

# **Environmental Audit Committee**

## **Flood Resilience in England: Call for Evidence**

### **Historic England Submission**

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). We champion and protect England's historic places, providing expert advice to local planning authorities, developers, owners and communities to help ensure our historic environment is properly understood, enjoyed and cared for. Historic England is responsible for the delivery of several identified actions in the National Adaptation Programme (NAP3), specifically regarding understanding and preparing for the likely impacts of climate change on England's cultural heritage.

We welcome the opportunity to respond to this Call for Evidence<sup>1</sup> and submit the following comments for consideration. Our comments encompass all sources of flooding on land as well as flooding from the sea.

The historic environment has an important role to play in learning from experience and ensuring that appropriate materials and methods are used to facilitate the speed of drying. As an example, a study by Historic England in 2017<sup>2</sup> showed that buildings which retained their traditional materials were able to recover faster and with less disruption than those repaired with modern materials.

Paleoenvironmental reconstruction can also support our understanding of how landscapes, waterways and coasts were managed historically, but much of this evidence is at risk of loss due to flood defence schemes potentially impacting this class of archaeological remains.

A more holistic approach is required to consider the cumulative and larger scale impacts of projects on flooding. A piecemeal approach to flood defence schemes or to wider development, can be problematic in this respect, as usually these decisions are made at a county level and do not always consider the wider catchment area at risk.

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<sup>1</sup> <https://committees.parliament.uk/call-for-evidence/3512/>

<sup>2</sup> [APreliminaryStudyofFloodRemediationinHebdenBridgeandAppleby](#)

## **1. To what extent are current flood resilience assets and interventions fit-for-purpose and what are the strengths and weaknesses?**

- 1.1 It is recognised that the Environment Agency is in the process of updating their flood risk modelling<sup>3</sup>. However, unless it considers all components of an area's risk, by identifying vulnerability on a social, economic, physical and community level, it is not possible to know how sensitive and resilient specific areas and assets are.
- 1.2 The UK focuses its attention on defence flood assets, but this is not always an economical or environmentally appropriate solution and can be particularly carbon intensive<sup>4</sup>. Instead of concentrating on preventing water escaping, we recommend a focus on solutions that can have combined benefits. Seeking to integrate biodiversity, nature, reduce flooding and increasing water retention all have physical and mental benefits to their communities.
- 1.3 The Wildlife Trust<sup>5</sup>, RSPB<sup>6</sup> the Forestry Commission<sup>7</sup> and others are all seeking alternatives to hard infrastructure that require associated mechanical and electrical services. These solutions will reduce the need for construction workers, already in demand for delivering other government commitments.
- 1.4 In addition, consideration should be given to the principle and density, as well as the design of buildings within flood risk areas and a review of the 'exception test'. Adopting new methods that are more resilient to our predicted climates will create a more resilient UK<sup>8</sup>.

## **2 How appropriate is the current balance between 'green' nature-based solutions and 'grey' hard infrastructure resilience assets, and what adjustments, if any, are needed to improve it?**

2.1 Nature-based solutions to flooding may have the benefit of reducing the need for 'grey' hard infrastructure resilience assets. They also have the added benefit of providing a range of ecosystems services that can support nature recovery, carbon capture and heat resilience, whilst offering cultural services that support health and wellbeing<sup>9</sup>.

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<sup>3</sup> [Environment Agency publishes major update to national flood and coastal erosion risk assessment - GOV.UK](#)

<sup>4</sup> [Low-carbon concrete flood defences to help Environment Agency hit net zero by 2030 - GOV.UK](#)

<sup>5</sup> [Wiltshire's river to be 're-wiggled' to help reduce floods - BBC News](#)

<sup>6</sup> [Defending The Wash](#)

<sup>7</sup> [First ever UK woodland natural flood management guide published - GOV.UK](#)

<sup>8</sup>

[https://www.bing.com/search?pglt=171&q=floating+homes+netherlands&cvid=1066b0e4c47e4389a40a685a85a236b8&gs\\_lcrp=EgRIZGdlKgclABAAGPkHMGclABAAGPkHMGYIARBF GDkyBggCEAAYQDIICAMQ6QcY\\_FXSAQgzNDQwajBqMagCALACAA&FORM=ANNAB1&PC=U531](https://www.bing.com/search?pglt=171&q=floating+homes+netherlands&cvid=1066b0e4c47e4389a40a685a85a236b8&gs_lcrp=EgRIZGdlKgclABAAGPkHMGclABAAGPkHMGYIARBF GDkyBggCEAAYQDIICAMQ6QcY_FXSAQgzNDQwajBqMagCALACAA&FORM=ANNAB1&PC=U531)

<sup>9</sup> See <https://www.gov.uk/guidance/use-nature-based-solutions-to-reduce-flooding-in-your-area>

2.2 The Severn Valley Water Management Scheme (SVWMS) is a developing example of an approach to sustainable and holistic water management across a catchment to reduce flooding and enhance climate resilience. The scheme aims to combine traditional engineering solutions with nature-based solutions that support the natural environment, reconnecting people with the landscape, and sustainable economic growth<sup>10</sup>.

2.3 There are opportunities in schemes such as these to take an integrated approach that is mutually beneficial for the historic and natural environment. Heritage assets can be protected from damaging impacts of flooding, as well as helping to support nature-based solutions and the wider benefits they can provide to communities. It is important that the potential opportunities for, and impacts on heritage, are accounted for as part of a sustainable approach to developing flood management schemes. In the case of the SVWMS, cultural heritage was a key part of the sustainability appraisal.<sup>11</sup>

### ***3 What changes to the planning system and building regulations are needed to ensure that buildings and infrastructure are resilient to flooding in the short, medium, and long-term?***

3.1 At present the main Building Regulations Approved Document in relation to flooding is Part C.<sup>12</sup> However, it provides limited information on the resilience of buildings to flooding or recommendations that should be followed. In addition, all the Approved Documents generally do little to highlight the difference between traditional and modern construction. This has resulted in many flood resilient measures being inappropriately applied to all building typologies, resulting in damp and deterioration to the building and issues for the occupants.

3.2 Historic England also recommends the following amendments to the Approved Documents:

- a. Approved Document A would benefit on further clarification on the impact of structural damage for existing and new buildings in flood zones from impact of water and debris.
- b. Approved Document H would benefit from discussing in more detail the various options for sustainable drainage and water recovery.
- c. Approved Document L would benefit from a note about the impact flood water might have on energy efficiency measures.
- d. Approved Document P requires highlighting the need to assess flood risk in relation to all electrical systems being installed.

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<sup>10</sup> See Severn Valley Water Management Scheme: Creating thriving, resilient communities and natural environments in the upper Severn Valley, [https://res.cloudinary.com/commonplace-digital-limited/image/upload/v1730803475/Vision\\_Document\\_abyrmu.pdf](https://res.cloudinary.com/commonplace-digital-limited/image/upload/v1730803475/Vision_Document_abyrmu.pdf)

<sup>11</sup> See SVWMS StoryMap: SA Scoping, <https://storymaps.arcgis.com/stories/4c59daa19b074aa9b5fe20fc6554d4fb>.

<sup>12</sup> [The property flood resilience plan](#)

3.3. National flooding policy is set out in chapter 14 of the National Planning Policy Framework (NPPF, December 2024). This includes broader climate change policies, as well as those relating to flooding. The latter are largely concerned with the *sequential* and *exception* tests to managing the types and location of new development, directing it to areas of lowest risk. This approach could potentially steer development away from areas in which it would secure the effective reuse of existing buildings, impacting both climate change mitigation and brownfield-first approaches.

3.4 The NPPF could encourage a holistic approach in plan-making to flooding, integrating policies with those on protection of the historic environment, nature-based solutions and nature recovery strategies, increasing the resilience of places and communities to flooding. Furthermore, the sequential test could place explicit emphasis and greater weight on development, where justified in areas of higher flood risk, that makes appropriate reuse of existing buildings, including measures to increase their flood resilience. This should coincide with strengthening the weight given to reuse in paragraph 161, which it presently only ‘encourages’.

3.5 Historic England, in collaboration with the Environment Agency, has been updating their technical guidance on flooding, whilst also offering in-house training to the Environment Agency staff undertaking works on listed buildings. It is important that where there might be conflicting priorities such as infrastructure, heritage, natural environment and life safety, open communication and collaboration are key to finding the best outcome. Historic England is commissioning a project on using Multi Criteria Analysis to support decision-making on heritage buildings at risk of coastal erosion, following on from a project undertaken in 2022. Historic England is also a partner in the Centre for Doctoral Training for Resilient Flood Futures<sup>13</sup>. We are also actively engaged with the Coastal Transition Accelerator Programme<sup>14</sup> which addresses communities on the coast that cannot sustainably be defended from erosion but might offer a model for communities that cannot be protected from flooding.

#### ***4. To what extent are current metrics for monitoring the effectiveness of flood resilience fit for purpose, and what improvements could make them more effective?***

4.1 Historic England thinks that there is more work that can be done in this area and has commissioned Liverpool John Moores University to develop a methodology to identify the risk and vulnerability of traditionally constructed buildings in Liverpool to surface water flooding. This is a three-year project starting in 2025 and completing in 2028.

4.2 At present there is only a reporting structure<sup>15</sup> but no database that identifies how many privately-owned flood resilience assets there are, or who owns them. The Environment Agency’s own assets need routine maintenance and repair<sup>16</sup>. Many

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<sup>14</sup> [Coastal Transition Accelerator Programme \(CTAP\) | Engage Environment Agency](#)

<sup>15</sup> <https://www.gov.uk/guidance/flood-and-sea-defences-designated-assets-on-your-land>

<sup>16</sup> [Resilience to flooding](#)

listed structures serve as flood risk assets<sup>17</sup>, such as harbours and sea walls. There is no database identifying the number of historic assets that provide this function. Identifying this figure would be extremely important to ensure that when changes to policies and strategies, or consideration of decommissioning listed assets, they are not left at risk of decay or loss.

4.3 Further work is needed to understand what the implication of continuous flooding has on our built environment and on the life expectancy of flood resilience measures. A one-off flood is unlikely to cause significant damage to a building, but the implication of several occurring in quick succession (such as those experienced in Shrewsbury) means that building materials and property flood measures might see their life expectancy reduced.

4.4 In addition, it is important as part of Government's overarching goal to achieve Net Zero by 2050 that we consider the carbon cost associated with investment to improve resilience and reduce the need for wholesale strip out and reinstatement, or - worse case - demolition<sup>18</sup>.

## ***5. How effectively and how frequently do flood risk management authorities work together to tackle flooding issues and do they have sufficient resources and skills available to carry out their work?***

5.1 It is important to first recognise that local authorities are borough, city, district or county specific, whereas flood schemes are catchment specific, thus might be working across several local authorities. Difference in opinion on what are acceptable measures means that many projects are likely to experience delays due to conflicting priorities, such as Tenbury Wells<sup>19</sup> and the Somerset levels<sup>20</sup>.

5.2 The National Adaptation Plan<sup>21</sup>, rightly puts the emphasis on DEFRA and the EA to improve the UK's resilience to flooding. Historic England considers it is important, however, that all government departments operate together to mitigate inappropriate works and provide a smoother method of achieving projects. Flooding is a national problem that requires collaborative working across government departments. The Environment Agency lead on hydrological aspects of flooding but built environment expertise is also required to address constraints around materials and policies. Historic England is supporting the flood sector and the built environment sector to improve their knowledge and skills in this area. However, it requires government to recognise the need to upskill the workforce in both planning and construction to ensure non-abortive works are completed. It also requires more joined-up schemes

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<sup>17</sup> [How Did Our Medieval Ancestors Cope with Flooding? | Historic England](#)

<sup>18</sup> [The carbon cost of restoring a flooded home: Building Future Communities - Aviva](#)  
[The carbon cost of restoring a flooded home: Building Future Communities - Aviva](#)

<sup>19</sup> [Worcestershire communities fear flood defences may never happen - BBC News](#)

<sup>20</sup> [Somerset communities facing delays into flood inquiry reports - BBC News](#)

<sup>21</sup> [NAP3 Annex 1: Climate risks and opportunities \(with correction slip\)](#)

across all departments, as works, research and funding by others such as MHCLG, DESNZ is highly likely to be impacted by flooding.

5.4 Further work needs to be done to monitor and provide early warning systems, as well as support to places that have not previously flooded. Recognising that hard defences are not always going to be appropriate and seeking to work with natural environment organisations and National Highways to provide green solutions is one way of reducing increased pressures on rivers.

## ***6. What should the key priorities be for the Flood Resilience Taskforce, and how can it enhance coordination and improve flood resilience?***

6.1 The National Flood Forum in collaboration with Liverpool John Moores University<sup>22 23</sup> are currently doing research to understand how Flood Action Groups help to support the community. Historic England only sees this as being a positive contribution to what can often be a devastating event.

## ***7. Is there a backlog in maintenance of existing flooding adaptation/resilience assets and in identifying where new ones could be introduced?***

7.1 Historic England is aware that there is a backlog in maintenance for existing flood assets and community projects<sup>24</sup>. As indicated in question 4, it would be beneficial for Historic England to be made aware of how many assets are designated and will require statutory approval for proposed works so we can adequately resource and plan.

## ***8. What level of flood resilience is required to address the flood risks identified in the Climate Change Risk Assessment and is current funding adequate to meet these risks effectively?***

8.1 This question needs to be split into two elements. Firstly, the need for support across the sector to include capacity building, skills and knowledge. At present there are conflicting priorities outlined by government with an aging workforce and lack of young people coming into the sector. Improving the country's flood resilience is only viable if there is sufficient workforce capacity. Many of these workers are already committed on other government targets such as decarbonising the UK's energy system, meeting the government's target of building 1.5 million new homes and its retrofit commitment. However, flood resilience work includes many of the same skills needed for fire prevention and for energy efficiency – if workers were enabled to transfer their skills to different areas of work, supported by flexible and de-segregated funding streams, demand for such workers would grow<sup>25</sup>, creating new

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<sup>22</sup> [Flood resilience expert leads research with vulnerable communities in Cumbria | Liverpool John Moores University](#)

<sup>23</sup> [FLOOD ACTION GROUP RESEARCH – National Flood Forum](#)

<sup>24</sup> [Resilience to flooding - Committee of Public Accounts](#)

<sup>25</sup> [Delivering Net Zero for England's Historic Buildings: Local Data on the Demand for Retrofitting Skills and Economic Growth | Historic England](#)



roles with increased job security. Further clear guidance and support needs to be provided to those in the planning departments and local authorities to reduce delays in projects.

8.2 The second element relates to ensuring the appropriateness of measures. Resilience and resistance measures are the focus of funding and government support, whereas adaptation appears to only be undertaken by private individuals. One such example is lifting buildings above the level of flood water<sup>26</sup>. Adaptation will be the only option in some circumstances otherwise properties will end up becoming stranded assets, particularly where mortgage lenders identify them as high risk<sup>27</sup>. Types of adaptation were discussed in a Historic England Technical Tuesday webinar<sup>28</sup>. Adaptation does not have to focus purely on reducing the impact of flooding but can also provide opportunities for reducing other climate change hazards such as water scarcity and water pollution, which is tackled as part of China's Sponge cities<sup>29</sup>.

### ***9. How can the Government encourage more long-term private investment in flooding defences and resilience measures?***

9.1 Historic England has no comments on encouraging investment in flood defences. However, we do encourage the insurance industry to work with the heritage sector to ensure that appropriate materials and methods are used in repairs to traditionally constructed buildings and that they seek to identify alternative adaptation options where resilience or resistance measures are not appropriate.

### ***10. What support do property owners and neighbourhoods require to enhance their resilience to flooding?***

10.1 Property owners receive a good deal of support from FloodRe and the National Flood Forum, as well as funding from government for 'Build Back Better'<sup>30</sup> and Property Flood Resilience (PFR)<sup>31</sup>. However, there are still a percentage of buildings that fall out of scope and receive no funding or support. This includes commercial buildings, and generally listed buildings and those of traditional construction particularly timber-framed or cob.

10.2 To support property owners and neighbourhoods, further work to upskill the workforce undertaking resilience/resistance measures is needed to ensure they understand when certain products are not appropriate, particularly for traditionally

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<sup>26</sup> [House Lifted 1.5m To Avoid More Flood Misery | UK News | Sky News](#)

<sup>27</sup> [UK Mortgages: Nationwide Won't Lend to Some Homes Over Flood Risk - Bloomberg](#)

<sup>28</sup> [Webinar on Adapting to Flooding | Historic England](#)

<sup>29</sup> [Sponge City Concepts Could Be The Answer to China's Impending Water Crisis](#)

<sup>30</sup> [Build Back Better - Flood Re](#)

<sup>31</sup> [Government payments for communities affected by flooding - GOV.UK](#)

constructed buildings<sup>32</sup>. Traditionally constructed buildings equate to roughly 36% of the UK's existing buildings and those having been built before 1944<sup>33</sup>.

10.3 Historic England is currently working with the Environment Agency to ensure that the products and methods offered as part of PFR are appropriate for both traditional and modern construction. However, this still needs to be embraced within the wider flood sector, and to encourage insurance firms to use appropriately knowledgeable and skilled workers on traditionally constructed buildings. This is important to ensuring that property owners are provided accurate information and support. This could be achieved by continued joined up thinking and collaboration across the sector, government departments and accredited organisations (like the RICS, IStructE) to ensure that skills and knowledge are improved.

*Historic England*

*Policy & Evidence: National Specialist Services*

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<sup>32</sup> [Skills Needs Analysis for the Repair, Maintenance & Retrofit of Traditional \(pre-1919\) buildingBuildings\) in England.](#)

<sup>33</sup> [Council Tax: stock of properties, 2022 – GOV.UK.](#)