitoring the progress and effectiveness of ongoing conservation related actions (see Action Plan) and their impact on the WHS.

Visitor data including visitor numbers, behaviours, and associated impacts: monitoring
to understand the impacts of changes in visitor movements and behaviour, including
tracking visitor demographics, patterns of visitation, visitor satisfaction levels, and the
potential impact of tourism activities on the WHS.

Every four years a monitoring report will be produced by the Steering Group, addressing the above and informing the longer-cycle of Periodic Reporting and the mid-point evaluation of the Management Plan.

# 6.2.2 Monitoring the Implementation of the Management Plan and Action Plan

Monitoring the progress of the Management Plan and associated Action Plan is a core function of the Steering Group. The following standing actions in the Action Plan will address this:

	Action	Outcome / Measure	Timetable	Frequency
1.1	Annual Action Plan Progress Review: Dedicated session to assess and drive forward progress of the Action Plan and to review governance approach. Short report from each responsible party required before commencement of the review by way of update.	Memo and actions document and updated Action Plan. Annual bulletin  Updated memo when new actions area added and agreed.	January 2026	Annually
1.2	Biennial Action Plan Delivery Report: Summary report on progress including key updates, Action Plan progress etc for wider interest and for transparency.	Action Plan Delivery Report and Revised Action Plan Event for Elected Members and public. Social and local media updates.	February 2027	Two-yearly
1.3	Capacity and Resourcing Review: To identify any gaps in capacity that might impact the delivery of the Management Plan and fulfilment of UNESCO obligations.	Gap Analysis and action document.	Winter 2025	Annually

	Action	Outcome / Measure	Timetable	Frequency
1.7	Mid-point Evaluation: Evaluation at the mid-point of the Management Plan cycle to formally review the Management Plan, review and respond to challenges and changes in conservation and management practices.	Reviewed and updated Management Plan in place.	Autumn 2030	Once

The Steering Group will meet annually to carry out an **Action Plan Progress Review** (Action 1.1) to discuss the progress of actions, including a progress overview, action responsibility, successes and challenges. As part of this process the Steering Group will confirm and agree any changes to the Action Plan, and agree new actions as needed. A **Capacity and Resourcing Review** (1.3) will identify gaps in resources and capacity available to enable the delivery of Management Plan Action and UNESCO obligations.

- Annual summary and Recommendations Report will be provided to the organisations represented on the Steering Group, with a focus on key recommendations for funding and action.
- Every second year an Action Plan Delivery Report will be published online with key
  updates for local residents, the wider public and other stakeholders. This report will
  include a summary of conservation works, visitor management updates, and highlight
  upcoming plans, projects and events.

This ongoing review process will allow the Partners to react to changing circumstances and priorities over the ten-year period of the Plan.

#### 6.2.3 Mid-point Evaluation of the Management Plan

A mid-point evaluation of the plan will be carried out in 2030. This will be a formal review and reflection of the overall progress of the Management Plan progress to date, though stopping short of a full renewal of the Plan. Considering the progress on the Action Plan and State of Conservation reporting, this will review the validity of the Objectives and update them if appropriate, responding to the results of new research and changes to our understanding of the WHS, and to any changes in conservation and management practices. It will also identify any new challenges in need of a high-level response.

#### 6.2.4 Reactive Monitoring

In addition to the above programmed monitoring, there is a World Heritage Convention obligation to report to the World Heritage Committee whenever a major restoration or new construction project is proposed that could affect the OUV of the WHS. This process of Reactive Monitoring is required so that the Committee may assist in seeking appropriate solutions to ensure that the OUV of the property is fully preserved.

This reporting is the responsibility of the State Party (see Section 1.2.1), advised by HES and the Culture and Historic Environment Division in the Scottish Government.



Learners from the HES Heritage Remixed project at the Ring of Brodgar.

# Acronyms and Abbreviations Used in the Text

CHED Culture and Historic Environment Division (Scottish Government)

DCMS Department for Digital, Culture, Media and Sport (UK Government)

HES Historic Environment Scotland

HIE Highlands and Islands Enterprise

HONO Heart of Neolithic Orkney

ICOMOS The International Council on Monuments and Sites

ICOMOS UK The International Council on Monuments and Sites: UK National Committee

NS NatureScot

OIC Orkney Islands Council

OUV Outstanding Universal Value

RSPB Royal Society for the Protection of Birds

SDGs The UN Sustainable Development Goals

SEA Strategic Environmental Assessment

SIRFA Scottish Islands Research Framework for Archaeology

SOUV Statement of Outstanding Universal Value

UHI University of the Highlands and Islands

UNESCO United Nations Environmental and Scientific Organisation

WHS World Heritage Site(s)

### Appendix 1: Key Documents and Links

#### Key Policy and Guidance

<u>Scotland's National Planning Framework 4 (2023)</u> is Scotland's national spatial strategy and sets out spatial principles, regional priorities national developments and national planning policy. The policy requires that Development proposals affecting a WHS or its setting will only be supported where their OUV is protected and preserved.

<u>The Historic Environment Policy for Scotland (HEPS) (2019)</u> sets out a series of principles and policies for the recognition, care, and sustainable management of the historic environment.

<u>Scheduled Monuments Consents Policy (2019)</u> sets out the HES policy for making decisions about consents at scheduled monuments and supports HEPS.

<u>Managing Change in the Historic Environment</u> is a series of guidance notes produced by HES give best practice advice to help guide changes to the historic environment. One of these focuses on World Heritage and should be used to inform local planning policies and to help make decisions about planning applications that could affect a WHS.

The Orkney Local Development Plan (2017) establishes policy to protect the WHS and its setting from inappropriate development. Further guidance is provided in OIC's 2017 Supplementary Guidance: Historic Environment and Cultural Heritage and 2017 Planning Policy Advice: Historic Environment. These are material considerations in the planning process.

The Orkney Development Plan Scheme 2024/2025 (DPS2024), prepared by OIC, sets out a programme for preparing and reviewing the Local Development Plan (LDP). The LDP is a land use strategy that details areas within a location that require to be protected for their value, as well as where new development needs to meet the social, economic and housing needs of that area. The DPS provides a programme and schedule of work that will culminate in a new Local Development Plan by 2027. (See also 2.2. The Buffer Zone and Wider Context).

Other relevant legislation, policy, and guidance:

<u>The Town and Country Planning (Scotland) Act 1997</u> as amended by the Planning etc. (Scotland) Act 2006, and the <u>Town and Country Planning (Neighbouring planning authorities and Historic Environment) (Scotland) Direction 2015</u>

Historic Environment (Amendment) Scotland Act 2011

Planning Advice Note 2/2011 Planning and Archaeology

Our Past, Our Future – Scotland's Strategy for the Historic Environment (2023)

# Key Supporting Management Documents

<u>Climate Vulnerability Index Assessment for Heart of Neolithic Orkney World Heritage</u> <u>Property (2019)</u>

Heart of Neolithic Orkney World Heritage Site Management Plan 2014-2019

Heart of Neolithic Orkney World Heritage Site Research Strategy 2013-18

## Appendix 2: Statement of Outstanding Universal Value

# Heart of Neolithic Orkney World Heritage Site: Statement of Outstanding Universal Value

Adopted by UNESCO World Heritage Committee Thirty-seventh session, Phnom Penh, Cambodia, June 2013

**Property** Heart of Neolithic Orkney

State Party United Kingdom of Great Britain and Northern Ireland

Id. N° 514rev

Date of inscription 1999

#### **Brief synthesis**

The Orkney Islands lie 15km north of the coast of Scotland. The monuments are in two areas, some 6.6 km apart on the island of Mainland, the largest in the archipelago.

The group of monuments that make up the Heart of Neolithic Orkney consists of a remarkably well-preserved settlement, a large chambered tomb, and two stone circles with surrounding henges, together with a number of associated burial and ceremonial sites. The group constitutes a major relict cultural landscape graphically depicting life five thousand years ago in this remote archipelago.

The four monuments that make up the Heart of Neolithic Orkney are unquestionably among the most important Neolithic sites in Western Europe. These are the Ring of Brodgar, Stones of Stenness, Maeshowe and Skara Brae. They provide exceptional evidence of the material and spiritual standards as well as the beliefs and social structures of this dynamic period of prehistory.

The four main monuments, consisting of the four substantial surviving standing stones of the elliptical Stones of Stenness and the surrounding ditch and bank of the henge, the thirty-six surviving stones of the circular Ring of Brodgar with the thirteen Neolithic and Bronze Age mounds that are found around it and the stone setting known as the Comet Stone, the large stone chambered tomb of Maeshowe, whose passage points close to midwinter sunset, and the sophisticated settlement of Skara Brae with its stone built houses connected by narrow roofed passages, together with the Barnhouse Stone and the Watch Stone, serve as a paradigm of the megalithic culture of north-western Europe that is unparalleled.

The property is characteristic of the farming culture prevalent from before 4000 BC in northwest Europe. It provides exceptional evidence of, and demonstrates with exceptional completeness, the domestic, ceremonial, and burial practices of a now vanished 5000-year-old culture and illustrates the material standards, social structures and ways of life

of this dynamic period of prehistory, which gave rise to Avebury and Stonehenge (England), Bend of the Boyne (Ireland) and Carnac (France).

The monuments on the Brodgar and Stenness peninsulas were deliberately situated within a vast topographic bowl formed by a series of visually interconnected ridgelines stretching from Hoy to Greeny Hill and back. They are also visually linked to other contemporary and later monuments around the lochs. They thus form a fundamental part of a wider, highly complex archaeological landscape, which stretches over much of Orkney. The current, open and comparatively undeveloped landscape around the monuments allows an understanding of the apparently formal connections between the monuments and their natural settings. The wealth of contemporary burial and occupation sites in the buffer zone constitute an exceptional relict cultural landscape that supports the value of the main sites.

Criterion (i): The major monuments of the Stones of Stenness, the Ring of Brodgar, the chambered tomb of Maeshowe, and the settlement of Skara Brae display the highest sophistication in architectural accomplishment; they are technologically ingenious and monumental masterpieces.

Criterion (ii): The Heart of Neolithic Orkney exhibits an important interchange of human values during the development of the architecture of major ceremonial complexes in the British Isles, Ireland and northwest Europe.

Criterion (iii): Through the combination of ceremonial, funerary and domestic sites, the Heart of Neolithic Orkney bears a unique testimony to a cultural tradition that flourished between about 3000 BC and 2000 BC. The state of preservation of Skara Brae is unparalleled amongst Neolithic settlement sites in northern Europe.

Criterion (iv): The Heart of Neolithic Orkney is an outstanding example of an architectural ensemble and archaeological landscape that illustrate a significant stage of human history when the first large ceremonial monuments were built.

#### Integrity

All the monuments lie within the designated boundaries of the property. However, the boundaries are tightly drawn and do not encompass the wider landscape setting of the monuments that provides their essential context, nor other monuments that can be seen to support the Outstanding Universal Value of the property. Part of the landscape is covered by a two part buffer zone, centred on Skara Brae in the west and on the Mainland monuments in the central west.

This fragile landscape is vulnerable to incremental change. Physical threats to the monuments include visitor footfall and coastal erosion.

#### **Authenticity**

The level of authenticity in the Heart of Neolithic Orkney is high. The state of preservation at Skara Brae is unparalleled for a prehistoric settlement in northern Europe. Where parts of the site have been lost or reconstructed during early excavations, there is sufficient information to identify and interpret the extent of such works.

Interventions at Maeshowe have been antiquarian and archaeological in nature; the monument is mostly in-situ and the passageway retains its alignment on the winter solstice sunset. Re-erection of some fallen stones at Stones of Stenness and Ring of Brodgar took place in the 19th and early 20th century, and works at Stenness also involved the erection of a 'dolmen', now reconfigured. There are, however, many antiquarian views of the monuments attesting to their prior appearance, and it is clear that they remain largely in-situ.

Their form and design are well-preserved and visitors are easily able to appreciate their location, setting and interrelationships with one another, with contemporary monuments situated outside the designated property, and with their geographical setting. This relationship with the wider topographic landscape helps define the modern experience of the property and seems to have been inextricably linked to the reasons for its development and use in prehistory.

#### **Protection and management requirements**

World Heritage properties in Scotland are protected through the following pieces of legislation. The Town and Country Planning (Scotland) Act 1997 and The Planning etc. (Scotland) Act 2006 provide a framework for local and regional planning policy and act as the principal pieces of primary legislation guiding planning and development in Scotland. Additionally, individual buildings, monuments and areas of special archaeological or historical interest are designated and protected under The Planning (Listed Building and Conservation Areas) (Scotland) Act 1997 and the 1979 Ancient Monuments and Archaeological Areas Act.

The Scottish Historic Environment Policy (SHEP) is the primary policy guidance on the protection and management of the historic environment in Scotland. Scottish Planning Policy (SPP) sits alongside the SHEP and is the Government's national planning policy on the historic environment. It provides for the protection of World Heritage properties by considering the impact of development on their Outstanding Universal Value, authenticity and integrity.

Orkney Islands Council prepared the Local Development Plan that sets out the Council's policy for assessing planning applications and proposals for the allocation of land for development. The Plan contains policies that address the need to put an appropriate level of protection in place for the property and its setting. Supplementary Planning Guidance for the World Heritage Site has also been produced. These policies and guidance establish a general commitment to preserving the integrity and authenticity of the property. They also seek to manage the impact of development on the wider landscape setting, and to prevent development that would have an adverse impact on its Outstanding Universal Value through the designation of Inner Sensitive Zones, aligned with the two parts of the buffer zone and the identification of sensitive ridgelines outside this area. The Rural Conservation Area at Brodgar includes Maeshowe, the Stones of Stenness and the Ring of Brodgar, and it is envisaged to establish a Rural Conservation Area at the Bay of Skaill.

The property is in the care of Historic Scotland on behalf of Scottish Ministers. A Management Plan has been prepared by Historic Scotland in consultation with the Partners who share responsibility for managing the sites and access to them: Orkney Islands Council, Scottish Natural Heritage, and the Royal Society for the Protection of Birds. The Management Plan is a framework document, and sets out how the Partners will manage the property for the five years of the Plan period, together with longer-term aims and the Vision to protect, conserve, enhance and enjoy the property to support its Outstanding Universal Value. It does so by identifying a series of key issues and devising specific objectives or actions to address these issues. The Steering Group responsible for implementing the Management Plan comprises representatives of the Partners. Stakeholders drawn from the tourist industry, local landowners and the archaeological community participate in Delivery Groups reporting to the Steering Group with responsibilities for access and interpretation, research and education, conservation and protection, and tourism and marketing.

Condition surveys have been completed for each of the monuments. These documents record previous interventions and include a strategy for future maintenance and conservation. Conservation and maintenance programmes require detailed knowledge of the sites and are managed and monitored by suitably experienced and qualified professionals. Conservation work undertaken at the sites follows national and international policy and seeks to balance minimum intervention with public accessibility to the monuments. Any intervention is given careful consideration and will only occur following detailed and rigorous analysis of potential consequences. In conservation work, local materials have been used where appropriate.

Management of tourism in and around the World Heritage property seeks to recognise its value to the local economy, and to develop sustainable approaches to tourism. Key approaches include improved dispersal of visitors around the monuments that comprise the property and other sites in the wider area. A World Heritage Ranger Service supports this approach and allows for on-the-ground education about the issues affecting the site. The relationships and linkages between the monuments and the wider open, almost treeless landscape, and between the monuments that comprise the property and those in the area outside it that support the Outstanding Universal Value are potentially at risk from change and development in the countryside. The long-term need to protect the key relationships between the monuments and their landscape settings and between the property and other related monuments is kept under review by the Steering Group. Policy HE1 as well as the Heart of Neolithic Orkney World Heritage Site in the Local Development Plan and the associated Supplementary Guidance require that developments have no significant negative impact on either the Outstanding Universal Value or the setting of the World Heritage property.

# Appendix 3: Strategic Environmental Assessment and Other Assessments

# Strategic Environmental Assessment

A Strategic Environmental Assessment (SEA) was carried out by HES alongside the Management Plan to assess the possible environmental impacts of this draft Plan, in accordance with the Environmental Assessment (Scotland) Act 2005. This found that the vision has a generally positive relationship with environmental factors and the long term aims generally had a positive or neutral relationship.

SEA Draft Schedule of Commitments	Relevant environmental topic
Any proposals to alter the WHS Buffer Zone boundary will be developed in consultation with Partners and a public consultation exercise undertaken.	Population, human health, landscape, cultural heritage, biodiversity, flora and fauna
Environmental assessment will be integrated into the development of options for both short- and long-term large scale physical measures to identify in detail the potential environmental effects on environmental parameters.	Climatic factors, landscape, cultural heritage, biodiversity, flora and fauna
Steps taken to address carrying capacity issues should be sustainable in the long term and include natural heritage interests.	Population, human health, landscape, cultural heritage, biodiversity, flora and fauna
The sustainability checklist should be applied to actions from all objectives within the detailed assessment, to ensure that a holistic environmental approach is taken in their delivery.	Climatic factors, population, human health, landscape, cultural heritage, biodiversity, flora and fauna
Ensure careful consideration in proposals for any potential development or improvements to facilities at sites which may impact the sensitive heritage, landscape and natural environment.	Landscape, cultural heritage, biodiversity, flora and fauna
Suggest actions to encourage landowners or managers to contribute to the monitoring and management of the WHS Buffer Zone	Cultural heritage
Integrate environmental assessment and archaeological investigation of any new interpretive, digital or management services or infrastructure.	Population, human health, landscape, cultural heritage, biodiversity, flora and fauna.

Any new physical measures for digital, interpretive or management infrastructure should be sensitively located and designed to avoid effecting environmental parameters.	Landscape, cultural heritage, biodiversity, flora and fauna.
Active operational monitoring of the active travel and path networks is required to allow areas to be temporarily closed off if sensitive habitats shift in the future (bird nesting, seasonal growth etc).	Biodiversity, flora and fauna
Wider environmental issues will be included in interpretation plans.	Climatic factors, population, human health, landscape, cultural heritage, biodiversity, flora and fauna

#### Other Assessments

An Equality Impact Assessment (EqIA) is a process of analysing and informing decisions about a proposed or existing project to identify any discriminatory or other negative impacts that the proposal could have on a particular group or part of the community or workforce. An Initial Screening for the draft Management Plan was undertaken and it was determined that the plan is unlikely have a significant negative impact on the basis of protected characteristics.

An Island Communities Impact Assessment (ICIA) is sometimes required when relevant authorities are planning or reviewing a policy, strategy or service, to consider how it might have an effect on an island community, in accordance with the Islands (Scotland) Act 2018. An ICIA screening is nearing completion: the results will be reported here, and this Plan updated if necessary.

A Habitats Regulations Appraisal (HRA) was carried out as part of the development of the Management Plan in line with Article 6(3) of the EC Habitats Directive. This concluded that the Management Plan will not adversely affect the integrity of the Loch of Stenness Special Area of Conservation and its qualifying interests and conservation objectives.

# Heart of Neolithic Orkney World Heritage Site Management Plan 2025-2035: Action Plan

The Action Plan has been drawn up primarily as a tool to drive forward change at the WHS that is appropriate, relevant, sustainable and that supports the Vision, Aims and Strategic Objectives of the Management Plan.

This Action Plan is a live document that will be updated by the Steering Group. Actions will be expanded, altered, added and retired as necessary, on the basis that all Actions should aid the delivery of the Management Plan. All external projects should demonstrate how they contribute to the delivery of the Management Plan and the achievement of its Vision, Aims and Strategic Objectives.

This Action Plan will be updated periodically, with an initial duration of 2 years, but also requires review when new actions are brought forward. Despite many of the Actions having a longer timeframe, these are ongoing, and progress must still be achieved within this initial period. The accompanying Management Plan covers a 10-year cycle of Action Plan updates.

The Actions are organised into three categories, linking to the long-term Aims below:

- **1. Monitoring** Actions: Repeated actions that will drive forward the Management Plan. Primarily supporting Aim 1
- **2. Essential** Projects/Actions: One-off actions that will improve the WHS over time. Supporting Aims 2-6.
- **3. Opportunities:** Desirable projects should resourcing and funding be identified. Supporting Aims 2-6.

All actions rely on the WHS Steering Group and partners to drive forward delivery. "Lead" refers to the individual and/or team responsible for the progress and delivery of each Action, with evidence presented to the Steering Group during the Annual Action Plan Progress Review (Action 1.1) and two-yearly Action Plan Progress Reports (Action 1.2). "Support" identifies other inputs required. "Potential Partnerships" have also been cited where engagement with local groups, or the engagement of an external consultant are required.

To deliver the Vision the partners agreed **six long-term Aims**. These are a revised version of the aims in previous management plans (2008 and 2014). These Aims expand on the shared aspirations for the WHS and look beyond this ten-year management plan period to 2050.

**Aim 1** Protect and conserve the Outstanding Universal Value of the World Heritage Site for present and future generations.

**Aim 2** Inspire and engage people with the Heart of Neolithic Orkney and deepen their understanding of the Site's values.

- **Aim 3** Benefit people and communities in Orkney and elsewhere.
- **Aim 4** Interpret and present the Heart of Neolithic Orkney to the highest standard.

**Aim 5** Enhance access to and experience of the World Heritage Site responsibly, sustainably and equitably.

**Aim 6** Facilitate a diversity of research connected to the Heart of Neolithic Orkney and draw on the results to pursue the Long Term Aims

# 1: Monitoring Actions: Repeated actions that will drive forward the Management Plan.

	Action	Outcome / Measure	Lead	Support	Audiences	Time- table	Frequency	Supports Aim	Supports Objective
1.1	Annual Action Plan Progress Review: Dedicated session to assess and drive forward progress of the Action Plan and to review governance approach. Short report from each responsible party required before commencement of the review by way of update.	Memo and actions document and updated Action Plan. Annual bulletin  Updated memo when new actions area added and agreed.	WHS Coordinator	Steering Group	Internal (including relevant operational teams) and Elected Members	January 2026	Annually	1	1, 3, 4
1.2	Biennial Action Plan Delivery Report: Summary report on progress including key updates, Action Plan progress etc for wider interest and for transparency.	Action Plan Delivery Report and Revised Action Plan Event for Elected Members and public. Social and local media updates.	WHS Coordinator	Steering Group	Internal (inc. operational teams, senior management, Elected Members). Published to wider public and promoted to local communities and tourism providers.	February 2027	Two-yearly	1	3, 4, 6
1.3	Capacity and Resourcing Review: To identify any gaps in capacity that might impact the delivery of the Management Plan and fulfilment of UNESCO obligations.	Gap Analysis and action document.	Short life working group	WHS Coordinator	Internal	Winter 2025	Annually	1	1, 4, 9
1.4	Guidance Review: Review local, national and international guidance in relation to the protection and management of the WHS.	Updated Policy and Guidance note.	WHS Coordinator	Steering Group	Internal	Autumn 2025	Two-yearly	1	1, 3, 4

	Action	Outcome / Measure	Lead	Support	Audiences	Time- table	Frequency	Supports Aim	Supports Objective
1.5	Participate in World Heritage related activities: Team members/partners to attend conferences, workshops and meetings including WHUK, UK National Commission for UNESCO, Scottish WH Coordinators Forum and other opportunities as appropriate and if funding is available.	WHS activities better connected with wider activities. Section in 1.2 Action Plan Delivery Report.	Members of the Steering Group as appropriate; WHS Coordinator	N/A	N/A	Ongoing	At least twice a year	1	1, 3, 4, 5, 14
1.6	State of Conservation Monitoring: Mid-point State of Conservation review addressing changes in physical site conditions, environmental/ climate impacts, proposed/ active development proposals, and informing the formal Periodic Reporting cycle and Mid-point Evaluation.	State of Conservation Monitoring summary report produced.	HES	Steering Group; WHS Coordinator	Internal National agencies Summary published to wider public	Winter 2029	N/A	1	1, 7, 8
1.7	Mid-point Evaluation: Evaluation at the mid-point of the Management Plan cycle to formally review the Management Plan, review and respond to challenges and changes in conservation and management practices.	Reviewed and updated Management Plan in place.	Steering Group	WHS Coordinator	Internal Updated Management Plan published to wider public	Autumn 2030	N/A	1	1, 5

# 2: Essential Projects / Actions: One-off actions that will improve and enhance the WHS over time.

	Action	Outcome / Measure	Lead	Support	Potential Partnerships	Audiences	Time- table	Frequency	Supports Aim	Supports Objective
2.1	Accessibility Audit: Accessibility audit to identify physical and intellectual barriers and identify actions to improve access for all. To include both Ring of Brodgar/Stones of Stenness/Maeshowe and Skara Brae and connections between the component sites and to local communities and infrastructure.	Accessibility Report and Action Plan.	WHS Coordinator	Steering Group	Orkney Disability Forum Community Groups Gateway Project	Internal Published to wider public	Spring 2025	Two-yearly	3, 5	12, 13, 16
2.2	Community Involvement Options Appraisal: Options Appraisal to review and identify how the community could be more directly involved in the management of and engaged with the WHS, with a particular focus on landowners/managers and residents within the Buffer Zone.	Options Appraisal and Action Plan.	WHS Coordinator	Steering Group	Community Councils Community Groups Gateway Project	Wider public	Winter 2025	Five-yearly	3, 5	12, 13, 16
2.3	Formalise engagement with the Orkney Gateway Project: Steering Group to agree a formal relationship and communications protocol with the Orkney Gateway Project to support mutual alignment as necessary.	Formal relationship and communications protocol agreed and implemented.	Steering Group	WHS Coordinator	N/A	N/A	Spring 2025	As agreed	1	1, 9, 16

	Action	Outcome / Measure	Lead	Support	Potential Partnerships	Audiences	Time- table	Frequency	Supports Aim	Supports Objective
2.4	Skara Brae Climate Change Strategy: Development and implementation of long-term strategy to address the threat to Skara Brae from climate change / sea level rise and associated coastal erosion.	Skara Brae Climate Change Strategy produced and implementation planned. (Implementation actions will be included in later iterations of this Action Plan.)	HES and OIC	WHS Coordinator Steering Group	NatureScot SEPA Orkney Climate Aware Heriot-Watt University	Internal Published to wider public	Spring 2026	N/A	1, 5	1, 7, 15
2.5	Buffer Zone boundary review: Review of the Buffer Zone* boundaries in parallel with the development of the new Local Development Plan. Any proposed changes agreed by Signatory Partners and a formal Minor Modification request submitted to UNESCO.  *referred to as the Inner Sensitive Zone in the 2017 LDP: ideally standardised language to be agreed in new LDP	Review of Buffer Zone complete and recommendations made to timetable established for LDP process to allow any changes to boundaries to be included.  Modification proposal submitted to UNESCO if proposed by review.	HES (Buffer Zone review) WHS Coordinator (UNESCO submission)	OIC (LDP)	N/A	Internal UNESCO Published to wider public	Summer 2026	N/A	1	1, 2, 6

# 3: Opportunities: Desirable projects should resourcing and funding be identified.

	Action	Outcome / Measure	Lead	Support	Potential Partnerships	Audience	Time- table	Frequency	Supports Aim	Supports Objective
3.1	Messaging and Interpretation Strategy: Development and implementation of a Strategy (including events, collections, online presence) to establish storytelling approaches and site cohesion and increase awareness of archaeology, geography, natural heritage and biodiversity through onsite and online material	Messaging and interpretation Strategy and Action Plan.	WHS Coordinator	Steering Group	Gateway Project Institutions holding WHS-related collections	Internal	Early 2026 onwards	Ten-yearly with five- year review	2, 3, 4, 5	10, 11, 13, 16
3.2	Digital Media Strategy: Building on Messaging and Interpretation Strategy and enhancing web presence and offer online access to information, news, interpretation and events.	Digital Media Strategy and Action Plan.	WHS Coordinator	Steering Group	Gateway Project	Internal	Spring 2026 onwards	Ten-yearly with five- year review	2, 3, 4, 5	6, 12, 13
3.3	Research Group and Guidelines: Establishment of a research-focused steering group to develop and promote robust research guidelines, and to encourage and promote research projects across wide range of relevant fields.	Research Steering Group established and research guidelines in place. Bulletin published.	Short life working group (establishment of group) RSG (bulletin)	WHS Coordinator	NatureScot RSPB Scotland's Islands Research Framework for Archaeology (SIRFA) UHI	Research community and institutions Published to wider public	Spring 2026 onwards	N/A	2, 3, 4, 6	14, 15, 16
3.4	Biodiversity Strategy: Assessment of biodiversity and integration with existing strategies, for safeguarding biodiversity and the environment, for the WHS and immediately associated land and water.	Biodiversity Strategy produced.	WHS Coordinator	Steering Group Specialist officers in Partner orgs	NatureScot RSPB Heriot-Watt University Gateway Project	Internal Published to wider public	Spring 2026 onwards	Five-yearly	1	1, 8, 10, 13, 16

# THE HEART OF NEOLITHIC ORKNEY WORLD HERITAGE SITE

DRAFT MANAGEMENT PLAN 2025-2035

STRATEGIC ENVIRONMENTAL ASSESSMENT ENVIRONMENTAL REPORT

**AUGUST 2024** 

#### **Contents**

1	Int	roduction	1
	1.1	Background to the Heart of Neolithic Orkney World Heritage Site	1
	1.2	Content of the draft Management Plan	2
	1.3	SEA process	3
2	Co	ntext	4
	2.1	Other legislation, plans, programmes, strategies and environmental objectives	4
	2.2	Environmental baseline	4
	2.3	Environmental problems	6
	2.4	Evolution of the Environment without the Management Plan	7
3	As	sessment approach and methods	8
	3.1	Scoping the environmental topics to be included in the assessment	8
	3.2	Scoping the parts of the draft Management Plan to be included in the assessment	10
	3.3	Scoping the level of detail of the assessment	11
	3.4	How was the draft Management Plan assessed?	11
	3.5	Alternatives	13
4	As	sessment of the draft Management Plan	14
	4.1	Vision	14
	4.2	Long-Term Aims	14
	4.3	Objectives	14
	4.4	Cumulative effects	16
	4.5	Mitigation	16
	4.6	Monitoring	18
5	Ne	xt steps	18
A	ppen	dix A: Scoping Recommendations	19
A	ppen	dix B: Review of other relevant plans, programmes, strategies and legislation	21
A	ppen	dix C: Baseline Information	27
A	ppen	dix D: Assessment of the Vision and Aims	42
A	ppen	dix E: Screening the draft Objectives	49
Α	ppen	dix F: Detailed assessment of the draft Objectives	57

#### 1 Introduction

#### 1.1 Background to the Heart of Neolithic Orkney World Heritage Site

The Heart of Neolithic Orkney (HONO) was inscribed as a World Heritage Site (WHS) in 1999. The site comprises a series of discrete, but related, Neolithic monuments which fall into two complexes, 6 km apart. These are: Maeshowe, Skara Brae, the Stones of Stenness, the Watch Stone, the Barnhouse Stone, the Ring of Brodgar, and thirteen mounds and a stone setting, all of which are Scheduled Monuments. The monuments within the WHS are also all Properties in the Care of Scottish Ministers, managed by Historic Environment Scotland (HES) on their behalf. HES therefore has responsibilities as both the manager of this particular WHS and as the State Party under the terms of the World Heritage Convention 1972.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) requires that appropriate management systems are in place at WHS's. Management Plans specify how the Outstanding Universal Value (OUV) of the Site will be protected and managed for future generations. The draft Management Plan provides a framework for the management of the WHS over the next ten years, identifying key issues that affect or are likely to affect the Site and lays out how these will be addressed.

Best practice is for Management Plans to be regularly reviewed, monitored and implemented. The last Management Plan was published in 2014. Although technically past this period, dates for Management Plans are indicative only and the 2014-2019 Plan continues to be active. HES reviewed the current Management Plan in consultation with our partners<sup>1</sup> and stakeholders<sup>2</sup>, and have now prepared a draft Management Plan for public consultation.

Table 1 sets out the key facts about the draft Management Plan. Key changes to note from the SEA scoping report is the long-term vision has moved to a period between 2025-2050, with the Plan now intended to cover a ten-year cycle with an evolving action plan.

Table 1: Key facts - HONO WHS Management Plan

Responsible Authority	Historic Environment Scotland
Title of the Plan	Heart of Neolithic Orkney World Heritage Site Management Plan 2025 - 2035
Period covered by the Plan	Ten years
What promoted the Plan	UNESCO Operational Guidelines for the Implementation of the World Heritage Convention state that effective management of WHS involves a cycle of short, medium and long-term actions to protect, conserve and present the inscribed property. This review of the Management Plan forms part of this cycle.
Plan area	Heart of Neolithic Orkney World Heritage Site and Buffer Zone (see maps in <b>Appendix C</b> )
Purpose of the Plan	The revised Management Plan will specify how the Outstanding Universal Value of the site will be preserved in line with the appropriate UNESCO Operational Guidelines for the implementation of the World Heritage Convention. It will set out the overarching framework and aspirations to

<sup>&</sup>lt;sup>1</sup> Historic Environment Scotland and Orkney Islands Council are the signatory partners. NatureScot and the Royal Society for the Protection of Birds were previously delivery partners and are now advisory partners as are Highlands and Islands Enterprise.

<sup>&</sup>lt;sup>2</sup> A wide range of individuals, organisations and groups have an interest in how the WHS is managed. These can be broadly grouped under the headings of community, tourism, business and agriculture, heritage and environment, and access and education.

	conserve and protect the site, defining a new period of a shared vision (2025-2050), its six long-term aims and strategic objectives. The plan is intended to balance the needs of conservation, access, the interests of
Contact point for	the local community and sustainable economic development.
Contact point for	Heart of Neolithic Orkney WHS Coordinator (Alice Lyall)
queries on the	Historic Environment Scotland
Plan	Longmore House
	Edinburgh
	EH9 1SH
	0131 668 8942 e: worldheritage@hes.scot
Contact point for	World Heritage Officer (Olivia Anderson)
queries on the	Historic Environment Scotland
SEA	Longmore House
	Edinburgh
	EH9 1SH
	0131 668 8959 e: worldheritage@hes.scot

#### 1.2 Content of the draft Management Plan

The draft Management Plan must satisfy the current UNESCO Operational Guidelines for the implementation of the World Heritage Convention<sup>3</sup>. It includes the following sections:

- Summary & Vision
- World Heritage and the Management Plan
- The Heart of Neolithic Orkney
- People and the Plan: Partners, Stakeholders and Community
- Challenges and Themes
- Aims and Objectives
- Monitoring and Delivery
- Acronyms and Abbreviations Used in the Text
- Appendices

The draft Management Plan sets out the overarching framework and aspirations to conserve and protect the site, defining a new extended period of a shared vision (2025-2050), its six long-term aims and strategic objectives. The long-term aims are:

- 1. Protect and conserve the Outstanding Universal Value of the World Heritage Site for present and future generations.
- 2. Inspire and engage people with the Heart of Neolithic Orkney and deepen their understanding of the Site's values.
- 3. Benefit people and communities in Orkney and elsewhere.
- 4. Interpret and present the Heart of Neolithic Orkney to the highest standard.
- 5. Enhance access to and experience of the World Heritage Site responsibly, sustainably and equitably.
- 6. Facilitate a diversity of research connected to the Heart of Neolithic Orkney and draw on the results to pursue the Long Term Aims.

A suite of strategic objectives are designed to deliver on the long-term aims throughout the tenyear cycle of the Management Plan, delivered through more detailed actions set out in a regularly updated Action Plan. Many of the objectives relate to awareness-raising and partnership working activities but several will likely result in changes on the ground. For example, there are objectives to address the following:

Consider review of the current Buffer Zone boundaries

<sup>3</sup> For the latest revision of the Operational Guidelines see <a href="https://whc.unesco.org/en/guidelines/">https://whc.unesco.org/en/guidelines/</a>

- A programme of monitoring for the WHS and Buffer Zone to inform decision making and future management
- Providing a greater understanding, access to and awareness of the WHS and Buffer Zone through management, interpretation, and digital presence
- Responding to increased pressures on the WHS from the growth of tourism to Orkney
- Adapting to the effects of and combating the causes of climate change
- · Monitoring the state of conservation

In providing a strategic framework, the draft Management Plan cannot include detail on how these issues will be/will begin to be resolved nor is the preferred solution always known during review of the Plan. In most cases options will be developed as the Management Plan is implemented through the Signatory partners' and other stakeholders' work and actions reviewed as part of a cycle of annual monitoring.

#### 1.3 SEA process

The requirement for SEA comes from the European Directive 42/2001/EC on the assessment of the effects of certain plans and programmes on the environment (commonly known as the SEA Directive). This is implemented in Scotland through the Environmental Assessment (Scotland) Act 2005.

The purpose of SEA is to ensure that information on the environmental effects of a plan or programme is gathered and made available to plan-makers and decision takers as the plan is prepared and implemented. The overarching aim of SEA is to provide a high level of protection for the environment, to reduce environmental impact and to enhance environmental outcomes. It also ensures that policies and proposals are informed by relevant environmental information and provides further opportunities for people to get involved in the process.

Under section 5(4) of the Act, plans, programmes and strategies with the potential to have significant environmental effects are to be subject to environmental assessment prior to adoption. HES considered that the Management Plan has the potential to result in significant environmental effects and submitted a joint screening and scoping report to the Scottish Government's SEA Gateway on 17/12/2019. In this report we 'scoped' the environmental assessment and consulted the Consultation Authorities (NatureScot and SEPA) on the proposed scope and level of detail of the assessment. Helpful comments were received from both organisations who were supportive of our proposed approach. **Appendix A** summarises the comments provided by NatureScot and SEPA and shows how these have been considered in progressing the SEA.

Following on from the scoping stage, we carried out an environmental assessment of the draft Plan as it was being developed. This Environmental Report reports the results of the environmental assessment, sets out measures proposed to mitigate the potentially adverse effects of the plan and suggests indicators to monitor the environmental effects of the plan.

This Environmental Report accompanies the draft Management Plan for an xx-week period of public consultation from xx/xx/2025 to xx/xx/2025. We would welcome any comments that you would like to make on either document. We have included five questions in this Environmental Report which you may use to help structure your response is you wish. Links to the questions in the text: Question 1; Question 2; Question 3; Questions 4 and 5.

Once the consultation period is complete, the need for changes to the draft Management Plan will be reviewed. Where significant changes are made which could result in significant environmental effects, an assessment will be undertaken of their impact, and reported in the SEA Post Adoption Statement. This will be published along with the final Management Plan.

# 2 Context

# 2.1 Other legislation, plans, programmes, strategies and environmental objectives

One of the early stages of the SEA process is to consider the relationship of the plan to other relevant legislation and policies, plans, and strategies (PPS) and environmental objectives. This allows key environmental protection objectives to be identified for consideration during the plan preparation process. It is also important to identify both the plans and strategies that will influence the draft Management Plan and those that will be influenced by the draft Management Plan itself. An understanding of the context and the hierarchy that the Plan sits within is also useful for giving early thought to mitigation measures and where they may be best implemented.

**Appendix B** sets out the review of the legislation and PPS that are considered to be of most direct relevance to the draft Management Plan. We have assumed that key environmental protection objectives for each of the environmental parameters identified in schedule 3 of the Act are translated into national policy and strategy and we have not reviewed in detail the environmental protection framework provided by European legislation. Instead, we have tried to focus the review on the key pieces of legislation relevant to the draft Management Plan and its assessment.

The key environmental protection objectives identified from the review of legislation, policies, plans and strategies are:

- To promote sustainable development
- To reduce our contribution to climate change and be positioned to respond to the predicted effects of climate change
- To promote sustainable tourism
- To improve health and wellbeing through access (including equality of access) to good quality natural, historic and built environments
- To recognise the need to shape places which are nurturing of positive health, wellbeing and resilience
- To make plans for local areas which meet the needs and ambitions of local people, and which give weight to the voice and views of local communities
- To increase awareness, understanding and enjoyment of the natural and historic environment
- To protect, enhance and where appropriate restore landscape character, local distinctiveness and scenic value
- To protect and where appropriate enhance the historic environment
- To ensure that Scotland's cultural heritage remains one of the main motivators for visits to Scotland.
- To halt the loss of biodiversity and continue to reverse previous losses through targeted action for species and habitats
- To protect and enhance species, habitats and ecosystems
- To promote and encourage opportunities for people of all abilities to enjoy access to wildlife and the countryside

# 2.2 Environmental baseline

In order to establish the environmental effects of the draft Management Plan it is necessary to understand the environmental baseline of the area that is likely to be affected. Schedule 3 of the Act lists the environmental parameters that should be considered in SEA. To focus the SEA, we have gathered baseline information on the environmental issues that are likely to be affected by the plan. We have not gathered information on the environmental parameters that we have scoped out of the assessment.

We have not defined a boundary to the study area; however, we have included baseline information on the environmental features within the WHS and its environs. We have not provided baseline information on environmental features that will not be affected by the plan e.g., Special Area of Conservation in other parts of Orkney.

**Table 2** sets out the key baseline information for each environmental topic. A fuller description of the environmental baseline, a list of data sources and maps of the WHS and Buffer Zone is provided in **Appendix C**.

**Table 2: Key baseline information** 

able 2. Ney baseline information					
Environmental	Baseline Data	Sources			
Topic					
Climatic	CO <sub>2</sub> Emissions	SNIFFER			
Factors	_				
	Carbon Footprint	UKCIP			
	SNIFFER 2014 Online Handbook of Climate Trends across Scotland	Scotland's Environment Web			
	United Kingdom Climate Impacts Programme (UKCIP) Climate Modelling	Climate Vulnerability Impact Assessment for HONO WHS			
	Climate Vulnerability Assessment for HONO WHS June 2019				
Population	Access to historic environment	Historic Environment Scotland			
and Human Health	sites, records and collections and access to natural heritage	NatureScot			
Пеанн	access to flatural flefftage	NatureScot			
	Tourism revenue and visitor	RSPB			
	numbers	Visit Costland			
	Health and Place data	<u>Visit Scotland</u>			
	Treattrand Fideo data	NHS Scotland			
	Socio-economic data				
		Scottish Government			
		Scotland's Environment Web			
Landscape	National Scenic Areas	NatureScot			
(including					
seascapes and	Landscape character	NatureScot Orkney Landscape			
urban and suburban	Historic land use	Character Assessment 1998			
landscapes)	Historic land use	Scotland's Environment Web			
.s.r.s.capoo,	Sites of Local Landscape	STATE OF THE STATE			
	Character (Special Landscape	Historic Land Use Assessment			
	Areas and other areas of	Orling and Local Development Plan			
	landscape value identified on Local Development Plan (LDP)	Orkney Local Development Plan			
	proposals maps)				
Cultural	World Heritage Sites	Heart of Neolithic Orkney World Heritage			
Heritage		Plan (2014-2019) and associated			
	Designated Sites (listed	research reports			
	buildings, scheduled monuments,				

Environmental Topic	Baseline Data	Sources
Τορισ		
	gardens and designed landscapes, historic battlefields)	Historic Environment Scotland GIS Data
	Conservation Areas	Scotland's Historic Environment Audit 2016
	Regionally/locally important	Scotland's Environment Web
	archaeological sites and unscheduled archaeology	Orkney Local Development Plan
		Canmore (National Record of the Historic Environment)
Biodiversity, Flora and	Statutory Designated Sites (including SACs, SPAs, Ramsar	NatureScot
Fauna	Sites, SSSIs)	Joint Nature Conservation Committee (JNCC)
	European Protected Species	Scotland's Environment Web
	Local Biodiversity Action Plan (LBAP)	Orkney Local Biodiversity Action Plan
	Local designations – LNR, Sites of	Orkney Local Development Plan
	Local Nature Conservation Importance etc	
	RSPB reserves	

# 2.3 Environmental problems

A review of the baseline information shown in **Table 2** helped identify environmental problems relevant to the preparation of the Management Plan. This includes:

- **A.** The impacts of climate change on the historic environment and the role of the historic environment in contributing to adaptation and mitigation:
  - A workshop was held in April 2019 in Orkney, to determine the Climate Vulnerability Index (CVI) for HONO. This is a new methodology developed to assess climate change impacts on all types of WH properties: natural, cultural or mixed. It is based on a risk assessment approach but differs from other WH assessments by evaluating both the Outstanding Universal Value (OUV) Vulnerability and the Community Vulnerability (the latter being based on the economic, social and cultural dependencies related to the property and the adaptive capacity to cope with climate change). It has been developed to rapidly assess climate change impacts on WH properties and their OUV. The findings of the workshop identified three key climate change drivers: precipitation change, sea level change and changes in storm intensity and frequency.
  - Climate change impacts are likely to interact with a wide range of compounding issues including growing visitor numbers, infrastructure developments and agricultural practices, all of which impact on Orkney, its cultural heritage and its cultural resources.
  - Skara Brae is located on Skaill Bay, and the surviving extent of the site is vulnerable to coastal erosion. One of the specific actions of previous Management Plans is to

monitor, assess and address coastal erosion at Skara Brae. An annual monitoring regime continues to monitor and review coastal erosion around Skara Brae. This issue remains a threat to the long-term survival of the site.

- **B.** The pressures of increased numbers of visitors requires careful management to ensure the site is protected from footfall-linked soil erosion and to ensure local biodiversity interests are protected, while maintaining the visitor experience. Issues relating to physical access include:
  - Car parking provision and pedestrian routes between car parks or drop-off points, visitor centres and the monuments have health and safety risks which have been identified and are being mitigated where possible.
  - Planning for varying numbers of visitors with waves of coaches and projected future changes in both numbers and visitation patterns, including increasing rise in cruise ship numbers.
  - The visitor centre at Skara Brae was not designed for the numbers of visitors now being served at peak times.
  - Given rising visitor numbers, careful management is required to ensure that the WHS is conserved while at the same time maintaining local biodiversity interests, e.g., at Ring of Brodgar which is surrounded by the RSPB Brodgar Reserve.
  - Facilitating access in terms of public transport provisions and pedestrian routes between the four physically separate sites comprising the WHS.
- **C.** Understanding of the value of the historic environment to communities and the placemaking agenda, including:
  - Interpretation of the sites, public understanding of research etc.
  - The WHS sits within an archaeological landscape and in order to improve the
    public's understanding and enjoyment of it, improving opportunities and better
    access to it for exploration of tangible and intangible links with other related
    archaeological sites and the landscape as a whole is desirable.
  - The highly sensitive heritage, landscape and natural environment requires careful
    consideration in proposals for any potential developments and improvements to
    facilities at visitor centres, and at the sites themselves.

We have also identified environmental issues for other environmental parameters through a review of Environmental Reports prepared for Orkney wide plans e.g., Orkney LDP 2017-2022. Issues identified include:

- Loss of natural habitats through loss and fragmentation of habitat and protected species from increased development
- Renewable's development, a growing economic sector in Orkney, and contributing significantly to national climate change and carbon reduction targets, has potential to impact upon other environmental receptors e.g., cultural heritage

However, most of the above issues identified for other Orkney wide plans e.g., Orkney LDP 2017-2022 are unlikely to be affected by the Plan.

#### 2.4 Evolution of the Environment without the Management Plan

If the Management Plan were not reviewed then the current Management Plan (2014-2019) would remain in effect. This may result in a lack of coordinated effort in the management of the WHS, with many aims and objectives becoming out of date. This is unlikely to have significant effects on the environmental parameters identified in schedule 3 other than human health and population.

#### **Question 1**

Do you have any comments on the baseline information, or the environmental problems/issues?

# 3 Assessment approach and methods

# 3.1 Scoping the environmental topics to be included in the assessment

A key part of the SEA process is scoping, where the environmental parameters (from schedule 3 of the Act) that are likely to be significantly affected by the Plan are identified. This can lead to some environmental topics being "scoped out" of the assessment and helps to focus the SEA on the key environmental issues. A scoping report was prepared in December 2019 which set out the proposed scope and level of detail of the assessment and comments were sought from NatureScot and SEPA.

The scoping report included an initial assessment to identify the environmental parameters that were likely to be affected by the draft management plan. Both NatureScot and SEPA provided comments on the scope of the assessment, and we have revised **Table 3** from the scoping report to take these into account. **Appendix A** describes these comments in more details.

**Table 3** sets out the scope of the assessment with reference to the environmental topics included in Schedule 3 of the Act. Justification is provided for those environmental topics that are scoped out of the assessment.

Table 3: Scoping in/out of environmental topics

Environmental parameter	Scoped in / out	Potential issues arising from the draft Management Plan and justification for scoping in/out
Climatic Factors	In	Contributing to addressing impacts on Climate Change from emissions of greenhouse gases Although the WHS covers a geographically small area, the WHS Management Plan will include aims that will seek to play an active role in addressing the causes of climate change.
		This may include the Plan considering ways to encourage sustainable approaches in its objectives to address the impacts of rapid growth of tourism to Orkney which can lead to rises in emissions of greenhouse gases from methods of travel e.g., cruise ships, bus tours.
		Risks to HONO WHS from climatic factors Findings from the Climate Risk Assessment for HONO WHS June 2019, using the Climate Vulnerability Index (CVI) show that the HONO WHS is at significant risk from three key climate drivers:  • Sea level change  • Precipitation change  • Changes in storm intensity and frequency
		Increases in storm intensity and frequency and sea level rise lead to increases in coastal erosion and risk of single extreme storm events; changes to precipitation increases risk of torrential rain and flooding and can lead to changes

Environmental parameter	Scoped in / out	Potential issues arising from the draft Management Plan and justification for scoping in/out
		to wetting and drying cycles, changes to the water table and changes to flora and fauna.
		The growth of renewable energy also has the potential to impact on the setting of the monuments.
Population and Human Health	In	The historic environment makes a key contribution to community, place making, housing, amenities and recreation. Although the local population of the WHS is relatively small, we consider that there are likely to be effects on population and human health as a result of some the Plan's objectives.
Landscape	In	The limited geographical extent and scope of the Plan suggests that it is unlikely to have significant adverse effects on landscape, however the WHS is an integral component of the landscape so from a precautionary perspective we have scoped landscape into the assessment.  Based on comments from NatureScot, due consideration
		will be given to the Special Qualities of the Hoy and West Mainland National Scenic Area (NSA).
Cultural Heritage	In	This is the key issue to be considered by the Plan and we consider that significant effects on cultural heritage are likely and consequently we propose to scope cultural heritage into the assessment.
Biodiversity, Flora, Fauna	In	The sensitive location of the WHS means that some of the objectives to be included in the Plan may lead to adverse effects on biodiversity, flora and fauna.
		Increase pressures associated with increasing visitor numbers to the site may also lead to adverse effects on biodiversity, flora and fauna.
		After consultation, due consideration will be given to potential impacts on the Hoy and West Mainland National Scenic Area (NSA), Stromness Heaths and Coast SSSI and otters.
Soil	Out	As a precautionary measure, we initially scoped soil into the assessment. This was because although the Plan is unlikely to propose any archaeological investigations, watching briefs associated with infrastructure works could lead to impacts on soil. Increasing visitor numbers, combined with the changing weather patterns associated with climate change - such as increased storm intensity and changes in precipitation patterns - could also lead to increased vulnerability of soil to erosion which could have wide-ranging impacts from integrity of archaeological structures to biodiversity and water quality.  After consultation, we have decided to scope out soil from
Water	Out	the assessment as effects are considered to be localised rather than significant.  As there may be notential for effects on water quality in
vvaler	Out	As there may be potential for effects on water quality, in particular at the Lochs of Stenness (saline) and Harray

Environmental parameter	Scoped in / out	Potential issues arising from the draft Management Plan and justification for scoping in/out
		(freshwater) - e.g., from works related to infrastructure such as foot paths that may be along these loch sides — alongside effects on coastal waters at Skaill Bay - e.g., from coastal defences — water was initially scoped into the assessment. After consultation, we have decided to scope out water from the assessment as effects are considered to be localised rather than significant. Effects on coastal and fluvial flooding from any new developments e.g., car parks, visitor facilities, should not be located in areas at risk of flooding and/or should not exacerbate flooding elsewhere.  We have not identified any interactions between the draft Management Plan and groundwater quality. None of the objectives will involve water abstraction or activities that may alter the groundwater table or discharge contaminants to it.
Air	Out	We have opted to scope out Local Air Quality as this is generally not considered to be an issue in Orkney; local air quality is very good as there are few industrial processes and road traffic volumes are low, and we have not identified any interactions between the Plan and local air quality.
Material Assets	Out	We do not consider that the Plan will have a significant effect on material assets (waste, transport infrastructure, minerals, energy etc.). HES manages the WHS as a visitor attraction and the staffed sites are members of the Green Tourism Business Scheme (GTBS). The GTBS assesses businesses against a set of criteria, covering a range of areas, including energy and water efficiency, waste management and biodiversity. The GTBS will pick up sitespecific issues for waste and energy management.

# 3.2 Scoping the parts of the draft Management Plan to be included in the assessment

As well as identifying the environmental topics that we considered were likely to be affected by the plan, the scoping report also described the proposed scope of the assessment in terms of the elements of the draft Management Plan that would be assessed. At that time, we considered that the environmental assessment would most likely be focussed on the vision, aims, issues and objectives. This approach has not changed with the exception that we recognised that identified issues crosscut different aims and are addressed by multiple objectives. **Table 4** identifies the parts of the draft Management Plan that have been assessed in the SEA.

Table 4: Sections of the draft management plan that have been assessed

Section of the draft management plan	Is this assessed?
Summary and Vision	Yes, this section provides a summary of the Management Plan which is not included however it describes the long-term vision which is scoped into the assessment. The assessment of the vision is described in section 4.1 and in <b>Appendix D</b> .
World Heritage and the Management Plan	No, this section outlines what World Heritage is and its context within Scotland and the UK. It also provides information on the protection of World Heritage, the purpose of the management plan

Section of the draft management plan	Is this assessed?
	and a summary of the consultation and review during the production of the plan.
The Heart of Neolithic Orkney	No, this sections provides a description of the World Heritage Site including its criteria and Outstanding Universal Value, attributes and wider values. It also outlines the extent and purpose of the Buffer Zone.
People and the Plan: Partners, Stakeholders and Community	No, this section outlines management plan partners alongside Orkney and wider afield stakeholders and communities related to the World Heritage Site. It also describes the partnership principles that should be considered at every level of decision making.
Challenges and Themes	No, this section provides an insight into the seven key issues facing the World Heritage Site.
Aims and Objectives	Yes, this includes the long-term aims, strategic objectives, action planning, and monitoring and reporting. The assessment of the aims and objectives is described in Section 4, and Annexes D, E and F. The strategic objectives have been sifted to focus the assessment on the objectives that are likely to have significant environmental effects.
Monitoring and Evaluation	No, this section outlines the periodic reporting process for the physical condition of the WHS. It also includes how, when and by who the implementation of the management and actions plans will be monitored.  Note: this section was added during development of the draft Plan.
Abbreviations and Acronyms	No
Appendices	No

# 3.3 Scoping the level of detail of the assessment

At the scoping stage we suggested that the environmental assessment would be undertaken at a level of detail that was appropriate to the draft Management Plan. For example, the detailed aspects of the plan (i.e., long term vision and aims and the strategic objectives) would be assessed in a greater level of detail than the overarching vision. This is the approach that we have taken.

# 3.4 How was the draft Management Plan assessed?

As noted above, the following elements of the draft Management Plan were identified for inclusion in the assessment: vision, long-term aims, and strategic objectives.

At the scoping stage we developed an assessment framework to provide a consistent way of assessing each element of the Plan. In line with common practice, SEA objectives were developed for each of the environmental parameters scoped into the assessment. These are supported by more detailed assessment criteria which will be applied to the more detailed components of the Plan (i.e., objectives). The SEA objectives and criteria are set out in **Table 5**.

Table 5: SEA objectives and criteria

Environmental	SEA Objective	How will the Plan affect
Topic		
Climatic Factors	Reduce the causes of climate change  Contribute to effective adaptation to the predicted effects of climate change	CO2 and greenhouse gas emissions  Effective adaptation to the effects of climate change
Population and Human Health	effects of climate change  Promote celebration, understanding, enjoyment and access to the natural and cultural heritage  Support healthy living and working environments  To reduce inequalities	Access to the historic environment  Understanding of the value of the historic environment  Community involvement in decisions affecting their places and spaces.  The condition of the historic environment
Landscape (including urban and suburban landscapes)	To safeguard and enhance the distinct identity, the diverse character and the special qualities of Scotland's landscapes as a whole.	as a place to work and live.  The safeguarding and enhancement of natural characteristics and qualities of Scotland's landscapes, especially the Hoy and West Mainland National Scenic Area (NSA).  A unified approach to managing change in landscapes
Cultural Heritage	Safeguard and where appropriate enhance the historic environment	The safeguarding of designated tangible features of the historic environment  The safeguarding of undesignated / unknown tangible features of the historic environment  The safeguarding of intangible features of the historic environment  Elements of the historic environment which have been identified as at risk  Address the consequences of climate change for the historic environment
Biodiversity, Flora, Fauna	Maintain, protect and enhance biodiversity (species, habitats, ecosystems)	Loch of Stenness SAC  Lochs of Harray and Stenness SSSI  Bay of Skaill SSSI  Stromness Heaths and Coast SSSI  Protected species, especially otters  Wider biodiversity, including the RSPB Brodgar Reserve

The assessment of impact was undertaken using a simple scoring system:

+	Positive effects
0	Neutral effects
-	Negative effects
+/-	Positive and/or negative effects
?	Uncertain effects

This framework was used to assess the draft Plan's vision and long-term aims alongside the detailed assessment of draft objectives. The results of the assessment are described in **Section 4**.

At the scoping stage we explained that we would undertake a two-stage approach to the assessment of the draft objectives, as we considered that several of the objectives may not have any direct or indirect environmental effects, and we wanted to focus the assessment on the objectives that were likely to have significant environmental effects. First, we carried out a screening exercise on the objectives included in the draft Management Plan to sift the objectives into those that are unlikely to have significant environmental effects and those that are likely to have significant environmental effects. We did this by reviewing each of the draft objectives against the environmental topics scoped into the assessment, with reference to the environmental baseline and problems, and judging if the objectives were likely to have significant environmental implications.

**Appendix E** documents this stage of the assessment, and each of the 20 objectives included in the draft plan were reviewed. 13 of the 20 objectives were not considered likely to have significant environmental effects and were not assessed further. These objectives were largely related to awareness raising, partnership working, governance, stakeholder engagement, etc. and have no direct or indirect physical impact. Several of these objectives will have positive effects on environmental parameters, in particular on cultural heritage, however it was not considered necessary to assess these further than simply identifying the positive relationship.

Seven objectives were assessed in more detail as part of the second stage of the assessment. The assessment framework in **Table 5** was used to assess these objectives and the results are described in **Section 4**.

#### 3.5 Alternatives

At the scoping stage we noted that we would assess the environmental effects of the alternatives that were considered during the plan preparation process. For example, alternative wording for the vision and aims, or more detailed alternatives for the objectives that are taken forward into the finalised management plan.

The draft Management Plan has been prepared in consultation with the Partners and the vision, aims, and objectives have been refined through this process. The SEA team were advised of all revisions made to each element of the plan throughout its preparation. These were minor, iterative changes to phrasing and structure. The plan making process did not identify any significantly different or additional reasonable alternatives to the vision, aims and objectives presented in the draft Plan.

We have not assessed strategic alternatives i.e., the 'no plan' option or strategic options for the overall direction of the Plan, as these are largely prescribed by the UNESCO guidance and are not considered to be reasonable alternatives.

#### Question 2

Do you have any comments on the approach taken for the environmental assessment?

# 4 Assessment of the draft Management Plan

#### 4.1 Vision

The vision for the WHS is intended to provide a strategic view between 2025 and 2050. The draft vision is:

The Heart of Neolithic Orkney and its exceptional testimony to the cultural achievements of the Neolithic peoples of northern Europe will be protected and conserved for present and future generations. The World Heritage Site will bring social, cultural, environmental and economic benefits to the wider community. It will offer an exceptional responsible visitor experience, and inspire and catalyse research and learning, widening engagement through participation and discovery. It will be managed sustainably in ways that contribute to reducing the causes of climate change and address its threat to the Site. It will contribute to a thriving, sustainable and equitable future for Orkney residents, visitors and communities of interest worldwide.

The draft vision was assessed against the SEA objectives and the assessment table is shown in **Appendix D**. We found that the vision has a generally positive relationship with climatic factors, population, human health, and cultural heritage, and will have no effect on other environmental topics. No recommendations were made to improve the vision.

# 4.2 Long-Term Aims

The long term aims flow from the vision and in turn inform the priorities for the medium term (10 years). The long terms aims for the WHS 2025-2035 are set out in section 5 of the Management Plan.

The long-term aims were assessed against the SEA objectives and the assessment tables are shown in **Appendix D**. We found that the aims had generally positive or neutral relationships for all environmental topics. No negative issues were identified though there was some uncertain effects identified for landscape. We made the following recommendations as a result of the assessment:

- Consider how people can have an increased awareness and understanding of the
  effects of climate change on the WHS to allow them to have a deeper understanding of
  the Site's values.
- Consider the way that the World Heritage status could benefit the landscape which the WHS sits in, especially the Hoy and West Mainland National Scenic Area.
- Consider clearer recognition of landscape interests and their role in interpreting and presenting the WHS should also be included within this aim.
- Consider whether the presentation and interpretation of the WHS could be affected by or used to better understand, climate change.
- Look into possibility of including a research objective specifically around sustainable tourism effects on climate change

These recommendations will be considered by HES in finalising the management plan and the SEA Post Adoption Statement will explain whether or not they have been taken forward into the management plan.

#### 4.3 Objectives

As explained in section 3.4, the 16 objectives included in the draft plan were screened to focus the assessment on those that were likely to have significant environmental effects. **Appendix E** documents this process.

Seven objectives were assessed in more detail using the SEA objectives and the SEA criteria and **Appendix F** sets out the results of this assessment. We have summarised the key impacts for each of the environmental topics scoped into the assessment in **Table 6**.

As explained, the assessment has been undertaken at a level of detail that is appropriate to the information included in the draft Management Plan. A number of the objectives have been developed to ensure that particular issues are resolved during the lifetime of the plan, and detailed proposals will come forward as the plan is implemented through an evolving action plan. We have tried to identify the generic environmental impacts associated with these objectives and expect that more detailed environmental assessment will be incorporated into the development of specific actions.

Table 6: Summary of the results of the assessment of the draft objectives

Environmental topic	Key impacts
Climatic Factors	Some of the objectives will have no effect on climatic factors as the SEA objective are unlikely to be affected.
	A programme of monitoring for the WHS and its Buffer Zone could include monitoring the effects of climate change. This can act as an important baseline for future decision making and long-term management but could have negative effects on access.
	Prioritising the adaptation to and mitigating the effects of climate change will have a positive effect on climatic factors.
	It is uncertain if increasing the digital presence of the WHS will have a positive effect on climatic factors by reducing the number of visitors to the site, resulting in a reduction in CO <sub>2</sub> and greenhouse gas emissions.
	Measures to ensure that tourism contributes to climate mitigation will have a positive effect by reducing the emissions caused by the rapid growth in visitor numbers and providing more sustainable transport options.
Population and Human Health	A number of the objectives were found to have positive effects on population and human health in terms of providing greater access to the WHS, physically, digitally and intellectually.
	There could however be instances where monitoring and management solutions, such as closure of areas of the WHS to manage erosion impacts, may have negative effects on access but these are expected to be small scale and short-term actions.
	Management will improve the condition of the historic environment as a place to live and work, improving opportunities and understanding of the WHS and the archaeological landscape it sits in.
	Ensuring tourism is responsible and beneficial to Orkney communities will have a positive effect by supporting healthy living and working environments.
Landscape	Many of the objectives were found to have positive effects on landscape in terms of protecting the special qualities of the archaeological landscape the WHS sits in.
	If required, any new physical measures, such as visitor infrastructure or new interpretive services, may adversely affect landscape character but this is not expected unless there is large scale developments.

Environmental topic	Key impacts
Cultural Heritage	All of the objectives were found to have positive effects on cultural heritage in terms by contributing to the safeguarding and appropriate enhancement of the historic environment.
	A programme of monitoring may be less effective in the Buffer Zone resulting in negative effects to cultural heritage. The zone covers a large area containing a range of designated and undesignated heritage assets. There are many different landowners and managers who have no obligations to monitor or manage heritage asset on their land.
	There may be conflicts between the management of natural heritage and cultural heritage.
	If required, any new physical measures, such as visitor infrastructure or new interpretive services, may disturb archaeological remains and adversely affect the setting of the WHS.
	Using digital interpretation may result in localised positive impacts by reducing or replacing access to fragile areas of the WHS.
Biodiversity, Flora and Fauna	There may be conflicts between the management of natural heritage and cultural heritage.
	Positive effects were identified for a number of objectives that incorporate natural heritage issues including the monitoring, management and interpretation of the WHS and Buffer Zone.
	Monitoring of climate change effects could result in management recommendations that could have adverse effects on biodiversity, in particular affecting natural processes and affecting coastal and landwards habitats and the species that they support.
	If required, any new physical measures, such as visitor infrastructure or new interpretive services, could adversely affect the areas designated for nature conservation and wider biodiversity.

#### **Question 3**

Do you agree with the results of the environmental assessment? Have we identified the key issues?

#### 4.4 Cumulative effects

We considered whether the Plan is likely to generate cumulative effects on any of the environmental topics scoped into the assessment or cross cutting effects as a result of interrelationships between topics areas. It has been concluded that this will not result in any significant additional effects.

# 4.5 Mitigation

In strategic environmental assessments, mitigation can be achieved in a number of different ways. Mitigation can involve:

- 1. Making changes to the plan itself e.g., amending aims or objectives
- 2. Adding environmental aims or objectives to the plan to strengthen the inclusion of environmental issues
- 3. Proposing more detailed measures that should be considered as the plan is implemented.

In this SEA, the third approach has been used by developing a number of more detailed mitigation measures that aim to ensure that the findings of this environmental assessment are followed through into the design and development of specific actions. As noted in section 3.6, we see this as one of the key purposes of undertaking an SEA at this level of plan making.

The proposed mitigation measures are included in **Table 7** as a schedule of commitments. The measures proposed will be finalised following comments made during the public consultation and a final list be included in the SEA Post Adoption Statement. It is important to note that a number of the actions and related projects that may flow from the Management Plan are not the sole responsibility of HES and will be taken forward by the Partners, for example through the Orkney Gateway programme.

**Table 7: Schedule of commitments** 

Commitment	Relevant environmental topic
Any proposals to alter the WHS Buffer Zone boundary will be developed in consultation with Partners and a public consultation exercise undertaken.	Population, human health, landscape, cultural heritage, biodiversity, flora and fauna
Environmental assessment will be integrated into the development of options for both short- and long-term large scale physical measures to identify in detail the potential environmental effects on environmental parameters.	Climatic factors, landscape, cultural heritage, biodiversity, flora and fauna
Steps taken to address carrying capacity issues should be sustainable in the long term and include natural heritage interests.	Population, human health, landscape, cultural heritage, biodiversity, flora and fauna
The sustainability checklist should be applied to actions from all objectives within the detailed assessment, to ensure that a holistic environmental approach is taken in their delivery.	Climatic factors, population, human health, landscape, cultural heritage, biodiversity, flora and fauna
Ensure careful consideration in proposals for any potential development or improvements to facilities at sites which may impact the sensitive heritage, landscape and natural environment.	Landscape, cultural heritage, biodiversity, flora and fauna
Suggest actions to encourage landowners or managers to contribute to the monitoring and management of the WHS Buffer Zone	Cultural heritage
Integrate environmental assessment and archaeological investigation of any new interpretive, digital or management services or infrastructure.	Population, human health, landscape, cultural heritage, biodiversity, flora and fauna.
Any new physical measures for digital, interpretive or management infrastructure should be sensitively located and designed to avoid effecting environmental parameters.	Landscape, cultural heritage, biodiversity, flora and fauna.
Active operational monitoring of the active travel and path networks is required to allow areas to be temporarily closed off if sensitive habitats shift in the future (bird nesting, seasonal growth etc).	Biodiversity, flora and fauna
Wider environmental issues will be included in interpretation plans.	Climatic factors, population, human health, landscape, cultural heritage, biodiversity, flora and fauna

The development and use of a sustainability checklist has been recommended in relation to all the objectives within the Plan which underwent detailed assessment. This is to ensure that the potential for achieving positive effects, and mitigating negative effects, is embedded within the process for delivering the Plan objectives. The sustainability checklist will be developed from the

environmental objectives and criteria which have been used in the assessment and will be published as part of the Post Adoption Statement.

# 4.6 Monitoring

Although no significant environmental effects have been predicted, it will still be important to understand how the Management Plan is affecting the environment over the next ten years of its implementation. This will help to identify any effects arising which were not predicted through the assessment and allow appropriate mitigation to be sought.

Monitoring of the environmental effects will be incorporated into overall monitoring strategy for the Plan. The HONO Steering Group will produce an annual monitoring report on the progress of the Management Plan which will focus on the Action Plan, key projects and report on the delivery of the finalised SEA commitments. The Sustainability Checklist will play an important role in monitoring the identified effects.

A mid-point evaluation of the Management Plan planned for 2030 will involve reviewing if the strategic objectives are still valid and allow for changes where they are needed. If there are any changes in objectives, a screening exercise will be undertaken to review if they will have significant environmental effects and a Screening Report will be submitted for views from Consultation Authorities before making our determination.

#### **Question 4**

Do you have any comments on the environmental mitigation measures, including the schedule of commitments?

#### **Question 5**

Do you have any comments on the proposed additional environmental monitoring approaches?

# 5 Next steps

The public consultation period on the draft Management Plan and SEA Environmental Report ends on xx xxx xxxx. A final version of the Management Plan will be prepared following the consultation period to take into account comments made. All changes will be screened to consider if they raise significant environmental issues that have not already been considered in the environmental assessment.

We are required by the SEA Act to demonstrate how we have taken the Environmental Report (and all the comments expressed on it) into account in the adopted Management Plan. This will be explained in the SEA Post Adoption Statement which will be published along with the final version of the Management Plan. The SEA Post Adoption Statement will also include a final version of the schedule of commitments and monitoring approaches to take into accounts comments made on this report.

# **Appendix A: Scoping Recommendations**

Table A below summarises the comments made by NatureScot and SEPA in response to the scoping report and shows how these comments have been taken into account in the environmental assessment.

**Table A – Summary of scoping recommendations** 

Section	Comments	HES Action/Comments
NatureScot		
Table 2: Scoping in/out of environmental topics	We note that you have scoped the topic of 'air' out of the assessment process but that you will be considering the effects of increased visitor numbers and associated traffic emissions within the 'climatic factors' topic. With one of the outcomes of the plan to potentially build a gateway centre within the Heart of Neolithic Orkney World Heritage Site (WHS) area, we welcome this consideration.	Noted and welcomed.
	We note the topic of 'landscape' has been scoped into the assessment and would agree with this determination. A large proportion of the WHS is located within the Hoy and West Mainland National Scenic Area (NSA). Therefore, due consideration should be given to the Special Qualities of the NSA. We would be happy to provide advice on specific aspects of the work where there may be an overlap between the designations.	Noted and welcomed.
Table 3: Baseline data and sources	Information in relation to designated sites and European Protected Species (EPS) can be found on our website at <a href="https://sitelink.nature.scot/home">https://sitelink.nature.scot/home</a> and <a d="" href="https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-species/legal-framework/habitats-directive-and-habitats-regulations/european&lt;/a&gt;. Information in relation to Local Nature Conservation Sites and Local Nature Reserves can be found within the Related Sites section at &lt;a href=" https:="" natural-environment.htm"="" service-directory="" www.orkney.gov.uk="">https://www.orkney.gov.uk/Service-Directory/D/natural-environment.htm</a>	Noted and welcomed

Section	Comments	HES Action/Comments
Section 4: Proposed Assessment Framework	We welcome and support the use of the assessment to identify any opportunities to enhance the Plan to provide more positive benefits for the environment.	Noted and welcomed
Table 4: SEA Objectives and assessment criteria	Within the 'biodiversity, flora and fauna' row of the table it would be worth noting that in addition to the Bay of Skaill Site of Special Scientific Interest (SSSI). Any proposed coastal works at Skara Brae, which may occur as a result of the Plan, could also have an impact on Stromness Heaths and Coast SSSI.	
	We note that you intend to assess how the plan will affect protected species. Due to the proximity of the WHS to the Lochs of Harray and Stenness and Skaill Bay, consideration of otter in particular, is welcomed.	Noted. The assessment will take into consideration how the plan may affect otter.
Habitats Regulation Appraisal (HRA)	As the Plan has the potential to impact at least one European site, a Habitat Regulations Appraisal will be required. Current Scottish Government SEA guidance recommends that the HRA is undertaken alongside the Environmental Assessment and although the guidance does not recommend full integration of SEA and HRA, there may be efficiencies and value gained from linking the two processes. I/ We would be happy to provide additional advice on the HRA if required.	
SEPA		
General	We welcome the assessment will consider if "there are any opportunities to enhance the Plan to provide more positive effects for the environment."	Noted and welcomed
Scoping In/Out of environmental topics	We note that as a precautionary measure soil has been scoped in and, as there may be potential effects on water quality, water has also been scoped in. Based on the information provided we consider there could be localised effects on soil and water but not necessarily significant ones. As such we would have no concerns if these topics were scoped out and the report focused on the other scoped in environmental topics. However Historic Environment Scotland know the plan best and are best placed to decide on this.	Noted and welcome advice and we will scope out soil and water from the assessment. However, impacts from physical works to mitigate soil erosion at Ring of Brodgar and Stones of Stenness have been considered separately in the HRA alongside the Environmental Assessment that will accompany.

# Appendix B: Review of other relevant plans, programmes, strategies and legislation

Table B lists the local and national (Scotland and UK wide) plans, programmes, strategies, legislation and environmental objectives considered in this Environmental Report.

SEA Topic	Plan, Programme, Policy or Strategy	Summary of Environmental Objectives
Climatic Factors	Orkney	
	Carbon Management Programme 2016- 2026	The Council has commitments to reduce the Islands' total carbon dioxide emissions by 42% from the 2004-2015 baseline by 2026. The Carbon Management Programme sets out the Council's aims to move towards a low carbon operation, through careful planning of all their energy consuming activities and by assessing future plans in terms of their Carbon Impact in order to reduce their total Carbon Dioxide emissions.
	A Sustainable Energy Strategy for Orkney, (2017-2025)	The strategy provides a framework to ensure a secure, sustainable low carbon island economy driven uniquely by innovation and collaboration, enabling the community to achieve ambitious carbon reduction targets, address fuel poverty and provide energy systems solutions to the world
	National	
	<ul> <li>UK Climate Change Act 2008</li> <li>Climate Change (Scotland) Act 2009</li> <li>Climate Change Adaptation Framework (2009)</li> </ul>	Policies focus on the need to cut greenhouse gas emissions. As of June 2019, national targets are for a 100% reduction by 2050 making a contribution to climate change abatement targets set at the UK, EU and international levels.
	<ul> <li>UK Low Carbon Transition Plan (2009)</li> <li>Conserve and Save: Energy Efficiency Action Plan (2013)</li> <li>Fuel Poverty Strategy (draft, 2018)</li> </ul>	In May 2019, amendments to the Scottish Climate Change Bill have been lodged to set a legally binding target of net-zero greenhouse gas emissions by 2045 at the latest with Scotland becoming carbon neutral by 2040.
	<ul> <li>Scotland's Energy Strategy (2017)</li> <li>Climate Change Plan: third report on proposals and policies 2018-2032 (RPP3)</li> <li>HES Climate Action Plan (2020-2025)</li> </ul>	Energy policy highlights the importance of energy efficiency, and the need to achieve a shift from fossil fuels to renewable sources of energy. There is also a need for adequate, planned adaptation to future climates in order to increase the resilience of communities, and natural and economic systems.

SEA Topic	Plan, Programme, Policy or Strategy	Summary of Environmental Objectives
		The HES Climate Action Plan details our climate action ambitions for the historic environment for 2020–2025
Population and	Orkney	
Human Health	Orkney Outdoor Access Strategy (2017)	The Orkney Outdoor Access Strategy was first published in 2006 and was reviewed and updated in 2016. The strategy provides a framework to guide the development and management of outdoor access throughout the islands.
	The Orkney Core Paths Plan (2018)	The Plan identifies a series of paths to promote outdoor access across Orkney set out a new right of responsible access in Scotland. Core paths are to be identified in each local authority area, promoting more widespread and functional walking, cycling and riding and thereby supporting improved levels of physical activity
	Orkney Community Plan 2023-30, incorporating the Local Outcomes Improvement Plan (LOIP)	The Plan will allow for providers of public services to work together with the community to deliver improved, more joined-up public services for individuals, families, and communities, and especially to combat inequality and prevent disadvantage.
	National	
	Improving Health in Scotland – the Challenge (2003)	Policy outlines the need to seek to improve health and quality of life.
	<ul> <li>Community Empowerment Act (Scotland) 2015</li> <li>Creating Places – A policy statement</li> </ul>	There is now a growing recognition of an additional need to shape places which are nurturing of positive health, wellbeing and resilience.
	on architecture and place for Scotland  • Homes fit for the 21st century – the Scottish Government's Strategy for Housing 2011-2020	Community Planning Partnerships, which involve a number of public bodies, including HES, have a duty to make plans for local areas which meet the needs and ambitions of local people. Community planning priorities stress the important role played by communities in shaping and making local decisions.
	<ul> <li>Good Places Better Health (2008)</li> <li>Equally Well: Implementation Plan (2008) and 2010 Review Recommendations</li> </ul>	
	The Islands (Scotland) Act (2018)	The Islands (Scotland) Act is legislation with provision to 'island-proof' decision-making across the public sector that will ensure the interests of islanders are reflected in future legislation and policy from the very outset.

SEA Topic	Plan, Programme, Policy or Strategy	Summary of Environmental Objectives
	The Land Reform (Scotland) Act 2003	Land reform legislation establishes rights of responsible access to most land and inland water for informal recreation and includes requirement for local authorities to draw up a plan for a system of paths (core paths) to give public reasonable access throughout their area
Landscape	Orkney	
	Orkney Landscape Character Assessment, Land Use Consultants (1998)	The assessment provides a detailed assessment of the landscape character of Orkney; considers the likely pressures and opportunities for change in the landscape; assesses the sensitivity of the landscape to change; and includes guidelines indicating how landscape character may be conserved, enhanced or restructured as appropriate.
	The Heart of Neolithic Orkney World Heritage Site Setting Project Atkins. Ltd 2008	Commissioned in 2008 by Historic Scotland to provide an objective description of the setting of the Heart of Neolithic Orkney World Heritage Site and to provide recommendations on approaches to defining the future Buffer Zone and the nature of policies that may apply to that Buffer Zone. Supports the HONO Management Plan and the Orkney Local Development Plan
	National	
	<ul> <li>Council of Europe, European Landscape Convention (2000)</li> <li>NatureScot Natural Heritage Futures</li> <li>SNH (now NatureScot) National Scenic Areas Programme (2009)</li> </ul>	Landscape policies aim to not only safeguard protected areas, but to recognise and conserve wider landscapes. These may not be formally designated but make an important contribution to the quality of environment.  The Strategic Historic Environment Forum's vision is for the historic
	<ul> <li>Scotland's Landscape Charter</li> <li>Landscape and the Historic         Environment – A Common         Statement (Strategic Historic         Environment Forum)     </li> </ul>	dimension of landscape to be fully acknowledged and valued. It is at the core of a shared and unifying approach to managing change in our landscape in ways which maximise public benefit for present and future generations.
	<ul> <li>Scottish Natural Heritage's         <ul> <li>Landscape Policy Framework: Policy</li> <li>Statement No. 05/01</li> </ul> </li> <li>People, Place and Landscape: A</li> </ul>	Natural Heritage Futures policies aim to guide the sustainable management and use of Scotland's nature and landscapes up until 2025.
	position statement from NatureScot and Historic Environment Scotland (2019)	Our landscapes are changing and will continue to change. People, Place and Landscape sets out our approach, working towards a shared vision

SEA Topic	Plan, Programme, Policy or Strategy	Summary of Environmental Objectives
		where all of our landscapes are vibrant, resilient, inspiring and beneficial.
	Guidance on Local Landscape Designations SNH (2006)	Guidance that assists Local Authorities in reviewing their local landscape designations
Cultural Heritage	Orkney	
	Orkney Local Development Plan 2017	The Orkney LDP establishes the main principles of the policy to protect the WHS and its setting from inappropriate development.
	Supplementary Guidance: Historic Environment and Cultural Heritage (Orkney LDP 2017)	The SG provides a context for managing the impact of land use planning decisions on the Outstanding Universal Value of the Heart of Neolithic Orkney World Heritage Site. The scope of the SG includes issues associated with the component sites themselves and their wider setting.
	National	

SEA Topic	Plan, Programme, Policy or Strategy	Summary of Environmental Objectives
	<ul> <li>Historic Environment Scotland Act 2014</li> <li>Historic Environment Policy for Scotland (2019)</li> <li>Our Past, Our Future: The Strategy for Scotland's Historic Environment (2023)</li> <li>National Planning Framework 4 2023</li> <li>The Ancient Monuments and Archaeological Areas Act 1979;</li> <li>The Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997</li> <li>PAN 2/2011 Planning and Archaeology</li> <li>Historic Environment Scotland Corporate Plan 2019 onwards</li> <li>Managing Change in the Historic Environment Guidance Notes</li> </ul>	Historic environment policies aim to identify and protect historic buildings and sites from inappropriate development and damage. Policies extend beyond specific designated sites to reflect the value of undesignated/unknown sites, wider townscapes, the setting of monuments and historic buildings, and wider cultural landscapes.  The Historic Environment Policy for Scotland (HEPS) sets out principles and policies to direct decision-making which affects the historic environment.
Biodiversity, flora	Orkney	
and fauna	The Orkney Local Biodiversity Action Plan 2018–2022	The Local Biodiversity Action Plan (LBAP) is the third in a series of focused revisions based on the original Orkney LBAP 2002 identifies actions which can be taken locally, and which make a contribution to the conservation of those species and habitats identified as being "at risk" or "threatened" in the UK as a whole.
	National	

SEA Topic	Plan, Programme, Policy or Strategy	Summary of Environmental Objectives
	<ul> <li>The Birds Directive 2009/147/EC</li> <li>The Habitats Directive 1992/43/EEC</li> <li>Wildlife and Countryside Act 1981</li> <li>Conservation (Natural habitats &amp;c.)     Amendment (Scotland) Regulations     2007</li> <li>Nature Conservation (Scotland) Act     2007</li> <li>UK Post-2010 Biodiversity     Framework</li> <li>Biodiversity strategy to 2045:     tackling the nature emergency     (2022)</li> </ul>	Biodiversity policies from international to local levels aim to conserve habitats, species and ecosystems. Halting the decline of key species is important, and where possible remedial action and enhancement should be implemented in degraded areas. Policies also note the importance of an ecosystem approach – a holistic, landscape approach to biodiversity conservation that goes beyond the traditional emphasis on protecting individual sites.  Scottish Biodiversity Strategy sets out the Scottish Governments clear ambition for Scotland to be Nature Positive by 2030, and to have restored and regenerated biodiversity across the country by 2045.
	Scotland's Biodiversity – It's In Your Hands (2004) supplemented by the 2020 Challenge for Scotland's Biodiversity	The 2020 Challenge for Scotland's Biodiversity sets out the major steps needed to improve the state of nature in Scotland. The work needed to deliver this is, however, complex and challenging. The two documents together now constitute the Scottish Biodiversity Strategy.

# **Appendix C: Baseline Information**

#### Introduction

In order to establish the environmental effects of the draft Management Plan it is necessary to understand the environmental baseline of the area that is likely to be affected. Some of the baseline information is provided for the Orkney Islands as a whole, however where possible we have provided specific information for the study area, which is the World Heritage Site and the Buffer Zone, as shown in Figures C0–C4.

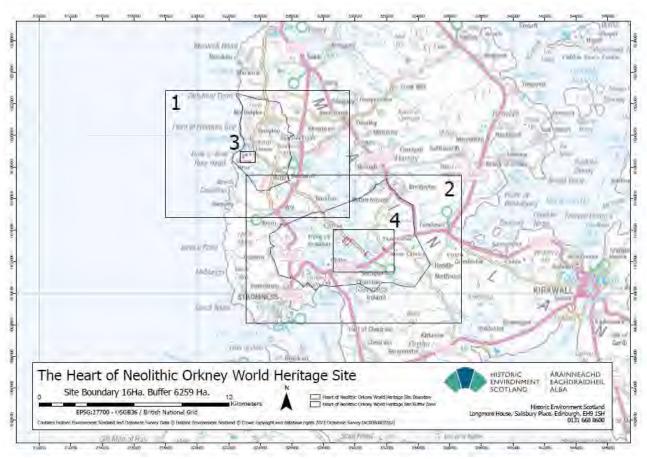


Figure C0: The Heart of Neolithic Orkney World Heritage Site – location of monuments and the two-part Buffer Zone.



Figure C1: Skara Brae location and surrounding Buffer Zone boundary.



Figure C2: The central West Mainland monument locations and surrounding Buffer Zone boundary.

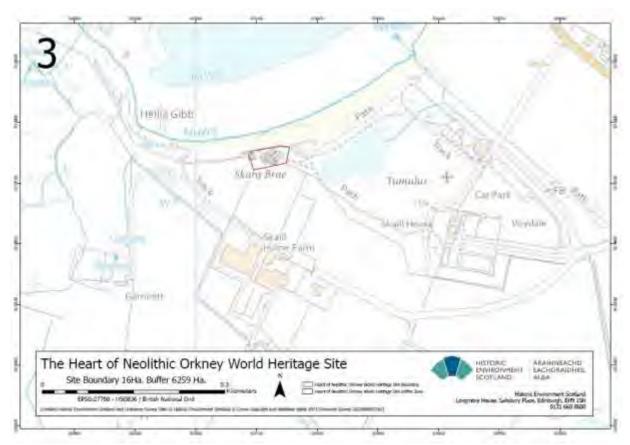


Figure C3: Skara Brae.



Figure C4: Ring of Brodgar, Stones of Stenness and the Watchstone, Maeshowe and the Barnhouse Stone.

A description of the environmental baseline is set out below. We have not provided detailed baseline information for the environmental parameters scoped out of the SEA – air, material assets, water, and soil. We have provided a list of data sources for each environmental factor.

#### 1. Climatic factors

Baseline Data	Sources
CO2 Emissions	SNIFFER
Carbon Footprint	www.seaguidance.org.uk
SNIFFER 2014 Online Handbook of Climate Trends across Scotland	UKCIP
United Kingdom Climate Impacts Programme (UKCIP) Climate Modelling	Climate Risk Assessment for HONO WHS Scotland's Environment Web
Climate Risk Assessment for HONO WHS June 2019	

#### 1.1 National Climatic Factors

Scotland's climate is already changing. The climate will continue to change in the future, and this will present a wide range of threats and opportunities to the environment, infrastructure, economy and people of Scotland.

Over the last 100 years our climate has become warmer, while altered precipitation patterns have led to drier summers, wetter winters, and more frequent heavy rainfall. Climate change is also causing changes in the growing, breeding and migration seasons, shifts in species abundance and diversity, higher river flows leading to flood risk, and sea level rise causing erosion.

Evidence from observed trends from Scotland's State of the Environment Report 2014 notes that on the whole, Scotland's environment is of good quality and there have been many significant improvements in recent years. However, the Report shows that some habitats and species are under threat, and poor air quality continues to affect some people in our towns and cities, increased flooding and droughts can damage our economy and wildlife and affect our health and wellbeing, and more intense farming practices and how we manage our towns are altering habitats and wildlife.

A State of the Environment Report: Climate (2014) also describes the changes in weather patterns experienced in Scotland over the last century and notes that observed recent climate trends over the period 1961-2011 show the mean annual temperature across Scotland has increased by 1.3°C

The State and Trend Assessment report undertaken by independent experts contained within the State of the Environment report 2014, show the current condition of the environment covered by each topic as well as the future trend for that environment. The spectrum diagrams in the report indicate that the current state of the historic environment is moderate, and the future trend is stable.

# 1.2 Orkney - wide Climactic Factors

The Environmental Report that accompanies the <u>Orkney Islands Council (OIC) Local Development Plan (LDP) (2017)</u> baseline indicates that locally, there are a number of factors that contribute to climate change in Orkney:

- Orkney's domestic, industry, commerce and transport emissions represents a significant source of CO<sup>2</sup> emissions, accounting for over 80% of all emissions annually.
- Private car use is an important form of transport due to the islands' dispersed settlement pattern, which causes emissions. Ferry and air services also are vital forms of transport causing emissions
- As there is no access to a public gas supply, which would be a lower carbon option, oil and electricity are the main energy sources for central heating in the island areas.
- Renewable energy development has risen, and during 2013/2014 Orkney produced more electricity from renewable energy sources than it consumed.

#### 1.3 Risks to HONO WHS from Climatic Factors

Climate change is affecting elements of the WHS through increases in storm intensity and frequency, and sea level rise leads to increases in coastal erosion, and risk of single extreme storm events; changes to precipitation increase risk of torrential rain and flooding and can lead to changes to wetting and drying cycles, changes to the water table and changes to flora and fauna.

In 2018 HES produced the <u>Screening for Natural Hazards to inform Climate Change Risk</u>
<u>Assessment Report for Properties in the Care of Scottish Ministers 2018</u>, which includes the four component sites of the HONO WH property. This report was part of ongoing work to develop best practice and integrate climate change actions into our operations, in line with the Public Bodies Duties under the Climate Change (Scotland) Act 2009 and Climate Ready Scotland: Scottish Climate Change Adaptation Programme.

Furthermore in June 2019 the findings from the <u>Climate Risk Assessment for HONO WHS</u>, using the climate vulnerability index (CVI) show that the HONO WHS is at significant risk from three key climate drivers:

- Sea level change
- Precipitation change
- Storm intensity and frequency

The CVI is a new methodology developed to rapidly assess climate impacts – both to Outstanding Universal Value (OUV) and the associated 'community' (local, domestic and international) – for all types of World Heritage properties (natural, cultural or mixed).

Adaptation measures continue to be considered as part of the long-term management of the WHS, and the CVI will provide the opportunity to identify adaptation strategies in the face of potential impacts, with a consistent methodology that supports applications for funds and other resources to undertake identified activities.

The growth of renewable energy development on Orkney also has the potential to impact on the setting of the monuments.

# 2. Population and human health

Baseline Data	Sources
Access to historic environment sites, records and collections and access to natural heritage	Historic Environment Scotland
Tourism revenue and visitor numbers	<u>SNH</u>
Health and Place data	RSPB
Socio-economic data	Visit Scotland
	NHS Scotland Scottish Government
	Scotland's Environment Web

#### 2.1 National factors

The 2011 National Census found that the population of the Orkney Islands is 21,349 with an average male age of 44 (Scottish average of 40) and female age of 45 (Scottish average of 42).

Around 86% of the population are recorded as having very good or good general health (Scottish figure is around 82%). Excluding full time students, 2.4% of the population was recorded as unemployed.

The Environmental Report that accompanies the Orkney Islands Council (OIC) Local Development Plan (LDP) (2015) includes baseline information on trends towards an increasingly ageing population on Orkney and in the 2011 Census 16.8% of people are recorded as retired (Scottish figure was 14.9%).

The 2011 Census records around 60% of the Orkney population travel to work using a car, (including as passengers and taxis). This is slightly less than the Scottish figure of around 63%. However, bus travel to work was around 2% which is less than the Scottish figure of 10%.

The Environmental Report prepared by OIC that accompanies the LDP (2015) includes baseline information on existing transport types and trends, finding that due to the rural nature and the dispersed settlement patterns the use of the car is a very important form of transport. 2011 Census information indicates that the average number of cars or vans per household on Orkney was 1.3 and the Scottish average was 1.

#### 2.2 Public Transport

#### 2.2.1 Bus Service

There is a combination of subsidised and commercial bus services operating on Orkney. OIC subsidises bus services on the mainland, and these are currently operated by Stagecoach.

Several services currently operate to provide cover 7 days a week to the different monuments within the WHS. These currently include X1 service with stops at Stenness for Maeshowe with an increased service in the busy summer months offered on a Sunday, and bus route 8S which currently runs daily to stops at Stenness for Maeshowe, the Ring of Brodgar and Skara Brae.

#### 2.2.2 Ferries

Nine ferries operate between Orkney mainland and its islands. While no ferry is required to be used to visit the WHS, as it is on Orkney mainland, ferries are essential for locals who live and work on its islands, and visitors and tourists who wish to explore Orkney's islands. OIC has responsibility for the operating of the ferries through the Orkney Ferries Service.

#### 2.3 Access

Access in its widest sense is a fundamental principle for World Heritage Sites, and includes physical, remote and intellectual access. Access for all abilities is important to ensure equality, however some of the WHS monuments are fragile, and measures to optimise remote access are always considered.

The geographical area of the WHS is relatively small, as is the local population. However, visitor numbers have continued to rise. For example, in the 2019-20 financial year 113,986 people visited Skara Brae, the Ring of Brodgar received approximately 157,000 visitors and Maeshowe 29,036. Whilst visitor numbers dipped during the COVID-19 pandemic, they have started to rise again and beyond to pre-pandemic levels.

The monuments are managed by HES on behalf of Scottish Ministers and are open all year. The monuments at Skara Brae and Maeshowe are online booking and ticketed which allows visitor numbers to be managed. The other monuments within the WHS can be accessed at any time by the public without charge. The draft Management Plan includes objectives related to resolving a number of issues associated with access to the WHS.

#### 2.4 Core Paths

Low levels of activity and obesity are two factors which currently contribute to ill health throughout the United Kingdom. National initiatives aim to encourage people to enjoy the outdoors and take more exercise. Under the Land Reform (Scotland) Act 2003 OIC has a duty to prepare a Core Paths Plan. Through its Core Paths Plan, Orkney Islands Council highlights the many routes and pathways throughout the Orkney mainland and the Isles which are available to walkers of varied abilities, enabling them to experience and appreciate the County's excellent natural and historic resources. The Orkney Core Paths Plan was reviewed and renewed in 2018. Several core paths in the plan run alongside or in the vicinity of the WHS e.g., VM11 Maeshowe, VM11 and VM13 at Stones of Stenness, VM13 at Ring of Brodgar and VM26 at Skara Brae.

#### 3. Landscape

Baseline Data	Sources
National Scenic Areas	NatureScot
Landscape character	SNH Orkney Landscape Character Assessment 1998
Historic land use	Scotland's Environment Web
Sites of Local Landscape Character (Special Landscape Areas and other areas of landscape value identified on Local	Historic Land use Assessment
Development Plan (LDP) proposals maps)	Orkney Local Development Plan
	The Heart of Neolithic Orkney World Heritage Site: Setting Report

NatureScot Review 100 - Orkney landscape
character assessment   NatureScot.

The Heart of Neolithic Orkney World Heritage Site: Setting Report 2008 was produced by Atkins Ltd on behalf of Historic Scotland to provide an objective description of the setting of and to provide recommendations on approaches to defining any future Buffer Zone and the nature of policies that may apply to that Buffer Zone.

As part of this work, Atkins Ltd. provided a general description of the landscape character generated through field survey, which confirmed the findings of the NatureScot <u>Landscape</u> <u>Character Assessment</u> published in 1998.

The Orkney Local Development Plan 2017 also presents the findings of the 1998 SNH Landscape character assessment which identifies Regional Character Areas, Landscape Character Types and Island Character Areas. It also identifies a total of 23 landscape character types in the Orkney Islands.

The descriptions of the landscape character of the WHS in sections A and B below are taken directly from the Atkins Ltd. Report.

# A. Landscape character around the Ring of Brodgar, Stones of Stenness and Maeshowe

The landscape around the Ring of Brodgar, Stones of Stenness and Maeshowe is a large scale exposed and open rural landscape. It is generally pastoral in nature with worked fields on the low slopes of the hills and unimproved moorland and pasture on the upper slopes and ridge tops. On the whole, it is a simple landscape in terms of features and elements that can be described e.g., hill, water, farmstead, permanent pasture, minor roads, post-and-wire fencing, and very few trees.

The land cover is defined by enclosed fields under permanent pasture for intensive livestock rearing. The predominant livestock is cattle, and these are overwintered in barns, although there are also significant numbers of sheep. Fields are of medium size with a mix of traditional stone walls and post-and-wire fencing. Most gated within field boundaries are metal. The area is definitely rural and agricultural in nature.

The form of the landscape is one of rolling hills and so curved lines predominate. Although, straight lines exist in the form of field boundaries and roads the overall pattern of the landscape structure is irregular.

Settlement is scattered across the area, with a mix of modern and traditional buildings a frequent element of views. The buildings are situated in an irregular pattern, predominantly small (although some overwintering cattle barns are large) and most have been modified over time. The majority of buildings are coated in pebbledash, are grey in colour and have grey slate roofs. One exception is the red roofing of Odin House, which is close to the Watch Stone and the Stones of Stenness.

Although the area has a large number of minor roads, they are nearly all surfaced with tarmac. The dominant single point features in this landscape are the farmsteads dotted across the views. In general, the roads are fenced off from the fields by post-and-wire fencing. The two lochs dominate views from the monuments and form a key element of the wider area's landscape character.

The dominant landscape character type around this part of the WHS is the loch basin type.

#### B. Landscape character around Skara Brae

Skara Brae is situated on the edge of the Bay of Skaill and has virtually no visual prominence and plays no role in the landscape character of the area. There is a fine sandy beach below the site, and its immediate hinterland is pasture on top of the old sand links, at the eastern edge of which is Skaill House. The Bay is tightly enclosed by surrounding low hills, the ridgelines of which are

almost continuous around the bay. The landscape around the site and enclosed by the ridgelines, is typical of Orkney coasts where softer rocks have created sandy bays. Small in scale and closely confined, the Bay of Skaill is defined at its outer limit by high cliffs and within the bay by ridges and hills. It is rounded and smooth in a regular horseshoe shape. The sheltered, enclosed, small-scale, low-lying landscape cradled by low green slopes and overlooked by steadings and cottages on the higher ground above, is dominated by Skaill House and the farm buildings. However, closer to the shore, the character is more maritime and provides the unique and distinctive setting of Skara Brae.

The dominant landscape character of the area around Skara Brae is the enclosed bay landscape type.

#### 3.1 National Scenic Areas

National Scenic Areas (NSA) are Scotland's only national landscape designation. They are those areas of land considered of national significance on the basis of their outstanding scenic interest which must be conserved as part of the country's natural heritage. They have been selected for their characteristic features of scenery comprising a mixture of richly diverse landscapes including prominent landforms, coastline, sea and freshwater lochs, rivers, woodlands and moorlands.

The Hoy and West Mainland NSA is the only NSA in Orkney. The NSA extends across West Mainland as far north as Hestwall, and extending SW, to include Hoy Sounds, Burra Sounds, Graemsay, the hills of North Hoy, extending SW as far as the Candles of Sneuk. The WHS lies within the NSA at Loch of Stenness and the southern part of the Loch of Harray. See <a href="Hoy and West Mainland NSA">Hoy and NSA</a> on NatureScot's Sitelink for the boundaries of the NSA.

The Special Qualities as stated in *The special qualities of the National Scenic Areas SNH Commissioned Report No.374 Scottish Natural Heritage (2010)* for the Hoy and West Mainland NSA are as follows:

- A palimpsest of geology, topography, archaeology and land use
- An archaeological landscape of World Heritage Status
- The spectacular coastal scenery
- Sandstone and flagstone as an essence of Orkney
- A long-settled and productive land and sea
- The contrast between the fertile farmland and the unimproved moorland
- A landscape of contrasting curves and lines
- Land and water in constantly changing combinations under the open sky
- The high hills of Hoy
- · The townscape of Stromness, its setting and its link with the sea
- The traditional buildings and crofting patterns of Rackwick

The Orkney LPD 2017 Landscape Baseline section also notes the following environmental issues and pressures from development on Orkney's landscape:

- The growth of renewable energy development on Orkney in the form of wind turbines and accompanying infrastructure has the potential to erode the character and impact on its landscape
- Construction from new buildings not reflecting settlement pattern or scale design and materials that are appropriate to the landscape character of the area
- loss or deterioration of some distinctive features such as stone dykes, crofts and other buildings
- Changes in vegetation cover and field patterns due to more intensive methods of agriculture.

# 3.2 Geological Conservation Review (GCR)

3 areas of Geological Conservation are within the WHS Site and/or buffer zone. These sites contain geological and geomorphological features of national and international importance. They are selected through a process known as the <u>Geological Conservation Review</u>. They have statutory protection through designation as geological features in <u>Sites of Special Scientific Interest (SSSIs)</u> and are considered under the SSSI designation in the Biodiversity, Flora. Fauna Section 5 below.

- Bay of Skaill SSSI/GCR Site of geological/geomorphic importance due to Middle Devonian Fish Beds with fossil plant community
- Cruaday Quarry SSSI/GCR Site is of outstanding geological importance due to exposure and preservation of the Sandwick Fish Beds
- Stromness Heaths & Coasts SSSI/GCR Site of Coastal geomorphology (West Coast of Orkney) Non-marine Devonian (Yesnaby & Gaulton Coast Section)

# 4. Cultural Heritage

Baseline Data	Sources
World Heritage Sites	Heart of Neolithic Orkney World Heritage Plan (2014-2019)
Designated Sites, Buildings, Landscapes and Battlefields	and associated research reports Historic Scotland GIS Downloader
Conservation Areas	(includes equivalent data to the Sites and Monuments Records)
Regionally/locally important archaeological sites and unscheduled archaeology	Scotland's Historic Environment Audit 2016
	Scotland's Environment Web
	Scotland's Environment Web
	Orkney Local Development Plan
	National Monuments Record of Scotland

Historic Environment Policy for Scotland (HEPS) aims to identify and protect historic buildings and sites from inappropriate development and damage. Policies extend beyond specific designated sites to reflect the value of undesignated/unknown sites, wider townscapes, the setting of monuments and historic buildings, and wider cultural landscapes.

**Chapter 2** of the draft Management Plan provides a full description of the features of the historic environment baseline that are included in the WHS, and it does not seem necessary to repeat this here.

There are also a large number of nationally, regionally and locally important historic environment features that are adjacent to the WHS and for simplicity these are linked here on the Designations Map Search Portal rather than being individually listed.

Listed Buildings, Scheduled Monuments, Conservation Areas, Battlefields Inventory Boundary, Gardens and Designed Landscapes, Listed Buildings boundaries and Historic Marine Protected Areas in the vicinity of <a href="Skara Brae">Skara Brae</a> and the <a href="Brodgar-Stenness-Maeshowe area">Brodgar-Stenness-Maeshowe area</a> can be seen via the portal.

In particular, the concentration of prehistoric monuments around the Brodgar–Stenness part of the WHS is exceptional. The surrounding archaeology helps to inform our understanding of the development of the ritual and funerary landscape in this area, and how ritual and funerary sites related to settlement sites.

# 5. Biodiversity, flora, fauna

Baseline Data	Sources
Statutory Designated Sites (including SACs, SPAs, Ramsar Sites, SSSIs)  European Protected Species  Local Biodiversity Action Plan (LBAP) species and habitats  Local designations – LNR, Sites of Local Nature Conservation Importance RSPB reserves	Joint Nature Conservation Committee (JNCC)  Scotland's Environment Web  2020 Challenge for Scotland's Biodiversity.  SSSI Management Statement for Lochs of Harray and Stenness, Nature Scot 2011  SSSI Management Statement for Stromness Heaths and Coast, Nature Scot 2010  SSSI Management Statement for Bay of Skaill, Nature Scot, 2010  SSSI Management Statement for Cruaday Quarry Nature Scot 2009  Information on European Protected Species from Nature Scot website.  Orkney LBAP (Supplementary Guidance: Natural Heritage)
	Natural Heritage)
	Orkney Local Development Plan  OIC website for information on local nature
	designations  Brodgar RSPB Reserve

# **5.1 National Factors**

Biodiversity encompasses the whole variety of life on Earth. It is important for our health and wellbeing and for the ecosystem services that it provides. The original strategy – <u>Scotland's Biodiversity</u>: It's in Your Hands – was published in 2004. In 2013, it was supplemented by the <u>2020 Challenge for Scotland's Biodiversity</u> which sets out the major steps needed to improve the state of nature in Scotland.

The two documents together now constitute the Scottish Biodiversity Strategy and aim to protect and restore biodiversity on land and in our seas, to support healthy ecosystems, while connecting people to the natural world enjoyment and wellbeing, now and in the future, and to involve the in more decision making. It also seeks to maximise the benefits for Scotland of a diverse natural environment and the services it provides, contributing to sustainable economic growth.

There are a number of areas designated for their nature conservation interest both within and near to the WHS. Information on these areas is provided below. We have also included information on areas that may be of local importance for their biodiversity value that are within or near to the WHS.

# 5.2 Designated areas

# 5.2.1 Special Areas of Conservation

Special Areas of Conservation (SACs) are areas designated under the European Directive commonly known as the 'Habitats' Directive. They are internationally important areas that, together with Special Protection Areas (designated under the Wild Birds Directive for wild birds and their habitats) form the Natura 2000 network of sites.

There are six SACs in Orkney, one of which (Loch of Stenness SAC) is adjacent to the WHS. A description of the Loch of Stenness SAC is provided below. This information is largely taken directly from the descriptions on the Joint Nature Conservation Committee (JNCC) website <u>Loch of Stenness</u> - Special Areas of Conservation (jncc.gov.uk).

The qualifying habitat for the Loch of Stenness SAC is coastal lagoon, which is a priority habitat in Annex 1 of the Directive. The Loch of Stenness is one of the best and biggest UK examples of a coastal lagoon. It is of particular importance on account of its large size, stability, reduced salinity regime and northern location. The loch supports a mainly marine flora and fauna, although species richness is impoverished relative to the adjacent coast.

The Loch of Stenness and the similarly sized adjoining Loch of Harray are together designated as a SSSI (see SSSIs below for further information).

# **5.2.2 Special Protection Areas**

Special Protection Areas (SPAs) are classified under the European Directive on the Conservation of Wild Birds (<u>Directive 2009/147/EC 2009</u>), commonly known as the Birds Directive.

SPAs are intended to safeguard the habitats of the species for which they are selected and to protect the birds from significant disturbance. Together with Special Areas of Conservation they form the Natura 2000 network of sites.

There are 13 SPAs in Orkney, however none of these areas are within or adjacent to the WHS. Orkney Mainland Moors are nearest, and were designated in 2008, while Marwick Head, Hoy, Rousay, Copinsay, West Westray and Calf of Eday SPAs were designated in 2009. There are three new proposed SPAs North Orkney, Scapa Flow and Pentland Firth.

#### 5.2.3 Ramsar Sites

Ramsar sites are designated under the Convention of Wetlands of International Importance. There is one Ramsar site on the Orkney Islands at East Sanday Coast, however this is not within the environs of the WHS.

# **5.2.4 Site of Special Scientific Interest**

Sites of Special Scientific Interest (SSSI) represent the best of Scotland's natural heritage. They are 'special' for their plants, animals or habitats, their rocks or landforms, or a combination of such natural features. Together they form a network of the best examples of natural features throughout Scotland and support a wider network across Great Britain and the European Union.

There are 36 SSSIs in the Orkney Islands and 4 of these are within the WHS buffer zone - the Lochs of Harray and Stenness SSSI, the Bay of Skaill SSSI and Stromness Heaths and Coast, and the Cruaday Quarry.

A description of each of these areas is provided in the table below and the information is largely taken from NatureScot SSI Management Statements and the SSSI citation sheets.

SSSI Name	Description
Lochs of Harray and Stenness	The Lochs of Harray and Stenness (see Sitelink for boundary) were designated as a biological SSSI in 1962 on the basis of specific plant and invertebrate species in Harray and nationally significant wintering wildfowl populations on both lochs. The SSSI covers only the lochs and none of the adjacent land. The lochs are the two largest lochs in Orkney. The Loch of Harray drains a shallow basin in the centre of West Mainland. Its waters flow into the Loch of Stenness through a series of channels at Brodgar, which is open to the sea at Brig O' Waithe. The waters of the lochs range from marine at the seaward entrance of Stenness to freshwater in Harray with variability between marine and freshwater within Stenness itself.
	The associated flora and fauna is diverse comprising predominantly brackish and marine species in Stenness and freshwater species in Harray, with a transition zone in the vicinity of the Bridge of Brodgar. The SSSI designation lists the presence of a large number of pondweed species in Harray, some rare invertebrate species and, as noted above, both lochs are of importance for nationally significant populations of wintering wildfowl.
	The management statement for the Lochs of Harray and Stenness SSSI identifies the following issues as the principal factors affecting management:
	<ul> <li>water quality</li> <li>nutrient enrichment from the run-off of fertiliser and slurry into the lochs and by sewage and septic tank discharges</li> <li>trout fishery</li> <li>housing development – a loch protection zone is designed to control housing in the area</li> <li>Disturbance of wintering populations of wild fowl by fast boats near</li> </ul>
	<ul> <li>sensitive places</li> <li>Decline of tufted ducks population connected to changes in nutrient levels</li> <li>Safeguarding habitats of caddis fly and freshwater snail against the introduction of non-native species</li> </ul>
	<ul> <li>Exchange of water between Loch Harray and Loch Stenness</li> <li>Introduction of marine alien species</li> </ul>
Bay of Skaill	Bay of Skaill SSSI (see Sitelink for boundary) was designated in 1991 and lies to the north of Skara Brae. The Bay of Skaill SSSI is a geological SSSI and the rocks at the Bay of Skaill represent sediment of the Old Red Sandstone, deposited in the Devonian geological time, about 380 million years ago. The Bay of Skaill is composed of the 'Upper' and 'Lower Caithness Flagstone with the intervening 'Sandwick Fish Bed' characterised by containing a distinct fossil floral assemblage. The Bay of Skaill site is the best development of this flora available and the fossils are of international importance.  The management statement for the Bay of Skaill SSSI identifies the following
	<ul> <li>issues as the principal factors affecting management:</li> <li>road development</li> <li>dumping of materials</li> </ul>

SSSI Name	Description
	<ul> <li>fossil collecting</li> <li>removal of beach deposits</li> <li>Marine erosion is considered to maintain open exposures of the sections of the cliffs and it is not seen as negative.</li> </ul>
Stromness Heaths and Coast	Stromness Heaths and Coast SSSI (see Sitelink for boundary) designated in 1991 is a geological SSSI and is a prime example of coastal vegetation communities with associated breeding birds. The coast itself is of geological and geomorphological importance. A major feature of this site is the juxtaposition of different coastal habitats and the natural landward transition from typical maritime communities to a heathland community interspersed with species-rich flush and mire communities. There are several colonies of the nationally scarce Scottish primrose. The site also supports small numbers of breeding Arctic and great skua and a small Arctic tern colony. A pair of peregrines breed regularly on the sea cliffs and Row Head is noted for its colonies of guillemots and kittiwakes. Vegetation on the cliff top is strongly influenced by the sea, grading into mosaics of coastal heath and grassland as the sea's influence reduces. The coastal heath is often rich in species.
	The management statement for the Stromness Heaths and Coast SSSI identifies the following issues as the principal factors affecting management:  • farming/grazing • tourism/vehicles access • fly tipping
Cruaday Quarry	• fossil collecting  Cruaday Quarry SSSI (see Sitelink for boundary) designated in 1989 lies to the north of Skara Brae near the northeast edge of the WHS buffer zone. The SSSI is a geological SSSI; its qualifying interests lie in its fine fossil specimens exposed in the Sandwick Fish Bed and includes some of the earliest fish and vascular plants of the fossil record. The rocks at Cruaday Quarry, as elsewhere in Orkney, belong to the Old Red Sandstone group, and were laid down in a harsh arid climate between 350-390 million years ago (the Devonian Period) when what is now Scotland lay south of the equator in latitudes equivalent to the present Australian and Kalahari deserts. Deposition of sediment was mainly by large rivers into an enormous freshwater lake (the Orcadian Basin). During the Middle Devonian, the depth of the Orcadian Lake fluctuated and at times of greatest depth, the central portions of the lake became starved of oxygen (anoxic). It was here that fish carcasses were deposited, to become beautifully preserved fossil specimens.
	The management statement for the Cruaday Quarry SSSI identifies the following issues as the principal factors affecting management:  • Quarrying • Spoil Removal • Fossil Collecting • Tourism and Education

#### 5.3 European protected species

Annex IV of the Habitats Directive lists certain species as species of European Community interest and in need of strict protection. The protective measures required are outlined in Articles 12 and 13 of the Directive. The species listed on Annex IV whose natural range includes any area in Great Britain are called 'European protected species'. They are also listed on Schedules 2 (animals) and

4 (plants) of the Habitats Regulations and are specifically protected under Regulations 38-46 and Regulations 10-13 of the Amendment Regulations.

A list of these 24 species can be found on NatureScot's website at <u>Search | NatureScot</u> Under the UK Biodiversity Action Plan, individual Species Action Plans have been drawn up for most of the European protected species occurring in Scotland.

Of the 24 European protected species occurring in Scotland the one most likely to be found in or near the WHS is the otter, which use the loch shores. In Orkney it is possible to find other protected species, including many bird species as well as harbour and grey seal.

#### 5.4 Local biodiversity interests

The Orkney Local Biodiversity Action Plan 2018-2022 (LBAP) is the third in a series of focused revisions of the original Orkney LBAP (2002). It identifies a series of habitat, which link into ecosystems and species from the Scottish Biodiversity List, as a priority for action. A number of these priority habitats are found within the WHS including:

- road verges, the Brodgar Road (B9055) is identified as an example of a species rich verge
- coastal sand dunes, it is noted that sand extraction has aggravated coastal erosion problems in Bay of Skaill and recreational pressure on the dune systems close to Skara Brae is identified as being a significant issue
- saline lagoons, Loch of Stenness
- · eutrophic standing water, including the Loch of Harray

#### 5.5 RSPB Reserves

The Brodgar RSPB reserve is located within the World Heritage Site on the narrow strip of land between Stenness and Harray. The reserve covers 34 hectares of grassland, meadows and loch shore, and surrounds the Ring of Brodgar on three sides. The site supports a wide range of waders and waterbirds, including curlew, skylark, lapwing, redshank and oystercatcher. The great yellow bumblebee, a nationally scarce species is also present and can be seen in large numbers. Rare wildflowers are also present.

The reserve is managed to balance to restoration of semi-natural habitats with maintaining a low-intensity arable rotation. Light grazing by cattle and mown in late summer help to create ideal conditions where waders can nest, and a range of wild fowl can nest on wetter areas.

#### **5.6 Local Nature Reserve**

There are two Local Nature Reserves in the Orkney Islands:

- 1. Mull Head, designated in 1992 for its wildlife, geology and history, is not within the vicinity of the WHS, and Happy Valley designated in 2017, which is within the buffer zone of the WHS.
- 2. Happy Valley is located in the parish of Stenness and includes the C listed Bankburn house a garden created along the Burn of Russadale and four enclosed fields. It comprises a mature woodland, supporting a wide range of species, including invertebrates, mosses and liverworts. The site also contains other habitats including the Burn of Russadale, stone walls, shaded earth banks, a freshwater pond and wildflower-rich grassland, as well as a small patch of heathland.

#### **Appendix D: Assessment of the Vision and Aims**

The tables below show the results of the assessments undertaken against the SEA objectives for the vision and six long-term aims.

#### **Key to Scoring**

+	Positive effects
0	Neutral effects
-	Negative effects
+/-	Positive and/or negative effects
?	Uncertain effects

#### **Revised Vision:**

The Heart of Neolithic Orkney and its exceptional testimony to the cultural achievements of the Neolithic peoples of northern Europe will be protected and conserved for present and future generations. The World Heritage Site will bring social, cultural, environmental and economic benefits to the wider community. It will offer an exceptional responsible visitor experience, and inspire and catalyse research and learning, widening engagement through participation and discovery. It will be managed sustainably in ways that contribute to reducing the causes of climate change and address its threat to the Site. It will contribute to a thriving, sustainable and equitable future for Orkney residents, visitors and communities of interest worldwide.

Environmental	SEA objective	Score	Comments
parameter			
Climatic factors	Reduce the Causes of Climate change Contribute to effective adaptation to the predicted effects of climate change	+	The vision notes that the WHS will be managed in sustainable ways which will contribute to the reduction in the causes of climate change and address its threats to the Site.
Population and Human Health	Promote celebration, understanding and access to the natural and cultural heritage Support healthy living and working environments To reduce inequalities	+	Access alongside social and community benefits are a fundamental part of the WHS and is included within the vision. The vision states that the WHS will contribute to a thriving and equitable future for people living on or visiting Orkney which will have a positive effect.
Landscape	To safeguard and enhance the distinct identity, the diverse character and the special qualities of Scotland's landscapes as a whole	0	The vision is specifically related to the social, cultural, environmental and economic aspects of the WHS and will have no effect on this parameter.

Cultural Heritage	Safeguard and where appropriate enhance the historic environment	+	The vision incorporates the protection, conservation and enhancement of the WHS which will contribute to the safeguarding of the historic environment.
Biodiversity, Flora, Fauna	Maintain, protect and enhance biodiversity (species, habitats, ecosystems)	0	The vision is specifically related to the cultural aspects of the WHS and will have no effect on this parameter.

No recommendations.

#### Summary

General positive effect on the cultural heritage, population, human health, and climatic factors. No effect on the other environmental topics as this is not the function of the overarching vision.

Environmental parameter	SEA objective	Score	Comments
Climatic factors	Reduce the Causes of Climate change Contribute to effective adaptation to the predicted effects of climate change	+	A key element of this aim is to take action to adapt and mitigate effects of the climate emergency on the WHS and contribute to a low carbon society through sustainable approaches. This will have a positive effect on this parameter as CO <sub>2</sub> and greenhouse gas emissions alongside effective adaptation of the effect of climate change will be addressed.
Population and Human Health	Promote celebration, understanding and access to the natural and cultural heritage Support healthy living and working environments To reduce inequalities	0	This aim relates to the protection and management of the WHS.  Population and human health interests are addressed in different aims.
Landscape	To safeguard and enhance the distinct identity, the diverse character and the special qualities of Scotland's landscapes as a whole	+	Protecting and conserving the authenticity and integrity of the WHS includes considering the landscape setting of the WHS and ensuring this is safeguarded.
Cultural Heritage	Safeguard and where appropriate enhance the historic environment	+	Safeguarding and enhancing the WHS is the key function of this aim.
Biodiversity, Flora, Fauna	Maintain, protect and enhance biodiversity (species, habitats, ecosystems)	+	This aim relates to the protection and management of the WHS, an element of which is around increasing awareness and understanding of the natural heritage and biodiversity.

No recommendations.

#### Summary

The aim has largely positive effects with one neutral.

Environmental	SEA objective	Score	Comments
parameter			
Climatic factors	Reduce the Causes of Climate change Contribute to effective adaptation to the predicted effects of climate change	0	This aim is related to people having a deeper level of engagement with, and understanding of, the WHS and is focussed on the archaeological, historical and natural heritage.
Population and Human Health	Promote celebration, understanding and access to the natural and cultural heritage Support healthy living and working environments To reduce inequalities	+	Improving access to the historic environment - both physically, digitally and intellectually - and increasing understanding of the value of the historic environment is key to this aim.
Landscape	To safeguard and enhance the distinct identity, the diverse character and the special qualities of Scotland's landscapes as a whole	+	This aim is related to people having a deeper level of engagement with, and understanding of, the WHS and is focussed on the archaeological, historical and natural heritage. Having a clearer understanding of the setting of the WHS will however have positive effects on the archaeological landscape.
Cultural Heritage	Safeguard and where appropriate enhance the historic environment	+	A clear understanding of the tangible and intangible aspects of the WHS will have a positive effect on the cultural heritage by allowing more people to be engaged and inspired by the WHS.
Biodiversity, Flora, Fauna	Maintain, protect and enhance biodiversity (species, habitats, ecosystems)	+	An increase in awareness and understanding of the natural heritage and biodiversity of the WHS will have a positive effect on the natural heritage of the WHS.

#### Recommendations

Consider how people can have an increased awareness and understanding of the effects of climate change on the WHS to allow them to have a deeper understanding of the Site's values.

#### Summary

Generally positive or neutral effects.

Aim 3: To use our World Heritage status to benefit people and communities in Orkney and elsewhere.					
Environmental	SEA objective	Score	Comments		
parameter					
Climatic factors	Reduce the Causes of Climate change Contribute to effective adaptation to the predicted effects of climate change	+	Using World Heritage status to ensure there is sustainable and responsible tourism will help address CO <sub>2</sub> and greenhouse gas emission and contribute to effective adaptation to the effects. It will benefit people and communities in Orkney and beyond by mitigating the effects of the climate emergency and contribute to a low carbon society.		
Population and Human Health	Promote celebration, understanding and access to the natural and cultural heritage Support healthy living and working environments To reduce inequalities	+	Key to this aim is that the WHS, buffer zone and associated materials and records are actively used in education and training which will be beneficial. People will have access and understanding of the value of the WHS and its associated sites through a range of physical and digital assets which can be used by a range of groups. People and communities will also be involved, informed and engaged with decisions affecting their places and spaces.		
Landscape	To safeguard and enhance the distinct identity, the diverse character and the special qualities of Scotland's landscapes as a whole	?	There may be positive effects in term of visitors better understanding the landscape setting of the WHS through this aim but the effect this will have on safeguarding and enhancing the natural characteristics and qualities of the landscapes is uncertain.		
Cultural Heritage	Safeguard and where appropriate enhance the historic environment	0	It is not anticipated that this aim is not expected to have any additional significant effects to those identified for aims 2 and 4.		
Biodiversity, Flora, Fauna	Maintain, protect and enhance biodiversity (species, habitats, ecosystems)	0	It is not anticipated that using World Heritage Status to benefit people and communities will affect this parameter as the Site is not inscribed for its natural significance.		

Consider the way that the World Heritage status could benefit the landscape which the WHS sits in, especially the Hoy and West Mainland National Scenic Area.

#### Summary

Generally positive with neutral and uncertain effect.

Environmental parameter	SEA objective	Score	Comments
Climatic factors	Reduce the Causes of Climate change Contribute to effective adaptation to the predicted effects of climate change	0	It is not anticipated that interpreting and presenting the Heart of Neolithic Orkney will affect this parameter.
Population and Human Health	Promote celebration, understanding and access to the natural and cultural heritage Support healthy living and working environments To reduce inequalities	+	Interpreting and presenting the Heart of Neolithic Orkney to the highest standard through a range of mediums should ensure that it is understood and accessible, now and in the future.
Landscape	To safeguard and enhance the distinct identity, the diverse character and the special qualities of Scotland's landscapes as a whole	?	Through interpreting and present the WHS there will be an increase in awareness and understanding of the Site and its buffer zone. This should have positive effects on the archaeological landscape, but it is unsure if this will in turn have positive effects on the wider landscape. There may be negative effects with interpretive offers having a negative impact on the landscape.
Cultural Heritage	Safeguard and where appropriate enhance the historic environment	+	There will be positive effects in safeguarding and enhancing the cultural heritage (both tangible and intangible) by interpreting and presenting the WHS to a high standard.
Biodiversity, Flora, Fauna	Maintain, protect and enhance biodiversity (species, habitats, ecosystems)	+	Natural heritage and biodiversity, both past and present, will be included in the interpretation and presentation of the WHS.

Consider clearer recognition of landscape interests and their role in interpreting and presenting the WHS should also be included within this aim. Consider whether the presentation and interpretation of the WHS could be affected by or used to better understand climate change.

#### Summary

Generally positive, with one neutral and one uncertain effect.

Environmental parameter	SEA objective	Score	Comments
Climatic factors	Reduce the Causes of Climate change Contribute to effective adaptation to the predicted effects of climate change	+	Ensuring that access to and experiencing the WHS will be sustainable and responsible will have a positive effect on CO <sub>2</sub> and greenhouse gas emissions and contribute to the effective adaptation to the effects of climate change.
Population and Human Health	Promote celebration, understanding and access to the natural and cultural heritage Support healthy living and working environments To reduce inequalities	+	This aim will allow people to have more equal access to and understanding of the historic environment through a range of mediums. Ensuring this is done responsibly and sustainably will ensure the WHS and its surroundings is a positive place to work and live.
Landscape	To safeguard and enhance the distinct identity, the diverse character and the special qualities of Scotland's landscapes as a whole	+	The landscape will be safeguarded and enhanced by ensuring the WH is accessed and experience more responsibly, sustainably and equitably.
Cultural Heritage	Safeguard and where appropriate enhance the historic environment	+	The historic environment will be safeguarded and enhanced by ensuring the WH is accessed and experience more responsibly, sustainably and equitably.
Biodiversity, Flora, Fauna	Maintain, protect and enhance biodiversity (species, habitats, ecosystems)	+	Biodiversity, flora and fauna will be safeguarded and enhanced by ensuring the WH is accessed and experience more responsibly, sustainably and equitably.
Recommendations No recommendations	•		

Aim 6: Facilitate a di	Aim 6: Facilitate a diversity of research connected to the World Heritage Site and draw on the results to pursue the Long Term Aims.					
Environmental parameter	SEA objective	Score	Comments			
Climatic factors	Reduce the Causes of Climate change Contribute to effective adaptation to the predicted effects of climate change	+	Research which examines the effects of climate change on the WHS will contribute to effective adaptation and reduction of the causes of climate change.			
Population and Human Health	Promote celebration, understanding and access to the natural and cultural heritage Support healthy living and working environments To reduce inequalities	+	Research will give an increased understanding to the value of, and access to, the historic environment.			
Landscape	To safeguard and enhance the distinct identity, the diverse character and the special qualities of Scotland's landscapes as a whole	0	It is not anticipated that facilitating research will affect this parameter.			
Cultural Heritage	Safeguard and where appropriate enhance the historic environment	+	Using research to gain a greater understanding of intangible cultural heritage within the WHS and buffer zone will have a positive effect on the historic environment to ensure it is safeguarded and enhanced.			
Biodiversity, Flora, Fauna	Maintain, protect and enhance biodiversity (species, habitats, ecosystems)	+	Research targeted at the natural heritage connected to the World Heritage Site, such as understanding the effects of increased visitor numbers, would be beneficial to protect, maintain and enhance important species, habitats and ecosystems.			

Look into possibility of including a research objective specifically around sustainable tourism and climate change.

Summary
Research will predominately have a positive effect across the SEA objectives.

#### **Appendix E: Screening the draft Objectives**

The table below documents the screening exercise that was undertaken to sift the original 20 draft strategic objectives into those that are unlikely to have significant environmental effects and those that are likely to have significant environmental effects and require further consideration in the detailed assessment. This table also highlights where Objectives were updated or deleted during the process of revising of the draft Management Plan.

	Objective	Updates to Objective	Description of possible significant environmental effects	Impact on assessment findings from any updates	Include in the detailed assessment?
1	The WHS is protected conserved and maintained in accordance with national guidance and legislation and international conservation charters; including both historic environment and natural environment considerations.	Changes to wording to add reference to historic and natural environment.  No impact on assessment findings.	This objective is related to ensuring the authenticity and integrity of the WHS is protected and preserved through agreement of partnership approaches, identifying and addressing gaps in capacity and resource, and ensuring SEA mitigation commitments are delivered.  This will have no effect on biodiversity, flora, fauna, population, human health and climatic factors. However, this will have a positive effect on cultural heritage, and perhaps landscape, by ensuring the WHS and its setting is adequately safeguarded. It is not considered possible to assess this any further than simply identifying a positive relationship.	None	No
2	The boundaries of the Buffer Zone are suitable for purpose and included in future iterations of the Local Development Plan.	Changes made to wording to remove reference to WHS boundary; reference to Local Development Plan added.	It is assumed that a review of the WHS boundary and buffer zone would result in a proposed increase in the boundary rather than a decrease. This may have varying implications on different environmental parameters and will be considered further in the detailed assessment.	Some impact on findings: see detailed assessment at Appendix F.	Yes

	Objective	Updates to Objective	Description of possible significant environmental effects	Impact on assessment findings from any updates	Include in the detailed assessment?
3	Policy and guidance produced by the Partners that affects the protection and management of the WHS, Buffer Zone and wider setting is up to date and fit for purpose.	Minor changes to wording.	This objective is around reviewing and amending policies and guidance related to the WHS and buffer zone to ensure that the OUV is taken into consideration, such as during the development of the Orkney Local Development Plan and associated Supplementary Guidance.  Doing this is unlikely to affect biodiversity, flora, fauna, population, human health and climatic factors.  However, it will have a positive effect on cultural heritage, and perhaps landscape, to ensure that the WHS and Buffer Zone is adequately and clearly protected within the planning system and promotes appreciation and understanding. It is not considered possible to assess this any further than simply identifying a positive relationship.	None	No
4	Governance of the WHS is robust and transparent and is periodically reviewed.	None	This objective is around reviewing the remit and membership of the steering, working and action groups alongside formalising the relationships between the Orkney Gateway Programme Board and Scottish Government. It will also involve developing and reviewing a risk strategy for the Management Plan.  Clearly defining the Partners and management structure will have no effect on climatic factors, population, human health, landscape, biodiversity, flora and fauna. It is assumed the this will have a positive effect on cultural heritage, but it is not considered possible to assess this any further than simply identifying a positive relationship.	N/A	No

	Objective	Updates to Objective	Description of possible significant environmental effects	Impact on assessment findings from any updates	Include in the detailed assessment?
5	The Management Plan remains relevant, is fit for purpose, and allows the partners to respond to new understandings and challenges.	None	This objective relates to the review, reflection and updating of the Management Plan throughout its period of use. Ensuring that the plan is kept relevant, progress is shared and amended as required will likely have positive effects on all environmental parameters. It is not considered possible to assess this any further than simply identifying a positive relationship.	N/A	No
6	Decision makers and communities can access what they need to know about the WHS and Buffer Zone, understand the opportunities and obligations that come with WH status, and are engaged with the management of the WHS.	Minor changes to wording to include communities and add reference to engagement with management of WHS.	This objective is concerned with providing events and training sessions to key stakeholders, such as Elected Members and senior management of partner organisations, to allow them to better understand the WHS  This will not affect biodiversity, flora, fauna, population, human health, landscape and climatic factors. It is assumed that a greater understanding of the opportunities and obligations of world heritage status will generally have positive effects on cultural heritage, however it is not considered necessary to assess this further.	None	No
7	Management of the WHS prioritises adaption to the effects of the Climate Emergency on the WHS and Buffer Zone, and mitigation of climate impacts by reducing emissions and contributing to a sustainable low-carbon society.	None	The key purpose of this objective is to contribute to the effective adaptation to the predicted effects of the Climate Emergency alongside reduce the causes of climate change, including encouraging sustainable approaches. This may have varying implications on different environmental parameters and will be considered further in the detailed assessment.	N/A	Yes

	Objective	Updates to Objective	Description of possible significant environmental effects	Impact on assessment findings from any updates	Include in the detailed assessment?
8	A programme of monitoring is in place for both the state of conservation and the implementation of actions for the WHS and Buffer Zone and the results are used by the Partners to inform decision making and future management.	Minor changes to wording.	It is assumed that a programme of monitoring used to inform decision making and future management will have effects on all environmental parameters. It is not possible to assess what the outcomes of monitoring will be however they may have environmental implications. This objective will be included in the detailed assessment to identify possible mitigation measures.	None	Yes
9	The Partners are collaborating to identify and access new sources of funding to support new projects and programmes to deliver shared Objectives.	None	This objective aims to find additional sources of funding to support the delivery of new projects and programmes. As there is currently no details on what these may be, and any projects and programmes that come from it would be subject to their own SEA's, it is not considered possible to assess the effects any further.	N/A	No
10	Management and interpretation (onsite and offsite, including digitally) enhance awareness and understanding of the archaeological and historical heritage, the natural environment, the Buffer Zone, and the WHS in its wider context, geographically and through time. All based on robust research and understanding.	Minor changes to wording.	The intention of this objective is to provide a greater understanding and awareness of the WHS and Buffer Zone to a range of people through a variety of mediums. This is likely to have positive effects on a range of environmental factors, in particular cultural heritage, population and human health, but may have negative environmental issues on others. This objective will be considered further in the detailed assessment.	None	Yes

	Objective	Updates to Objective	Description of possible significant environmental effects	Impact on assessment findings from any updates	Include in the detailed assessment?
N/A	Management of the WHS protects and enhances the natural heritage values of the WHS and interpretation contributes to awareness and understanding of the natural heritage of the WHS and the Buffer Zone.	Deleted – was Draft Objective 11	This objective will ensure that the natural heritage within the WHS and Buffer zone is protected and enhanced, and people will have a better understanding and awareness it. It is not likely that there will be effects on cultural heritage. This may have varying implications on different environmental parameters and will be considered further in the detailed assessment.	N/A	Was "Yes": Now removed from detailed assessment – see Appendix F
N/A	HONO has an inspiring, engaging and accessible digital presence that reflects the values of the Site and enables access – physical and intellectual – to, and understanding of, the WHS and Buffer Zone.	Deleted – was Draft Objective 12	The intention of this objective is to ensure that there is a coherent digital presence for the WHS that complements existing digital assets and provides a range of opportunities to experience and understand the WHS and the Buffer Zone. This will likely have a positive effect on cultural heritage, population, human health but may have negative effects on other environmental parameters such as biodiversity, flora, and fauna. This objective will be considered further in the detailed assessment.	N/A	Was "Yes": Now removed from detailed assessment – see Appendix F
11	The WHS and its associated sites and assets, materials and records (physical and digital) are easily accessible for use in research, education and training and are used by a range of community and special interest groups and projects.	Previously Objective 13	This objective is concerned with improving links between artefacts and other materials and records from the WHS and its associated sites, such as working with institutions, developing and supporting events and activities and identifying and reducing barriers of use and access.  This will not affect biodiversity, flora, fauna, climatic factors and landscape. It is assumed that providing more tangible links between people today and in the Neolithic will have a positive effect on the historic environment through improving awareness and understanding and promoting safeguarding of the site. There may also be positive effects on the population and human health parameter in terms of providing	N/A	No

	Objective	Updates to Objective	Description of possible significant environmental effects	Impact on assessment findings from any updates	Include in the detailed assessment?
			better access and greater understanding of the value of the historic environment. It is not considered necessary to assess this further, beyond identifying these positive relationships.		
12	Key stakeholders are involved in, informed about, and engaged with the decision-making process for managing the WHS and its associated infrastructure.	Previously Objective 14	The focus of this objective is to ensure that key stakeholders such as landowners/managers and communities are engaged with, involved in and informed about management decisions for the WHS. This will have no effect on climatic factors and landscape.  There will be positive effects on population and human health factor as communities will be involved in decisions affecting their places and spaces. There may also be positive effects on cultural heritage, biodiversity, flora and fauna as engaging all	N/A	No
			stakeholders can positively help safeguard the WHS including its undesignated tangible and intangible features and natural heritage. It is not considered necessary to assess this further, beyond identifying these positive relationships.		
13	Tourism at and around HONO offers a world class responsible visitor experience while benefitting the Orkney communities.	Previously Objective 15 Changes to Objective: climate mitigation reference removed as covered in Objective 7	This objective has multiple elements including improving infrastructure, delivering active travel network, and delivering multi-disciplinary interpretation. There are broad sustainability matters associated with this objective with potential for a range of environmental impacts which will be explored further in the detailed assessment.	None	Yes

	Objective	Updates to Objective	Description of possible significant environmental effects	Impact on assessment findings from any updates	Include in the detailed assessment?
14	Strong connections between HONO and other WHSs and UNESCO designations are maintained enabling development of shared solutions to common issues.	Previously Objective 16	The intention of this objective is to maintain and develop links with various organisations to ensure the WHS is managed effectively through developing shared solutions. As there is no detail on what these solutions may be, it is not possible to assess further any effects on environmental factors.	N/A	No
15	Research needs for the understanding, interpretation, protection and management of HONO WHS are identified and integrated with relevant research frameworks at a regional, nation and international level.	Previously Objective 17	This objective will focus on ensuring that research needs for the WHS are identified and integrated into relevant frameworks. Although some research needs may relate to different environmental topics and have positive effects, these are currently unknown, and it is not considered possible to assess this further.	N/A	No
N/A	Management and interpretation of the WHS draws on robust and high-quality research and can adapt to reflect changes in understanding and perspective.	Deleted – was Draft Objective 18	The intention of this objective is to identify needs for, and develop ways to ensure that, ongoing research is incorporated into the management and interpretation of the WHS. This will have no effect on landscape, population, human health, biodiversity, flora and fauna.  This will have positive effects on cultural heritage by contributing to the safeguarding and enhancing of the historic environment. There may also be positive effects on climatic factors by research potentially providing new ways to allow effective adaptation to the effects of climate change.  It is not considered necessary to assess this further, beyond identifying these positive relationships.	N/A	No

	Objective	Updates to Objective	Description of possible significant environmental effects	Impact on assessment findings from any updates	Include in the detailed assessment?
N/A	The range of values with the WHS and Buffer Zone are identified, understood, and informing the management and interpretation of the Site	Deleted – was Draft Objective 19	The aim of this objective is to ensure that it is not just the Outstanding Universal Value of the WHS that is considered in informing management and interpretation of the Site, but instead a multi-layered approach is taken. This will have no effect on climatic factors, population and human health.  It will likely have positive effects on biodiversity, flora, and fauna by highlighting the species, habitats and ecosystems which contribute to the WHS and Buffer Zone. Similarly, this will take into consideration the special qualities, diverse character and distinct identify which makes up the landscape setting of the WHS. Identifying and highlighting the intangible cultural heritage associated with the WHS and its Buffer Zone will ensure they are safeguarded. It is not considered necessary to assess this any further than simply identifying a positive relationship.	N/A	No
16	The WHS delivers a wide range of benefits – social, economic, cultural, environmental, wellbeing – to Orkney's communities.	Previously Objective 20 Minor changes to wording.	This objective will focus on ensuring there is community benefits from being within and near a WHS and Buffer Zone. This will have no effect on climatic factors, landscape, cultural heritage, biodiversity, flora and fauna.  There will likely be positive effects on population and human health by supporting healthy living and working environments and promoting access and understanding of the historic environment. It is not considered necessary to assess this further, beyond identifying these positive relationships.	N/A	No

### **Appendix F: Detailed assessment of the draft Objectives**

#### **Key to Scoring**

+	Positive effects			
0	Neutral effects			
-	Negative effects			
+/-	Positive and/or negative effects			
?	Uncertain effects			

Objective 2: The boundaries of the Buffer Zone are suitable for purpose and included in future iterations of the Local Development Plan.

Environmental	SEA Objective	Score	Comments
parameter			
Climatic Factors	<ul> <li>Reduce the causes of climate change</li> <li>Contribute to effective adaptation to the predicted effects of climate change</li> </ul>	0	Reviewing and potentially amending the WHS and Buffer Zone boundaries will have no effect on this environmental parameter.  Update: Changes made to Objective to remove reference to WHS boundary; reference to Local Development Plan added. No impact on score.
Population and Human Health	<ul> <li>Promote celebration, understanding, enjoyment and access to the natural and cultural heritage</li> <li>Support healthy living and working environments</li> <li>To reduce inequalities</li> </ul>	+	A review of the current boundaries will have a positive effect in terms of access to the WHS. Any proposed extensions should involve the local community so they can have a say in decisions affecting their places and spaces and have an understanding of the value of the historic environment.  Update: Changes made to wording to remove reference to WHS boundary; reference to Local Development Plan added. No impact on score as review of Buffer Zone boundaries still likely to have positive impact on access.
Landscape	To safeguard and enhance the distinct identity, the diverse character and the special qualities of Scotland's landscapes as a whole.	+	Any changes to the boundary are will likely have positive effects on the wider archaeological landscape. Any extensions to the Buffer Zone are unlikely to affect the wider qualities of the landscape as this is already protected through landscapes designations, such as the Hoy and West Mainland National Scenic Area.  Update: Changes made to wording to remove reference to WHS boundary; reference to Local Development Plan added.

Cultural Heritage	Safeguard and where appropriate enhance the historic environment	0	This could have a positive effect on cultural heritage by ensuring all sites which contribute to the OUV are incorporated within the boundaries. This will ensure that the site is adequately protected and safeguarded.
		0	Update: Changes made to wording to remove reference to WHS boundary; reference to Local Development Plan added. Score changed from positive to neutral as WH boundary no longer included.
Biodiversity, Flora and Fauna	Maintain, protect and enhance biodiversity (species, habitats, ecosystems)	0	Reviewing and potentially extending the boundary focuses on the cultural value of the WHS and will have no effect on biodiversity, flora and fauna.
			Update: Changes made to wording to remove reference to WHS boundary; reference to Local Development Plan added. No impact on score.

- Any proposals to alter the WHS Buffer Zone boundary will be developed in consultation with Partners and a public consultation exercise is undertaken.
- The sustainability checklist should be applied to actions which contribute to this objective, to ensure that a holistic environmental approach is taken in their delivery.

#### **Summary**

Positive and neutral effects with no negative effects predicted.

Objective 7: Management of the WHS prioritises adaption to the effects of the Climate Emergency on the WHS and Buffer Zone, and mitigation of climate impacts by reducing emissions and contributing to a sustainable low-carbon society.

Environmental parameter	SEA Objective	Score	Comments
Climatic Factors	<ul> <li>Reduce the causes of climate change</li> <li>Contribute to effective adaptation to the predicted effects of climate change</li> </ul>	+	This objective focuses on developing and implementing a strategy to address threats to the WHS and Buffer Zone from climate change, for example addressing coastal erosion at Skara Brae. This will have a positive effect by contributing to the effective adaptation and mitigation of climate change effects on the WHS.
Population and Human Health	<ul> <li>Promote celebration, understanding, enjoyment and access to the natural and cultural heritage</li> </ul>	+/-	There will likely be a positive effect on population and human health as adaptation to the effects of the Climate Emergency will ensure long term access to natural and cultural heritage and make healthier living and working environments.

	<ul> <li>Support healthy living and working environments</li> <li>To reduce inequalities</li> </ul>		However, there could be instances where management and mitigation also have negative effects on access to specific areas of the WHS or Buffer Zone. For example, closure of areas to combat erosion caused by the combined impact of increased footfall with climate change impacts. This is expected to be short term and it is not considered that these implications will be significant.
Landscape	To safeguard and enhance the distinct identity, the diverse character and the special qualities of Scotland's landscapes as a whole.	-	Physical measures from a long-term strategy to address the threats to Skara Brae from climate change effects could have a negative effect on landscape depending upon the scale, design and material used. It is uncertain at this stage if any measures will take place and if so impacts should be considered as options are developed.
Cultural Heritage	Safeguard and where appropriate enhance the historic environment	+	Adaptation and mitigation of climate impacts will have a positive effect on the historic environment by contributing to the safeguarding of tangible features at risk from the consequences of climate change.
Biodiversity, Flora and Fauna	Maintain, protect and enhance biodiversity (species, habitats, ecosystems)	-	Any physical measures required to address climate effects on the WHS, such as costal defence work, could have a range of adverse effects on biodiversity, flora and fauna. This includes impacts on geology and geomorphology, natural coastal processes, and coastal and landward habitats and species. It is uncertain at this stage if any measures will take place and if so impacts should be considered as options are developed.

- Environmental assessment will be integrated into the development of options for both short- and long-term large scale physical measures to identify in detail the potential environmental effects on biodiversity, flora, fauna, and landscape.
- The sustainability checklist should be applied to actions which contribute to this objective, to ensure that a holistic environmental approach is taken in their delivery.

#### Summary

There is an even balance in likely positive and negative effects for this objective. Negative effects are expected to be minor or if potentially significant, suggested mitigation and enhancement should ensure that they do not have significant effects.

Objective 8: A programme of monitoring is in place for both the state of conservation and the implementation of actions for the WHS and Buffer Zone and the results are used by Partners to inform decision making and future management.

Environmental	SEA Objective	Score	Comments
parameter			
Climatic Factors	<ul> <li>Reduce the causes of climate change</li> <li>Contribute to effective adaptation to the predicted effects of climate change</li> </ul>	+	This objective will see the ongoing monitoring of the effects of climate change on the WHS and Buffer Zone, such as sea level change and precipitation change. Monitoring the impacts of the rapid growth of tourism and its associated rise in emissions of CO <sub>2</sub> and greenhouse gases from methods of travel may also be included.
		Ť	Although it is not possible to assess exact details of monitoring or what the outcomes of the monitoring will be, it will provide an important baseline which can inform decision making and future management of the site. This will likely allow steps to be taken to reduce emissions and contribute to effective adaptation to the predicted effects of climate change.
Population and Human Health	<ul> <li>Promote celebration, understanding, enjoyment and access to the natural and cultural heritage</li> <li>Support healthy living and working environments</li> <li>To reduce inequalities</li> </ul>	+/-	The monitoring of erosion impacts from visitors may have negative implications for access to the WHS, such as the closure of areas for turf repair or to allow areas of ground to rest. These will likely be small scale, short/medium term actions and it is not considered that these implications will be significant.  In contrast, monitoring can result in the WHS and Buffer Zone being better management decisions, allowing the WHS and its archaeological landscape to be understood and enjoyed with greater access for people, especially local
Landscape	To safeguard and enhance the distinct identity, the diverse character and the special qualities of Scotland's landscapes as a whole.	+	communities, in the longer term.  The archaeological landscape of World Heritage Status is a special quality of the Hoy and West Mainland National Scenic Area (NSA). Monitoring of the WHS and Buffer Zone and undertaking positive decision making and management will ensure that the special qualities of the landscape are safeguarded and enhanced.
Cultural Heritage	Safeguard and where appropriate enhance the historic environment	+/-	A programme of monitoring for the WHS and Buffer Zone will contribute the safeguarding of both designated and undesignated/unknown tangible features alongside intangible features of the historic environment. It will help identify which elements are at risk, including in the context of climate change. This will assist with the safeguarding and, where appropriate, enhancement of cultural heritage.

			The sites which comprise the WHS are Properties in Care and can be monitored appropriately. However, the WHS sits within a wider archaeological landscape, some of which is within the Buffer Zone. Here, the responsibility of designated and undesignated tangible heritage features is primarily the responsibility of the landowner or manager, and they have no obligation to monitor and manage monuments. HES's field officers monitor the condition of scheduled monuments through site visits approximately every 5 years, however there is no current system for monitoring undesignated monuments within the Buffer Zone.
			There can be instances where monitoring can lead to management recommendations for natural heritage which can conflict with cultural heritage, reducing the level of positive effect. Any negative effects as a result of this are expected to be minor and not significantly impact the WHS and Buffer Zone.
Biodiversity, Flora and Fauna	Maintain, protect and enhance biodiversity (species, habitats, ecosystems)		Monitoring the increased pressures associated with growing visitor numbers to the site can allow positive management solutions to be identified that maintain local biodiversity interests. Natural heritage interests should be taken into consideration when taking steps to address carrying capacity issues.
		+/-	There can be instances where monitoring can lead to management recommendations for cultural heritage which can conflict with biodiversity, flora and fauna interests, for example vegetation clearing.
			Monitoring of climate change effects could result in management recommendations, such as coastal defences at Skara Brae or changes to car parking/traffic management to reduce greenhouse gas emissions, that could have adverse effects on biodiversity, in particular affecting natural processes and affecting coastal and landwards habitats and the species that they support.

- Steps taken to address carrying capacity issues should be sustainable in the long term and include natural heritage interests.
- The sustainability checklist should be applied to actions which contribute to this objective, to ensure that a holistic environmental approach is taken in their delivery.
- Ensure careful consideration in proposal for any potential development or improvements to facilities at sites which may impact the sensitive heritage, landscape and natural environment.
- Suggest actions to encourage landowners or managers to contribute to the monitoring and management of the WHS buffer zone

#### Summary

The overall effects of this objective are positive however some negative effects have been identified. These are likely to be minor and suggested mitigation and enhancement should ensure that they do not have significant effects.

Objective 10: Management and interpretation (onsite and offsite, including digitally) enhance awareness and understanding of the archaeological and historical heritage, the natural environment, the Buffer Zone and WHS in its wider context, geographically and through time. All based on robust research and understanding.

Environmental	SEA Objective	Score	Comments
parameter			
Climatic Factors	<ul> <li>Reduce the causes of climate change</li> <li>Contribute to effective adaptation to the predicted effects of climate change</li> </ul>	0	Climatic factors are unlikely to be affected by this objective.
Population and Human Health	<ul> <li>Promote celebration, understanding, enjoyment and access to the natural and cultural heritage</li> <li>Support healthy living and working environments</li> <li>To reduce inequalities</li> </ul>	+	This objective should have a positive effect on population and human health by increasing understanding of the value of the historic environment. Improving opportunities and better access.  Management will improve the condition of the historic environment as a place to live and work, improving opportunities and understanding of the WHS and the archaeological landscape it sits in.
Landscape	To safeguard and enhance the distinct identity, the diverse character and the special qualities of Scotland's landscapes as a whole.	-	Depending on their location, scale and materials used, any new physical measures may affect special landscape qualities, such as land use character. Although there are potential negative effects, these are not expected to be significant unless large scale development is proposed.
Cultural Heritage	Safeguard and where appropriate enhance the historic environment	+/-	The WHS and Buffer Zone will be safeguarded and enhanced through an increase in awareness and understanding of its archaeological and historical heritage.  This objective could lead to the creation of new interpretive and management services or infrastructure. Depending on their natures, this could cause disturbance to archaeological remains and have effects on the setting of the WHS
Biodiversity, Flora and Fauna	Maintain, protect and enhance biodiversity (species, habitats, ecosystems)	+/-	Management and interpretation should enhance awareness and understanding of natural heritage which will have positive effects for maintaining, protecting and enhancing biodiversity.  However, any new physical measures used to enhance awareness and understanding could adversely affect natural heritage interests such as areas

	designated for nature conservation and wider biodiversity and should be designed
	sensitively.

- Environmental assessment of any new interpretive or management services or infrastructure
- Any new physical management or interpretive measures should be sensitively located and designed to avoid effecting the natural and historic elements alongside the landscape character of the WHS
- The sustainability checklist should be applied to actions which contribute to this objective, to ensure that a holistic environmental approach is taken in their delivery.

#### **Summary**

Overall, effects are likely to be positive, with some neutral and negative impacts but these are likely to be minor and suggested mitigation and enhancement should ensure that they do not have significant effects

Objective 13: Tourism at and around HONO offers a world class responsible visitor experience, while benefitting the Orkney communities.				
Environmental	SEA Objective	Score	Comments	
parameter				
Climatic Factors	Reduce the causes of climate change     Contribute to effective adaptation to the predicted effects of climate change	+	This objective will play a positive role in contributing to the effective adaptation to the effects of climate change and combat the rises in CO2 and greenhouse gas emissions caused by the rapid growth of tourism.  The creation of active travel networks will potentially see an increase on the use of more sustainable transport options through walking and cycling to get between the central west mainland sites, contributing to a reduction in the causes of climate change. This however will likely not have an effect on certain methods of travel, such as cruise ships and buses, resulting in no change to climate outcomes.	
Population and Human Health	<ul> <li>Promote celebration, understanding, enjoyment and access to the natural and cultural heritage</li> <li>Support healthy living and working environments</li> <li>To reduce inequalities</li> </ul>	+	This objective will have a positive effect on the local community, being a significant benefit by supporting healthy living and working environments. The delivery of multi-disciplinary interpretation to a wide range of recreational, learning and community groups within the WHS and beyond will support placemaking.  A holistic Interpretation and Access Plan will ensure there is both natural and cultural heritage interests, which will allow people to have a better understanding of the value of and access, physical and intellectual, to the WHS and Buffer Zone.	

Landscape	To safeguard and enhance the distinct identity, the diverse character and the special qualities of Scotland's landscapes as a whole.	-	There is potential for this objective to have negative effects on the safeguarding of landscape, particularly around the central West mainland sites. Extending the core path network, developing a new active travel network and improvements to infrastructure could affect the archaeological landscape. Depending on their location, scale and materials used, any new physical measures there may also be effects on the special landscape qualities, such as land use character. Although there are potential negative effects, these are not expected to be significant unless large scale development is proposed.
Cultural Heritage	Safeguard and where appropriate enhance the historic environment	+/-	Improvements to infrastructure defined by a responsible tourism approach can have a positive effect on cultural heritage. It can contribute to the dispersal and reduction in the concentration of visitors which will help safeguard the historic environment.  Any new interpretive/access services or infrastructure proposed within an Interpretation and Access Plan or delivered through an active travel or path network could result in adverse effects to the setting of the WHS and key
			monuments, alongside disturbance of archaeological remains. The level of effect could be mitigated by the sensitive choice of locations and appropriate design, but this is unknown at this stage.
Biodiversity, Flora and Fauna	Maintain, protect and enhance biodiversity (species, habitats, ecosystems)	+/-	An interpretation and Access Plan will include all aspects of access, ranging from physical access to the sites to different interpretive services and intellectual access. A holistic approach is positive by including natural heritage interests however any new physical measures (such as paths or signage) could affect biodiversity and should be designed sensitively.
Occupants desired	igation/onbancoment		Extending or creating new core path networks and active travel could have adverse effects on biodiversity depending on where they are situated, and the materials used. However, if they are designed to avoid sensitive habitats and are monitored, they offer the opportunity to disperse the concentrations of visitors and potentially away from sensitive habitats and safeguard biodiversity.

- Any new developments or physical measures for visitors should be located and designed sensitively (including materials and colours used) to avoid adversely affecting biodiversity, landscape and cultural heritage
- Wider environmental issues will be included in the Interpretation Plan
- Environmental assessment and archaeological investigation prior to any new physical measures
- Active operational monitoring of the active travel and path networks is required to allow areas to be temporarily closed off if sensitive habitats shift in the future (bird nesting, seasonal growth etc).

• The sustainability checklist should be applied to actions which contribute to this objective, to ensure that a holistic environmental approach is taken in their delivery.

#### **Summary**

Though largely positive, there is potential for adverse negative effects to cultural heritage, landscape, biodiversity, flora and fauna if suggested mitigation is not followed. There are contrasts in the scoring effects between different environmental parameters for this objective. For example, creating an active travel network could have both positive and negative environmental effects depending upon the location and design of the new path.

#### **Deleted draft Objectives**

These Objectives were deleted during the process of developing the consultation draft of the Management Plan. Their assessment has been retained here for information.

**Deleted – previously Objective 11** ("Management of the WHS protects and enhances the natural heritage values of the WHS and interpretation contributes to awareness and understanding of the natural heritage of the WHS and the Buffer Zone.")

Environmental parameter	SEA Objective	Score	Comments
Climatic Factors	<ul> <li>Reduce the causes of climate change</li> <li>Contribute to effective adaptation to the predicted effects of climate change</li> </ul>	0	Climatic factors are unlikely to be affected by this objective.
Population and Human Health	<ul> <li>Promote celebration, understanding, enjoyment and access to the natural and cultural heritage</li> <li>Support healthy living and working environments</li> <li>To reduce inequalities</li> </ul>	+	This objective should have a positive effect on population and human health by increasing understanding of the value of the natural environment, improving opportunities and better access to it
Landscape	To safeguard and enhance the distinct identity, the diverse character and the special qualities of Scotland's landscapes as a whole.	-	Depending on their location, scale and materials used, any new physical measures may affect special landscape qualities, such as land use character. Although there are potential negative effects, these are not expected to be significant unless large scale development is proposed.

Cultural Heritage	Safeguard and where appropriate enhance the historic environment		The WHS and Buffer Zone will be safeguarded and enhanced through an increase in awareness and understanding of its natural heritage.
		+/-	This objective could lead to the creation of new interpretive and management services or infrastructure. Depending on their natures, this could cause disturbance to archaeological remains and have effects on the setting of the WHS
Biodiversity, Flora and Fauna	Maintain, protect and enhance biodiversity (species, habitats, ecosystems)		Management and interpretation should enhance awareness and understanding of natural heritage which will have positive effects for maintaining, protecting and enhancing biodiversity.
		+/-	However, any new physical measures used to enhance awareness and understanding could adversely affect natural heritage interests such as areas designated for nature conservation and wider biodiversity and should be designed sensitively.

- Environmental assessment of any new interpretive or management physical services or infrastructure
- Any new physical management or interpretive measures should be sensitively located and designed to avoid effecting the natural and historic elements alongside the landscape character of the WHS
- The sustainability checklist should be applied to actions which contribute to this objective, to ensure that a holistic environmental approach is taken in their delivery.

#### **Summary**

Overall, effects are likely to be positive, with some neutral and negative impacts but these are likely to be minor and suggested mitigation and enhancement should ensure that they do not have significant effects

**Deleted – previously Objective 12** ("HONO has an inspiring, engaging and accessible digital presence that reflects the values of the Site and enables access – physical and intellectual – to, and understanding of, the WHS and Buffer Zone.")

Environmental	SEA Objective	Score	Comments
parameter			
Climatic Factors	<ul> <li>Reduce the causes of climate change</li> <li>Contribute to effective adaptation to the predicted effects of climate change</li> </ul>	?	Increasing the digital presence, especially providing alternative sustainable opportunities to change the way people experience the WHS via online interpretation and outreach, may have a positive effect on this parameter. It could reduce CO <sub>2</sub> and greenhouse gas emissions by potentially reducing the number of people visiting the WHS and Buffer Zone. However, it is uncertain how this would realistically affect the rapid growth of visitor numbers to

			Orkney, and if visitors would still come the WHS regardless to experience it in person.
Population and Human Health	<ul> <li>Promote celebration, understanding, enjoyment and access to the natural and cultural heritage</li> <li>Support healthy living and working environments</li> <li>To reduce inequalities</li> </ul>	+	The objective will have a positive effect by disseminating information through a range of mediums to allow people to better understand the value of and access, physically and intellectually, the WHS and Buffer Zone.
Landscape	To safeguard and enhance the distinct identity, the diverse character and the special qualities of Scotland's landscapes as a whole.	0	Depending on the nature of the digital presence there may be positive effects on landscape if mediums contribute to the enhancement of the WHS in its wider landscape setting. However, this will likely be minor and localised with an overall effect expected to be neutral.
Cultural Heritage	Safeguard and where appropriate enhance the historic environment	+	Having an accessible, engaging and inspiring digital presence will positively enhance the cultural heritage of the WHS and Buffer Zone. There may also be localised positive impacts through being able to use digital interpretation to reduce or replace access to fragile areas of the WHS, helping to conserve it.
Biodiversity, Flora and Fauna	Maintain, protect and enhance biodiversity (species, habitats, ecosystems)	+/-	Providing more opportunities to experience and understand the WHS digitally could have a positive affect for the physical pressures caused by increased visitor numbers by offering alternative online ways to experience the site. This could be beneficial to natural heritage, helping to maintain and protect biodiversity by reducing the numbers and intensity of visitors or replace access to parts of the WHS. As noted above, the effects this will realistically have on visitor numbers is uncertain.  If digital services require infrastructure and/or encouraged greater spatial disruption around the WHS and Buffer Zone, this may have negative impacts on biodiversity by moving visitors into potentially sensitive habitats.

- Any new physical measures for digital infrastructure should be sensitively located and designed to avoid effecting the natural and historic elements of the WHS
- Natural heritage interests should be taken into consideration when designing and providing different digital opportunities to experience and understand the WHS and Buffer Zone.

• The sustainability checklist should be applied to actions which contribute to this objective, to ensure that a holistic environmental approach is taken in their delivery.

#### Summary

Overall, largely positive effects have been identified for this objective with one neutral and one uncertain. There may be negative effects on biodiversity, flora and fauna but these are likely to be minor and suggested mitigation and enhancement should ensure that they do not have significant effects. It could contribute to measures to address carrying capacity issues at the sites, especially effects on cultural heritage, but any new physical access measures or infrastructure to support digital resources could contrast with biodiversity interests.

# THE HEART OF **NEOLITHIC ORKNEY WORLD HERITAGE SITE**

**DRAFT MANAGEMENT PLAN 2025-2035** 

HABITATS REGULATIONS APPRAISAL **AUGUST 2024** 

#### **Table of Contents**

1 Introduction and Context	1
1.1 Introduction	1
1.2 European Site Details	1
1.3 Stage 1: The Plan or Project: Heart of Neolithic Orkney World Heritage Site Management Plan 2025-2035	1
1.4 Stage 2: Is the Plan or Project directly connected with or necessary to site management for nature conservation?	3
1.5 Stage 3: is the Plan or Project (either alone or in combination with other plans or projects) likely to have a significant effect on the Loch of Stenness SAC?	3
1.6 Stage 4: Undertake an appropriate assessment of the implications for the Loch of Stenness SAC) in view of its conservation objectives.	3
1.7 Stage 5: Can it be ascertained that the proposal will not adversely affect the integrity of the Loch of Stenness SAC?	y 5
1.8 Advice sought.	5
2 Conclusion in relation to Plan or Project.	6
Appendix 1: Screening for European Sites Potentially Affected by the Management Plan	7
Appendix 2: Maps	12

#### 1 Introduction and Context

#### 1.1 Introduction

Article 6(3) of the EC Habitats Directive requires that any plan (or project), which is not directly connected with or necessary to the management of a European site but would be likely to have a significant effect on such a site, either individually or in combination with other plans or projects, shall be subject to an 'appropriate assessment' of its implications for the European site in view of the site's conservation objectives. The plan-making body shall agree to the plan only after having ascertained that it will not adversely affect the integrity of the site concerned, unless in exceptional circumstances the provisions of Article 6(4) are met.

The Heart of Neolithic Orkney (HONO) World Heritage Site (WHS) Management Plan qualifies as a plan that contains a programme, or policies, or proposals to which a HRA is applicable, in order to comply with Article 6(3) of the Habitats Directive.

This HRA screening document has identified the European Sites that may potentially be affected, presents information about them and has screened the HONO WHS Management Plan for the likelihood of significant effects, alone or in combination, on European Sites.

#### 1.2 European Site Details

#### Name of European site(s) potentially affected:

Loch of Stenness Special Area of Conservation (https://sitelink.nature.scot/site/8303)

#### Name of component SSSI if relevant:

Lochs of Harray and Stenness SSSI (https://sitelink.nature.scot/site/1083)

#### European site qualifying interest(s) & whether priority/non-priority:

Coastal Lagoons; priority

#### Conservation objectives for qualifying interests:

- 1. To ensure that the lagoons at Loch of Stenness SAC are in favourable condition and make an appropriate contribution to achieving Favourable Conservation Status.
- 2. To ensure that the integrity of Loch of Stenness SAC is maintained in the context of environmental changes by meeting objectives 2a, 2b and 2c for lagoons:
  - 2a. Extent and distribution of the habitat within the site.
  - 2b. Structure and function of the habitat and the supporting environment on which it relies
  - 2c. Distribution and viability of typical species of the habitat.

(See Conservation and Management Advice at https://sitelink.nature.scot/site/8303 for more detail.)

## 1.3 Stage 1: The Plan or Project: Heart of Neolithic Orkney World Heritage Site Management Plan 2025-2035

**Proposal title:** Heart of Neolithic Orkney World Heritage Site (HONO WHS) Management Plan 2025-2035

Name of competent authority: Historic Environment Scotland

#### Details of proposal (inc. location, timing, methods):

Location: Four sites together make up the World Heritage Site: The settlement of Skara Brae, located on the Bay of Skaill on the north-west coast of the island of Mainland. Maeshowe chambered tomb and the associated Barnhouse Stone lie to the east of the south end of the Loch of Harray. The Stones of Stenness and the nearby Watch Stone are located near the shore of the Loch of Stenness just to the south of the Loch of Harray. The Ring of Brodgar and a series of associated mounds and a stone setting known as the Comet Stone lie a short distance to the north, on the peninsula that divides the Loch of Harray from the Loch of Stenness. All four sites are Properties in Care, which means they are managed by HES on behalf of Scottish Ministers. The World Heritage property boundary is the same as the boundary of these Properties in Care.

The Loch of Stenness SAC is located within in the WHS Buffer Zone. The boundary of the Stones of Stenness component of the WHS is c. 25 metres east of the boundary of the SAC, on the other side of the Brodgar Road B9055. Its associated standing stone the Watch Stone stands on the west side of the road slightly to the north of the Stones of Stenness, c. 10 metres from the SAC. About a kilometre to the north the Ring of Brodgar is located on the peninsula between the Lochs of Harray and Stenness; its boundary is between 100 and 250 metres from the SAC, separated by land forming part of the RSPB Brodgar Reserve.

**Timing:** The HONO WHS Management Plan covers the years 2025-2035 and provides a framework for management decisions by the partners who form the Steering Group (Historic Environment Scotland and Orkney Islands Council) and advisory partners (Highlands & Islands Enterprise, NatureScot, Orkney College UHI Archaeology Institute, RSPB) over the next ten years.

**Methods:** The Plan identified six "Challenges and Themes" (Climate Emergency; Planning for Uncertainty; Tourism and Access; Community Involvement; Sustainability; Research and Learning). There are also six long-term aims, carried forward from past Management Plans, and 16 shorter term Objectives. An Action Plan has been developed to deliver the Objectives, informed by the aims and guided by the vision. The Action plan will be revised every two years, and a mid-point update of the Management Plan and Objectives is scheduled for 2030. The primary focus of the management plan is the cultural heritage criteria under which the WHS was inscribed on the UNESCO World Heritage List in 1999.

A wide range of stakeholders also have an interest and a role to play in how the Site is managed and promoted. Stakeholders include landowners, local community, tourism and access organisations, education and research (local schools, universities, research and further education) and cultural and natural heritage bodies and membership organisations. The Management Plan partners have sought to engage with stakeholders throughout the review of the Management Plan through a range of consultation and engagement exercises.

Note: In addition to but separate from the Management Plan is the development of the Orkney World Heritage Site Gateway Project. This is a project within the Islands Deal programme. It responded to the commitments within the previous HONO WHS Management Plan (2014-19 and active until the new Plan is launched). The Gateway Project will help realise the 10-year vision and shared aspirations set out in the 2025-2035 Management Plan. The outline business case for the Gateway Project includes improving opportunities for active travel

encouraging the transition to net zero, making improvements to the visitor experience at Skara Brae, improved interpretation and digital platforms for managing visitor numbers across the WHS, and the creation of a new orientation centre to help safeguard the sites and surrounding area. However, the Gateway Project is still in development; a full business case is not yet complete, and the individual elements of the project have not yet reached options appraisal stage. This HRA therefore addresses only the HONO WHS Management Plan 2025-2035. When projects that support Management Plan Aims or Objectives are brought forward thorough the Gateway Project, these will be subject to assessment, including HRA and SEA, as required.

### 1.4 Stage 2: Is the Plan or Project directly connected with or necessary to site management for nature conservation?

HONO WHS Management Plan 2025-2035 is **not** directly connected with or necessary to site management for nature conservation for one or more European site qualifying interests, so this assessment proceeds to Stage 3.

## 1.5 Stage 3: is the Plan or Project (either alone or in combination with other plans or projects) likely to have a significant effect on the Loch of Stenness SAC?

The proximity of parts of HONO WHS to the Lochs of Stenness SAC present potential pathways by which the proposal may influence the site's qualifying interest: lagoons. We note the SEA Environmental Report conclusions, which state in the Summary of the results of the assessment of the draft objectives for Biodiversity, Flora and Fauna that "[t]here may be conflicts between the management of natural heritage and cultural heritage. Positive effects were identified for a number of objectives that incorporate natural heritage issues including the monitoring, management and interpretation of the WHS and Buffer Zone. Monitoring of climate change effects could result in management recommendations that could have adverse effects on biodiversity, in particular affecting natural processes and affecting coastal and landwards habitats and the species that they support. [A]ny new physical measures, such as visitor infrastructure or new interpretive services, could adversely affect the areas designated for nature conservation and wider biodiversity."

On this basis there is some potential for "Causing direct or indirect change to the physical quality of the environment, hydrology or habitat within the site" and/or "Causing ongoing disturbance to qualifying species or habitats."

Conclusion: for the Qualifying Interest (Lagoons) there is Likely Significant Effect (LSE).

### 1.6 Stage 4: Undertake an appropriate assessment of the implications for the Loch of Stenness SAC) in view of its conservation objectives.

Accepting the proximity of two component of the WHS to the Loch of Stenness SAC and within the Buffer Zone, we also note that there are no new and relevant specific physical management or infrastructure interventions are identified in the Management Plan Objectives or Action Plan for this area of the WHS.

The Action Plan is divided into three sections. Section 1 contains Monitoring Actions: these will have no physical effects and have been omitted from consideration.

Section 2 contains the Essential Projects/Actions; Section 3 focuses on Opportunities - desirable projects that depend on the identification of resourcing and funding.

The Section 2 and 3 actions in summary are:

- 2.1 Accessibility Audit to identify physical and intellectual barriers and identify actions to improve access
- 2.2 Community Involvement Options Appraisal
- 2.3 Formalise engagement between WHS Steering Group and Orkney Gateway Project.
- 2.4 Develop and implement a long-term Skara Brae Climate Change Strategy
- 2.5 Review the Buffer Zone boundary
- 3.1 Develop and implement a Messaging and Interpretation Strategy
- 3.2 Produce a Digital Media Strategy
- 3.3 Reestablish Research Group and establish Research Guidelines
- 3.4 Develop a Biodiversity Strategy and integrate with with existing strategies to safeguard biodiversity and the environment for the WHS and immediately associated land and water

Of the Section 2 actions, 2.1, and to a lesser extent 2.2, may inform future projects that carry the potential for LSE on Loch of Stenness SAC's qualifying features. However, as these projects have not yet been proposed or developed it is not possible to assess them for probability, magnitude, duration or reversibility at this time. In Section 3, action 3.4 has been designed explicitly to address biodiversity across the WHS property, and to consider adjacent land (here this should be read as "land and water").

As such, the proposed mitigation for any potential LSE is to ensure that any projects developed in response to this work should consider throughout how best to avoid any possible impacts on the SAC. An SEA was carried out as part of the development of the Management Plan. The SEA addressed this by developing a number of more detailed mitigation measures that aim to ensure that the findings of the environmental assessment are followed through in the subsequent design and development of specific actions as the Management Plan is implemented.

The measures proposed in the SEA will be finalised following comments made during the public consultation and a final list be included in the SEA Post Adoption Statement. It is important to note that a number of the actions and related projects that may flow from the Management Plan may be taken forward by the Partners or through the Orkney Gateway programme.

Monitoring: Although no significant environmental effects have been predicted, it will still be important to understand how the Management Plan is affecting the environment over the ten years of its implementation.

Monitoring of the environmental effects will be incorporated into the overall monitoring strategy for the Plan.

A mid-point evaluation of the Management Plan planned for 2030 will allow for changes where they are needed. If there are any changes in objectives, a screening exercise will be

undertaken to review if they will have significant environmental effects and a Screening Report will be submitted for views from Consultation Authorities before making our determination.

SEA Schedule of Commitments (draft)	Relevant environmental topic
Any proposals to alter the WHS Buffer Zone boundary will be developed in consultation with Partners and a public consultation exercise undertaken.  Environmental assessment will be integrated into the development of options for both short- and long-term	Population, human health, landscape, cultural heritage, biodiversity, flora and fauna Climatic factors, landscape, cultural heritage, biodiversity,
large scale physical measures to identify in detail the potential environmental effects on environmental parameters.	flora and fauna
Steps taken to address carrying capacity issues should be sustainable in the long term and include natural heritage interests.	Population, human health, landscape, cultural heritage, biodiversity, flora and fauna
The sustainability checklist should be applied to actions from all objectives within the detailed assessment, to ensure that a holistic environmental approach is taken in their delivery.	Climatic factors, population, human health, landscape, cultural heritage, biodiversity, flora and fauna
Ensure careful consideration in proposals for any potential development or improvements to facilities at sites which may impact the sensitive heritage, landscape and natural environment.	Landscape, cultural heritage, biodiversity, flora and fauna
Suggest actions to encourage landowners or managers to contribute to the monitoring and management of the WHS Buffer Zone	Cultural heritage
Integrate environmental assessment and archaeological investigation of any new interpretive, digital or management services or infrastructure.	Population, human health, landscape, cultural heritage, biodiversity, flora and fauna.
Any new physical measures for digital, interpretive or management infrastructure should be sensitively located and designed to avoid effecting environmental parameters.	Landscape, cultural heritage, biodiversity, flora and fauna.
Active operational monitoring of the active travel and path networks is required to allow areas to be temporarily closed off if sensitive habitats shift in the future (bird nesting, seasonal growth etc).	Biodiversity, flora and fauna
Wider environmental issues will be included in interpretation plans.	Climatic factors, population, human health, landscape, cultural heritage, biodiversity, flora and fauna

### 1.7 Stage 5: Can it be ascertained that the proposal will not adversely affect the integrity of the Loch of Stenness SAC?

In the light of the appraisal above, we conclude that the Plan will not adversely affect the integrity of the Loch of Stenness SAC and its qualifying interests and conservation objectives.

#### 1.8 Advice sought.

NatureScot are an Advisory Partner in the HONO WHS Steering Group for the 2025-2035 Management Plan, and as Partner in the 2014 Management Plan. They were consulted during

the HRA process, and on previous drafts of this assessment beginning in 2020. A copy of this completed assessment has also been shared for comment.

## 2 Conclusion in relation to Plan or Project.

In view of the appraisal above select the appropriate response position and whether the plan or project can be consented/approved/undertaken. Note: this conclusion is just in relation to effects on a European site. There may be impacts to other natural heritage interests that also need to be considered.

**Conclusion:** Likely significant effect but appropriate assessment shows that it will not adversely affect the integrity of the site - consent/approval can be given

**Comments:** Click or tap here to enter text.

Appraised by: Alice Lyall; Rosalind Campbell

**Date:** 28/08/2024

## Appendix 1: Screening for European Sites Potentially Affected by the Management Plan

Table A (Appendix 1) lists the European Sites in Orkney. Each site has been screened:

- To identify all aspects of the plan which would have no effect on a European Site. These sites will be eliminated from further consideration.
- To identify all aspects of the Plan which are not likely to have significant effects on a European site (i.e. would have some effect, because of links/connectivity, but which are minor residual), either alone or in conjunction with other aspects of the same plan or in combination with other plans, which therefore do not require 'appropriate assessment'.
- To identify those aspects of the plan where it is not possible to rule out the risk of likely significant effects on a European site, either alone or in combination with other plans or projects. This provides a clear scope for the parts of the plan that will require appropriate assessment.

For twenty-one of the twenty-two European Sites no potential effects on the site and its qualifying interests were identified.

One site was screened in as having the potential for likely significant effects on its qualifying interests. This was Loch of Stenness Special Area of Conservation (#4 in the table).

	Natura site name	Designation status	Qualifying interests	Conclusions
1	Faray & Holm of Faray	Special Area of Conservation (SAC)	Grey seal.	No connectivity to the SAC or its qualifying feature from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.
2	Hoy	SAC	Alkaline fen; Alpine & Boreal heath; Blanket Bog; Calcareous rocky slopes with chasmophytic vegetation; European dry heaths; Natural dystrophic lakes & ponds; Northern Atlantic wet heaths with Erica tetralix; Petrifying springs with tufa formation; Vegetated sea cliffs of the Atlantic and Baltic coasts.	No connectivity to the SAC and its qualifying interests from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.

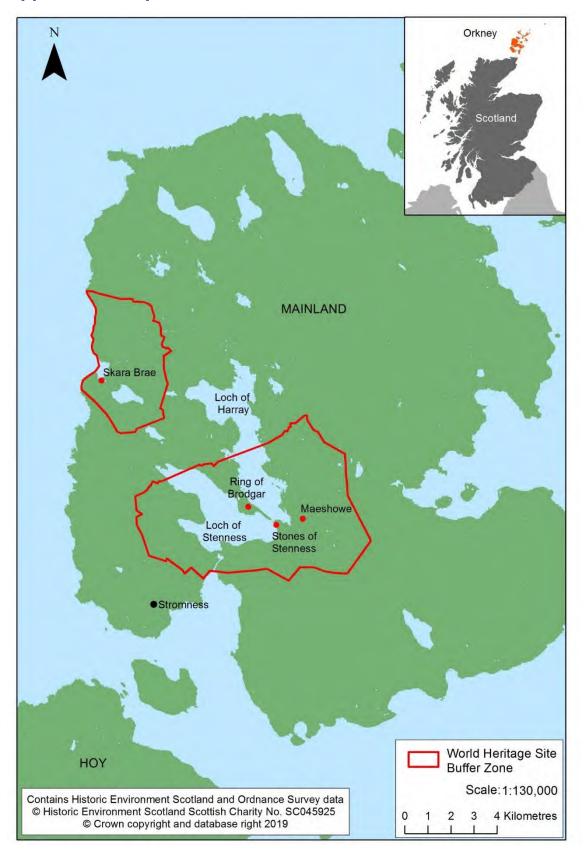
	Natura site name	Designation status	Qualifying interests	Conclusions
			Acid peat-stained lakes and ponds; Alpine and subalpine heaths; base- rich fens; blanket bog; dry heaths; hard-water springs depositing lime; plants in crevices on base-rich rocks; vegetated sea cliffs; wet heathland with cross-leaved heath.	
3	Loch of Isbister	SAC	Otter. Naturally nutrient-rich lakes or lochs which are often dominated by pondweed; very wet mires often identified by an unstable 'quaking' surface.	Although this SAC is in the vicinity of the WHS buffer it is considered there will be no effect on the SAC and its qualifying interest from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.
4	Loch of Stenness	SAC	Coastal lagoons	The Loch of Stenness SAC is located within in the WHS buffer zone, and the boundary of one component site of the WHS, the Ring of Brodgar, is between 100 and 250 metres from the SAC (separated by part of the RSPB Brodgar Reserve).
5	Sanday	SAC	Intertidal mudflats and sandflats Reefs Subtidal sandbanks Harbour seal	No connectivity to the SAC or its qualifying interests from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.
6	Stromness Heaths and Coast	SAC	Base-rich fens; dry heaths; vegetated sea cliffs.	No connectivity to the SAC and its qualifying interests from any of the objectives and actions contained within the HONO Management Plan and can therefore be eliminated from further consideration in respect of this plan.

	Natura site name	Designation status	Qualifying interests	Conclusions
7	Auskerry	SPA	Arctic tern; storm petrel	No connectivity to the SPA or its qualifying interests from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.
8	Calf of Eday	SPA	Cormorant; fulmar, great black- backed gull; guillemot; kittiwake; seabird assemblage.	No connectivity to the SPA or its qualifying interests from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.
9	Copinsay	SPA	guillemot; kittiwake; great black- backed gull; fulmar; seabird assemblage	No connectivity to the SPA and its qualifying interests from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.
10	East Sanday Coast	SPA	bar-tailed godwit; purple sandpiper; turnstone	No connectivity to the SPA and its qualifying interests from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan
11	Hoy	SPA	Red-throated diver; peregrine; great skua; puffin; kittiwake; Arctic skua; fulmar; great black-backed gull; guillemot; seabird assemblage	No connectivity to the SPA and its qualifying interests from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.
12	Marwick Head	SPA	Kittiwake; guillemot; seabird assemblage	No connectivity to the SPA and its qualifying interests from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.
13	Orkney Mainland Moors	SPA	Breeding and non-breeding hen harrier; short-eared owl; red-throated diver	This SPA is located in the vicinity of the WHS buffer zone. However any proposed projects are some distance away, and there will be no Likely Significant

	Natura site name	Designation status	Qualifying interests	Conclusions
				Effect on the pSPA and its qualifying interests from any of the objectives and actions contained within the HONO Management Plan, so it can be eliminated from further consideration in respect of this plan.
14	Papa Westray (North hill and Holm)	SPA	Arctic tern; Arctic skua	No connectivity to the SPA and its qualifying interests from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.
15	Pentland Firth Islands	SPA	Arctic tern	No connectivity to the SPA and its qualifying interest from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.
16	Rousay	SPA	Arctic tern; Arctic skua, kittiwake; guillemot; fulmar; seabird assemblage	No connectivity to the SPA and its qualifying interests from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.
17	Sule Skerry & Sule Stack	SPA	Storm petrel; Leach's petrel; gannet; puffin; guillemot; shag; seabird assemblage	No connectivity to the SPA and its qualifying interests from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.
18	Switha	SPA	Greenland barnacle goose	No connectivity to the SPA and its qualifying interest from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.
19	West Westray	SPA	Arctic tern; guillemot; razorbill; kittiwake; Arctic skua, fulmar; seabird assemblage	No connectivity to the SPA and its qualifying interests from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.

	Natura site name	Designation status	Qualifying interests	Conclusions
20	North Orkney	Proposed SPA (pSPA) at consultation stage	Breeding red-throated diver Non-breeding eider; shag; great northern diver; long-tailed duck; red- breasted merganser; Slavonian grebe; velvet scoter	No connectivity to the pSPA and its qualifying interests from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.
21	Pentland Firth Islands	Proposed SPA at consultation stage	Breeding Arctic skua, Arctic tern, guillemot. Seabird assemblage.	No connectivity to the pSPA and its qualifying interests from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.
22	Scapa Flow	Proposed SPA at consultation stage	Breeding red-throated diver Non-breeding black-throated diver, eider, goldeneye, shag, great northern diver, long-tailed duck, red-breasted merganser; Slavonian grebe	This pSPA is located adjacent to and connecting with the Loch of Stenness SAC; however there will be no likely significant effect on the pSPA and its qualifying interests from any of the objectives and actions contained within the HONO Management Plan and can be eliminated from further consideration in respect of this plan.

# **Appendix 2: Maps**



Map 1: the location of HONO WHS World Heritage Site component monuments and Buffer Zone in relation to the Loch of Stenness.



Map 2: Map showing the boundaries of the HONO WHS at Ring of Brodgar (top left) and Stones of Stenness (lower centre) with the Loch of Stenness SAC to the south-west.



## **Equality Impact Assessment (EqIA) – Initial Screening**

### What is an EqIA?

An EqIA is a process of analysing and informing decisions about a proposed or existing project (this could be a policy, a planned service or a change to a service, a proposal for building or access work, a strategic publication or a major financial decision). The aim is to identify any discriminatory or other negative impacts that the proposal could have on a particular group or part of the community or workforce. These effects could be as a result of people's race, disability, age, gender re-assignment, religion or belief, sex and sexual orientation (known as 'protected characteristics').

#### Why do I need to do one?

The Equality Act (2010) puts a general legal duty on all public authorities to have due regard to the need to eliminate discrimination, advance equality and foster good relations.

We use the EqIA to identify potential positive impacts of our work and take full advantage of any opportunities for promoting the benefits of inclusion.

Assessing impact is an effective way of improving our policy development, service delivery and decision making to ensure we consider the needs of employees and the various communities we are in contact with, to identify potential steps to advance equality, foster good relations, and demonstrate that we do not unlawfully discriminate.

### When do I need to do the Initial Screening?

The Initial Screening helps to decide whether a full EqIA is needed. It should therefore be done in tandem with the development of your business case. You will find references to the equality impact assessment embedded in the business case paperwork on the intranet.

If your project is likely to have a significant impact on people and is a public facing service e.g. key tourist sites; have a direct impact on the public e.g. communications; likely to differentially and significantly affect a discrete group who have a protected characteristic e.g. project design and accessibility for disabled users; potentially will affect staff e.g. organisation re-design/re-structures, you need to carry out an initial screening to determine if a fuller assessment is required.

The initial assessment will form the foundation of any fuller EqIA and does ensure that equality considerations are built into the early stages of developing your project and runs parallel to business case development and implementation.

All full EqIA's must be published on our website. Initial Screening EqIA's will be held on file in the relevant Directorate.

#### What do I do now?

As part of the process of planning your project you should carry out an initial screening to check whether it is relevant to the equality groups identified above. You should not start your project or implement your policy or plan until you have filled in the Initial Screening form and identified whether or not a full EqIA is required.

Advice and support is available from the Equalities Manager, External Relations & Partnership – anila.mirza@hes.scot

# SECTION ONE: ESSENTIAL INFORMATION

Directorate and Service:	World Heritage and Heritage Policy Service, Heritage Directorate			cy Service,	Name of Lead Officer:	F	Rachel Nicholson		
					Team:		World Heritage and	Heritage Policy Service	
						Tel:	0131 668 8959		
						Email:	rachel.nicholson@h	es.scot	
					Da	te started:	May 2023		
Proposal/Project:					Reference No. (if applicable):				
What is the Proposal?	Budget & Other Financial De		Cant Corporate Polic (New or Char				Changed HR Policy & Practice	New or Changed Service Delivery / Service Design	
	No			No			No	Yes	
Who Does the Proposal Affect?	Stakeholders	Partner	S	Members of the Public	⊢ r	mployees	Other, please specify:		
	Yes – including local community, landowners/ managers	Yes – the ¡ is a partner docume	rship   VISILOIS and		Yes which ite, the	– the sites ch make up WHS are all PiC's	leve	education and learning at all els, researchers	

#### The main aims of this proposal

The UK has obligations under the UNESCO World Heritage Convention to have a management system in place that ensure that the Outstanding Universal Value of World Heritage Sites (WHS) is protected and managed for future generations. In the UK, this is achieved through a Management Plan for each WHS.

Best practice is for Management Plans to be regularly reviewed, monitored and implemented. The new Heart of Neolithic Orkney WHS Management Plan for 2023-2033 draws on the work that has already been delivered through previous Partnership Management Plans and specifically builds upon the work of the 2014-2019 Management Plan.

It sets out an overarching vision, defining the second cycle of a 30-year vision, and its six long-term aims with associated medium-term objectives to address key issues for the Site's management over the next ten years. The aims are:

- 1. To protect and conserve the authenticity and integrity of the World Heritage Site for present and future generations
- 2. To inspire and engage people with the World Heritage Site and deepen their understanding of the Site's values.
- 3. To use our World Heritage status to benefit people and communities in Orkney and elsewhere.
- 4. To interpret and present the Heart of Neolithic Orkney to the highest standard.
- 5. To enhance access to and experience of the World Heritage Site responsibly, sustainably and equitably.
- 6. To facilitate a diversity of research connected to the World Heritage Site and draw on the results to pursue the Long Term Aims.

The Management Plan will be accompanied by annual Action Plans designed to deliver the aims and objectives through specific actions or projects.

### **Projected Outcome of this Proposal**

The Management Plan will:

- clearly set out the special qualities and values of the site
- establish a framework for decision-making to preserve the specific character of the WHS
- ensure a coordinated approach by the partners who work together to deliver the plan
- address threats and opportunities for the WHS so that it can be managed sustainably

## SECTION TWO: ASSESSING THE IMPACT

Equality Protected Characteristics: What will the impact of implementing this proposal be on people who share characteristics protected by the Equality Act 2010. Quantitative and qualitative information should be considered in determining any impact.

Protected Characteristic	Neutral Impact	Positive Impact	Negative Impact	Please provide information on how the impact on this protected characteristic was identified and arrived at.
Age		Х		Whilst we do not know the exact breakdown of visitors to the WHS by age profile or those engaging with the site digitally, there is likely visitors from all age demographics.
				A key aim of the Management plan is to enhance access to and experience of the World Heritage Site, both physically and digitally, in a responsible and equitable way. Some of these improvements will be delivered via the Islands Deal funded Orkney Gateway programme, which sits separately from the Management Plan. Individual Gateway projects will likely require EqIA assessment, but at present the proposals are not fully developed.
				Older age groups are more likely to have mobility issues or other disabilities and could potentially benefit from positive impacts through enhanced access improvements. Groups with children may also benefit from improved access. For instance, improved infrastructure on sites such as upgrades to travel and path networks would benefit individuals with limited mobility whilst increasing digital access would benefit those who are unable to physically travel to the World Heritage Site.
Disability		Х		We do not have quantitative or qualitive information on the number of disabled individuals who engage with the WHS.
				A key aim of the Management plan is to enhance access to and experience of the World Heritage Site, both physically and digitally, in

				a responsible and equitable way. There is potential for positive impact on people with disabilities through proposed enhanced access improvements, such as path and travel networks. Any new forms to increase digital access will conform to AA standards for accessibility.
				The Management Plan aims to present and interpret the WHS to the highest standard. Any specific projects or actions to achieve this should include reasonable adjustments to ensure they are accessible to disabled people. However, on the sites themselves the extent to which adjustments are considered reasonable will be restricted by the archaeological and protected nature of the monuments.
				Some of these changes will be delivered via the Islands Deal funded Orkney Gateway programme, which sits separately from the Management Plan. Individual Gateway projects will likely require EqIA assessment, but at present the proposals are not fully developed.
Sex	X			The potential for the Management Plan to impact positively or negatively on sex appears to be neutral and therefore further assessment is not felt to be necessary.
Ethnicity	Х			The potential for the Management Plan to impact positively or negatively on ethnicity appears to be neutral and therefore further assessment is not felt to be necessary.
Religion / Belief / non-Belief		Х	Х	A key aim of the Management plan is to enhance access to and experience of the World Heritage Site, both physically and digitally, in a responsible and equitable way.
				Some parts of the WHS are spiritually important to some individuals and contribute to people's identity through 'sense of place'. In addition, Pagan weddings and other Pagan religious ceremonies are held at the Ring of Brodgar. There is potential for positive impacts from improved access that could benefit these groups.
				However, there is also potential for negative impacts arising from another key aim of the Plan, protecting and conserving the WHS. For instance, by restricting access to certain parts of the WHS to address erosion issues or requirements for adjustments in ceremonies to avoid impact on the monuments. These are examples of time limited and area restrictions actions, with the former not disproportionally affecting

			one specific protected characteristic. However any restrictions will be managed through the annual Action Plans and decisions will be taken within HES's ongoing framework for managing Properties in Care so negative impacts will not be significant.
Sexual Orientation	Х		The potential for the Management Plan to impact positively or negatively on Sexual Orientation appears to be neutral and therefore further assessment is not felt to be necessary.
Transgender	Х		The potential for the Management Plan to impact positively or negatively on gender reassignment appears to be neutral and therefore further assessment is not felt necessary.
Pregnancy / Maternity		X	A key aim of the Management plan is to enhance access to and experience of the World Heritage Site, both physically and digitally, in a responsible and equitable way. There is potential for positive impact on pregnant individuals and carers of young children through proposed enhanced access improvements within and between sites in the WHS.
			Some of these improvements will be delivered via the Islands Deal funded Orkney Gateway programme, which sits separately from the Management Plan. Individual Gateway projects will likely require EqIA assessment, but at present the proposals are not fully developed.
Marriage / Civil Partnership	Х		The potential for the Management Plan to impact positively or negatively on marriage and civil partnership status appears to be neutral and therefore further assessment is not felt necessary.

Public Sector Equality Duty: Scottish Public Authorities must have 'due regard' to the need to eliminate unlawful discrimination, advance quality of opportunity and foster good relations.

	Please say how your proposal will contribute to the general equality duty	What is the potential impact of your proposal
Eliminate Unlawful Discrimination	Not applicable	Not applicable
(harassment, victimisation and other		
prohibited conduct):		

Advance Equality of Opportunity (taking positive action through activity and policies which widen access; participation and opportunity to protected groups):	Several of the aims of the Management Plan provide opportunities to contribute to the advancing of equal opportunity. In particular:  1. To inspire and engage people with the World Heritage Site and deepen their understanding of the Site's values.  2. To use our World Heritage status to benefit people and communities in Orkney and elsewhere.  3. To interpret and present the Heart of Neolithic Orkney to the highest standard.  4. To enhance access to and experience of the World Heritage Site responsibly, sustainably and equitably.	Objectives and specific actions could focus on encouraging and including people with protected characteristic to participate in activities and interact with the WHS.  For example, particular age groups, those with disabilities or pregnant individuals could potentially benefit from positive impacts related to access improvements. Any specific projects or actions to achieve this could include reasonable adjustments to ensure they are accessible, however on the sites themselves the extent to which adjustments are considered reasonable will be restricted by the archaeological and protected nature of the monuments.
Foster Good Relations (promoting understanding and reducing prejudice):	A key aim of the Management Plan is to make the WHS more accessible. It is expected that this will lead to specific actions with inclusivity at their heart.	In the delivery of the Management Plan, partners will take a more inclusive and open view of heritage and how to make it accessible to all.

JUDGED OVERALL LEVEL OF NEGATIVE /DIFFERENTIAL IMPACT:									
LEVEL		COMMENTS							
HIGH	No								
MEDIUM	No								
Impact:		N/A							
Action/s:		N/A							
Lead Offic	er:		Action ti	mescale:	N/A				
LOW	Yes	No negative impact has been identified.							
Evidence		The initial screening has confirmed that there are no prop the Management Plan that will have any significant negative effects on the basis of protected characteristics. There is for negative impacts upon religion and belief, but it was determined that these are addressed by existing procedul balance access and conservation issues on Properties in Positive impacts for age, disability and pregnancy and mawere identified.	ve potential res that Care.	Outcome:	Initial EqIA screening completed. Full assessment is not required.				
SECTION TH	REE: LEAD PF	ROJECT OFFICER SIGN OFF							
Lead Proje	ect Officer:								
Signature:		Date:		29/06/2023					
SECTION FOUR: DIRECTOR/HEAD OF SERVICE SIGN OFF									
Director / I	lead of Serv	vice:							
Signature:			ate:	29/06/202	23				