

National Trust – Written evidence (NSD0049)

With our staff, members, volunteers and supporters, the National Trust is the biggest conservation charity in Europe. We protect and care for places so people and nature can thrive. Many millions share the belief that nature, beauty and history are for everyone. So we look after the nation's coastline, historic sites, countryside and green spaces, ensuring everyone benefits. For everyone, for ever.

Question 1

1. We define nature-based solutions (NBS) as land management interventions that use nature and natural ecosystems to deliver improvements against societal problems, providing multiple benefits for the public and for biodiversity.
2. Nature-based solutions will be a key mechanism to tackle a broad number of issues, but they will be particularly useful in addressing climate change. While they alone cannot fix the climate crisis, and we still also need to adopt ways of living that produce less carbon, nature-based solutions will play a crucial role in reaching the national Net Zero greenhouse gas emissions target by sequestering carbon in our land. For nature-based solutions to have a lasting and effective impact, they will need to be designed well and deliver multiple benefits that embed them in the landscape and local communities.
3. NBS with the greatest potential for impact include restoring degraded peatlands, increasing tree cover (both in and out of woodland), saltmarsh buffering, agriculture system change and urban green engineering. There are also small scale NBS that can cumulatively add up to significant benefits, including creating field margins, improving and extending hedgerows, and soil management.
4. It is important to bear in mind that, while helping to reach these climate goals, nature-based solutions can also deliver against some of our other societal challenges, including:
 - **Reversing the loss of nature** - with unprecedented declines in the abundance and distribution of the wildlife that underpins a healthy environment, we need to restore and create bigger and better habitats.
 - **Restoring healthy soils, air and freshwaters** - targeted woodland establishment can reduce atmospheric pollution and soil erosion. Riparian buffers can help improve water quality and shade water bodies from increased temperatures.
 - **Adapting to the effects of climate change** – the effects of climate change have already negatively affected people, businesses and the places we love. Trees can provide shade in extreme heat, and floodplain meadows can be restored to store more water, alleviating flood risk downstream.

- **Addressing inequality of access to nature** – evidence shows that there are significant inequalities in people’s access to nature, often correlated to poverty and BME representation.
 - **Improving public health and wellbeing** - A growing body of evidence suggests that for those living in urban deserts, with reduced opportunity to connect with the natural world, the impact on their health and wellbeing is significant. More nature is needed within and close to cities.
 - **Developing rural economic opportunities** – Rural areas often struggle to retain young people because of limited local job opportunities. Land based rural economies such as local food markets and nature conservation and access can generate local green jobs.
5. Thus, NBS have the potential to restore some of our most precious, nature-rich habitats and bring nature closer to communities, as well as contributing to Net Zero. NBS can be used not just to mitigate against worsening climate change; they can also help us to adapt to its effects, acting as natural buffers against flooding, for example. You can see [our recent press release](#) on our work to restore Holcombe Moor, which also helped to protect Manchester from flooding. NBS moreover are not just a tool to tackle climate change; they can also be used to deliver environmental improvements, including water and air quality, and tackle other societal problems, such as health inequalities and economic deprivation.

Question 2

6. Much is still unknown about the potential and delivery of NBS; research is ongoing and new projects are still needed. There is still considerable variation for some habitats and actions regarding estimates of the quantity of greenhouse gas emissions reduced or sequestered by nature-based solutions, as well as the duration and reliability of this storage, but we believe the relative values between options are probably reasonably reliable, so we can make decisions on land management choices with some confidence. There remains significant uncertainty about permanence in some habitats and a complete lack of understanding of large elements e.g. some soil feedbacks.
7. In terms of the Committee’s habitat-specific queries - on peatland, establishing an evidence base and best-practice techniques for restoration should fall to independent research organisations, which in turn feed into independent authorities/committees such as IUCN. At a macro/conceptual scale we have a reasonable understanding of the capacity of the oceans and coastal ecosystems to sequester greenhouse gases, but there are still significant gaps in knowledge about the magnitude and permanence of actions.
8. Many of the Committee’s questions are subject to continued scientific papers and debate. The National Trust is involved in several research projects. These include a project with Oxford University investigating the viability of five different NBS for greenhouse gas removal. The NBS investigated are management of peatland, enhanced rock weathering, use

of biochar, afforestation and rapid scale-up of perennial bioenergy crops (e.g. grasses (*Miscanthus*) and short rotation coppice willow). You can read more about this project [here](#) and we would be happy to be contacted for more information on our ongoing research projects. We recommend this [recent report](#) by the British Ecological Society on NBS for more information on the latest research.

Question 3

9. NBS will only have a meaningful impact if they are employed in the context of effective action to limit climate change. When private finance is used to fully or partially fund NBS, this is often in the context of offsetting existing emissions, but strict checks need to be put in place to ensure that NBS do not act as a 'greenwashing' screen to legitimise continuing climate or environmental harm.
10. Offsetting must only be used at the end of the mitigation hierarchy – once all options to remove or reduce emissions have been exhausted. The NBS undertaken, moreover, must be truly additional to any action otherwise already planned or committed to and there must be no 'double counting', where the benefits delivered by an NBS contribute to reducing emissions for two or more organisations or individuals. Monitoring and careful measurements are also essential for ensuring that an NBS genuinely delivers equivalent benefits to the harm caused. Offsets can only be delivered effectively when both the supplier and the customer are carefully monitored and held to a high standard. We point to this [Link paper](#), which explains our concerns with carbon offsetting and the criteria needed for it to be helpful to the effort to tackle climate change.
11. We endorse the Woodland Code as a method for ensuring this high standard of offsetting. We are piloting use of the Peatland Code to refine it, but do believe that it produces offsets of a similarly high standard to the Woodland Code. These standards together are creating a national, cohesive sense of what a quality offset looks like and we support their introduction and the standardisation they bring. Quality offsetting for other habitats – i.e. soil carbon – cannot currently be assured and therefore credits for this should not be sold because there is no existing standard of equal quality to the Carbon and Woodland Codes.

Question 4 and 5

12. The key stakeholders that need to be engaged for successful NBS are the practitioners managing the land, who will often be asked to change the money-making assets their business relies on to deliver NBS. Thus, the key mechanisms to deliver NBS will be the incentivising farm-payments scheme, in England the Environmental Land Management Scheme (ELMS), which will encourage farmers and land managers to take up NBS.
13. The current Nature for Climate (N4C) Fund focuses on delivering increased tree cover and restored peatland. We believe that the new ELMS should be subtler and should integrate these delivery objectives more carefully with

existing agricultural practice and private finance initiatives. However, we welcome the scale of funding, and agree strongly with the incentivising mechanisms that encourage diverse and nature-friendly tree planting and peatland restoration. Putting the right solution in the right place will be essential for NBS to deliver to their greatest potential and will only be achieved with an ELMS that incentivises high quality NBS. Please see below for our definition of an aspiration gold standard for NBS.

14. There must also be a coherent plan for the transition Defra are proposing between the N4C Fund and ELMS. This is part of a broader issue, in which multiple funding pots for NBS create a confusing and disjointed landscape for land managers, further complicated by a continuing lack of clarity over how these funds interact with other new policy mechanisms, including Local Nature Recovery Strategies and Conservation Covenants. Clarity is needed now from Defra about how these mechanisms will work together to deliver effective NBS and achieve Government's nature and climate targets.
15. This question is further complicated by the fact that Government has not yet laid out how exactly it will reach Net Zero or what part NBS will play. Currently, the Government's funding and ambition are only clear to 2025 and in Peatland, ambitions of peat partnerships are already outstripping the Government's funding. We need Government to set ambitious, long-term targets for NBS, in line with CCC recommendations, to reach 17% tree cover by 2050 and to restore all upland peatlands by 2045. We, at the Trust, have pledged to be net zero by 2030, are working with partners to restore the upland peatland within our care and will establish 20 million new trees on our land by 2030.
16. If NBS, however, are to deliver for climate, people and nature, as they have the potential to do, they must be integrated into policy across many areas, including nature restoration and access to nature. NBS must be given consideration in the new Local Nature Recovery Strategies, which should have fighting and adapting to climate change as one of their purposes. These strategies, which should include NBS, must be planned and delivered with the help of experts locally, as well as in Defra's Arm's-Length Bodies. Thus, another set of key stakeholders are those groups with authority and expertise, including Local Authorities, National Parks, AONBs and private local nature groups.

30 September 2021

ANNEX – The National Trust's NBS Gold Standard

The National Trust have been drawing up a document that sets out what we believe to be an aspirational gold standard of NBS. We do not claim always to meet this standard, but we are working across our land to ensure that NBS are done effectively and in a way that benefits everyone, forever. We would be very happy to provide specific details of our work or host the committee at one of these sites.

The National Trust believe that a climate-focused nature-based solution of the highest standard will:

- 1. Be implemented alongside, not instead of, meaningful action to reduce greenhouse gas emissions, and be designed and monitored to ensure that there is a net gain of carbon sequestration.**

The most pressing action we need to take to tackle climate change is to reduce the harmful emissions we release. We can do this, for example, by shifting towards renewable energy sources, using electric vehicles, making our buildings more energy efficient and reducing emissions from agriculture.

Nature-based solutions can complement such carbon reduction strategies and help mitigate the impacts of existing and continuing emissions; however, we cannot use nature-based solutions to neutralise all the harmful emissions we are currently releasing. Reducing emissions and mitigation efforts, including nature-based solutions, will both be crucial in reaching our national ambition of having net zero greenhouse gas emissions. Hence, for nature-based solutions to be meaningful in the fight against climate change, they must be accompanied by efforts to reduce greenhouse gas emissions.

Land use changes and management practices of nature-based solutions can themselves generate emissions; these should be minimised and steps should be taken to ensure that these emissions do not outweigh the carbon sequestered by the solution. Where possible, baselining and monitoring should be put in place so the net emissions of the project can be understood and minimised.

- 2. Create or restore wildlife rich habitats and ecosystems to genuinely support nature's recovery and provide long term biodiversity increases in a changing environment.**

Implementing nature-based solutions should not only deliver carbon sequestration, but also generate long-term improvements to biodiversity by creating new or restoring old habitats that wildlife will use. This will ensure that any solution implemented increases the number and abundance of species that benefit from the land. Provision should be made to ensure that there is a net increase in the land managed for nature and the number of benefits delivered for biodiversity. A baseline of wildlife abundance should be taken and frequent monitoring should take place to ensure that the solution is genuinely delivering for native wildlife.

- 3. Be designed, implemented and managed in consultation with local communities to ensure they take account of past, present, and future landscape character.**

Nature-based solutions can be harmful if they are done against the will of the local community. In some cases, consultation with locals is compulsory, but land managers should strive to go beyond this and work in collaboration with local people.

Respecting the existing landscape character will help to ensure the new solution is welcomed and is effective. This does not mean nothing can change, rather it means understanding what is important and special about local landscapes and interpreting this for current societal and environmental demands. The historic uses of the land as well as the needs of modern society must both be considered. Taking account of landscape character also includes protecting existing historic features and working with existing plans for the neighbourhood, such as the Local Nature Recovery Strategies in England.

4. Take up opportunities, where they exist, to deliver benefits for people, at a local and a national level.

Beyond just working with local communities, implementing a nature-based solution provides the opportunity to deliver wider benefits to people. This might include encouraging and facilitating local access to nature, by providing a path through newly planted woodland, or generating green jobs and apprenticeships in the local area.

5. Consider the location, ecology and the broader landscape, to put the right solution in the right place and deliver multiple benefits.

Different areas will be better suited to different solutions. This means, for example, a landscape of deep peat will be better suited to rewetting, rather than using it as a place to plant trees, because the former will store carbon more effectively and the latter might release carbon. The natural context of a plot of land will also be influenced by broader landscape-scale considerations, such as catchment areas, and these will also have a bearing on which solution is most appropriate. Land managers can look to plans and analysis of the local area, including Local Nature Recovery Strategies in England, to understand the potential of the land, how it could best be used, and how it could best compliment the surrounding landscape.

Any land management change will have consequences, so it is important to find the solution that minimises the losses and maximises the benefits. These benefits might include carbon sequestration, local community health, and increasing biodiversity. The best nature-based solutions will deliver multiple benefits across these categories. There will be choices in the benefits a project can deliver and a fair, transparent, and inclusive process will be the best way to acknowledge and balance these compromises.

6. Be future-proofed and adaptively managed to ensure they are climate resilient and effective for generations to come.

When implementing a nature-based solution, consideration should be given as to the changes we will see to our land because of climate change. In a few decades, temperatures will likely be more extreme and flooding and drought more extensive. Thus, solutions should be implemented that will be sustainable in this new and changing environment.

We are still studying and learning about nature-based solutions, so it is very likely that new techniques will develop and new best practice will evolve as the

evidence base grows. These should be applied; management of nature-based solutions must evolve with the science. Management plans should also be flexible enough to react and make changes if monitoring reveals the project is not delivering the desired outcomes.