Nature recovery plan

Executive summary

February 2025

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1. Introduction

1.1 The NDA

The Nuclear Decommissioning Authority (NDA) is a non-departmental public body leading the clean-up of the UK's earliest nuclear sites. We own approximately 5,000 ha of land and properties across England, Wales, and Scotland, plus associated assets and liabilities. Our role is strategic, establishing the overall approach to clean-up, allocating budgets, setting targets, and monitoring progress, while delivery is via NDA group subsidiaries, including the management of nuclear sites.

Our mission is to decommission the UK's early nuclear sites safely, securely and cost effectively with care for people and the environment, which includes taking full account of our social responsibilities. In our current Strategy (effective March 2021), we state "Although these outcomes were implicit in our previous 3 Strategies, we have now decided to seek out further opportunities to deliver our mission in a more sustainable way"[1], in line with the NDA Value Framework[2] and our Sustainability Strategy[3].

1.2 Our Commitment to nature recovery

Figure 1 Peregrine falcon (Falco peregrinus) at Sizewell C

We are the guardian of varied and unique areas of land, supporting a wide range of habitats and species. For example, the natterjack toad is present at the Sellafield and Low Level Waste Repository sites, and a wildlife reserve for the species has been created in association with the Amphibian and Reptile Conservation Trust to provide a haven for them. All six native species of reptile found in the UK have been recorded within the NDA estate. Many of the coastal Nuclear Licenced Sites support important populations of gull and tern species, such as greater black-backed gulls and Arctic terns, where they are protected from external pressures and at our Oldbury site we are working to restore and re-wet a disused lagoon for the benefit of wetland birds and other species. As part of this guardianship, responsibilities for the conservation and enhancement of biodiversity are taken seriously, and every effort will be made to meet these, to the extent that is compatible with our mission.

We lead on strategies for, and progression of nuclear clean-up and decommissioning with sustainability at the heart of how our organisation is run. Our core work in itself provides for significant environmental improvements by returning land back to other beneficial uses. Our

[1] Nuclear Decommissioning Authority (2021). Nuclear Decommissioning Authority Strategy effective from March 2021

[2] Nuclear Decommissioning Authority (2016). [ARCHIVED CONTENT] NDA value framework: how we make decisions | Nuclear Decommissioning Authority (nationalarchives.gov.uk)

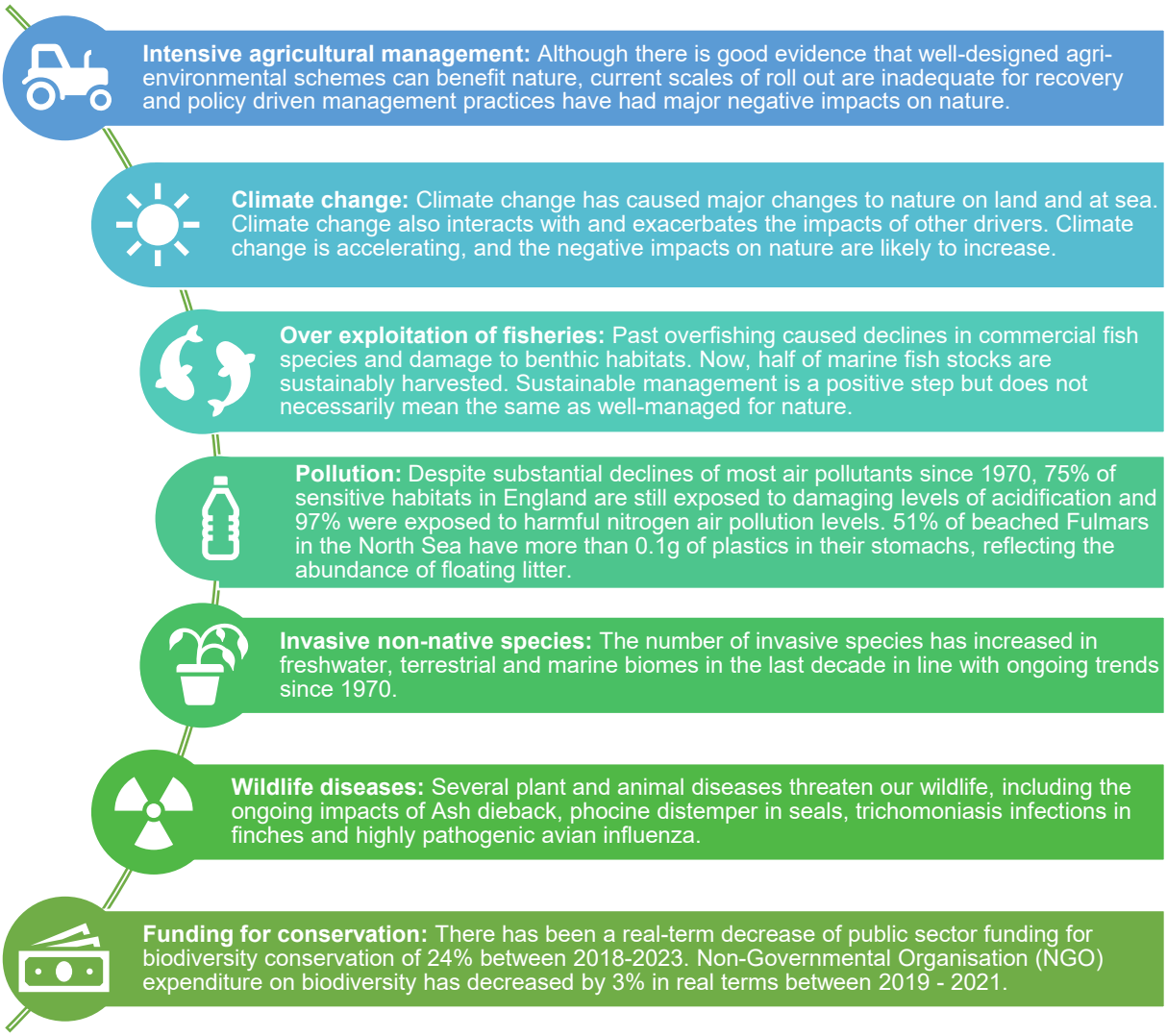
[3] The NDA group Sustainability Strategy 2022 - GOV.UK (www.gov.uk)

intention is that protecting and enhancing nature is seen as “business as usual”, whilst continuing to focus on the core mission. This will include the development of strategies and processes that ensure the biodiversity value of our land, including our nuclear sites, is understood, appreciated, and considered alongside the delivery of our mission.

Through the implementation of our Nature Recovery Plan (NRP) we will help address the decline of biodiversity by strategically conserving and restoring natural habitats and species within our control as well as supporting government aims and objectives for nature recovery. Through stakeholder engagement, rigorous baseline assessments, and clear goal setting, the NRP seeks to outline how we will enhance ecosystem resilience, mitigate biodiversity loss, and contribute positively to broader landscape-scale conservation efforts. The NRP aspires to help halt biodiversity decline and to facilitate the recovery and flourishing of diverse ecosystems for the benefit of both nature and society. Enacting the NRP will support this by integrating biodiversity considerations into organisational policies, fostering collaboration with key stakeholders, and implementing targeted actions informed by robust monitoring and evaluation. The NRP will be a living document, subject to periodic review, tracking progress and considering any new research, policy and guidance as they become available.

2. Why we need a nature recovery plan

Figure 2-1 – Major pressures on UK nature from the past 50 years according to the 2023 State of Nature Report



The UK's nature is special and unique, forming part of our common heritage and giving us all a sense of where we belong. Our nature includes 15% of the world's blanket bogs and most of its chalk rivers. We have Atlantic temperate rainforests, ancient woodlands, flower-rich grasslands and fens, each supporting unique species' communities. Our rich seas contain cold-water coral reefs and kelp forests and support globally important numbers of seabirds including over half the world's gannets. Some species occur nowhere else in the world, such as the Scottish primrose and the schelly, a relative to the salmon.

Within the UK, dramatic habitat changes have happened at an increasing pace, resulting in the decline in many species. The State of Nature Report 2023 reviewed the major pressures on the UK's nature of the past 50 years, outlined in Figure 2-1.

Among the headlines of the 2023 State of Nature Report, nearly one in six of over 10,000 species assessed are threatened with extinction from the UK and the abundance of species studied in the UK has declined by 19% on average since records began in 1970. As the Report says: *"We have never had a better understanding of the State of Nature and what is needed to fix it"*. The consistent picture across most species groups and habitat types is a continuing decline in biodiversity.

In response to the crisis of biodiversity loss, many Heads of State around the World have recently made significant commitments to nature, notably through the *Leaders' Pledge for Nature* launched at the United Nations General Assembly in 2020, and the *30by30* commitment to protect 30% of our land and seas for nature by 2030. These commitments are far-reaching, requiring transformational change across industry sectors in the way we protect, value, use and engage with nature.

The Greening Government Commitments[4] (GGCs) set out the actions that UK Government departments and their partner organisations will take to reduce their impacts on the environment in the period 2021 to 2025. Commitment E states: "*Departments and partner organisations with the greatest potential to improve biodiversity should develop and deliver Nature Recovery Plans for their land, estates, development, and operations"*. Further GGCs, again including actions in relation to nature, are being developed for the period 2026 to 2031.

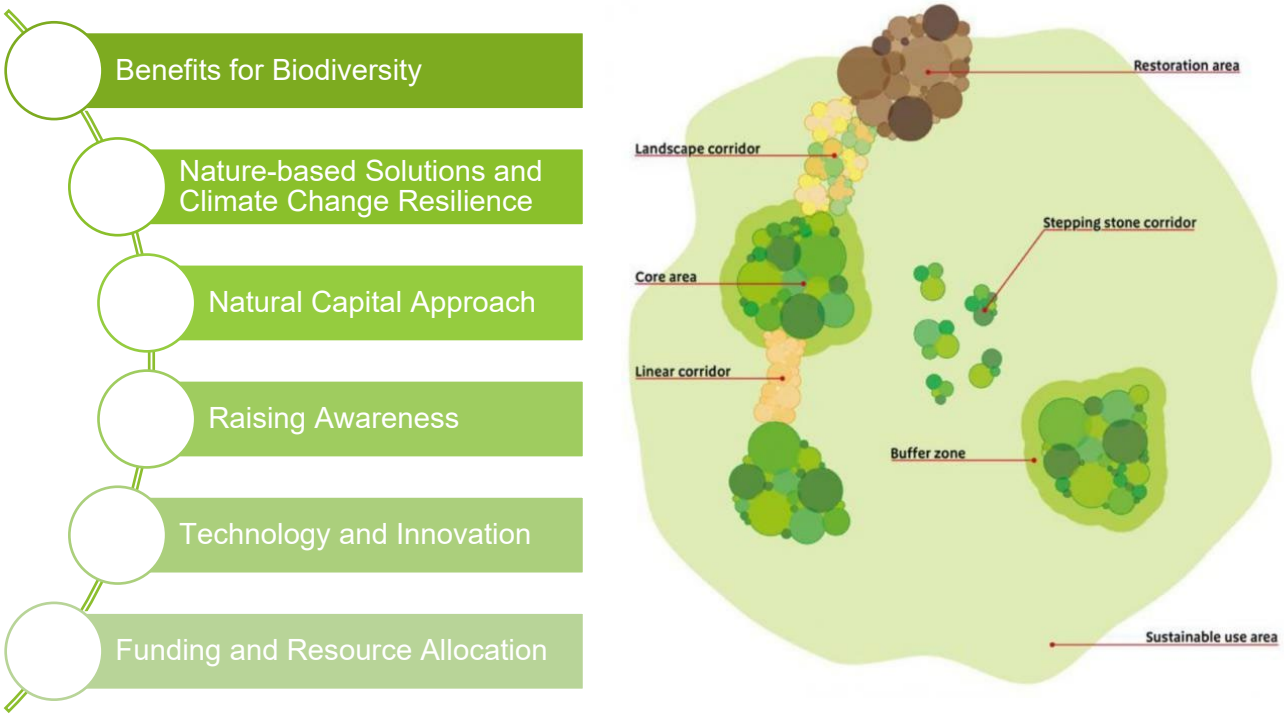
We will seek to align with requirements in the Environment Act 2021[5] and support the delivery of Environment Improvement Plan (EIP) 23 and the Net Zero Strategy. The NRP will also help NDA comply with our Biodiversity Duty[6].

[4] Greening Government Commitments 2021 to 2025 - GOV.UK
[5] Environment Act 2021 - GOV.UK
[6] Complying with the biodiversity duty - GOV.UK

3. Our vision for nature

This section describes how we would like to operate to support nature recovery across its estate. Topics important for the successful recovery of nature are introduced and then summarised with a vision statement.

Figure 3-1 From 'the Lawton Report' Defra (2010) Making Space for Nature 'Bigger, better, more, and joined up'



3.1 Benefits for biodiversity

Biodiversity vision statement: We integrate the protection and enhancement of nature into our entire decision-making process, whilst balancing the objectives of our mission.

Nature recovery initiatives offer many benefits to biodiversity, serving as vital lifelines for threatened species and ecosystems. Restoring habitats create sanctuaries where native plants and animals can thrive, promoting genetic diversity and bolstering ecosystem resilience against environmental stressors. Increased habitat connectivity facilitates species movement and migration, essential for maintaining healthy populations and preserving genetic exchange.

Figure 2 Roe deer with fawns. Low Level Waste Repository.

The following aspects are important factors for protecting biodiversity:

- **Protected sites:** We will prioritise habitat protection on our land, aiming to balance biodiversity preservation with our mission through responsible land management, monitoring, stakeholder collaboration, and innovative conservation practices. This will ensure these sites flourish as resilient ecosystems for future generations.
- **Local Nature Recovery Strategies (LNRSs):** Our sites, and individual habitat areas, do not exist in isolation. We will be guided by national aspirations for restoring the natural environment, which will influence priorities. In England, we will use Local Nature Recovery Strategies to guide habitat protection and enhancement, align with local ecological priorities and foster community engagement.
- **Mitigation hierarchy:** We follow the mitigation hierarchy from the National Planning Policy Framework (NPFF), prioritising the avoidance and minimisation of biodiversity impacts in development projects, while also investing in restoration and offsetting when necessary, noting that the NPPF does not supersede other legislative requirements such as those protecting certain species and designated sites.
- **Irreplaceable habitats:** Irreplaceable habitats, such as ancient woodlands, are critical for biodiversity due to their unique ecological value and difficulty in restoration. We commit to protecting irreplaceable habitats in so far as we can by ensuring we have a good baseline knowledge of the locations and extent of each habitat in order to preserve these unique ecosystems.
- **Protected/priority habitats:** These habitats serve as vital refuges for plant and animal species. We will preserve and enhance priority habitats, ensuring they are identified, protected, or compensated for during development, with a focus on creating new priority habitats to support biodiversity.
- **Protected/priority species:** Protected and priority species are facing unprecedented threats from human activity, habitat loss and climate change, making their conservation crucial for maintaining biodiversity. We will assess the impact of our projects on legally protected species, aiming to create wildlife havens and contribute to the UK's goal of halting species decline and supporting biodiversity.
- **Habitat connectivity:** Fragmented landscapes pose a significant challenge to wildlife, limiting species' ability to move, respond and adapt to shifting conditions as well as the ability for populations to remain genetically diverse and resilient. Connected habitats also support a variety of ecological processes, including pollination, seed dispersal, and predator-prey interactions essential for ecosystem health and function. We will prioritise habitat connectivity to foster biodiversity, enabling species to move and adapt, and contribute to resilient ecosystems, supporting the long-term viability of habitats and wildlife.

3.2 Nature-based solutions and climate change resilience

Climate change vision statement: We consider climate risks and we aim for equitable, low-carbon, nature-based, resilient, and sustainable transformations to reduce our contribution to the climate crisis. Robust risk management strategies across sectors will balance climate resilience with mitigation and adaptation actions.

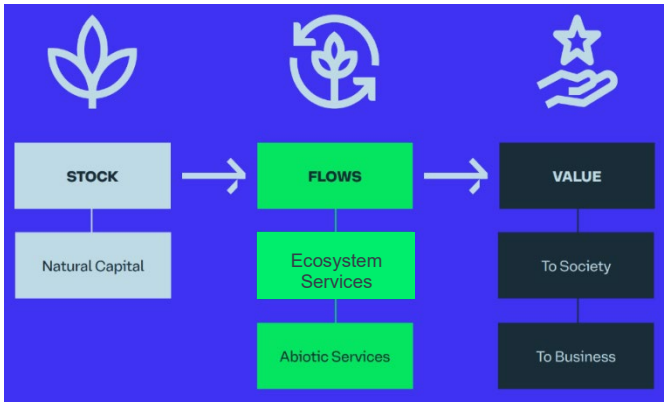
Adaptation and mitigation strategies must address changing climate conditions and focus on nature-based solutions to ensure our assets (including natural assets) are resilient to the effects of climate change, such as increased extremes of temperate and rainfall, improving flood and drought protection. Strategic planning of the use of nature-based solutions across our estate can increase the resilience of our estate to future climate risks. Nature-based solutions harness the power of nature to address societal challenges, particularly the impacts of climate change. By improving ecosystems, such as forests, wetlands, and grasslands, nature-based solutions offer sustainable and often cost-effective approaches to climate mitigation and adaptation. Not only can they sequester carbon dioxide, helping to mitigate greenhouse gas emissions, but they also enhance resilience to climate impacts by protecting against floods, storms, and erosion, while simultaneously providing multiple co-benefits, such as supporting biodiversity, enhancing water quality, and promoting human wellbeing. Nature-based solutions thus represent a holistic approach to addressing climate change that aligns with the broader vision of nature recovery.

We recognise the potential of nature-based solutions to mitigate our carbon emissions. We will utilise current research and knowledge to effectively assess and implement nature-based solutions into our land management strategies. Outside of nature-based solutions, we also understand the need to consider a circular economy approach to investigate the carbon impact of land use and other operations, including sustainable building materials, third-party emissions, etc.

3.3 Natural capital approach

Natural capital vision statement: We believe everybody should be able to enjoy the benefits of the natural environment. By bringing nature into decision making from the offset, we will protect, enhance, restore, and expand our estate's natural capital to help address both the climate and ecological emergencies. We will embed natural capital thinking into strategic planning, and when collaborating with stakeholders, to the extent this is compatible with our mission.

Figure 3-2 - Natural capital and its relationship to ecosystem and abiotic services



Analysis by the UK finance sector's Natural Capital Finance Alliance in 2018 found that "74% of the [FTSE All-Share] Index sectors are potentially highly or very highly dependent on natural capital". Combined, these figures highlight the importance of growing assets without undermining the natural foundations on which that prosperity lies. As HM Treasury's 2021 Dasgupta Review of the Economics of Biodiversity demonstrates, "the common assumption that the goods and benefits provided by nature which underpin our economy are unlimited and inexhaustible is wrong[7]".

Natural capital has emerged as a framework for gaining a better appreciation of the interlinkages between the economy and the environment. In the 25 Year Environment Plan, the UK Government stated its ambition to "use a natural capital approach as a tool to help make key choices and long-term decisions", including expanding the now embedded Biodiversity Net Gain approach to include wider natural capital benefits. This approach views the environment as a collection of assets that provide essential goods and services, such as clean air, food, and a stable climate, which support the economy and human wellbeing. By better understanding natural assets and the ecosystem services they supply, we can ensure they are properly valued in decision-making, leading to better investments in nature-based solutions that maximise benefits for both people and the environment. Natural capital not only strengthens the case for biodiversity conservation, but it also helps address broader challenges like climate change, food security, and habitat recovery.

A natural capital approach captures broader benefits for community wellbeing, environmental stewardship, health, safety, and equity. According to the 2022 ONS Report, health benefits from time in nature are valued at £6.2–£8.4 billion annually. Beyond financial considerations, nature is integral to our heritage and identity.

We will integrate natural capital thinking into our planning to design and implement interventions that deliver multiple environmental benefits, including social value, while optimising resources for nature-positive outcomes.

The use of Natural Capital accounting allows for the verification of the benefit of nature recovery. This can help improve the efficiency, value, and attractiveness of projects while contributing to a greener and more sustainable future.

3.4 Raising awareness

Raising awareness and social value vision statement: We consider the perspective of our stakeholders and recognises their contributions to better decisions and outcomes. We aim to proactively raise awareness on the value of nature recovery with stakeholders. Furthermore, we consider social value in decision-making and the importance of understanding the impact on people's lives and overall wellbeing.

[7] Nature Recovery Joint Statement | JNCC - Adviser to Government on Nature Conservation

- **Strategies for identifying and involving stakeholders in nature recovery:** We engage internal stakeholders across our estate, ensuring they are aware of the Nature Recovery Plan's vision and targets. The Natural Capital Working Group and the Strategic Land Management Working Group meet regularly to discuss ongoing improvements, opportunities and identify land for biodiversity enhancement where these are compatible with our mission. We also maintain strong relationships with external stakeholders, such as regulators and local authorities, to align with standards and targets. Partnerships with community groups, charities, and tenant farmers are essential for leveraging local knowledge, building trust, and effectively managing protected sites and priority habitats.
- **Employee training and awareness programs:** Raising awareness among staff and stakeholders is key to successful nature recovery and is part of our future plans. Sharing best practices and scientific insights fosters a culture of environmental stewardship and supports informed decision-making. Targeted training, communication strategies, and collaborative platforms enhance engagement, equipping staff with the tools to contribute to biodiversity efforts.

3.5 Technology and innovation

Technology and innovation vision statement: We see a future where innovative solutions and cutting-edge technologies underpin efforts towards nature recovery.

By harnessing the power of innovative technologies such as environmental DNA surveys, GIS mapping, satellite imagery, remote sensing technologies, and advanced soil testing methodologies, it is possible to revolutionise the approach to conservation and habitat restoration. Our vision is to consider how we might use some of these innovative solutions to understand ecosystem dynamics on our estate, identify priority areas for intervention, and deploy targeted strategies for biodiversity conservation and habitat enhancement to achieve tangible and sustainable outcomes, as well as utilise them to track and evidence progress made.

3.6 Funding and resource allocation

Funding and resource allocation vision statement: We strategically allocate funding for work across our estate and will consider where nature recovery opportunities can be combined with our prime decommissioning objectives We ensure that financial resources are deployed with due consideration for their impact on biodiversity and ecosystem resilience. Additionally, projects and programmes within the NDA Value Framework incorporate biodiversity as a fundamental value wherever feasible.

As described within the NDA Value Framework, “The programme for which we are responsible is funded primarily by UK government. We must demonstrate to our stakeholders that we are spending the funds allocated to us on the right things and in the right way”. For nature recovery

to be successful, funding is a key, potentially limiting factor, which needs to be recognised in the decision-making process. Therefore, any opportunities taken forward need to demonstrate their alignment with the NDA Value Framework to maximise the likelihood of successful funding provisions. Multiple options will be assessed for their feasibility as funding streams, including internal NDA funding, external offsetting markets (e.g. Woodland Carbon Code, Peatland Code, Blue Carbon Credits, Biodiversity Net Gain) as well as Governmental funding such as the Environmental Land Management scheme, Farming in Protected Landscapes scheme, Nature for Climate fund and Green Recover Challenge Fund.

4. Nature Recovery Targets

We aspire to be an exemplar landowner who will create net benefits for biodiversity whilst balancing considerations of our overarching priorities for land use in the context of our own responsibilities for mission progress and those of the organisations with whom we partner.

Further research is required before specific targets can be identified for some measures. Therefore, targets will be refined and expanded in the next iteration of the report to outline quantifiable targets for habitat enhancements and extensions to be fulfilled by 2050. Initial illustrative targets are outlined in Table 0-1.

Figure 3 Common blue butterfly. Low Level Waste Repository

Any actions have to be taken consistent with the proper exercising of NDA's duties and functions, to further the general biodiversity objective and ensure responsible use of public money. Therefore, actions must be consistent with delivering our overarching mission, but conservation and enhancement of biodiversity should be delivered as part of and alongside this wherever possible. Some of the biodiversity features we manage are affected by influences outside our control, and we will work with partners to encourage wider action as well as taking our own actions.

We recognise that there are challenges to delivering the nature recovery plan, our mission is complex and takes place over many decades. This means that the requirements for future land are not certain, and we need to maintain flexibility to ensure we have land available to deliver our mission, or to respond to government expectations for the use of our land. Much of our land is also leased to tenants and so any proposals we make for biodiversity improvement must consider their needs. We will use an adaptive management regime to respond to these risks. Adaptive management involves monitoring, at an intensity that will vary between features, but the critical requirement is for issues to be identified and reported where they are seen, and for this to lead to action. Adaptive management involves altering management prescriptions based on the results of such monitoring.

Table 0-1 – NDA-specific NRP targets

Measure		Baseline	Targets	Target Source	Target Year
1	Protected site status	The condition of SSSI across the NDA land is as follows: 70% favourable, 27% unfavourable recovering, 2% unfavourable no change, and 1% unfavourable declining. The time since the last assessment by the SNCO varies between sites, so there is uncertainty about current condition for some sites.	**a** All SSSIs on NDA land will have an up-to-date assessment **b** Timelines and plans will be created to reach an overarching target that all SSSI areas under NDA control will be in favourable condition by 2042	Environmental Improvement Plan (EIP) and Scottish Biodiversity Strategy	2028 2042
2	Protected site extent	13 NDA sites overlap with statutory environmental designated sites (note certain sites have multiple designations): SSSI – 1733 ha, SAC – 1668 ha, SPA - 957 ha, Ramsar - 68 ha	**a** Contribute to the EIP target for 30% of UK land to be designated or be recognised as Other Effective Area-Based Conservation Measures[8] (OECMs)	EIP	2030
3	Protected species	A centralised baseline of species abundance is not yet available.	**a** Create a database to store records for protected species across the NDA Estate		2026
			b The next NRP iteration will specify protected species targets	EIP	2027
4	Woodland/hedgerows	81 ha NDA land (1.4%) is woodland.	**a** Contribute to an increase in woodland cover	EIP	2050

[8] The definition of OECM will be confirmed once guidance is published, but it is envisioned that it will include at least Government Nature Recovery Projects and Landscape Recovery Projects, National Nature Reserves and BNG mitigation land protected through Conservation Covenants.

Measure		Baseline	Targets	Target Source	Target Year
		A baseline of hedgerow extent and condition is not yet available.	**b** Identify and map hedgerows across the NDA Estate		2026
			c Contribute to the creation or restoration of hedgerows	EIP	2050
5	Rivers	81% of watercourses within the NDA's land have 'moderate' status and 19% have 'poor' status. A baseline of waterbodies' extent and condition is not yet available.	**a** Identify and map waterbodies across the NDA estate	EIP	2026
			b Restore NDA watercourses and water bodies to good ecological status, where in our control	EIP	2040
6	Coastal habitats	512 ha (8.9%) NDA land total is coastal habitats (maritime cliff and slope, coastal vegetated shingle, coastal sand dunes and coastal saltmarsh)	**a** Contribute to the restoration of coastal priority habitats on NDA land	ReMeMaRe (Restoring Meadow, Marsh and Reef[9]	2043
7	Wetlands	524.3 ha of wetland habitats are recorded within NDA land (including reedbeds, mudflats and lowland fen habitats).	**a** Contribute to the restoration of wetland priority habitats on NDA land	The Wildfowl & Wetlands Trust[10]	2040

[9] Restoring Meadow, Marsh and Reef (ReMeMaRe) - Estuarine & Coastal Sciences Association
[10] Wetlands are the way - WWT

Measure		Baseline	Targets	Target Source	Target Year
8	Peatland	4 ha of NDA supports peat/peaty gleys and 67 ha is blanket peat (condition unknown).	**a** Contribute to the protection of the least damaged peatlands and the restoration of the remaining damaged peatlands	The UK Peatland Strategy[11]	2040
9	Moorland and heathland	1.2 ha of NDA land total is purple moor-grass and rush pasture and 62 ha is lowland heathland.	**a** Contribute to the restoration of moorland and heathland priority habitats on NDA land		2040
10	Grassland	22 ha (0.4%) total NDA land is formed of priority grassland habitats.	**a** Contribute to the restoration of grassland priority habitats on NDA land	Grassland Action Plan.[12]	2040
11	Soil health	Across NDA land there are 35 different soil types, with the predominant (30%) being deep loam.	**a** Contributing to enhancing of agricultural soil into sustainable management through new farming schemes	EIP	2030
12	Invasive non-native species	A baseline of invasive species presence and extent and condition is not yet available.	A future NRP iteration will specify invasive non-native species targets	EIP	2027
13	Tenant farmland	1,524 ha (30%) of NDA land is enclosed farmland. 20% of all agricultural land within NDA land is 'poor' or 'very poor' grade.	**a** Increase the number of landowners and farmers adopting nature-friendly farming on NDA land	EIP	2030
14	Natural capital accounting	The NDA Initial Natural Capital (NC) Account has	**a** Develop the NC (in full) Account for the NDA estate ensuring minimum		2026

[11] UK Peatland Strategy - IUCN
[12] Plantlife Briefing Grassland Action Plan - Plantlife

Measure		Baseline	Targets	Target Source	Target Year
		provided a high-level valuation of assets, pressures, drivers and beneficiaries which result from ecosystem services.	compliance with EA NCRAT/ENCA guidance and working towards BS8632		
15	Social value	36.9 km of Public Right of Ways across our land. A baseline of the current social value of nature across NDA landholdings is not yet available.	**a** Estimate (quantitatively) what NC benefits could arise from the other NRP targets e.g., how much carbon could be sequestered through woodland creation, emissions reduced through peatland restoration on a per hectare basis		2026
16	Staff engagement and awareness raising	A baseline of staff engagement and awareness of nature recovery is not currently available.	The next NRP iteration will specify staff engagement and awareness targets		2027

Figure 4 Common lizard Low Level Waste Repository

Nuclear Decommissioning Authority
Herdus House, Westlakes Science and Technology Park, Moor Row, Cumbria CA24 3HU

www.nda.gov.uk