

Broads Nature Recovery Strategy 2024-29



Swallowtail Butterfly: In Britain, it is only found in the Broads National Park.



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Front cover photo of Swallowtail Butterfly by Laura Biggart

This Broads Nature Recovery Strategy 2024-2029 is subject to consultation through the Broads Biodiversity Partnership and the Broads Authority. The final strategy was published in November 2024. It replaces the Broads Biodiversity and Water Strategy 2019-24.

1. Introduction

About the Broads

The **Broads National Park** ('the Broads') is an internationally important wetland on the East coast of England. Its unique landscape, shaped by centuries of human intervention, is a rich mosaic of interconnected habitats comprising, among other things, shallow lakes (or 'broads'), fens, saltmarshes, intertidal mudflats, drained marshland, wet woodland, relict estuary, and coastal dunes. Within an area that is only 0.12% of the UK, the Broads is home to 19% of all UK designated species¹ and 26% of the UK's Biodiversity Action Plan species². It is a unique member of the UK National Parks family, attracting more than 7 million visitors a year, and has around 6,500 residents.

The **Broads Authority** (BA) is a statutory body with a duty to manage the Broads executive area for the following three purposes:

- Conserving and enhancing the natural beauty, wildlife and cultural heritage of the Broads;
- Promoting opportunities for the understanding and enjoyment of the special qualities of the Broads by the public; and
- Protecting the interests of navigation.

In exercising or performing any functions in relation to, or to affect, land in the Broads, a relevant authority must seek to further these purposes³.

In practice, how much weight is given to any of the purposes will depend on the circumstances. The BA will always look for the potential win-win situation, rather than setting the purposes at odds with each other.

The delivery of the **Broads Nature Recovery Strategy** (BNRS) is coordinated by the Broads Authority and undertaken by the Broads Biodiversity Partnership. The BNRS links with the **Local Nature Recovery Strategies** (LNRS) for Norfolk and Suffolk, with the Broads forming a core area for nature recovery.

About Local Nature Recovery Strategies

The national legislative framework for nature recovery is set through the 25 Year Environment Plan 2018, The Environment Act 2021, and the Environmental Improvement Plan 2023. The Government has also committed to protect 30% of the land and sea of the UK for nature's recovery by halting the decline in species abundance (the number of individuals from a given species within a given area) and protecting 30% of UK land by 2030. By 2042, it has committed to: Increasing species abundance by at least 10% from 2030, surpassing 2022 levels; restoring

¹ based on the Joint Nature Conservation Committee only

² Broads Biodiversity Audit 2011

³ Levelling-up and Regeneration Act 2023, S.245 (13)

or creating at least 500,000 ha of a range of wildlife rich habitats; reducing the risk of species extinction; and restoring 75% of our one million hectares of terrestrial and freshwater protected sites to favourable condition, securing their wildlife value for the long term. These national environmental objectives are set out in **Appendix 3**.

The new provisions include **Local Nature Recovery Strategies** (LNRS), Conservation Covenant Agreements, a strengthened 'biodiversity duty' and a commitment to Biodiversity Net Gain (BNG). LNRS are spatial strategies for nature, covering the whole of England. They are designed to support the delivery of BNG and provide a focus for the strengthened duty on all public authorities to conserve and enhance biodiversity.

LNRS are one of the mechanisms to achieve the [Nature Recovery Network](#), a growing national network of wildlife-rich sites, supported by green and blue spaces that buffer and connect these sites. Preparation of each LNRS is led by a 'responsible authority' (County or Unitary Council) appointed by the Defra Secretary of State.

The Broads is covered by the Norfolk LNRS and the Suffolk LNRS, and the BA is a 'supporting authority'. A responsible authority must follow national guidance to produce its LNRS. This includes agreeing priorities for nature recovery, proposing actions in the locations where they will have the greatest impact for nature, providing all supporting authorities with the draft LNRS and inviting comments. A supporting authority may raise an objection within 28 days about the LNRS or its preparation. The draft LNRS are expected to be published by early 2025.

About the Broads Nature Recovery Strategy

To support the new national and regional provisions, the BA is working with key partners to prepare and deliver this **Broads Nature Recovery Strategy** (BNRS). The adopted BNRS has replaced the Broads Biodiversity and Water Strategy 2021-24.

The BNRS sits under the [Broads Plan](#), the integrated statutory management plan for the Broads, and set priority actions for the next five years and describes what could be achieved by 2040. It will cross-relate to other guiding strategies produced by the BA and to a wide range of partnership and site-based plans for the area, such as the Broads Landscape Character Assessment and Natural England's Natural Character Area profile for The Broads. Many actions in these strategies and plans (while not being repeated in this BNRS) will also benefit nature recovery, as well as enhancing public awareness, education and enjoyment of the Broads' natural environment.

It should also be noted that this BNRS does not cover all work being done to manage the habitats, water and wildlife of the Broads, as this would be too onerous to report. Instead, it focuses on priorities for the BA as a lead or joint delivery partner, and key projects led by partner organisations.

Through the BNRS process we aim to:

- Work towards a long-term vision for nature recovery in the Broads and set out how everyone (including the public sector, landowners, local communities and businesses) can work together to achieve the vision for this unique landscape.
- Plan, deliver and monitor work for more, bigger, better and more joined-up wildlife habitats in and around the Broads.
- Translate the national objectives for nature recovery to the local level, assessing their applicability to the Broads (including data availability) and work with the Broads Biodiversity Partnership to discuss the BNRS Delivery Plan.

Long-term vision

Biodiversity is thriving in the Broads, which remains a globally important wetland adapting to climate change. Sustainable land and water management practices support well-functioning ecosystems to provide multiple public goods including food, clean and plentiful water, carbon storage, abundant wildlife, landscape character, and recreation and tourism. The challenging targets to improve water quality, water supply and flood protection are being met. Opportunities are taken to establish more, bigger, better and more joined up ecological networks, and priority species and their habitat needs are well understood and well managed to halt and reverse biodiversity decline and loss, increase resilience and adaptive ability, and pursue environmental net gain. Invasive non-native species are under control and eradicated where possible. A profitable agriculture sector provides good food while maintaining or restoring habitats to good ecological condition. Robust evidence and monitoring guide good decision making in all aspects of natural resource management.

By 2040 our Broads nature ambition is to provide home to thriving wildlife that can adapt to the changing climate.

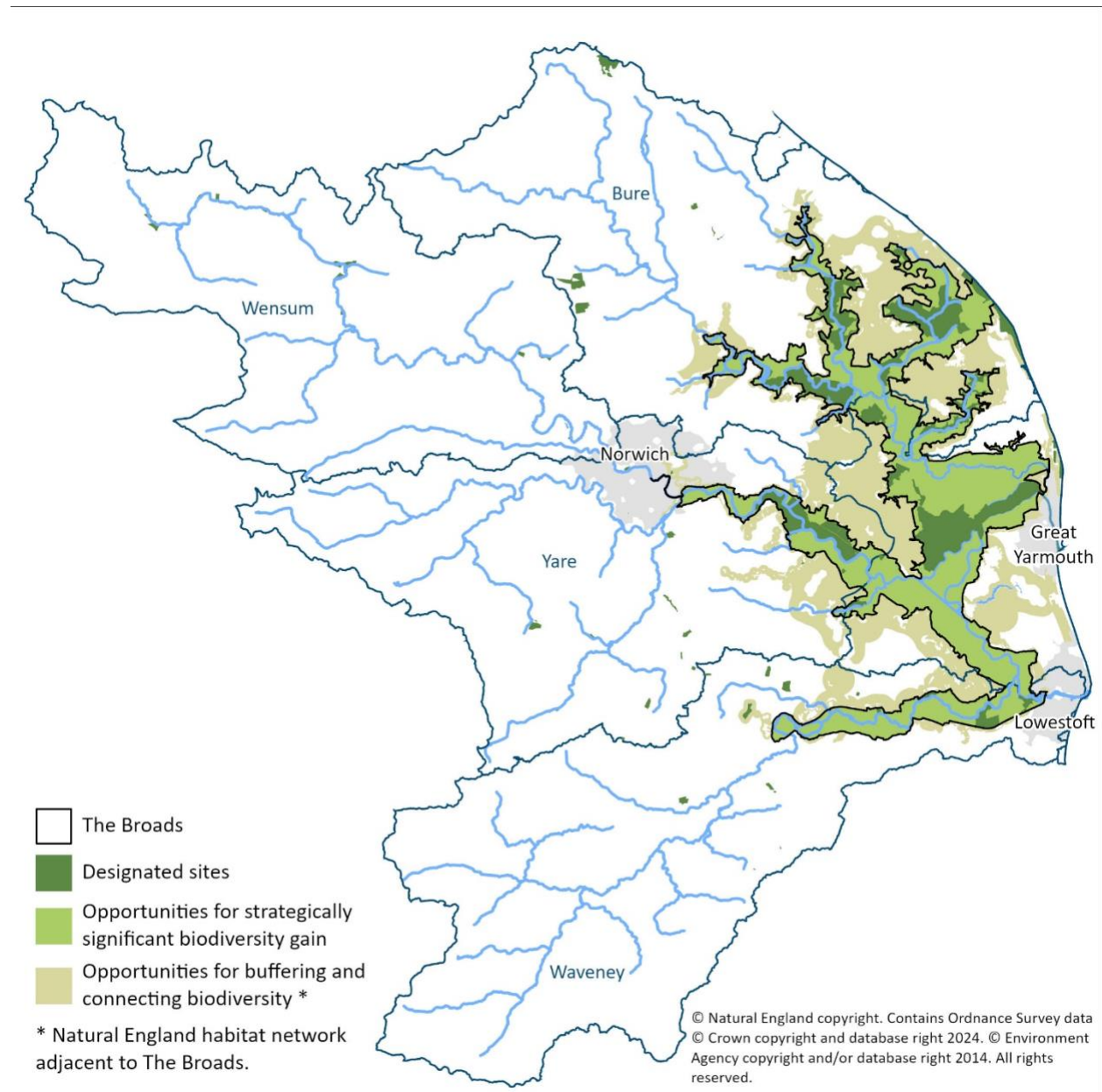
Delivery partners

The BNRS is produced by the BA in partnership with the other members of the **Broads Biodiversity Partnership** (BBP). The BBP is a network of organisations, businesses and individuals working together to plan, deliver and monitor work for habitat enhancement, creation and restoration in and around the Broads. The focus is on action that creates multiple benefits for biodiversity, water and people. The BA and the BBP also work with other stakeholders including local communities, farmers and land managers, and interest and amenity groups. The BBP meets around three times a year, with occasional site visits.

Individual organisations own very little land and rely on partnership agreements and cooperation with farmers and others working in the Broads and surrounding areas. The BA provides advice and support to farmers and land managers and contributes to the review and delivery of partnership strategies such as LNRS and the Broadland Futures Initiative. It also makes sure that Broads' related targets are ambitious, and their progress is monitored. Foremost amongst the stakeholders are farmers and land managers, without whose involvement we can make no progress.

At the time of writing, the BBP partners are: Anglian Water, Buglife, British Dragonfly Society, Broads Authority, Broads Society, Butterfly Conservation, Environment Agency, Essex & Suffolk Water, Freshwater Habitats Trust, Natural England, National Trust, Non-Native Species Initiative, Norfolk Biodiversity Information Service, Norfolk County Council, Norfolk Flora Group, Norfolk Wildlife Trust, Norfolk and Norwich Naturalists' Society, Plantlife, RSPB, Suffolk County Council, Suffolk Wildlife Trust, University of East Anglia, Water Management Alliance. The National Farmers Union were consulted on element of the BNRS and as a future BBP member. The efforts to save and restore nature from the combined land ownership of the conservation organisations and their influence extends over at least a quarter of the Broads.

Map 1. Core and Opportunity Areas in the Broads National Park and their Supporting Land



Further maps bring the Broads' habitats and key biodiversity areas to life via the [ArcGIS StoryMap](#).

Key Principles

More, bigger, better and more joined-up wildlife habitat

Nature cannot thrive or adapt to the changing climate in isolated pockets. Nature requires us to take opportunities to establish more, bigger, better and more joined up ecological networks, ensuring priority species and their habitat needs are well understood and well managed, helping increase resilience and adaptive ability, and pursue environmental improvement.

Opportunity for greater habitat mosaics and structural complexity

Species-rich sites in the Broads have mosaics of high-quality wetland features such as ditches, ponds, scattered scrub and varying vegetation communities. As open water grades into wetland, grass, heathland or arable land beyond, often unique environmental conditions occur that support scarce species. These wetland edge transitions are critical, as are large well managed and high nature value farmed areas.

Opportunity for connections along the valleys and outside the Broads

The Broads' boundary is drawn tightly around the wetland edge. Nature recovery can only be achieved by working positively for nature with farmers beyond the boundary, especially where land is functionally linked and providing important supporting habitats for species. For example, while some beetle larvae use decaying wood, their adult stage requires flowering plants which are mainly outside of woodlands, enabling animals to complete their life cycle each year. The intimate mixture of different habitats and microhabitats are likely to be of high value for nature and future farming.

Changes in the climate and sea level will make the existing and potential land management networks and connections more important.

Biodiversity duty reporting

The BNRS acts as the BA's [Biodiversity Duty Report](#). By law, the report must include a summary of actions the BA has taken to comply with the biodiversity duty, how it plans to comply with the biodiversity duty in the next reporting period, and other information it considers appropriate. As a Local Planning Authority, the BA must also include the actions it has carried out to meet biodiversity net gain (BNG) obligations; details of BNG resulting, or expected to result, from biodiversity gain plans it has approved; and how it plans to meet BNG obligations in the next reporting period.

Strategic Environmental Assessment and Habitats Regulations Assessment

The Broads Plan and relevant plans, programmes and works to implement its strategic objectives are subject to [Sustainability Appraisal](#) (incorporating Strategic Environmental Assessment). This process assesses any significant environmental, economic and social impacts of their implementation. Sustainability Objectives were developed as part of the Sustainability Appraisal framework for the Broads Plan and the Local Plan for the Broads.

Where required, plans and projects are also subject to [Habitats Regulations Assessment](#) to assess their impact on local sites protected by the Habitats Regulations, including Ramsar Sites, Special Areas of Conservation and Special Protection Areas.

Development management and biodiversity net gain

The purpose of biodiversity net gain (BNG) is to make sure development has a measurably positive impact on biodiversity, compared to what was there before the development. All planning permissions granted in England (with a few exemptions) will have to deliver at least 10% BNG. Defra's Biodiversity Metric and Small Site Biodiversity Metric will be used to measure the quality and quantity of biodiversity, allowing developers to determine whether a proposal will decrease or increase the biodiversity on a proposed development site. The Broads also has significant areas of 'irreplaceable habitats', namely lowland fen. Planning permission for development resulting in the loss or deterioration of irreplaceable habitat will only be granted in wholly exceptional circumstances and where a suitable compensation strategy exists.

The BA is the Local Planning Authority for the Broads Executive Area. As is expected within a protected landscape, the Local Plan for the Broads contains strong development management policies to help protect and enhance biodiversity.

The current Local Plan was adopted in 2019 and is now under review. The BA has drafted a new policy adopting the minimum 10% BNG set by the Government and will assess options to set a higher % BNG and test its viability. The draft Local Plan also includes a strengthened biodiversity strategic policy and natural environment policy, and new policies to address mitigating nutrient enrichment impacts and recreational impacts. BNG will be recorded as part of the Biodiversity Duty Report.

Resources

The BA receives core funding from the Government, and like its partners, relies increasingly on external resources to help deliver the Broads Plan and its guiding strategies.

Resources to support the delivery of the BNRS include: Agri-environment payments (e.g., Farming in Protected Landscapes, Countryside Stewardship, Landscape Recovery); spatial planning requirements (e.g., Green Infrastructure, Recreational Avoidance Mitigation, BNG), green finance (e.g. Norfolk Water Fund, partnership with Palladium, nutrient offsetting, carbon credits); partnership projects (e.g. Water Restoration Fund, Nature for Climate Peatland Grants, Lottery funds); collaboration with land owners/managers and farmers including the Norfolk & Suffolk Association of Farm Clusters and Norfolk Farm Advisers; and joint working with key partners including local authorities, Local Nature Partnerships in Norfolk and Suffolk, statutory bodies, NGOs, charities and trusts, businesses and communities.

2. State of the Broads

The Broads' natural environment

The Broads executive area covers 303km² shown on Map 1. This core area for wildlife is supported by the wider Broadland rivers catchment of 320,200km², where land and water management support the downstream nature-rich sites of the Broads. The executive boundary is drawn tightly around the floodplains and lower reaches of the rivers Bure, Yare and Waveney, and their tributaries, the Thurne, Ant and Chet. The Broads area includes a small area of coast, also a Protected Landscape, which can have a profound impact on the Broads. Approximately 95% of the executive area is at some risk of flooding, including over 2,000 properties and 30,000 hectares of land.

The **importance of the Broads** as one of Europe's finest and most important wetlands for biodiversity and nature conservation is borne out by its many sites afforded international, national or local nature conservation status. A quarter of the executive area is designated as 'Wetland Habitats of International Importance' under the Ramsar Convention for its incredibly rich biodiversity. This includes around 75% of the remaining species-rich peat fen in lowland Britain, wet woodland (almost entirely confined to East Anglia) and Breydon estuary, which supports the highest density of wintering birds of any UK estuary. The tens of thousands of birds that visit the estuary and surrounding grazing marshes create a rich spectacle, with Pink-footed Geese, Wigeons, and Black-tailed Godwit on the water, and Redshanks, Avocets and Lapwings foraging in the mud and wet grasslands. Birds of prey, such as peregrine and harriers, also use the vast stretches of wet grassland and estuary. The Broads supports a number of Local Nature Reserves and local wildlife sites.

A **biodiversity audit** based on 11 million records shows that 26% of all UK Biodiversity Action Plan species are found in the Broads (Panter et al., 2011). Fen habitat in the Broads is a hotspot for 1,519 Species of Conservation Concern. There are no recent records for 423 (28%) of these, 67 of which are believed to be locally or nationally extinct (loc cit., Table 8). The Broads has been losing species at a rate of six per decade for half a century.

Of the **1,519 Species of Conservation Concern**, 66 Broads Regional Specialties, including Milk-parsley and Swallowtail, are completely reliant on freshwater fen habitat for their survival (loc cit., pp. 33-34). Vegetation surveys indicate that only 20% of the fen area is suitable for Swallowtail, having both reed and Milk-parsley together (S24 NVC community). In addition, between 1996 and 2019 the Swallowtail's distribution shrank by 27%⁴.

Agriculture in the East of England is at the heart of an £8 billion food and farming industry, and farm businesses in the Broads make a significant contribution to this overall production. Farming and land management also play a vital role in maintaining the Broads' ecosystems and

⁴ Fox, R et al 2023. The State of the UK's Butterflies 2022. Butterfly Conservation

the services they provide, from food (including beef) and reed thatch to biodiversity, local landscape character and employment.

The **State of Nature 2023** indicates that most of the UK's important habitats for biodiversity are in poor condition, and one in six species is at risk of being lost. The species studied have, on average, declined by 19% since monitoring began in 1970, and are much higher for some groups, such as birds (43%), amphibians and reptiles (31%), fungi and lichen (28%) and terrestrial mammals (26%). The status of many freshwater fish is poorly known but the European Eel now faces an uncertain future. There are also declines in the distributions of 54% of our flowering plant species, including the Downy Hemp-nettle and Broad-fruited Cornsad being extirpated from the Broads.

The Broads has seen **declines** in many bird species, particularly breeding waders and migratory bird such as cuckoo, and in other groups including the adder and water vole. There have been significant fish kills, and the depressed river mussel appears to have disappeared from its stronghold locations in the rivers Waveney and Yare. Changes in abundance and range of conservation priority plants and invertebrates are almost entirely unmonitored apart from some well-studied groups, including water plants in the broads and where naturalists and conservation organisations monitor species such as the Swallowtail and the Fen Orchid.

The **National Protected Landscapes Targets (Appendix 2)** baseline data produced by Natural England shows that 58% of Broads SSSIs are in favourable condition (April 2024). The BA and its local partners will agree collective local targets based on this baseline data and publish them by July 2025. The targets will be embedded in the Broads Plan. Natural England will evaluate progress towards the targets and outcomes in the Framework, analysing trends from the annual statistics. It will report on progress each year, with the first report due in summer 2025 to tie in with the Environmental Improvement Plan (EIP) report.

Site management plans are key mechanisms for nature recovery. Nature reserves act as 'nature sinks' from which species can spread into the wider, non-designated, functionally linked components of the National Park and the Broadland Catchment. This is where nature needs to be allowed and helped to recover.

The habitats considered to be rich in wildlife are wet fen and reedbed, and greater support from **agri-environment payments** reflects the high management costs. Wet woodland and marsh ditches are also notable for biodiversity. Wildlife in areas of grazing marshes is responding to improved water management for breeding and wintering waders.

The **whole of the Broads, including development and arable land, has nature recovery opportunity (Map 1)**. Nature and its recovery contribute to other environmental benefits such as health and wellbeing of visitors, storing and cleaning water, locking up carbon and purifying air. High value nature farming is widely adopted in the Broads (13,800ha are in agri-

environment schemes, with an annual value of £313,400⁵). It includes sensitive ditch management, no fertiliser application on most grassland, fen and reedbed management – including harvesting thatching reed, deer management and appropriate predator control. Map 1 also shows the functionally linked area beyond the Broads.

Reed and sedge cutting activities are carefully managed to avoid disturbance to nesting birds and enhance the mosaic of wildlife rich habitats. **Coastal dune management** conserves a rare and valued landscape type within Norfolk and Suffolk. **Managing litter and invasive species** supports landscape condition and benefits people.

Stresses on the biodiversity in the Broads and its catchment are set out in the [Natural Capital Evidence Compendium for Norfolk and Suffolk](#) and include scarce water resources, with low rainfall regionally and increasing water demands from a rising local population. Water quality has remained stable in the last five years, with little change in most rivers, although water clarity and water plant growth has increased overall. Nitrogen, phosphate and pesticides remain an issue in rivers, with substantial turbidity monitored during high and persistent rainfall events. Some river sections suffer from leisure boat induced turbidity.

The sustainable, healthy and balanced **fish community** is improving, which is thought to be beneficial for wider wildlife. There have been no known fish deaths in the Thurne caused by toxins produced by *Prymnesium* algae in recent years, although *Prymnesium* algae remains a future risk.

Increased **storminess and tidal surges** are forcing salt water up rivers and high into the Broads' freshwater ecosystem, particularly during winter and times of drought. Salt water is seeping under dunes and into drainage ditches, bringing brackish conditions to the easterly broads and wetlands. Increased rainfall in winter is flooding marshes and reedbeds for longer impacting on habitat management. The winter of 2023/24 saw the worst flooding in living memory in some Broads' valleys. Deeper seasonal flooding is persisting for months rather than weeks, threatening species such as the Swallowtail, whose overwintering chrysalis can be fixed on reedbed stems close to the water.

Invasive non-native species continue to spread and create significant additional impacts. Partners aim to be responsive and coordinate ongoing action in the Broads to control Floating Pennywort and across East Anglia to control Mink.

Overall, **threatened species recovery action** coordination and monitoring could improve, but there are some successful examples of evidence gathering, habitat enhancements, translocations and coordination, such as the Fen Raft Spider. Projects for Large Copper Butterfly, Large Marsh Grasshopper, Natterjack Toad and rare plants (including Milk Parsley (the food plant of the Swallowtail) are developing over the

⁵ The area of agri-environment scheme (AES) agreements in Protected Landscapes - Countryside Stewardship (CS), Environmental Stewardship and the Sustainable Farming Incentive (SFI). Also includes the value of CS and SFI 2022 agreements in Protected Landscapes.

coming years. Some rare species are increasing beyond the Broads, such as the Norfolk Hawker dragonfly which is also a priority for the Suffolk Coast National Landscape. Other colonists such as the Great White Egret, Cattle Egret and Willow Emerald damselfly are seen increasingly.

Nature-rich areas sit within a few metres of important agricultural food producing land, tourism and boating infrastructure and large centers of population in Norwich and the wider catchment, all of which can impact nature recovery.

Drivers for change

The Earth's natural resources - water, air, soil, geology and all living things - provide us with a huge range of benefits: goods such as food, fresh water and energy; services such as clean air regulation and carbon storage; and many cultural values from health and wellbeing to jobs, community development and a sense of place. These public benefits are supported by other natural functions such as photosynthesis, soil formation, vegetation growth and water cycling, underpinned by biodiversity.

The 25-year [Environment Plan](#) sets out national goals for nature recovery including clean air, clean and plentiful water, thriving plants and wildlife, a reduced risk of harm from environmental hazards such as flooding and drought, using resources from nature more sustainably and efficiently, and enhanced beauty, heritage and engagement with the natural environment. The Plan also sets goals to manage environmental pressures by mitigating and adapting to climate change, minimising waste, managing exposure to chemicals and enhancing biosecurity. It emphasises the need to get better at including environmental and social costs, benefits and trade-offs in policy, investment and planning decisions.

The [Landscapes Review \(2019\)](#) highlighted that national protected landscapes like the Broads are fragile, that nature in them is in crisis as elsewhere, that communities are changing and that many people do not know about these places. The report emphasised that the way we protect and improve these landscapes needs urgent and radical change “if their natural beauty is to be in a better condition 70 years from today, even better to look at, far more biodiverse, and alive with people from all backgrounds and parts of the country”.

The biggest challenge for the easterly, low-lying wetland landscape of the Broads is adapting to climate change and sea level rise, especially in terms of managing water. Other significant issues are the state of the UK economy and the cost of living crisis; the rollout of post-Brexit legislation, particularly for [agricultural transition](#) and the management of farmland, habitats and species; the growth in demand for housing and infrastructure in the East of England; and the potential ongoing impacts of the Covid-19 pandemic on local communities, tourism and other businesses, and recreational trends.

Section 245 (the ‘Protected Landscapes’ clause) of the [Levelling Up and Regeneration Act 2023](#) makes important changes to Section 11 of the National Parks and Access to the Countryside Act

1949, and to Section 66 of the Environment Act 1995. This duty says that all ‘relevant authorities’ (generally those with a public function) ‘must seek to further the purposes’ of the designated landscape. This replaces the duty to ‘have regard to’ the specified purposes.

The Broads is like a vast mosaic of functionally linked land and water; lose one fragment and its overall integrity is flawed. This means that rather than focusing on single or favourable interests (such as food production, flood protection or economic benefit) possibly at the expense of others, we must manage this ecosystem as a dynamic, complex and interdependent whole.

Pressures, risks and opportunities

Table 1 highlights key pressures, risks and opportunities for nature recovery in the Broads.

We cannot predict exactly what the Broads will look like in 50 to 100 years’ time, but we must accept that it is likely to change. By improving our knowledge and acting now, we can help to make sure it will remain a special and distinctive place, richer in biodiversity and enjoyed by all.

Table 1

Drivers, pressures, risks and opportunities for nature recovery in the Broads

Drivers	Projected pressures	Risks and opportunities
Knowledge and dedicated funding resources	Increasingly complex issues and low capacity of experienced officers, partly due to increasing administrative burdens. Less funding for wildlife conservation.	Risks: Cuts in Government funding, decline in donations to charities, may result in less resources for conservation work. Lack of coordination and siloed portfolios of organisations and poor link of nature and economic growth. Opportunities: Aligning purpose and focus of external funding, e.g. National Lottery Heritage Fund, Nature for Climate. Integrating the portfolios of organisations to enable the delivery of water management for floods, nature and carbon. Developing relationships with philanthropic funders, developing private finance markets.
Climate change	Greater likelihood of flooding due to increasing incidence and severity of weather events	Risks: More winter rainfall, with higher winter freshwater river flows and floodplain wetland water levels; surge tides and episodes of salinization of floodplain wetlands; critical pump asset failure, high pumping costs and loss of farming that sustains nature and freshwater dependent species such as Fen Orchid,

Drivers	Projected pressures	Risks and opportunities
		<p>Norfolk Hawker dragonfly, Swallowtail butterfly and many other species of conservation concern.</p> <p>Opportunities: Capital investment in pumps. Developing water level management plans. Summer watertable raising in peat soils from the river high flows and returning super clean water to rivers. Increasing awareness and action on climate change mitigation and adaptation, including Broadland Futures Initiative (estates and landowner groups looking to modify and future proof their land holdings and transition to ‘new way of managing’ in line with current and predicted climate change, mostly related to agri-environment options for water management). Translocating species beyond high-risk areas and creating new habitats.</p>
Climate change	Hotter drier summers, more frost-free days	<p>Risks: Wetland habitats (e.g., dykes, fens) drying out, resulting in species loss (dependent on drought severity); stagnation, blue-green algae blooms and dissolved oxygen crashes, with reduced freshwater flow and summer storms; increased risk of fires and damage to habitat and peatland resource; spread of invasive species, new pests and diseases, including increasing deer population, increasing carbon emissions from drained peatland farms.</p> <p>Opportunities: Collaboration with farmers through Agri-Environment Schemes (AES) to store more high flow water for farming and nature. Multi-use multi-farm linked water resource reservoirs. Aquifer recharge and recovery. Expansion of species (such as Southern Migrant Hawker or Scarce Chaser, colonisation by species such as exotic Egrets). Using shade from trees to reduce impacts of rising air and water temperatures, thus contributing to climate change mitigation.</p>
Sea level rise	Higher water levels, increase in	<p>Risks: Surge tides, tide locking and salinization of floodplain wetlands, with loss of freshwater</p>

Drivers	Projected pressures	Risks and opportunities
	incidence and impact of seasonal storms and more wave erosion	<p>dependent species such as Norfolk Hawker dragonfly, Swallowtail butterfly, Fen Orchid, freshwater fish and many other species of conservation concern. The Broads Biodiversity Audit reported that sixty-three percent of priority species, including 79% of Broads Speciality invertebrates, require fully freshwater conditions and are unlikely to tolerate brackish influence. Thirteen percent of priority species were classified as tolerating mild to moderately brackish or saline conditions, and these were dominated by vertebrates. Coastal change could be significant for the Northern Broads.</p> <p>Opportunities: Adaptation projects potentially funded by longer-term AES may create opportunities for habitat change, benefiting some species.</p>
Water abstraction	Lower than natural river and groundwater flows	<p>Risks: Poorer river and broad water quality, making wetland habitats more sensitive to climate impacts, salt tides and pollution, with potential negative impacts on groundwater and dependent fen vegetation communities.</p> <p>Opportunities: Development of storage reservoirs could be designed to provide summer water to wetlands.</p>
Waste water and diffuse water pollution	Negative impact on water quality in floodplain habitats, waterbodies and their ecosystems	<p>Risks: More weather-related sewage spills and soil/fertilizer loss, nutrient enrichment deteriorating natural ecosystems, resulting in species loss, fewer rare species, decades of restoration and some permanent changes.</p> <p>Opportunities: Development of new wetlands could be designed to harvest some summer nutrients. Further investment in wastewater treatment and catchment sensitive farming measures. Sediment management can reduce sediment disturbance from motorboats.</p>

Drivers	Projected pressures	Risks and opportunities
Air pollution	Nitrogen deposition exceeds the designated site relevant critical load for ecosystem protection and hence there is a risk of harmful effects, particularly in the light of a changing climate.	<p>Risks: More transport related nitrogen and particulate matter emissions and continued emissions from farms and Cantley sugar beet factory, nutrient enrichment deteriorating sensitive habitats, resulting in species loss, fewer sensitive species, decades of restoration and some permanent changes.</p> <p>Opportunities: Growth of electric vehicles and boats. Develop Site Nitrogen Action Plan. Uptake of appropriate AES. Work with British Sugar.</p>
Land management	Positive and negative influences depending on management practices	<p>Risks: Numerous, though, can generally be managed through good practice and wildlife-friendly farming supported by AES if available and providing sufficient incentives. Some losses can be permanent, such as land subsidence from water drainage.</p> <p>Opportunities: High Nature Value Farming (low intensity, low input, often large herbivore grazing and regenerative agriculture). Enter AES and private finance schemes that create benefits for nature and attract investment by benefiting people, business or mitigating negative impacts. Coordinate approach and share objectives (e.g. within Internal Drainage Board (IDB) sub districts), to make best use of resources, topography and to be most effective.</p>
Invasive non-native species	Negative effects on land and water management, habitats and species	<p>Risks: Dependent on species - includes predation (e.g., American Mink), competition (e.g., New Zealand Pygmyweed), flooding and navigation risks from choking rivers (e.g. Floating Pennywort)</p> <p>Opportunities: Continue coordinated approach. Use public engagement and support with some actions to address the challenge, such as controlling Himalayan Balsam and monitoring mink. Support appropriate biocontrol.</p>
Development	Habitat loss, modification,	<p>Risks: Most small developments in the Broads result in minor negative impacts but could add up to be more</p>

Drivers	Projected pressures	Risks and opportunities
	isolation and fragmentation	<p>significant, although this is often dependent on the management of the scheme over the long-term. Water shortages and disconnect in awareness of users and how their water behaviours impact the natural environment. Poor water quality from more sewage inputs.</p> <p>Highways and infrastructure development are risks to the special qualities of the Broads.</p> <p>Opportunities: Biodiversity Net Gain (BNG) and other recreation and nutrient mitigation schemes raise funds to improve habitats. Some developments could potentially enhance wildlife, particularly in rural areas, including flood alleviation schemes and habitat creation. Promote 'Wise use of Water'. Follow green infrastructure principles and practices.</p>
Visitor numbers and behaviours	Potential for disturbance to species and habitats	<p>Risks: Direct disturbance to wildlife and habitats, such as dog control around breeding birds and trampling of sand dunes.</p> <p>Opportunities: Increase positive public engagement on being aware of and caring for nature that is often invisible or underwater, coordinate messaging⁶ to support nature recovery and peoples' health and wellbeing.</p>

Environmental impacts and biodiversity gains and losses

Some of the most significant environmental impacts and biodiversity gains and losses over the last five years include:

- Tidal surges into the Broads' freshwater ecosystem. Environment Agency water level monitoring in 2023 showed the lowest and the highest water levels on Hickling Broad since monitoring began twenty years earlier, creating high water in the floodplain fens. The winter flooding of 2023/24 was prolonged and exceptional, with certain impacts on species and habitats.

⁶ [Connection to Nature](#) (EIN068) Natural England report 2022

- Longer and more intense droughts, such as in summer 2022, drying out fens and marshes, threatening species, releasing carbon stocks and further shrinking land levels.
- Rising temperatures, pushing species into different climate envelopes and making the Broads unsuitable for many species, and suitable for new species. There is insufficient species monitoring ongoing to know the precise changes in the Broads over the last five years, but these years have been warmer than previous years. Shade from trees will be more important for wetland wildlife.
- The rivers and broads are relatively cleaner compared to the 1970s, but there has been little change in the nutrient concentration in the past five years, although water plants and clarity continues to improve in upper river reaches. New hazardous chemicals and microplastics compound the well documented nutrient pollution.
- Improved reedbed restoration and management (including harvesting reed and sedge for traditional thatch) have seen a continued growth in populations of Broadland species such as Bittern, Crane and Marsh Harrier. Fen Orchid translocation success is being assessed.
- The Swallowtail butterfly continues to disappear from sites. In 2023, it was reported to be breeding on just 16 sites in the Broads, down from 22 sites a few years ago⁷⁸
- Species translocation and investigations such as Fen Raft Spider, Lesser Whirlpool Ramshorn Snail, Nathusius Pipistrelle and Milk Parsley are positive, improving knowledge, development and action to support species recovery.
- There is evidence that agri-environment schemes are benefiting breeding Lapwing and Redshank, both inside and outside nature reserves⁹.
- The BA's direct grant from the Department for Environment, Food and Rural Affairs (Defra) has shrunk by 40% in real terms since 2010.¹⁰ Many other Government funded bodies and NGOs working in the Broads have been similarly impacted.
- There has been ongoing nature recovery and land acquisition by the Wildlife Trusts, RSPB and BA in the past five years (notably around extending the Halvergate Fleet, Hickling, Carlton Marsh, Worlingham Marsh and fen at Hulver Ground).

Some factors, such as climate change or government funding, are beyond the influence of this BNRS. However, the actions in its delivery plan will build on our knowledge about these and other issues helping play a part in addressing nature recovery in the Broads.

The BNRS delivery plan sets out actions to be taken by partners in 2024-29. Actions will be updated during the plan period.

⁷ Patrick Barkham, 'Rare swallowtail butterfly suffers worst summer since records began' The Guardian 30 January 2024

⁸ Collins, N.M. et al. Will the swallowtail survive in Norfolk? Transactions of the Norfolk and Norwich Naturalists Society 2019 52(1):62-68.

⁹ RSPB Centre For Conservation Science 2024

¹⁰ National Parks Health Check Report 2024, Campaign for National Parks, <https://www.cnp.org.uk/wp-content/uploads/2024/04/National-Parks-Health-Check-Report-Nature-Recovery-2024.pdf>

3. Looking ahead

Broads Plan objectives

The strategic objectives for the Broads are set out under six themes in the Broads Plan 2022-27. Theme B focuses on nature recovery, but objectives under other themes (particularly Theme A relating to climate change and flood risk) are also relevant to this BNRS.

Theme B: Improving landscapes for biodiversity and agriculture

B1 - Restore, maintain and enhance lakes (or broads) and use monitoring evidence to trial and implement further innovative lake restoration techniques

B2 - Promote best practice water capture and usage across the Broadland Rivers Catchment and reduce point and diffuse pollution into the floodplain and water courses

B3 - Seek biodiversity net gain and enhance areas of fen, reed bed, grazing marsh and wet woodland, to protect peatlands as carbon sinks

B4 - Define, implement and monitor management regimes for priority species and invasive non-native species

B5 - Improve partnership coordination and communication of Broads biodiversity monitoring and research effort, linked to the National Biodiversity Network

Theme A: Responding to climate change and flood risk

A1 - Prepare a long-term integrated flood risk strategy for the Broads, Great Yarmouth and interrelated coastal frontage and maintain current adaptive coastal, tidal and fluvial flood risk management approaches for the area.

A2 - Work towards making all Broads Authority operations carbon neutral by 2030 and carbon zero by 2040.

A3 - Agree carbon reduction targets for the Broads National Park and promote action to reduce emissions.

The BNRS 5-year Delivery Plan shows partnership actions towards meeting these objectives.

The nature recovery targets the BA will report on are set out in the National Protected Landscapes Targets. The BA will work with Natural England to assign and monitor the Broads' contribution to these national targets. The Broads Protected Landscapes Targets will be added at a later stage, once agreed.

The Broads will contribute to the '30 by 30' targets through the reporting mechanisms set up by Defra, which may include designated sites and validated applications for land meeting the standard.

Our targets

The BNRS targets include seven of the targets for Protected Landscapes, and an additional target for species. The BNRS will be updated once the Protected Landscapes targets are finalised through partnership working. The Broads Authority acknowledge that they are unable to meet the targets on their own, and collaboration with partners will be essential to meet them. Different external factors will also impact on delivery.

Protected Landscape targets

To help England’s Protected Landscapes meet the potential for nature, climate, people and place, the Government is establishing targets for National Parks and National Landscapes (Table 2). These targets will promote the actions that are most needed to achieve positive changes. They will set the ambition for how we expect Protected Landscapes to achieve the following outcomes from the Environmental Improvement Plan 2023:

Goal 1: Thriving plants and wildlife (5 targets)

Goal 7: Mitigating and adapting to climate change (3 targets) Goal 10: Enhancing beauty, heritage and engagement with the natural environment¹¹

Most Protected Landscape targets will be apportioned nationally, using national data. Three of the targets need to be apportioned to more accurately reflect the local circumstances of individual Protected Landscapes. National guidance will be used to calculate the contributions of the Broads towards the national targets 1, 7 and 8. Once the guided targets are agreed, we will update the BNRS with this information.

Table 2
Protected Landscapes targets

Protected Landscape target		Notes (November 2024)	Lead delivery body
Thriving plants and wildlife targets			
1	Restore or create more than 2384ha of a range of wildlife-rich habitats within the Broads, outside protected sites by 2042 (from a 2022 baseline). Equivalent to 119ha/yr	Locally apportioned For the Broads, the area-based allocation is 2,384ha, equating to 119ha per year from 2022 to 2042. Includes creation of priority habitats, but not improvement of existing. The	Defra – funding of Agri-environment schemes. Natural England – advising on high tier Agri-environment schemes.

¹¹ The two beauty, heritage and engagement PL targets are not included in the BNRS

		<p>Broads has 18,159ha of Priority Habitat, covering 60% of the area. Generally only lakes, rivers, and arable reversion contribute to Target 1, making restoration and creation challenging.</p> <p>For instance, achieving this target could require approximately 50% reversion of arable land, covering over 8% of the Broads.</p> <p>With no constraints, 100% of this area could be restored. However, achieving these targets depends on overcoming challenges, such as:</p> <ul style="list-style-type: none"> • Ensuring farm viability • Managing water <p>Provisional target: 2,384ha (equivalent to 119ha/year from 2022–2042).</p>	<p>Private investment for carbon and nature credits.</p> <p>External grants.</p>
2	Bring 80% of SSSIs within Protected Landscapes into favourable condition by 2042.	<p>Nationally apportioned.</p> <p>Currently at 57.8% in 2024.</p> <p>Total SSSI: 204 Favourable: 118 Recovering: 36 No Change: 21 Declining: 10 Not Recorded: 19</p> <p>Every site is being reassessed, so these figures may change. NE have a 5-year monitoring plan and actions on track for every site.</p>	<p>Defra – funding of Agri-environment schemes</p> <p>Natural England – assessing favourable condition</p> <p>Private investment for carbon and nature credits.</p> <p>External grants.</p>

3	60% of SSSIs within Protected Landscapes assessed as having 'actions on track' to achieve favourable condition by 31 January 2028.	<p>Nationally apportioned.</p> <p>Currently at 6.9%, October 2024.</p> <p>Total SSSI: 204 190 Negative 14 positive</p> <p>Every site is being assessed, so these figures may change. NE have a 5-year monitoring plan and actions on track for every site.</p>	Natural England – assessing SSSI actions and agreeing these with assigned organisations
4	Continuing favourable management of all existing priority habitat already in favourable condition outside of SSSIs (from a 2022 baseline) and increasing to include all newly restored or created habitat through agri-environment schemes by 2042.	<p>Nationally apportioned</p> <p>No data currently available</p>	<p>Defra – funding of Agri-environment schemes</p> <p>Natural England – advising on high tier Agri-environment schemes</p> <p>Private investment for carbon and nature credits.</p> <p>External grants.</p>
5	Ensuring at least 65% to 80% of land managers adopt nature friendly farming on at least 10% to 15% of their land by 2030.	<p>Nationally apportioned</p> <p>No data currently available</p>	<p>Defra – funding of Agri-environment schemes including Catchment Sensitive Farming</p> <p>Private investment for carbon and nature credits.</p> <p>External grants.</p>
Mitigating and adapting to climate change targets			
6	Reduce net greenhouse gas emissions in Protected	<p>Nationally apportioned</p> <p>No data currently available</p>	

	Landscapes to net zero by 2050 relative to 1990 levels.	Targeting the largest greenhouse gas emitters is crucial. In the Broads, aside from drained peat, the main sources are transport, buildings, commercial operations (especially sugar beet), and agriculture. We're already reducing agricultural emissions through the Broads Peat Partnership, Nature for Climate, LAP projects, WRF, agri-environment schemes, and FiPL projects. A key focus moving forward is also reducing emissions from domestic transport and residential buildings.	
7	<p>Restore approximately 2000ha of peat in the Broads Protected Landscapes by 2050.</p> <p><i>Equivalent to 80ha /yr (2022 – 2050)</i></p>	<p>Locally apportioned.</p> <p>The UK Government's national target is 32,000 hectares per year. For the Broads, an initial target of 4,438ha was set, though it did not account for peat already under high water tables in floodplain fen. The Broads Peat Partnership focuses on 2,000ha of drained deep peat, engaging farmers to create peat-forming habitats, measured through schemes like 'Fen creation,' 'Raised watertable on peat,' and 'Reedbed creation.'</p> <p>With no constraints, 100% of this area could be restored. However, achieving these targets depends on</p>	<p>Defra – funding of Agri-environment schemes</p> <p>Broads Authority – leading Broads peat partners.</p> <p>Natural England – advising on high tier Agri-environment schemes.</p> <p>Private investment for carbon and nature credits.</p> <p>External grants.</p>

		<p>overcoming several site-specific challenges, such as:</p> <ul style="list-style-type: none"> • Securing permissions • Ensuring farm viability • Managing water storage and management costs • Addressing conflicts with other land uses and infrastructure <p>Revised provisional target: 2,000ha (equivalent to 80ha/year from 2022–2050).</p>	
-	<p>No Tree Target for the Broads</p> <p>This target is not relevant to the Broads.</p> <p><i>Increase tree canopy and woodland cover (combined) by 0ha to contribute to the national targets of 3% of total land area in Protected Landscapes by 2050 (from 2022 baseline).</i></p> <p><i>Equivalent to 0ha/yr (2022 – 2050)</i></p>	<p>Locally apportioned.</p> <p>The Broads is known for its open priority habitats and landscapes, with limited woodland mainly in wet areas of the Ant, Waveney, and Muckfleet valleys. While woodland adds to the landscape, it is not a defining feature. Opportunity maps show limited suitable land for planting, and most proposals are refused due to conflicts with landscape character, species conservation, priority habitats, or deep peat areas. Tree-planting schemes are already well-covered at national and county levels.</p> <p>Revised provisional target: 0ha (2022 – 2050)</p>	<p>Forestry Commission advising on woodland schemes.</p> <p>This target is not relevant to the Broads.</p>

Species target for the Broads

In addition to the Protected Landscape targets, there is a species target for the Broads:

Species target		Notes (November 2024)
8	Carry out projects that support 90% of species listed in Table 3 towards stable or increasing populations within or beyond the Broads by 2029.	<p>The Broads species list focuses on the ‘rarest species that depend almost entirely on the Broads,’ for which we need to confirm actions.</p> <p>It is a preliminary manageable list to start monitoring progress and guide further discussions.</p> <p>If any proposed projects prove unfeasible, we’ll document the reasons and focus on realistic opportunities. This list isn’t meant to capture all rare, priority, characteristic or flagship species, nor does it cover every species with an active project.</p>

Species List

The Broads species list focuses on the ‘rarest species that depend almost entirely on the Broads,’ for which we need to confirm actions. Once these actions are deemed feasible and underway, the list will be revised to include lower-priority species—those that are less rare or more widely distributed. If any conservation projects prove unfeasible, the list will be adjusted accordingly. It is expected that further revision of the list will be in the next BNRS period.

This list (Table 3) is an Initial action priority list for Broads species (mainly endangered species that depend almost entirely on the Broads for their survival). Species are prioritised based on IUCN GB red list status, local population significance.

Critically Endangered species in the Broads are a high priority, regardless of local populations, unless local threats have been addressed or are unmanageable. **Endangered** species are typically medium priority unless their threats are resolved or cannot be tackled locally. Nationally significant populations in the Broads elevate a species' priority.

Vulnerable and **Near Threatened** species are prioritised based on the significance of their Broads populations. However, widespread species may be deprioritised due to the large number of species requiring attention.

Priorities may change over time as we gain more knowledge about species or as new, higher priority species are identified.

Table 3. Initial action priority list for Broads species (mainly endangered species that depend almost entirely on the Broads for their survival)

Common name	Species name	Rarity. IUCN GB red list threat status	Extent. Restricted / No. Natural Character Area's	Conservation priority for Broads
Invertebrates				
1 A spider	Robertus insignis	EN	Entirely Restricted	High
2 A hybotid / dance fly	Platypalpus pygialis		Entirely Restricted	High
3 Broads Long-legged Fly	Dolichopus laticola	EN	Entirely Restricted	High
4 Bure Long-legged Fly	Dolichopus nigripes	VU	Entirely Restricted	High

5	Fen Mason Wasp	Odynerus simillimus		Top 5 NCA	Medium
6	A leaf beetle	Galeruca laticollis	CR	Sole NCA	High
7	A spittlebug	Macrosteles oshanini		Entirely Restricted	High
8	A spittlebug	Metalimnus formosus		Entirely Restricted	High
9	A water boatman	Sigara longipalis		Entirely Restricted	High
10	One-grooved Diving Beetle	Bidessus unistriatus	CR	Top 5 NCA	High
11	Lesser Water Measurer	Hydrometra gracilenta		Entirely Restricted	High
12	Swallowtail	Papilio machaon	NT	Entirely Restricted	High
13	Small Dotted Footman moth	Pelosia obtusa	EN	Entirely Restricted	High
14	Fenn's Wainscot moth	Protarchanara brevilinea		Top 5 NCA	Medium
15	Little Whirlpool Ramshorn Snail	Anisus vorticulus	VU	Largely Restricted	Medium
Birds					
16	Lapwing	Vanellus vanellus	VU	Signif national population	Medium
17	Redshank	Tringa totanus		Signif national population	Medium
18	Savi's Warbler	Locustella luscinioides	CR	Top 5 NCA	High
Plants					
19	Crested Buckler Fern	Dryopteris cristata	EN	Top 5 NCA	High
20	Fen Orchid	Liparis loeselii	EN	Top 5 NCA	High
21	Greater Water Parsnip	Sium latifolium	EN	Top 5 NCA	High
22	Holly-leaved Naiad	Najas marina	VU	Largely Restricted	High
23	Intermediate Stonewort	Chara intermedia	EN	Entirely Restricted	High
24	Grass-wrack Pondweed	Potamogeton compressus	EN	Top 5 NCA	Medium
Reptiles and Amphibians					

25 Natterjack Toad

Epidalea calamita

EN

Top 10 NCA

High

In addition to this list, the Broads supports a diverse assemblage of over 1,500 conservation priority species. Some of these species are monitored to demonstrate recovery following habitat restoration, management, connection, and expansion efforts.

4. Delivery Plan

This BNRS follows on from the [Broads Biodiversity and Water Strategy: Action Plan 2019-2024 \(broads-authority.gov.uk\)](https://broads-authority.gov.uk), where progress in the last ‘reporting period’ was tracked and monitored.

The BNRS 5-year Delivery Plan will be implemented alongside other relevant plans such as the Broadland Rivers Catchment Plan, the BA coordinated strategies for managing waterways, tourism, education and integrated access, and site-based plans. **Appendix 1** outlines how the BA affects biodiversity in relation to raising public awareness and enjoyment of the area’s natural environment, and how its planned operations impact the environment. Development management is informed by the Local Plan for the Broads.

The Delivery Plan is written primarily for a technical and specialist audience, although we aim to explain terms where necessary.

Monitoring and reporting

We will assign and monitor the Broads’ contribution to the National Protected Landscapes Targets, working with Natural England and the Protected Landscape Partnership.

We will monitor the BNRS Delivery Plan annually using a ‘traffic light’ system to assess whether each action is on track, slower than expected or at risk of not being achieved. Status reports will be taken to the BBP annually and to the Broads Authority’s board as required.

Over the lifetime of the Delivery Plan, new priority projects are likely to emerge that meet the objectives of the BNRS. Where this happens, we will update the Delivery Plan, which will be available to view on the BA’s website [Biodiversity and nature recovery \(broads-authority.gov.uk\)](https://broads-authority.gov.uk)

Annual BNRS reporting will be through the Broads Biodiversity Partnership. Biodiversity duty reporting will be taken to the Broads Authority board and published on its website.

Under the Environment Act 2021, the BA (as a public authority¹²) will be required to publish a **Biodiversity Duty Report**. The BA submitted its ‘Consideration of biodiversity duty action’ report in January 2024 (see **Appendix 1** for a revised extract). It will need to have its first reporting period by no later than 1 January 2026, followed by reports at least every 5 years. Each report will include a summary of actions the BA has taken to comply with its biodiversity duty, and how it plans to comply with the duty in the next reporting period. The BNRS and its Delivery Plan will act as the Biodiversity Duty Report under this legislation.

The reports will also include the actions the BA has carried out to meet its Biodiversity Net Gain (BNG) obligations, the results of those actions, and plans to meet the obligations in the next

¹² Public authorities are defined as government departments, public bodies and agencies, local authorities and local planning authorities, and statutory undertakers.

reporting period. Under the BNG duty, all new developments will be required to deliver a 10% net gain in biodiversity.

What is already being done for nature recovery?

Partners are actively managing and restoring nature around the Broads, including the key projects highlighted below. There is a more comprehensive list of current and planned projects in the Delivery Plan.

- Widespread delivery of Agri-Environment Schemes by farmers and land managers
- The £2.3M Nature for Climate Fund and Lowland Agricultural Peat has supported land manager assessment of peat and water management across the 2500ha of drained peat marsh and peatland restoration over the past 2.5 years.
- The creation of a new nature reserve at Worlingham Marshes, connecting nature across the Waveney valley, and improved water management extending breeding wader habitat at Berney Marshes supported by wider farm advice.
- Undertaking surveys of the broads and rivers and their aquatic communities to understand the ongoing impact of nutrient and chemical pollutants.
- Broadland catchment projects protecting the water flowing into the Broads and its environment.
- The Norfolk Water Fund business plan setting out investment in nature-based solutions across the county.
- The effective control of invasive American mink across the Broads and East Anglia, and controlling the non-native Floating Pennywort to restrict its spread.

Broads Nature Recovery Strategy: Delivery Plan 2024-29

This Delivery Plan supports the Protected Landscape targets and the strategic objectives of the Broads Plan 2022-27, particularly those shown in the summary **Table 4**. Detailed actions are in **Tables 5 to 9**. Biodiversity net gain recording is in **Tables 10 to 12**. The Broads Biodiversity Partnership (BBP) will update and add projects as the Delivery Plan progresses through 2024-2029.

Table 4

Broads Plan themes and strategic objectives the BBP will use to record and track progress of the number of projects delivered

Theme B: Improving landscapes for biodiversity and agriculture	Number of projects		
	Completed	On track	Incomplete/ changed
Objective B1 - Restore, maintain and enhance lakes (or broads) and use monitoring evidence to trial and implement further innovative lake restoration techniques			
Objective B2 - Promote best practice water capture and usage across the Broadland Rivers Catchment and reduce point and diffuse pollution into the floodplain and water courses			
Objective B3 - Seek biodiversity net gain and enhance areas of fen, reed bed, grazing marsh and wet woodland, to protect peatlands as carbon sinks			
Objective B4 - Define, implement and monitor management regimes for priority species and invasive non-native species			
Objective B5 - Improve partnership coordination and communication of Broads biodiversity monitoring and research effort, linked to the National Biodiversity Network			
Theme A: Responding to climate change and flood risk	Completed	On track	Incomplete/ changed
Objective A1 - Prepare a long-term integrated flood risk strategy for the Broads, Great Yarmouth and interrelated coastal frontage and maintain current adaptive coastal, tidal and fluvial flood risk management approaches for the area.			

The delivery plan is framed around 4 focus areas: Water quality and quantity, Habitats (wet grassland, fen, fen meadow, reedbed, woodland), Species, and Monitoring, Research and Collaboration. The Climate Change element is transversal to the 4 focus areas.

Focus: Water quality and quantity

Principles: Habitat recovery principles (more, bigger, better, joined up)

Protected Landscape targets: 1, 2, 3, 4

Broads Plan objective B1: Restore, maintain and enhance lakes and use monitoring evidence to trial and implement further innovative lake restoration techniques.

How we can achieve our vision

Adaptive plans looking at long term impacts of climate change are developed for the Broads area, and include consideration of biodiversity impacts.

Nutrient inputs can be lowered through Catchment Sensitive Farming schemes, further investment in improving wastewater treatment and expansion of regenerative farming practices lowering chemical inputs. Improvements to soils will enhance water quality and help capture and slow release of water. We can use nature-based solutions through the Norfolk Water Strategy Programme, and attract investment for specific benefits such as nutrient neutrality.

To improve some broads and rivers, we need to continue the management of the waterways, and further invest with monitoring, research and review programmes, linking with UEA and other academic organisations, citizen science and community monitoring to help build knowledge.

The 28 Water Level Management Plans in the Broads need reviewing to direct the functional water control requirements of the replacement pumps which are economically critical to the future of the Broads.

Waterbodies need to be created and restored.

Table 5

Key actions for water

Ref	Detailed actions	Lead/ partners	Desired benefits	Timescale/ PL targets	Progress
	Support Broadland Futures Initiative (BFI) high level options study and adaptive plan by informing discussions during engagement activity and options shortlisting processes: <ul style="list-style-type: none"> - Appraise actions - 2025-26 - Develop adaptive plan - 2026 - Adopt adaptive plan - 2027 	BFI, BBP	Informed debate and holistic consideration of options for future flood risk management. Opportunities identified for possible nature-based approaches to managing flood risk.	Plan adopted mid-2027 PL 4	On track. Updates online at Broadland Futures Initiative (broadland-futures-authority.gov.uk)
	Continue the management of the waterways for navigation for the benefit of nature and people. Including: <ul style="list-style-type: none"> - Sediment removal - Water plant monitoring, reporting and cutting - River bank protection, tree management and speed compliance 	BA	People able to access the Broads via boat, with good level of understanding of the impact of management actions on the Broads.	Ongoing	On track
	Implement Hoveton Great Broad After LIFE Project, including water quality monitoring, invertebrate survey and final report.	NE , Hoveton Steering Group (HSG) BA, EA, Stirling University,	Improved understanding of the restoration following capital works; improved water flows.	2023 – 2028 PL 2	On track. HSG meets biannually. Monitoring ongoing. Decision on need for further restoration

Ref	Detailed actions	Lead/ partners	Desired benefits	Timescale/ PL targets	Progress
		Hoveton Estate			in 2026 2026 in agreement with the HSG and made publicly available.
	Carry out Trinity Broads fish surveys, retain and repair fish barrier and consider fish management, including installing fish/eel pass to allow fish upstream.	ESW (NWT) TBP	Clearer water is supporting healthier and more abundant water plant and water bird populations.	Ongoing PL 3	On track.
	Restore and create ponds, broads and wetland features using Agri-Environment Schemes and other schemes.	BBP	More habitat for wildlife.	PL 1	

Broads Plan objective B2: Promote best practice water capture and usage across the Broadland Rivers Catchment and reduce point and diffuse pollution into the floodplain and water courses.

(See [Broadland Rivers Catchment Plan](#) for more information on catchment projects)

Table 6

Key actions for water quantity

Ref	Detailed actions	Lead / Partners	Desired benefits	Timescales/ PL targets	Progress
	Review and update all 28 Water Level Management Plans in the Broads SSSIs.	WMA , RSPB, BBP	Improved water level management for designated sites, supporting wildlife and adaptation to climate change.	2024-2027 PL 2	Delayed. Funding not in place. RSPB drafted WLMP for Buckenham and Cantley and estimate min. £10k/ plan required.
	Install replacement aging critical pumps to control water levels, as directed by Water Level Management Plans.	WMA	Improved water level management supporting wildlife and adaptation to climate change.	2024-2029 PL 1, 2, 4	Delayed due to funding constraints.
	Invest in multi-use multi-farm linked water resource reservoirs combined with aquifer recharge and recovery where possible.	Landowners	Use of available water for food and nature recovery.	PL 1, 2, 4	Not started
	Seek to address water quality and resource issues through nature-based solutions, via the Norfolk Water Strategy Programme.	WRE , BCP	Societal challenges are addressed through actions to protect, sustainably manage, and restore natural and modified ecosystems, benefiting people and nature at the same time.	Ongoing PL 1, 2, 4	On track. Business plan published (Feb 2024) for a £30 million portfolio of nature-based solutions
	Support implementation and delivery of mitigation projects that enable nutrient neutrality for developers.	Norfolk LPAs , Natural England ,	Nutrient enrichment of waterbodies is not	Ongoing PL 2	Norfolk Environmental Credits have set up a scheme in Yare

Ref	Detailed actions	Lead / Partners	Desired benefits	Timescales/ PL targets	Progress
		Norfolk Environmental Credits, landowners	worsened by development in Norfolk.		Catchment. They and Natural England are looking at mitigation schemes for other catchments.
	Complete and implement agreed Diffuse Water Pollution Plans.	EA, NE, BCP	Improved water quality, supporting wildlife and improving peoples' enjoyment of these areas.	2024-2029 PL 2	Plans for the Ant, Yare and Trinity Broad available early summer 2024. Upper Thurne, Waveney and Potter & Scarning Fen due first half of 2025. Plans starting/ ongoing dependent on funding, resources and involvement of other groups and organisations.
	Investigate and install solutions to improve poor water quality in the Witton Run and investigate extending a citizen science approach more widely into the Broad, including the Witton Run.	NE, EA, UEA, RSPB, BCP	The plan is providing a model to improve water quality and wildlife, in turn improving peoples' enjoyment of these areas.	2024-2029 Supporting (S)	On track. Identifying pollution sources on the Witton Run. February - July 2024. UEA MSc research.

Ref	Detailed actions	Lead / Partners	Desired benefits	Timescales/ PL targets	Progress
	Carry out Wendling Beck water quality monitoring to support planned floodplain reconnection work.	UEA (Wendling Beck Environment Project) , BCP	Baseline water quality data is being used to inform restoration design.	2024 S	On track.
	Conduct trials of new water monitoring technologies at Salle in Wensum catchment (Agri-water innovations for a sustainable Europe).	UEA (Horizon Europe) , BCP	Baseline water quality data is being used to inform regenerative farming.	2024-2026 S	On track.
	Monitor microplastic release from combined sewer overflows from the Wensum and Yare catchments.	UEA, AW , BCP	Improved understanding of new water quality challenges and creation of solutions to cope with challenges.	2024-2026 S	On track.
	Undertake review of forever chemicals in the River Wensum PhD (pending successful interview).	UEA, BCP and NRT	Improved understanding of new water quality challenges and creation of solutions to cope with challenges.	2024-2027 S	Not started.
	Investigate Neonicotinoids levels in the Bure Marshes.	UEA , BCP	Improved understanding of new water quality challenges and creation of solutions to cope with challenges.	2024 S	On track. Appointment due June 2024.

Ref	Detailed actions	Lead / Partners	Desired benefits	Timescales/ PL targets	Progress
	Carry out Recovery pathways for lake ecosystems, 'RESTORE' project, building new simulation models of key lake processes in the Broads and other lakes across the world early indicators of recovery pathways.	Southampton and UCL (NERC)	Improved understanding of lake ecosystems and potential for recovery.	2023-27 S	On track. Commenced Oct 2024, data collection and fieldwork ongoing.
	Carry out six litter picks annually in Broads waterways and support other litter picking initiatives.	BA	Less litter pollution in waterways, helping to reduce harmful impacts on aquatic and marine food chains and improving landscape condition.	Annual S	On track.

Focus: Habitats (wet grassland, fen, fen meadow, reedbed, woodland)

Principles: Habitat recovery principles (more, bigger, better, joined up)

Protected Landscape targets: 1, 2, 3, 4, 5, 6, 7, 8

Broads Plan objective B3: Seek biodiversity net gain and enhance areas of fen, reed bed, grazing marsh and wet woodland, to protect peatlands as carbon sinks.

(NB: Targets will also be delivered by routine and operational management of sites in accordance with annual and longer-term commitments and plans not listed in Table 7, as well as through BNG actions and gains listed in Tables 10-12)

How the vision could be achieved

Collaborating across landscape or sub-catchment scale programmes, such as farm cluster groups working on adaptive projects, deer assessment and soil carbon and Landscape Recovery programmes. Creating evidence-based water plans and projects for holding, storing, cleaning and reusing water for nature and other benefits.

Advising land managers to create and restore grazing marshes, fen, reedbed and heathland for birds and other priority species through effective use of Environmental Land Management. Coordinating and sharing scientific evidence and monitoring data.

Restoring the 2000ha of drained peat, such as at Worlingham and Buttle Marsh. Creating and testing viable wetland farming opportunities for future floodplain landscapes.

Table 7

Key actions for habitats (wet grassland, fen, fen meadow, reedbed, woodland)

Ref	Detailed actions	Lead/ partners	Desired benefits	Timescale/ PL targets	Progress
	Engage with partners and prepare for development of East Atlantic Flyway: East Coast Wetlands, incl. a further ABPmer report to advise on the work needed to secure nomination for World Heritage status.	RSPB (to be confirmed)	The migration route used by about 90 million birds annually is recognised, protected and enhanced.	Beyond 2029 Supporting (S)	On track. Next stage includes potential partners to consider the report, then meet and agree how the nomination will be taken forward
	Carry out Waveney and Little Ouse Recovery (WaLOR Landscape Recovery) project.	SWT, EA (Defra)	Landscape-scale restoration over a sub-catchment, including new and restored wetland habitats, enhanced river corridors and water quality, and more sustainable land management practices.	2022-2025 S	On track. Ready to begin engaging and negotiating corporate requirements with buyers and investors.

Ref	Detailed actions	Lead/ partners	Desired benefits	Timescale/ PL targets	Progress
	Deliver Langley Abbey Environment Project (LAEP).	Langley Abbey Estate	Protecting priority habitats for wildlife and creating carbon stores.	Ongoing PL 1	On track. Collaborating with neighbouring landowners. Engaging and negotiating corporate requirements with buyers and investors.
	Deliver rewilding and nature friendly farming at Somerleyton Estate	Somerleyton Estate Wild East, Suffolk Wildlife Trust, RSPB	Functional grazing animals create species diversity and wood pasture habitats, wellbeing and other benefits from a range of nature-based enterprises.	Ongoing PL 1, PL 4	On track.
	Learn from Landscape Recovery Projects and support the development of a Landscape Recovery bid for the Broads. Develop carbon assessment, deer management and regenerative agriculture.	Northern Broads Farm Cluster Norfolk FWAG, BA	Landscape-scale restoration, including new and restored wetland habitats, enhanced river corridors and water quality, and more sustainable land management practices.	2024-2025 S	On track Formation meeting and 63 attendees of deer management meeting. Facilitation funding gained.
	Work with farmers and land managers to create and restore heath and acid grassland mosaic that has been lost around the Broads boundary.	Natural England, Norfolk FWAG	Conservation priority species are using these wetland edge transitions habitats to avoid floods and recover populations.	Ongoing PL 1, PL 5	Progress update required.

Ref	Detailed actions	Lead/ partners	Desired benefits	Timescale/ PL targets	Progress
	Restore Worlingham Marshes into a haven for wildlife, including improving water management, creating wetland scrapes and foot drains.	Suffolk Wildlife Trust IDB	Protecting priority habitats for wildlife and creating carbon stores.	PL 1	On track. Funded by The National Lottery Heritage Fund
	Support development and implementation of Green Infrastructure and Recreational Avoidance and Mitigation Strategies (GIRAMS) to inform spatial planning policy and decisions.	BA Norfolk Strategic Planners Group	The biodiversity value of sites is better protected from increasing recreational pressure, with mitigation measures costed and in place through Local Plans.	Ongoing S	Delayed. RAMS tariff being collected across all local planning authorities in Norfolk and part of Suffolk to fund measures to manage and reduce impact of people making extra visits to Special Areas of Conservation (SACs) in counties. The Norfolk RAMs review is nearly complete. The Suffolk Coast RAMS review is just starting
	Create peat building conditions at Buttle Marsh through management of watertable as part of Nature for Climate funding.	BA, (NFCPGS), AW	Wildlife is being protected while adapting to a changing climate. Water is supplying fens and creating conditions for lost fen	2024-2026 PL 1	Delayed due to EA water abstraction considerations.

Ref	Detailed actions	Lead/ partners	Desired benefits	Timescale/ PL targets	Progress
			vegetation communities to re-establish.		
	Implement the Lowland Agricultural Peat Water Discovery Project to lower carbon emissions from peat soils. Produce farmer co-designed maps of watertable scenarios and apply the model and calculate water storage needs for defined sites and the costs of paludiculture as an alternative agricultural system to reduce carbon emissions.	BAWAG , BA, NFWAG, Cranfield	Water storage solutions for sites are identified. Farmers are engaged in early option development.	2024-2025 PL 1, 4	On track. Project funded by Defra and administered by Environment Agency.
	Deliver Lowland Agricultural Peat Small Infrastructure Project. Install a further 10-12 peat level cameras. Further develop the Cranfield watertable model.	BIDB , BA, UKCEH, Cranfield	Farmers and land managers gain knowledge from peat level cameras. Water management plans are informed by baseline watertable model.	2024-2025 PL 4	On track. Project funded by Defra and administered by Association of Drainage Authorities.
	Test conversion of cut material from paludiculture into products such as fibre board, and evaluate product viability and markets as part of FibreBroads .	BA, Norwich University of the Arts, Hudson Architects (Defra, NE)	Businesses and farmers are more aware of opportunities for income generation and markets for wetland products.	2023-2025 PL 4	On track. Project funded by Defra and administered by Natural England. Harvesting in 2024/25.

Ref	Detailed actions	Lead/ partners	Desired benefits	Timescale/ PL targets	Progress
	Provide advice on paludiculture and wetland management to landowners and organisations as part of FibreBroad s.	BA, Norfolk FWAG (Defra, NE)	Farmers and land managers are supported by expert knowledge and appropriate management is undertaken, working with sustainable businesses and under clear agreements to create biodiversity and wider environmental benefits.	2023-2025 PL 4, 5	On track. Project funded by Defra and administered by Natural England. One training workshop complete, another in October 24.
	Review options and complete feasibility studies for a wildlife enhancement project at Heigham Holmes. Align capital restoration with IDB pump replacement construction timeline (2026-2027).	NT, BIDB	Wildlife is being protected while adapting to a changing climate. Water is stored during the winter creating wildlife benefits.	2024-2025 PL 1	
	Provide advice to land managers to enable maximum benefits for breeding waders through effective use of Environmental Land Management.	RSPB (Species Recovery Grant), BBP and advisers	Targeted advice is improving farmer engagement and uptake of schemes that result in public benefits.	2024-2026 PL 5	On track Funding advice provision via Species Recovery Grant Farming in Protected Landscapes (FiPL).
	Survey deer across 21,000ha, disseminate information and discuss management with farmers and land managers, help formulate a	FC, BA	Woodlands and wetland habitats are less negatively impacted by browsing deer.	2024-2025 PL 4	On track Survey complete and reported at farmer workshop on 1 May.

Ref	Detailed actions	Lead/ partners	Desired benefits	Timescale/ PL targets	Progress
	coordination group for Deer Management.				
	Help coordinate partners and assist in gathering scientific evidence on the impact of deer on habitats in the Broads, particularly fens, reedbeds and wet woodlands, and work with funding partners to encourage financing of a monitoring programme.	BPP (BA, NT, NWT, SWT, RSPB)	Environmental impact of deer on the Broads sensitive habitats is better understood and leads to appropriate management.	2024-2025 PL 4	On track Partners have met to discuss the specification
	Support the training and facilities for deer management via external funding, for example in 2024/25 through Farming in Protected Landscapes bids.	BA (FiPL)		2024-2025 S	On track Several potential applicants to FiPL
	Restore Wheatfen dykes to improve hydrology of the adjacent fen and provide protection from tidal salt surges.	Wheatfen Nature Reserve (Get River Positive), Anglian Water	Water flow is improved and tidal salt surges have less impact on the site.	2024-2025 PL 4	On track
	Carry out study of carbon stored and accumulated in wet woodlands.	Royal Holloway University, Leeds	Importance of wet woodland for the carbon cycle is better understood.	2023-2026 S	On track

Ref	Detailed actions	Lead/ partners	Desired benefits	Timescale/ PL targets	Progress
		University BA			
	Survey all planned fen habitats and grazing marsh ditches and identify sites in need of restoration.	Not assigned	Habitat condition is better understood and leads to appropriate management.	2030	Not active
	Develop a Broads Site Nitrogen Action Plan.	Not assigned	Environmental impact of air pollution on the Broads sensitive habitats is better understood and leads to appropriate management.	Not assigned S	Not active

Focus: Species

Principles: Species recovery principles (recover, reintroduce, control)

Target 10:

- Carry out projects that support 90% of species listed in Table 3 towards stable or increasing populations within or beyond the Broads by 2029.

Protected Landscape targets: 4

Broads Plan objective B4: Define, implement and monitor management regimes for priority species and invasive non-native species.

How the vision could be achieved

Species are diverse in the Broads, and recovery actions for threatened species (including outside the Broads) are developed. Working with experts to create species recovery projects (such as fen plant and invertebrate reintroduction projects).

Creating a BBP plan for species sensitive to landscape-scale changes in habitat and keeping the list of species under review. Updating species as status changes within the Broads.

Systematic and coordinated monitoring and control of the top priority invasive non-native species (INNS) that are impacting on habitats and species.

Table 8

Key actions for species

Ref	Detailed actions	Lead/ partners	Desired benefits	Timescales/ PL targets	Progress
	Develop projects to help manage the impact of human disturbance of birds that breed, feed and roost on the area's internationally important coastline and other sensitive areas.	RSPB, BBP	Visitor activity is environmentally sustainable.	2024-? PL 4	Preliminary meeting held summer 2024.
	Monitor approved programme for example water plants, fen plant transects and water levels at selected sites, and for Crested Buckler Fern, Swallowtail larvae, butterfly transect and breeding Bittern.	BBP	Trends in species populations are better understood in line with environmental change and management.	Annually Supporting (S)	On track.
	Create a plan for monitoring habitats such as fen and grazing marsh ditches, that informs or is compliant to SSSI condition monitoring.	BBP, NE		2026 S	
	Collate data to maintain overview of species trends and identify action where issues are identified, including an assessment of species of conservation concern and priority species.	BBP	Trends in species populations are better understood in line with environmental change and management.	Ongoing S	On track.

Ref	Detailed actions	Lead/ partners	Desired benefits	Timescales/ PL targets	Progress
	Create a list of Broads Conservation Priority Species - that are sensitive to landscape-scale changes in habitat.	BBP	Species change is more well understood in line with environmental change and management.	2028 S	Not started
	Work with species champions to create a costed programme for species recovery and monitoring of Broads Conservation Priority Species listed in Table 3 - where bespoke conservation action above and beyond habitat / site management is required.	NE, BA, BBP	Species are recovering and have space to adapt to the changing climate.	2025	Not started
	Investigate, create and implement species recovery plans and projects linked to 'Threatened Species Recovery Actions', including translocation of key species within and beyond the Broads, including (a) to (o) below:	BBP	(For all actions (a) to (o) below) Target species can expand to suitable locations where their future in the Broads remains under threat.	SP 1	
	(a) Fen Raft Spider: Investigate and translocate outside of the Broads.	BA, Helen Smith (consultant ecologist), Nottingham University Buglife		2024-2029 SP 1	On track. eDNA PhD commencing with Nottingham University.

Ref	Detailed actions	Lead/ partners	Desired benefits	Timescales/ PL targets	Progress
	(b) Swallowtail: Reintroduce from Broadland to other landscapes; investigate translocation sites.	BBP		2024-2029 SP 1	Long term proposal not yet worked up. Milk Parsley translocation required.
	(c) Natterjack toad: Monitor artificial ponds at Winterton and (depending on success) consider reintroduction.	NE, Amphibian and Reptile Conservation		2024-2028 S	On track.
	(d) Large Marsh Grasshopper: Release to sites in the Broads.	Citizen Zoo		2024-2029 S	On track Broads releases planned for 2024.
	(e) Large Copper (<i>Lycaena dispar</i>): Carry out long term project for various elements (genetics, habitat connectivity modelling, habitat usage). Aim for release from 2026.	NE		2024-2029 S	On track. Dutch experts on Large Copper visit to provide views on site suitability.
	(f) Marsh Fleawort (<i>Tephrosia palustris ssp congesta</i>): Reintroduce to Bure and Thurne.	NE		2024-2025 S	On track.
	(g) Fen Violet (<i>Viola persicifolia</i>), Fen Woodrush (<i>Luzula pallescens</i>) and Fen Ragwort (<i>Senecio paludosus</i>): Expand into suitable fen sites and consider paludiculture trial.	NE		2024-2025 S	On track Planned for 2024

Ref	Detailed actions	Lead/ partners	Desired benefits	Timescales/ PL targets	Progress
	(h) Water Germander (<i>Teucrium scordium</i>): Secure suitable site and trial future reintroduction to Broadland.	NE		2024-2025 S	On track
	(i) Grass-wrack pondweed (<i>Potamogeton compressus</i>): Research and discuss process and sites.	NE	Pondweed species act as an umbrella species for lost Broadland rivers macrophyte communities.	2024-2025 SP 1	On track.
	(j) Sharp-leaved pondweed (<i>Potamogeton acutifolius</i>): Carry out site-based translocations.	NE		2024-2025 SP 1	On track.
	(k) Fen Orchid (<i>Liparis loeselii</i>): Plan further translocations.	Plantlife RSPB, NWT, BA		2024-2029 SP 1	On track. Reintroduction programme ongoing. Existing populations monitored; alternative methods/translocations being trialled.
	(l) <i>Rubus iceniensis</i> (a rare bramble): Carry out cultivation programme to secure species, habitat restoration, and reintroduction in Norwich to Salhouse area over longer term.	NE		2024-2025 S	On track. Programme ongoing.
	(m) Swamp and tall-herb fen communities (S24) habitat: Translocate from Broadland to other landscapes.	NE		2024-2025 S	On track.

Ref	Detailed actions	Lead/ partners	Desired benefits	Timescales/ PL targets	Progress
					Initial research underway, delivery in next few years.
	(n) Greater Water-parsnip (<i>Sium latifolium</i>): Translocate outside Broadland.	NE		2026-2029 S	On track. Plans not yet drawn up.
	(o) Heracleum sphondylium ssp flavescens: Survey and find material to cultivate and release (Horsey-Happisburgh area).	NE		2024-2025 S	On track.
	Monitor <i>nathusius pipistrelle</i> bats around the Broads and coast to improve understanding of species migration from Europe and breeding sites around the Broads.	Norfolk and Norwich Bat Group BA, ESW	<i>Nathusius pipistrelle</i> breeding sites are being protected and migration routes are better understood, supporting measures to conserve this species.	Annually S	On track. Project funded by BA. MOTUS tracking stations installed. First time tracking of bats crossing English Channel. Broads roosting hotspots found. Interpretation panel installed at Dunwich.
	Monitor invasive non-native species (INNS)	BBP	Distribution trends in invasive non-native species are better understood in relation to environmental change, and management action is better informed.	Annually S	On track. See Annual water plant monitoring reports .

Ref	Detailed actions	Lead/ partners	Desired benefits	Timescales/ PL targets	Progress
	Undertake direct control of priority INNS on areas with high risk of spread, on priority basis.	BBP	Priority INNS are being eradicated or controlled to manageable background level to protect biodiversity, water flow and navigation. Improving landscape condition.	Annually S	On track.
	Carry out control programmes for American Mink, Floating Pennywort (FP) and other priority invasive non-native species (INNS).	NNNSI, Waterlife Recovery East, BA	Priority INNS are being eradicated or controlled to manageable background level to protect biodiversity, water flow and navigation.	Annually S	Waterlife Recovery Trust - Saving our native wildlife formed across UK with Waterlife Recovery East - operational since 2018. Evaluating success of coordinated volunteer approach based on genetic and other population assessments. Monthly monitoring and removal of FP on river Ant navigation.
	Carry out 'Check Clean Dry' and 'Be Plant Wise' public awareness campaigns and highlight risks of new invasive species in Broadcaster and Broadsheet publications and at key waterway access points.	BA , Parish Councils	Visitors are helping to prevent the spread of INNS, protecting the local biodiversity, water flow and navigation.	Annually S	On track

Ref	Detailed actions	Lead/ partners	Desired benefits	Timescales/ PL targets	Progress
	Control Giant Hogweed along the River Bure	NNNSI , Environment Agency	Giant Hogweed eradicated from the River Bure, spreading and impacts prevented.	2023-2026 S	On track
	Control Himalayan Balsam in the river Wensum catchment	NNNSI , Norfolk Rivers Trust	Himalayan Balsam eradicated from the Wensum catchment, restoring bank stability and space for native plants.	2020-2030 S	On track Control started upstream working to downstream as balsam becomes scarcer.
	Mapping of adder populations and modelling of suitable adder habitat across both counties of Norfolk and Suffolk.	NE , ARGUK, CEH	Provide heat maps showing most suitable areas of adder habitat across both counties and existing adder populations. This work should inform where best to target habitat management and corridor creation.	2024	Awaiting funding reaching partners
	Feasibility study for reintroduction and recovery of sea grass (<i>Zostera spp.</i>) communities at Breydon Water.	NE		To be confirmed	Potential project dependent on funding
	Low coverage whole genome sequencing of adders across Norfolk and Suffolk to estimate the size and connectivity of populations in the region, and to assess the genetic health of the populations.	NE , Bangor University, Newcastle University	Genetic health screening of adder populations would allow for informed decisions to be made for conservation translocations, and prioritisation of habitat connectivity.	To be confirmed	Potential project dependent on funding

Focus: Monitoring, Research and Collaboration

Broads Plan objective B5: Improve partnership coordination and communication of Broads biodiversity monitoring and research effort.

Table 9

Key actions for coordinating and communicating of monitoring and research

Ref	Detailed actions	Lead / partners	Desired benefits	Timescales/ PL targets	Progress
	Develop Norfolk and Suffolk Nature Recovery Strategy and agree key sites for nature recovery.	NCC, SCC, BBP	Delivery of the 25-year Environment Plan is better integrated through local natural capital plans for specific places in England.	2025 Supporting (S)	Local Nature Recovery Partnership set up. Theme groups established.
	Develop the Northern Broads Farm Cluster and consider a Landscape Recovery application.	Norfolk FWAG BA	Farmers are benefiting from advice and incentives to enhance nature recovery.	Ongoing S	On track for commence in July 2024
	Develop the Landscapes Connections Lottery project with partners including those working the Norfolk and Suffolk National Landscapes.	BA	Boost nature recovery and connect more people to Protected Landscapes.	Ongoing S	On track Expression of Interest to be submitted in early 2025.
	Develop the NWT Upper Thurne/Hickling vision	NWT	People are supporting the vision for the Staithe area at Hickling, the wider reserve and areas outside the reserve.	2025 S	On track, discussing with the BBP and Northern Broads Farm Cluster

Ref	Detailed actions	Lead / partners	Desired benefits	Timescales/ PL targets	Progress
	Work through the BCP and BBP to share approaches and collaborate on biodiversity and water monitoring in the Broads.	BBP, BCP	The importance of monitoring is better understood, and organisations are sharing data and resources.	Ongoing S	On track. MOA with NE and EA to share data.
	Send all wildlife records to NBIS and set up systems to help the public to submit wildlife records.	BBP, NBIS	Better species abundance and distribution data is informing development and management.	Ongoing S	On track.

Table 10

Summary of actions carried out to meet biodiversity net gain obligations

Ref	Detailed actions	Lead, partners	Desired benefits	Timescale	Progress
	Develop interim guidance on how biodiversity net gain (BNG) should be demonstrated within planning.	Local Planning Authorities (LPAs)	Applicants and agents well informed about application of BNG in the Broads and surrounding LPAs	2023	Completed
	Produce internal BNG procedures; create BNG webpage as first port of call for applicants.	BA	BNG applications can be considered	2023	Completed. Pre-app being encouraged as a way for applicants to discuss how BNG may relate to their proposals.

Ref	Detailed actions	Lead, partners	Desired benefits	Timescale	Progress
	Develop justification for requiring a BNG of greater than 10%.	BA	Benefits for biodiversity are maximised, while also considering viability.	2024	Under way

Table 11

Biodiversity gains resulting, or expected to result, from approved biodiversity gain plans

Date	Approved biodiversity gain plans	Expected biodiversity gains

At 30/09/24: Four minor applications received with BNG metric, and more in the pipeline following pre-app advice. BA providing pre-app BNG advice. One decision notice issued in September 2024, but no biodiversity gain plans approved yet. Biodiversity gain plans are a pre-commencement action. (This section will be developed in the final BNRS and will evolve into a link to where this information is updated and widely accessible)

Table 12

Plan to meet biodiversity net gain obligations 2024-2029

Ref	Detailed actions	Lead / partners	Timescale	Desired benefits	Progress
	Assess the potential for the Local Plan for the Broads to require a BNG of more than 10% and put policy in place when Local Plan is adopted.	BA, Viability Consultants	Decision by Dec 2024. Policy consultation early 2025. Local Plan submission June 2025.	Benefits for biodiversity are maximised while also considering viability.	Under way. Local Plan viability consultants assessing impact of % BNG greater than 10% (second test to pass if a Local Plan is to set % greater than 10%).

Ref	Detailed actions	Lead / partners	Timescale	Desired benefits	Progress
			Examination by end 2026.		
	Assess the opportunity for the BA becoming a Responsible Body for BNG.	BA	2024-2026	Supporting BNG habitat creation for larger projects that may overlap and/or neighbour the Broads	On track.
	Monitor 30-year agreements for significant on-site and all off-site BNG.	BA	Ongoing	Understanding biodiversity gain and ensuring compliance with legal requirements.	On track.

Appendix 1: BA's consideration of biodiversity duty

Table 13

Summary of BA strategies and plans contributing to biodiversity duty

Work area	Relevance to EIP requirements	Action to 2029
Statutory Protected Landscape Management Plan	<p>The Broads Plan is the statutory, overarching management plan for the Broads executive area. It coordinates and integrates other strategies, plans and policies where relevant to the BA's statutory purposes. The BNRS Delivery Plan sets out actions to achieve the objectives under Themes 1 and 2 in the Broads Plan 2022-27.</p> <p>Natural England is updating the management plan guidance for PLs in England to incorporate EIP requirements.</p>	Review Broads Plan by 2027 and embed PLTOF targets.
Annual business planning	The Annual Business Plan sets out agreed BA action from the Broads Plan, BA guiding strategies and elsewhere, including planned biodiversity delivery. The Plan incorporates a 3-year financial strategy.	Continue to include biodiversity delivery within Annual Business Plan and embed PLTOF targets.
Biodiversity	The Broads Biodiversity and Water Strategy (and Action Plan) focuses on action to restore, maintain and enhance the area's natural habitats, water and wildlife. The strategy is under review in 2024 and will be replaced by the Broads Nature Recovery Strategy (BNRS) 2024-29.	Adopt and implement Broads Nature Recovery Strategy 2024-29 and embed PLTOF targets.
Development management	<p>The Local Plan for the Broads was adopted in 2019 and is now under review. The next Plan will incorporate EIP requirements for Biodiversity Net Gain.</p> <p>The Preferred Options version includes the following strategic policies meeting the BA's first purpose: SP1: sustainable development; SP2: Strategic flood risk policy; SP3: Climate change; SP4: Soils; SP6: Biodiversity; SP7: Landscape character; SP8: Getting to and around</p>	Confirm BNG for development in the Broads following provision of regulations and guidance. Monitoring framework to be provided.

Work area	Relevance to EIP requirements	Action to 2029
	<p>the Broads; SP9: Recreational access around the Broads; and SP12: Sustainable tourism.</p> <p>Policies are informed by Species Conservation and Protected Site Strategies and GIRAMS to ensure no adverse effects are caused to Habitats Sites (also called European sites). Planning applications are determined in accordance with wildlife related legislation and policy.</p> <p>Policy monitoring/reporting mechanisms are set out in the Local Plan.</p>	Submit Local Plan for examination by June 2025.
Topic-based guidance	<p>Relevant guides informing the BA's work include:</p> <ul style="list-style-type: none"> • Sustainable design • Biodiversity enhancement • Impact of new development on peat soil • River bank stabilisation • Integrating development into the Broads landscape • Dark sky standards • Biodiversity Net Gain Interim Planning Guidance Note for Suffolk 	As required, review existing guides and create new guides.
Integrated physical access	The Broads Integrated Access Strategy sets out actions to maintain and improve physical access on and between land and water in the Broads. The design and implementation of projects seek to protect biodiversity and deliver habitat improvements.	Adopt and implement Broads Integrated Access Strategy 2024-29.
Waterways management for navigation	The Waterways Management Strategy provides a framework for the environmentally sustainable maintenance of the 200km of inland navigable waterways in the Broads, including water plant cutting, riverside tree management, byelaw compliance (including speeding) and dredging.	Implement Waterways Management Strategy 2022-26; review and update in 2026.

Work area	Relevance to EIP requirements	Action to 2029
Tourism and recreation	The Broads Sustainable Tourism Strategy (adopted 2016) includes action to enhance, manage and promote environmentally sustainable tourism and recreation. The strategy is under review in 2024.	Adopt and implement Broads Recreation and Tourism Strategy 2024-29.
Environmental education	<p>The Education Strategy for the Broads 2023-28 includes actions to raise public awareness of the area's biodiversity and encourage environmentally responsible behaviour.</p> <p>The Broads Curriculum and 'Water, Mills and Marshes' project provide educational resources.</p> <p>BA Education officers, Ecologists and Rangers give advice on how to conserve and enhance biodiversity to interest groups including farmers, young people, disadvantaged communities, visitors and other Broads users. BA information centres, Broadcaster and other publications, and social media promote biodiversity action to the public and advice on environmentally friendly visiting.</p>	Implement Education Strategy for the Broads 2023-28.
Volunteering	The Volunteer Strategy (2022-2027) outlines how volunteers help the BA's work in the Broads. It also has objectives to develop and refine the volunteering offer and support volunteers.	Implement Volunteer Strategy (2022-2027)
Local Nature Recovery Strategies	The BA is supporting the creation of the Norfolk and Suffolk LNRS through provision of evidence and advice. It will ensure the Broads targets are ambitious and progress against them is monitored.	Support Responsible Bodies in delivering the LNRS for Norfolk and Suffolk (2024).
Protected sites and species strategies	The Broads Nature Recovery Prospectus sets out what could theoretically be achieved for habitats and species, including enhancements for SSSI, National Nature Reserves, Local Nature Reserve, County Wildlife Sites, Section 41 priority habitat and/or species outlined in Broads Plan and Broads Biodiversity and Water Strategy.	Develop bid for external funding to deliver projects (ongoing).

Work area	Relevance to EIP requirements	Action to 2029
Biosecurity	Relevant BA staff are given biosecurity procedure training and support.	Continue to provide biosecurity training to staff.
Office estate	The BA's Environmental Standard Operating Procedures outline the likely impacts of each activity and how to minimise them. They guide staff and contractors on the most sensitive working practices, methods and timings to protect the environmental and ecological qualities of the Broads. The BA has recycling facilities in its main offices to reduce waste transport and landfill. It recycles rainwater at one facility.	Install solar power at BA Dockyard (2024). Take measures to reduce carbon footprint of BA head office by 50% by 2024. By end 2025, scope how BA offices/facilities, incl. lighting and water efficiency measures, could be better managed for biodiversity.
Land owned by BA and under management agreement, including waterways under navigation	<p>Management Plans are in place to ensure biodiversity enhancements at all 20 owned and management agreement sites. Environmental Standard Operating Procedures are in place at all sites for contractors and staff undertaking routine operations.</p> <p>Protected sites are adequately managed. Fen and water plants in the broads and rivers are monitored annually – see water conservation reports.</p> <p>The Asset Management Strategy (2024) sets out the practices and procedures to ensure the BA's land, property, and other assets are managed and maintained as effectively as possible to contribute to the delivery of its, as set out in the Broads Plan 2022-27 and other key strategic documents.</p>	Scope approach on how biodiversity enhancements are included (also for moorings) and recorded by end of 2025.
Climate change adaptation and mitigation	The BA has pledged to work towards making all its operations carbon neutral by 2030, and carbon zero by 2040. It is also contributing to the English NPA ambition towards net zero in the National Parks, including promoting green tourism. For more information see Climate change action in the Broads .	Work with NPAs to establish common standards for joint ambition towards net zero and apply to Broads. Commission further research on sector CO2

Work area	Relevance to EIP requirements	Action to 2029
		emissions and promote public awareness and action.
Flood risk management	The BA is a partner in the Broadland Futures Initiative , whose main goal is to agree a plan for future flood risk management that adapts to the changing climate and rising sea level.	Continue working towards to BFI objectives .
Catchment scale action	The Broadland Catchment Partnership tackles issues around water quality, water shortage, flooding and wildlife habitat across the river catchment feeding into the Broads.	In 2024, revise the Broadland Catchment Partnership Plan and coordinate training on water resources for partners.
Procurement	The BA's Procurement Strategy includes a commitment to purchasing sustainably sourced materials and supplies to reduce carbon emissions and the demand on natural resources.	Review Procurement Strategy in 2027.

Appendix 2: National Protected Landscapes Targets

The [Protected Landscapes Targets and Outcomes Framework](#) (PLTOF) (pb. Jan 2024) sets 10 ambitious targets for England's Protected Landscapes collectively to meet three key goals in the Environment Improvement Plan 2023 (Thriving plants and wildlife; Mitigating and adapting to climate change; and Enhancing beauty, heritage and engagement with the natural environment). Natural England will support this process and ensure contributions represent a fair share and add up to the national total.

The targets are non-statutory and create a shared ambition for all 44 of England's Protected Landscapes. The targets are for the Protected Landscapes as places (the geographic area covered by the designation). Action will be coordinated by Protected Landscape bodies through their statutory management plan. All stakeholders, partners and land managers in the area will be responsible for supporting their delivery.

Some targets are action focused, while others set a clear numerical target for how much Protected Landscapes are expected to contribute as areas to the national targets.

The targets are based on an analysis of the environmental potential of the Protected Landscapes. They are also set proportionally, based on the characteristics of these areas and the share of relevant natural assets within them. The targets are set for Protected Landscapes as geographical areas and will be delivered and monitored as such.

The targets in this framework are set at a national level for all 44 landscapes as a collective. Each individual Protected Landscape body, working with relevant local partners, will set their own individual contribution, which will be embedded in their management plan. Natural England will support this process and ensure contributions represent a fair share and add up to the national total.

Thriving plants and wildlife targets

Target 1: Restore or create more than 2384ha of a range of wildlife-rich habitats within the Broads National Park, outside protected sites by 2042 (from a 2022 baseline).

Target 2: Bring 80% of SSSIs within Protected Landscapes into favourable condition by 2042. *(Currently at 57.8% in 2024.)*

Target 3: 60% of SSSIs within Protected Landscapes assessed as having 'actions on track' to achieve favourable condition by 31 January 2028. *(Actions currently being defined)*

Target 4: Continuing favourable management of all existing priority already in favourable condition outside of (from a 2022 baseline) and increasing to include all newly restored or created habitat through agri-environment schemes by 2042.

Target 5: Ensuring at least 65% to 80% of land managers adopt nature friendly farming on at least 10% to 15% of their land by 2030.

Mitigating and adapting to climate change targets

Target 6: Reduce net greenhouse gas emissions in Protected Landscapes to net zero by 2050 relative to 1990 levels.

Target 7: Restore approximately 2000ha of peat in Protected Landscapes by 2050.

The two targets for enhancing beauty, heritage and engagement with the natural environment are not included in the BNRS.

Species target for the Broads

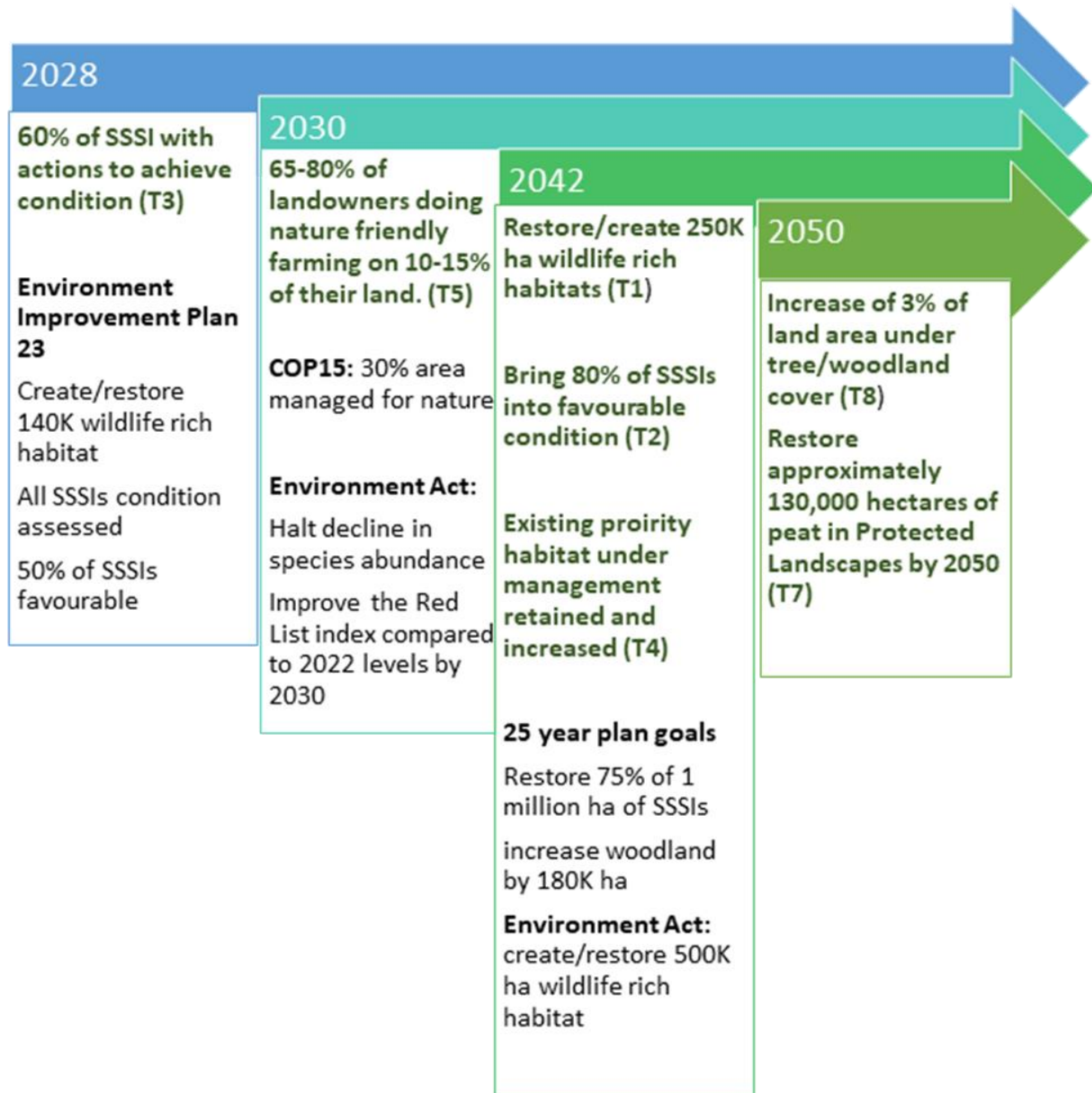
In addition to the Protected Landscape targets, there is a species target for the Broads:

Target 9: Carry out projects that support 80% of species listed in Table 3 towards stable or increasing populations within or beyond the Broads by 2029.

Appendix 3: National Environment Targets

Diagram 1

Diagram 1 shows key dates and associated Government targets, and the source of the targets such as the Protected Landscape Targets (in green text), Environment Improvement Plan, COP15, the Environment Act and 25 year Environment Plan.



Appendix 4: Glossary

30 by 30 – more information [here](#)

AES Agri-Environment Schemes – more information [here](#)

ARGUK – more information [here](#)

BBP Broads Biodiversity Partnership - partners working together to deliver nature recovery in the Broads – more information [here](#)

Biodiversity Duty - more information [here](#)

BNG - Biodiversity Net Gain – more information [here](#)

Broadland Futures Initiative – more information [here](#)

Broads Landscape Character Assessment – more information [here](#)

Diffuse Water Pollution Plans – more information [here](#)

Environment Act 2021 [here](#) Species and Wildlife Rich Habitats targets [here](#)

Environmental Improvement Plan 2023 [here](#)

Environmental Land Management - more information [here](#)

Check Clean Dry - more information [here](#)

25 Year Environment Plan 2018

Favourable Conservation Status – more information [here](#)

Favourable condition - more information [here](#)

FibreBroads – more information [here](#)

Green Infrastructure and Recreational Avoidance and Mitigation Strategies (GIRAMS) - – more information [here](#)

High Nature Value Farming - low intensity, low input, often large herbivore grazing and regenerative agriculture – more information [here](#)

Invasive non-native species (INNS) - more information [here](#)

Landscape Recovery – more information [here](#)

Langley Abbey Environment Project – more information [here](#)

LAPSIP Lowland Agricultural Peat Small Infrastructure Project – more information [here](#)

LAPWD Lowland Agricultural Peat Water Discovery – more information [here](#)

LIFE Programme – more information [here](#)

LNRS – Local Nature Recovery Strategies [here](#)

Local Plan for the Broads - more information [here](#)

Lowland Agricultural Peatland Road Map – more information [here](#)

LWS - Local Wildlife Sites – More information [here](#)

Microplastic – more information [here](#)

Natural Character Area – more information [here](#)

Nature for Climate Peatland Grant Scheme - – more information [here](#)

Nature Recovery Network – more information [here](#)

Net Zero Plan – more information [here](#)

Norfolk Water Fund – more information [here](#)

Northern Broads Farm Cluster group aims to bring together farmers, landowners, environmental bodies - collaborating to promote sustainable farming practices, improve biodiversity and link up environmental efforts.

Nutrient neutrality – more information [here](#)

Paludiculture - farming on rewetted peat, is a system of agriculture for the profitable production of wetland crops under conditions that support the competitive advantage of these crops – more information [here](#)

PLTOF Protected Landscapes Targets and Outcomes Framework [here](#)

Protected Landscapes – more information [here](#)

SSSI - Sites of Special Scientific Interest – More information [here](#)

Water Framework Directive – more information [here](#)

Wild East – more information [here](#)

'Wise use of Water' – more information [here](#)

World Heritage status – more information [here](#)