Historic England

March 2025
Climate Change Committee and Met Office Consortium

Historic England response to second call for evidence to inform CCRA4-IA technical report and Well-Adapted UK report

1. About Historic England

Historic England is the Government's statutory adviser on all matters relating to the historic environment in England. We are a non-departmental public body established under the National Heritage Act 1983 and sponsored by the Department for Culture, Media and Sport (DCMS). Our strategic aim is to protect England's historic places by providing expert advice to local planning authorities, developers, owners and communities to help ensure our historic environment is properly understood and cared for.

Advising government on matters related to the historic environment is a core part of our role. While sponsored by DCMS, we provide advice across the whole of government and its departments, including its many arm's-length bodies.

We are responsible for the care and operation of the National Heritage Collection – a diverse portfolio of over 400 English historic buildings, sites and monuments under the nation's ownership or protection. It includes World Heritage Sites, industrial monuments, castles, historic houses, abbeys, stone circles, forts, and a significant proportion of Hadrian's Wall. English Heritage Trust manages the National Collection on our behalf under a Property Licence and Operating Agreement.

From 2010 to 2025/26, Historic England's baseline Grant in Aid has declined by 62% in real terms, a reduction of £125m per annum. We have received no additional government funding to cover climate change activities beyond that which we have raised through external funding (such as Research Council funding). We are having to reprioritise work and be very selective about that which we carry out: this limits our ambition, capacity, and ability to rapidly produce new information and strategies, including climate adaptation planning.

2. Summary

Historic England's key messages in this response are:

1. We welcome the expansion of risk BE6 within CCRA4 on cultural heritage to include landscapes, which will broaden the scope to cover a wider variety of heritage assets and risks.

2. Throughout CCRA4, where the historic environment is subset of other risk sectors, it remains important to cross-reference heritage, both to increase understanding of risks and to highlight appropriate mitigation and adaptation solutions.
3. We are working with DCMS and other partners to meet existing commitments to adaptation action through the National Adaptation Programme and HE's Climate Change Strategy.
4. Our future adaptation plan and corresponding level of ambition are dependent on our financial settlement in the Spring 2025 Spending Review.

We submitted evidence relating to risk BE6 – Cultural heritage and landscapes in our published response to the September 2024 call for evidence.

Since September, we have submitted to Defra a joint Climate Adaptation Report with the English Heritage Trust in response to the Government's Fourth Adaptation Reporting Power call under provisions in Part 4, Section 62 of the Climate Change Act 2008. This sets out our current organisational and sector facing action to adapt to climate change, including progress against Historic England's actions within the National Adaptation Programme.

We are in contact with the chapter authors for risk BE6 and would welcome the opportunity to work further with the Met Office consortium and the Climate Change Committee (CCC) in the development of CCRA4-IA and the Well-Adapted UK report. We would be happy to provide further detail on any points raised in our submission.

3. Additional evidence to support risk BE6: cultural heritage and landscapes

The cultural heritage sector is a guardian of our nation's historic environment, protecting and conserving heritage assets and landscapes for future generations. As set out in our Heritage and the Economy publications, the sector also wields a substantial influence on our national and local economies, however many heritage assets are already recognised to be at risk from, or are already impacted by, climate change without additional resource or capacity to cope with increased rates of change.

Heritage attracts millions of visitors annually, playing an important role in the visitor economy and attracting people to places. It supports the growth of the creative economy – serving as inspiration for new works and innovation that can increase entrepreneurship and foster local growth. Cultural heritage is also recognised as an important part of the wellbeing economy – with visiting and volunteering at heritage sites demonstrated to increase life satisfaction and productivity. Using the latest national statistics, England's heritage sector is estimated to have contributed £45.1 billion in Gross Value Added to the UK economy in 2021 and employed over 538,000 workers.

Heritage assets vary in size and scale, from individual buildings to whole landscapes. Those assets within Historic England's remit include but are not limited to historic buildings and structures, collections, landscapes, buried archaeology, marine landscapes, and wrecks.

Historic England welcomes the expansion of the scope of the cultural heritage risk to include landscapes. A key point in our response to the 2024 call for evidence was that expanding the cultural heritage risk to capture the full range of heritage asset types at risk would ensure that CCRA4 would not unintentionally scope out asset types and associated risks.

Recognising the broad range of hazards, heritage asset types and impacts in CCRA4 will allow for the planning and resourcing of future work to gain a fuller understanding of the risk to the cultural heritage sector. It will also ensure that a more complete range of adaptation options can be included within an informed and targeted set of commitments in NAP4 and adaptation planning in the wider sector.

To support this, we would like to highlight the following new evidence and developing work that can feed into both the evidence gathering stage for CCRA4 and the development of the fourth National Adaptation Programme.

3A. Strategic work to identify and understand relevant hazards and risks

We continue to work with sector partners on projects to develop the evidence base for the climate hazards likely to affect heritage assets, and their impacts. This ongoing work will help us build a more comprehensive picture of climate risks to heritage and fill the remaining gaps in our understanding.

We are planning further work through our Climate Change Programme, although the breadth and depth of our ambition is dependent on our future resource allocation from government.

A new research agenda for climate change and heritage

Previously, we noted our 2023 research observatory of climate change and heritage (Research Report 28/2024). This work has helped us to better understand the large amount of research recently completed or already underway.

Since September 2024, we have progressed our goal to develop a coordinated plan with UK and Irish agencies and sector organisations for further collaborative research, to map past and future work, and ensure that scarce resource is used efficiently.

Historic England has led a recently submitted bid for AHRC Curiosity Award funding for a project to develop and embed a UK-Ireland Joint Research Agenda for Climate Change and Heritage (JRACCH) to create a framework to address the challenges posed by climate change to cultural heritage, archaeology, landscapes and the built historic environment.

We have worked with partners including the UK and Irish heritage agencies, English Heritage Trust, National Trust, the University of Oxford, the Church of England, Arts Council England, the Forestry Commission and the National Heritage Science Forum to develop this proposal.

This project will develop shared research priorities, minimise duplication and address critical gaps in knowledge, as well as promoting cross-border partnerships and sharing of expertise.

Throughout the CCRA4 and NAP4 period, this framework will address key knowledge gaps around our understanding of climate risk and appropriate adaptation solutions for heritage assets of all types.

Heritage Adaptation Partnership

The Heritage Adaptation Partnership (UK and Irish heritage agencies, English Heritage Trust, National Trust, and National Trust for Scotland) shares knowledge and collaborates on research relating to climate risk and adaptation solutions across key organisations in the UK and Ireland.

This network is launching a technical sub-group to further develop the evidence base for the impacts of key climate hazards on heritage assets. The sub-group will share expertise and foster collaboration between participating organisations on research to increase the climate resilience of our historic environment. It will bring together technical experts from across the sector to collate existing information on key hazards and impacts, discuss the technical aspects of potential adaptation approaches, and identify evidence gaps that require further research to fully understand the risk posed by climate change.

The Heritage Adaptation Partnership will form a keystone in the development of the shared research agenda above, as well as representing organisations likely to carry out research in priority areas.

Historic England's strategic work to understand climate hazards and risks

Following on from recent projects to develop a climate hazard vocabulary for heritage and to catalogue up to date climate data for priority hazards (set out in detail in our September 2024 call for evidence response), Historic England is analysing the number of designated heritage assets potentially impacted by these hazards under the scenarios considered in the CCRA. This builds on a 2022 research report by 3Keel for Historic England to map a number of hazards to historic sites under scenario RCP8.5 (27/2022).

The ongoing analysis will consider potential impacts of these hazards across all designated asset types on the National Heritage List for England including listed buildings, scheduled monuments, registered parks and gardens, registered battlefields, and protected wrecks; it also includes UNESCO World Heritage Sites. The hazards covered in this initial phase are flooding from rivers and seas; average temperature patterns and high temperature events, average precipitation patterns and high-precipitation events.

We have recently mapped listed buildings against the risk of flooding from rivers and seas using newly released data from the Environment Agency as part of the updated National Flood Risk Assessment (NaFRA). This version of NaFRA considers a 'central' allowance for the 2050s epoch (2040-2069) to calculate climate impact on riverine flooding, and a 'higher central' allowance for coastal flooding, accounting for cumulative sea level rise to 2065. Over 15,000 listed buildings are at high risk from flooding in a climate change scenario (a 1 in 30-year chance). This is a 234% increase from the current risk (11,940 listed buildings are currently high risk increasing to 15,678 with climatic impacts). This means that 4% of total listed buildings are at high risk from this particular hazard. The climate change data also shows that 2% of listed buildings are medium risk, 3% are low, and 1% are very low. This data now allows us to show that 4,000 additional listed buildings are now medium or high risk because of climate change. A challenge that will require resourcing and planning from owners, managers, and other relevant organisations to address.

Heritage assets at risk from coastal erosion, 'A Matter of Time and Tide': Following on from this analysis, Historic England is starting a more targeted project to understand the risk to heritage assets from coastal erosion using newly released Environment Agency flooding and coastal erosion risk management data. The project will consider Scheduled Monuments, examining individual monuments and asset types against the NCERM2, UKCP18 Sea Level Projections and OS Terrain Slope datasets. The methodology will then be used to expand the analysis to other asset types.

Sector to Net Zero and Carbon Literacy programme

Historic England is leading work within the heritage sector to support micro, small and medium sized heritage organisations to plan and prepare for reaching Net Zero and raising awareness about climate change impacts. A recent survey carried out by Historic England has shown that many sector organisations are at the beginning of their Net Zero journeys and will require a lot of initial support to measure carbon footprints, establish baselines and develop a carbon action plan.

The first stage has been to deliver the Heritage Carbon Literacy Course to the sector. In partnership with seven external trainers and seven Sector Bodies, we have trained nearly 700 people from 542 heritage organisations in carbon literacy (December 2023 – March 2025). This gives heritage organisations a foundation from which they can begin their journey, and the pledges submitted have the potential to save 376 tonnes of CO_2e.

Through the Sector to Net Zero programme, Historic England has published advice and resources for organisations on measuring carbon footprints, sustainable travel, reducing dependency on fossil fuels and sustainable business operations.

Although this programme focuses on supporting the sector to reach Net Zero, it is also raising awareness and understanding of the need to consider climate adaptation measures to increase the resilience of both heritage assets and sector organisations.

4. Cross-referencing risks and adaptation requirements of the historic environment across CCRA4

The updated cultural heritage risk, BE6, now includes risks to landscapes, allowing CCRA4 the potential to cover a much broader range of hazards, heritage assets and adaptation options. However, within both BE6 and other CCRA4 risks, it remains important to note that:

- The full spectrum of the cultural heritage sector encompasses a wide variety of assets and organisations beyond Historic England and our remit.
- The landscape element of BE6 has connections with risk owners beyond DCMS, particularly Defra and its arm's-length-bodies.
- Cultural heritage relates to a wide range of other risks within CCRA4, and it is important to ensure that these are appropriately cross-referenced with BE6, and that the historic subset of other risk sectors is acknowledged.

4A. Cultural heritage sector

As noted above, the cultural heritage sector is important to multiple aspects of the UK economy, supporting a large number of jobs across various industries – from arts, culture and tourism to infrastructure, agriculture and land management.

Historic England is not the only arms'-length-body within the cultural heritage sector in England and the risk to the full spectrum of cultural heritage is broader than our remit.

To capture the range of risks and adaptation measures required across the wide variety of cultural heritage assets and businesses, it is important for CCRA4 to include the necessary hooks for organisations to justify and make a case for government resource and commitment to adapting the full range of heritage assets.

To achieve this, that the Climate Change Committee and the Met Office consortium could continue to engage with bodies such as Arts Council England and their representative organisations in sectors including arts and museums.

4B. Connection between historic and natural environment

We welcome the inclusion of landscape risks within BE6, which now explicitly recognises the inseparability of cultural heritage and the natural environment. All our 'natural' environment has been shaped by human activities and cultural practices over millennia. Combining these within CCRA4 will help to help to recognise the significant and protected components of the natural environment sector and the connections to the historic environment.

Historic England works closely with Natural England, the Defra arm's-length-body with responsibility to help conserve, enhance and manage the natural environment. Historic England, Natural England and the National Lottery Heritage Fund have published a Joint Statement on the importance of integrating the management of the natural and historic environment. This sets out the strong connection between nature and heritage, the crucial role that heritage management practices can play in nature's recovery and commits our organisations to advocating for integrated management approaches and activity alignment.

Recognising these connections in CCRA4 will highlight that management and adaptation approaches that deliver for biodiversity, heritage protection, and climate action could offer a triple win scenario and should be pursued. To move toward this goal, it would help for CCRA4 to connect BE6 to risk owners within both the historic environment sector and the natural environment sector, including Defra, Natural England, and the Environment Agency.

In CCRA3, Defra owned the landscape character risk (N18), which in CCRA4 is now part of the cultural heritage risk BE6. Risk N18 included a range of natural processes and landscape-scale responses to a changing climate which go beyond the remit and technical expertise of DCMS as the risk owner and public bodies within the cultural heritage sector, such as Historic England. For example, biodiversity and hydrological and coastal processes.

To ensure a joined-up approach to the development of appropriate adaptation responses at the landscape scale within NAP4, it is important that CCRA4 makes connections in BE6 between organisations representing the historic and natural environment sectors, including government departments and arm's-length-bodies.

4C. Acknowledging the historic environment as a subset of other risk sectors

As set out in our previous response, for CCRA4 to better identify risks to cultural heritage, it would help to acknowledge and consider the historic subset of other risk sectors. This is particularly pertinent as the cultural heritage risk now includes landscapes but still sits within the built environment section of CCRA4.

In CCRA4, stronger links could be made across risk sectors where heritage is a subset. For example, there were no links drawn in CCRA3 between the cultural heritage risks and the wider building-related risks, although both risk sections sit within the built environment chapter of the CCRA, and despite the UK having the oldest building stock in Europe with around 21% of buildings constructed pre-1919.

CCRA4 could helpfully reinforce the connection between BE6 and the other built environment risks, BE1-5. This is supported by a recent publication to support the CCC's Seventh Carbon Budget, Assumptions for retrofitting residential buildings (Feb 2025), which

acknowledges historic buildings as an important subset of the UK's building stock. The CCC has updated this evidence since the 6th Carbon Budget to reflect the developing understanding that many retrofit measures, both for energy efficiency and climate resilience, can be installed in traditionally constructed buildings.

There are also clear connections between the cultural heritage risk and infrastructure risks relating to water-supply, road, and rail transport; and with land, nature and food risks relating to agriculture, forestry, and ecosystems.

Risks to infrastructure could reference the significant number of designated heritage assets that are also significant infrastructure assets such as road and railway bridges, railway tracks and canal infrastructure and note that a range of adaptation options may need to be considered for such assets due to their construction, materials, and historic significance. As an example, the Canal & River Trust manages canals, river navigations, docks, and reservoirs – including around 2500 listed buildings and scheduled monuments in England. Much of this is critical infrastructure of national significance, supporting telecoms, electricity, transport, and other networks.

Recognising the intrinsic links between heritage assets and other risks would help to encourage a more joined up and sustainable approach to adaptation across government and its separate departments when developing NAP4.

We would be happy to work with chapter authors to consider where heritage is a subset of CCRA4 risks.

5. Existing adaptation commitments in the National Adaptation Programme and Historic England's Climate Change Strategy

Historic England is committed to addressing the climate emergency. In 2022 we published our Climate Change Strategy, setting out our vision, current activity and future proposals to work with the heritage sector, stakeholders and government to combat climate change and show that heritage is an important part of the solution.

Our vision for 2040 clearly reflects the importance of adaptation action in our work: "By 2040, our heritage will have played an important role in the global fight to limit climate change and its impact on people and places. We will have enabled people to live more sustainably and adapt to a changing climate, while conserving our irreplaceable heritage for future generations."

Our strategy sets out broad areas of focus for our adaptation action, as follows:

- As we improve our knowledge of climate projections and their implications for heritage, we will engage and equip people to take action in support of the places they care about.
- We will develop, innovate, and adopt good practice – including emergent areas of work – responding to new insights, technical developments and changes as our work progresses.
- We will gather evidence to show how our historic environment can contribute to the resilience of places and communities, and how people can adapt to climate change.

The third National Adaptation Programme, set out six actions for cultural heritage, several of which focus on developing the evidence base to fully understand climate risks:

1. Historic England will develop its capacity and capability to model long-term impacts of climate change on cultural heritage caused by increased temperatures, increased rainfall, sea level rise and extreme weather, including in-combination effects by 2025.
2. Historic England, in consultation with DCMS, will work with partners to identify the research needs to develop methods to assess the vulnerability of intangible cultural heritage to climate hazards from 2024, using approaches developed for tangible heritage in the UK and overseas. The approaches to developing an evidence base will be improved to inform CCRA4 development in 2026.
3. Historic England, in consultation with DCMS, will identify and work with partners, such as the Environment Agency, from 2024 to understand and communicate the threat to cultural heritage from flooding and coastal erosion. This will inform future adaptation and decision-making.
4. Historic England will work with partners to ensure technical guidance on adapting historic buildings to the impacts of climate change is available and fit for purpose to a range of audiences by 2025.
5. DCMS, working with arm's-length bodies where appropriate, will develop (2023/4) and implement (ongoing) an engagement plan to raise awareness across government and relevant public bodies of the critical role that cultural heritage can play in supporting climate change adaptation.
6. DCMS and Historic England, will develop relevant indicators by the end of 2025 to monitor and track progress against the goals set in NAP3. [Note that Defra no longer requires the development of indicators for NAP3 actions and instead we will develop desired outcomes for well-adapted cultural heritage to inform adaptation planning and action setting for the Fourth National Adaptation Programme (NAP4).]

We have been working with DCMS, sector stakeholders across the UK and other partners such as Environment Agency, Natural England, and Arts Council England to deliver against these actions and our organisational commitments.

In November 2024, we submitted our Climate Adaptation Report with the English Heritage Trust in response to the government's third Adaptation Reporting Power call. This report set out current progress and planned work to deliver against these actions in an Adaptation Action Plan (p14-16), reproduced in the table included as Annex 1.

The commitments in NAP3, and the prioritisation of climate action across government have required Historic England to take on new responsibilities without additional resource. Our resources have continued to diminish as we receive below-inflation Grant-in-Aid settlements. Due to this, we need to be selective about our activities and reprioritise the work we carry out. This limits our ambition, capacity, and ability to deliver climate action.

We prioritise climate change organisationally and take what action we can, but it is increasingly challenging to understand threats, assess risks and take the necessary steps to adapt and prepare, both as an organisation and in the work that we do to support the wider sector.

Therefore, there is a caveat to the planned activity set out in our Adaptation Plan, both internal and sector-facing: our ability to deliver the necessary identified actions in support of NAP3 will depend on receiving sufficient resources in our spending review settlement. Continuation of the reduction in resources would require us to cut back on planned activity over the coming years.

6. Conclusion

Following on from our September 2024 submission, this response presents further evidence to allow CCRA4-IA to consider a broader range of hazards relevant to cultural heritage and the full range of heritage assets at risk from climate change.

It also presents information about our progress on climate change adaptation commitments and our future adaptation plan, while acknowledging that capacity and ambition will be set by our finalised settlement in the Spring 2025 Spending Review.

We would welcome the opportunity to work with the Climate Change Committee, the Met Office consortium and chapter authors to develop the sections of the CCRA4-IA technical report considering cultural heritage and the Well-Adapted UK report.

Annex 1: Adaptation Action Plan for Heritage

Table 1: Summary of current and ongoing adaptation work carried out by HE and English Heritage since the Third Adaptation Reporting Power (ARP3) submission.

Adaptation Themes	Adaptation Action Plan for Heritage
1. **Risk scoping** Identifying climate hazards relevant to heritage assets	1.1 Joint HE/UCL Institute for Sustainable Heritage and Heritage Adaptation Working Group (UK and Irish heritage agencies, English Heritage, National Trust and National Trust for Scotland) to develop a climate hazard vocabulary of standard terms covering over 50 hazards. HE to publish a research report (13/2024) and structured terminology on the Forum for Information Standards in Heritage (FISH). (Complete)
	1.2 Develop a mechanism for local Historic Environment Records (HERs), a primary source of information for planning and land-management, to use the vocabulary through the ARCHES for HERs software. (Ongoing)
	1.3 Work with Department for Culture, Media and Sport (DCMS) and partners to identify the research needs for assessing climate-driven risks to intangible cultural heritage, learning lessons from risk assessment of tangible heritage assets. (Ongoing)
2. Data and Evidence Collection Identifying datasets and tools to assess relevant hazards	2.1 Review of heritage risk assessment approaches (13/2023) to assess existing data, tools and risk assessment methods for hazards identified in 1.1 above. (Complete)
	2.2 Catalogue up to date climate data for priority hazards within 1.1 to enable internal risk assessment and evaluate asset-based climate change risk assessments for their applicability to the heritage sector. Research report (16/2024) and accompanying Zenodo database. (Complete)
	2.3 Using outputs from 1.1, identify partner organisations, such as the Environment Agency, who can help us to understand and communicate the threat to cultural heritage from flooding and coastal erosion, and other coastal hazards such as wave impacts. (Complete)
	2.4 Support development of Environment Agency National Flooding and Coastal Erosion Risk Management dataset. This includes revised coastal erosion risk mapping (NCERM2) and improvements to national flood risk maps using the new national flood risk assessment (NaFRA2). (Ongoing)
	2.5 Attend Environment Agency workshops on Shoreline Management Plan (SMP) next steps and display of NCERM2 data on the SMP Explorer and provide ongoing feedback ahead of public launch. (Ongoing)

Adaptation Themes	Adaptation Action Plan for Heritage
3. Analysis and Risk Assessment Using the data and tools to assess risk to heritage	3.1 Progress joint HE/UCL Institute for Sustainable Heritage collaborative doctoral PhD research to develop a scalable methodology for conducting multi-determinant climate change risk assessment for the historic environment. (Ongoing)
	3.2 Analysing the National Heritage List for England to calculate the number of designated assets at risk from priority hazards in the vocabulary at 1.1. (Ongoing)
	3.3 Joint HE/English Heritage advice and report on the threat of insect pest migration to moveable and immovable heritage assets to inform Department for Energy Security and Net Zero (DESNZ) project 'Mapping climate-related hazards to buildings', and publish research.[1] (Ongoing, See Case Study 1 in Appendix I)
	3.4 Commission analysis of coastal monitoring data collected by National Network of Regional Coastal Monitoring Programmes to assess actual and likely change on a site-by-site basis. (Ongoing)
	3.5 Support Defra and Environment Agency Coastal Transition Accelerator Programme (CTAP) projects including Changing Coasts East Riding and Coastwise (North Norfolk). (Ongoing)
	3.6 Model the risk faced by a selection of designated assets from coastal erosion, flooding and inundation. The 'A Matter of Time and Tide' project will take a subset of Scheduled Monuments from the National Heritage List for England and examine individual monuments and asset types against the NCERM2, UKCP18 Sea Level Projections and OS Terrain Slope datasets, the latter two selected as proxies for modelling inundation risk due to sea-level rise and increasing storm surge levels. (Ongoing; See Case Study 2 in Appendix I)
	3.7 Expand work carried out under 3.6 to other asset types once the methodology is proven. (Ongoing)
4. Risk Management Developing approaches for impacts, including loss	4.1 Develop, in collaboration with partners, a decision-making framework and toolkit to help owners and managers prepare for and manage climate-change driven impacts to heritage sites, including the unavoidable loss of heritage assets - informed by a review of the policy and regulatory landscape (18/2022) in relation to adaptive management. (Ongoing)
	4.2 English Heritage will work with HE and the Heritage Adaptation Working Group to add value to 4.1 by developing further technical guidance and tools to help people understand and manage climate change impacts on historic sites and collections. (Ongoing)
	4.3 Commission a pilot study with The Environmental Design Studio to better understand the impact of flooding on historic and traditionally constructed buildings and to examine why some historic buildings fall out of scope for receiving Property Flood Resilience (PFR) grants. (Complete, awaiting publication. See Case Study 3 in Appendix I)
	4.4 Work with the Environment Agency to support technical understanding of heritage assets within their adaptation schemes. (Ongoing)
	4.5 Develop desired outcomes for well-adapted cultural heritage in order to inform adaptation planning and action setting for the Fourth National Adaptation Programme (NAP4). (Ongoing)

Adaptation Themes	Adaptation Action Plan for Heritage
5. Capacity Building Sharing our learning and knowledge with others	5.1 Share work via HE climate change and technical advice web pages to help sector organisations use available data to understand the climate change risk to their assets and adapt to the impacts of climate change. (Ongoing)
	5.2 Supporting government-led projects mapping climate change hazards and their impacts, including projects led by the Department for Energy Security and Net Zero (DESNZ) to understand the impacts of future wind-driven rain and to map the ways different building types, including historic buildings, are exposed and vulnerable to climate-related hazards. (Ongoing)
	5.3 Review existing HE technical guidance on adapting historic buildings to the impacts of climate change to ensure it is fit for purpose and up to date. (Ongoing)
	5.4 Develop and share web content to help owners and managers understand and carry out climate change risk assessments using outputs from 1.1, 1.3, 2.1 and 2.2 above. (Ongoing)
	5.5 Share the decision-making framework and toolkit developed in 4.1 above to help owners and managers prepare for climate-change driven impacts. (Ongoing)
6. Planned Future Work Subject to spending review decisions and budget allocation from DCMS	6.1 Develop methods to assess and analyse data to determine the exposure of heritage assets to priority climate hazards to inform CCRA4 and those who manage and care for the historic environment. This work is ongoing.
	6.2 Analyse in-combination hazards, as noted in CCRA3, determining what is possible given some datasets include combined hazards (for example, wind-driven rain) while many others only show individual hazards. This work will begin from 2025.
	6.3 Map asset types against hazards to which they have known vulnerability, particularly coastal assets against erosion. Historic England is developing a project to map and assess risks to coastal archaeological assets pending the release of the Environment Agency coastal risk data. This work is ongoing.
	6.4 Understand vulnerability of different types of assets to key hazards set out in CCRA3 and continue to identify adaptation responses. This work will begin by 2026.
	6.5 Systematic monitoring of climate change risk to heritage assets through Historic England casework. Work is ongoing to integrate the monitoring of climate change risk through our casework and Heritage at Risk systems.
	6.6 Share ongoing research into risk assessment and adaptation with heritage decision-makers, increase sector collaboration on priority issues and avoid duplication of efforts by identifying shared priorities for future work. Historic England is working to develop collaborative research partnerships on priority areas of work such as the management of loss.
	6.7 Develop our approach to managing assets using adaptation pathways, including the risk of partial or complete loss of material fabric of heritage assets. This work will continue into 2025/2026.
	6.8 Develop technical advice to inform heritage owners and managers as they plan adaptation options for their sites using knowledge from best practice such as that shown at Case Study 6 in Appendix 1, covering the heat pump at Shrewsbury Flaxmill Maltings.
	6.9 Work with heritage partners to develop desired outcomes for well-adapted heritage using a theory of change to inform the development of adaptation actions for NAP4. This work will begin from 2025.