

LOCH
LOMOND
& THE TROSSACHS
NATIONAL PARK



Future Nature

ROUTE MAP



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Partnership working Naturally!

To deliver landscape scale nature restoration across the National Park will take a wide partnership and coalition of stakeholders who collectively develop the strategy, policy, engagement and delivery mechanisms it will require.

The organisations below have all supported the development of this Route Map, have committed to its overall vision and principles and pledge to continue to work together to develop and deliver the projects and monitoring which will be collectively required if we are to be successful.

A key next step for Future Nature will be to develop the formal governance structure through which the Future Nature partnership will be delivered and managed.

This partnership will continue to grow and develop - we hope that many more organisations will come forward to join us and encourage you to get in touch and get involved.



Our Future Nature vision

What is the future for nature in our National Park? We face a global biodiversity crisis and even in our most special landscapes, nature as a whole is still in real trouble. If we do not halt and reverse this decline, then our world and all of us will have a poorer and more uncertain future.

Our Future Nature programme aims to deliver a positive, exciting vision of this National Park as an exemplar where people can understand, experience and contribute towards a shared vision for restoring nature.

Our Vision

A resilient nature-rich National Park, where abundant wildlife and a healthy natural environment provide a wealth of benefits through an extensive, well-connected living network.

Our key terms

Throughout this Route map there are a collection of key terms which can have a range of meanings and connotations for different people. Here are some key terms and questions which often come up around them:

NATURE

In Future Nature we are using the word nature to collectively describe biodiversity: all our species and living landscapes.

This includes the complex and crucial connections which exist between them all as a web of life and includes our own human species.

Our vision for nature is a rich, thriving biodiversity, connected not just in special nature reserves, but across the whole landscape of the National Park.

Our vision for nature is a rich, thriving biodiversity connected across the whole landscape of the National Park

Landscapes are an intricate combination of natural processes and human influence

NATURAL

The idea of what is 'natural' is complex – but all landscapes including our National Park are an intricate combination of natural processes and human influence – this has been the case for millennia and will continue to be the case in the future. So there is no one state we'd consider 'natural' - we continue to try to increase space for natural processes of which people are a part.

NATURE RESTORATION

Nature restoration is currently the phrase which we think best describes what we are aiming to achieve through Future Nature to rebuild or give more space to nature and it's processes

For some people restoration implies looking back to a previous 'ideal' time at which nature was perfect or in some sense 'wild' or more natural

In this route map that is not our meaning – our meaning is to recognise that over millennia human influence and dominance over natural processes has grown – we need to restore the key role of nature in our National Park and get back to a state where natural processes are robust, resilient and sustainable

That will be about balancing a wide range of land uses, human influences and natural processes

This solution is not about looking back to an idealised past point in time but forward to how nature will play a key role in a resilient, fair, sustainable future

Balancing a wide range of land uses, human influences & natural processes



Nature is a really crucial element of our natural and cultural heritage

NATIONAL PARK

Our National Park designation recognises the special features of Loch Lomond & The Trossachs and the crucial role of conserving and enhancing the natural and cultural heritage of our area

Nature is a really crucial element of that natural and cultural heritage – but that does not mean the National Park is a nature reserve like it may be in some other parts of the world. Scottish National Parks are complex combinations of land ownership, land uses, communities, businesses and visitors

Whilst Future Nature commits to giving Nature more space in our National Park – this will be about working in broad partnership to restore nature across our communities, agricultural, forestry and other land uses

We are seeking a future which blends the sustainable, social and economic development of our communities with nature – it's about ensuring existing land uses maximise the space for nature – and ensuring our natural network is connected and resilient across all land uses and not in isolated pockets

REWILDING

Some people might use the term rewilding to describe what we've called nature restoration

It's another term with a wide range of meanings and many organisations now use it to explicitly include people, communities and development. Used in that way it has many cross-overs with nature restoration and some people may use the two interchangeably

However for some people rewilding has connotations that ignore the importance and role of people in the landscape and we have therefore tended to avoid using that term and preferred to talk about nature restoration



Where we are and where we want to get to.



ROUTE MAP

In it's simplest terms we define a Route Map to be a statement of where we are and where we want to get to. It links those two by laying out key elements of how we will get there

It is therefore not a statutory document, nor a detailed fixed workplan

It is instead a strategy, a set of principles, an approach and structure which we will allow us to continue to build delivery plans, develop projects and build partnerships

There will be many diversions and changes of route between now and 2045 but the route map aims to provide a handrail to guide the journey and retain a clear direction and a clear purpose to restore nature in our National Park



Where are we now?

Caledonian Forest, Glen Falloch

Why nature is so important to us all

Nature is too often forgotten and undervalued – but it is absolutely critical to all human development, from health and wellbeing, to our economy and our climate. We identify four key reasons why we must address the nature crisis.

For its intrinsic value

We believe that the world is a richer, more inspiring, better place if it is rich in nature

Natural capital

Nature is the bedrock of our economy and provides the critical resources on which our agriculture, forestry and many other industries rely. It is crucial to the fundamental services we need for clean air and water

Net Zero

Both in terms of helping us to mitigate against the effects of climate change and adapting to it, nature-based solutions can help us capture carbon and mitigate flood risk

Tourism, leisure, health and wellbeing

There is compelling evidence of the benefits of connection to nature, as well as those of being outdoors and active. Wildlife and nature tourism is a crucial component of people's leisure time so it is at the heart of many tourism and leisure industries

Nature is too often forgotten and undervalued but it is absolutely critical to all human development



Why we need Future Nature



Landslide at Glenogle on A85

There is growing awareness, understanding and recognition that we face twin global crises. In response many countries have declared emergencies for both the perilous state of biodiversity (nature), and to address a rapidly warming climate.



Capercaillie now extinct in this National Park

The nature crisis is as crucial as the climate emergency. The two are closely interlinked but the nature crisis is a distinct and crucial challenge in its own right which requires a specific and targeted response.



Invasive non-native Rhododendron ponticum

The causes of the global nature crisis are multifaceted and complex – they include issues ranging from an increasing loss of natural habitats for agriculture and development, to over-exploitation of species, and multiple pressures from climate change, invasive non-native species and pollution.



Red Squirrel numbers are under threat © Steven Gardner



To sustain healthy levels of salmon, the quality of our water bodies must improve © Nature.scot

These pressures vary from species to species and from country to country but the difficult truth we have to face is that nationally and internationally our collective efforts to protect nature are not enough and the scientific evidence shows us that the decline continues. In reality we have struggled to protect the habitats and species we have left, let alone achieve the large-scale restoration of nature to which we aspire – and which we need.

Policy background

Humanity as a species is now finding itself at a crossroads. The choice of direction that we face will influence the destiny of not only our own species, but a myriad of other organisms that we share our planet with.

We are living through a time of existential crises where not only has a global pandemic changed our very way of life, but overwhelming scientific evidence has shown us that human activity has created the twin global crises

of climate emergency and huge scale biodiversity loss. For many people and governments, including Scotland's, this has been a world-wide wake-up call, and a time for us to collectively galvanise into action in order to tackle these threats to all our futures.

At international and national level, the rationale to re-build nature is growing in scale and in pace, noticeably following the Intergovernmental Science-Policy Platform on Biodiversity

and Ecosystem Services (IPBES) stark report on the state of global biodiversity. This global report has reset the international biodiversity agenda and raised concerns in many national governments.

Both the biodiversity crisis and the climate emergency now feature highly in government agendas, and this has led to an increase in associated policy making at European, UK and Scottish Government levels.

Across Europe the new EU Biodiversity Strategy for 2030 highlights ambitious nature restoration targets, including:



Establishing protected areas for at least 30% of all land and sea in Europe



Increasing organic farming and biodiversity rich landscape features on agricultural land



Halting and reversing the decline of pollinators



Restoring at least 25,000 km of EU rivers to a free flowing state



Reducing the use and risk of pesticides by 50%



Planting 3 billion trees



The **Scottish Biodiversity Strategy 2045** sets out a clear ambition for Scotland to be Nature Positive by 2030, and to have restored and regenerated biodiversity across the country by 2045.

To deliver the vision detailed actions are set out in Delivery Plans which will:

- Accelerate restoration and regeneration
- Expand and connect protected areas and improve their condition
- Support nature-friendly farming, fishing and forestry
- Recover and protect vulnerable and important species and
- Generate the investment needed to support nature recovery.

Additionally the **Environment Strategy for Scotland**, published in 2020 provides an overarching framework, a long-term vision and supporting outcomes bringing together various environmental strategies and plans. The vision in the Environment Strategy is:

By 2045... by restoring nature and ending Scotland's contribution to climate change, our country is transformed for the better – helping to secure the wellbeing of our people and planet for generations to come.

In December 2020 the National Park Authority Board signed the **Edinburgh Declaration**, an international agreement which is a statement of intent from the Convention on Biodiversity, agreeing that subnational, regional and local governments across the world commit to taking bolder action to halt global biodiversity loss.

Proposed further strengthening of nature restoration policy, governance and legislation through the Bute House Agreement and resulting draft **Shared Policy Programme** between the SNP and Scottish Greens.

This programme includes a range of relevant commitments listed below:

- Secure positive effects for biodiversity from development and deliver natural solutions to climate change in a way that also enhances biodiversity;
- Targets based on an overarching goal of preventing any further extinctions of wildlife and halting declines by 2030, and making significant progress in restoring Scotland's natural environment by 2045;
- A Natural Environment Bill (2024) putting in place key legislative changes to restore and protect nature, including, but not restricted to, targets for nature restoration that cover land and sea, and an effective, statutory, target-setting monitoring, enforcing and reporting framework;
- Protect 30% of Scotland's land and seas by 2030, and highly protect 10%;
- Outcome targets that accommodate species abundance, distribution & extinction risk, and habitat quality and extent;
- Create at least one new National Park by 2025.

Further key policy factors include:

- Publication of important and over-arching national-level documents including National Planning Framework (NPF)4 and the new Scottish Biodiversity Strategy;
- Publication of our next National Park Partnership Plan, Local Development Plan (including Regional Spatial Strategy) and pilot Regional Land Use Partnership (and resulting Regional Land Use Framework);
- Consultation on a Future Agriculture Bill mapping out the transition to a new support system which delivers more for climate and nature, starting in 2026;
- Further work by Scottish Government and others on Natural Capital Market Development, and associated Green Finance initiatives.
- Recommendations of the Deer Working Group and the subsequent response by Scottish Government indicating the need for higher levels of deer management to reduce negative impacts.

Nature in Loch Lomond & The Trossachs National Park

National Parks are built upon the foundations of their nature and people. They play a crucial role in protecting these natural assets and supporting local communities whilst engaging and educating people in their dramatic landscapes and the wildlife that live there.

In Loch Lomond & The Trossachs National Park we are lucky to have a rich legacy of natural and cultural heritage left to us by environmental processes combined with the labour of previous generations.

The National Park encompasses around 720 sq miles (1,865 sq km) of some of the finest scenery in Scotland and many special qualities.

Perhaps most importantly and uniquely, 50% of Scotland's population lives within an hour of the National Park. The National Park is on the doorstep for much of the Scottish population and is easily accessible for visitors from further afield. We therefore have a unique and vital opportunity to be an exemplar of what a nature-rich environment can be, looks like and the benefits it can deliver.



SPECIAL NATURE QUALITIES IN LOCH LOMOND & THE TROSSACHS NATIONAL PARK

21

21 Munros in the Park

22

22 large lochs

50+

More than 50 rivers

2

We have two Forest Parks

166_{km²}

One of the UK's largest NNRs – The Great Trossachs Forest

30+

Over 30 National Priority habitats

300+

Over 300 National Priority Species

60+

Over 60 Sites Designated for their special habitats and species.

THE STATE OF NATURE IN THE NATIONAL PARK

Despite its inspiring landscapes, historic places and protected status, nature is still in trouble here. Pressures from over-grazing, pollution, invasive non-native species and a rapidly changing climate mean that many of our iconic habitats and species are in decline, and are in danger of becoming increasingly rare and therefore vulnerable.

Despite our collective best efforts to date:

- We need to expand and regenerate our native woodlands
- Up to 56,600 hectares of peatlands may currently be degraded and contributing towards climate warming
- Invasive non-native species remain widespread
- Approximately 20% of Designated Sites are in an unfavourable condition
- Approximately 50% of water bodies may not be in good ecological condition

Efforts to date, have been best intentioned and have created good examples, but their effectiveness have been limited due to insufficient resources and considerable challenges. We are failing to achieve the necessary impact in nature restoration that we need.

If we are to demonstrate real progress in reversing the decline in biodiversity in this National Park a systemic step change in action is required.



Osprey chicks nesting - East Loch Lomond

BASELINES WHAT DO WE KNOW?

A key part of Future Nature will be to build a robust and ongoing reporting structure to monitor and analyse progress of Nature Restoration in the National Park. To establish a full and detailed baseline we commit to commission a State of Nature Report and a review of key indicators. The following breaks down some of the key baselines we know now – and what we will need to monitor to track their progress.



TREES AND WOODLANDS

What do we know?

54,100 ha of woodland (31% of the land)

62% productive conifer

23% native woodland

Current rate of woodland creation – approximately 200ha / year

We want to gradually increase this and may need to get as high as 800 ha/year to meet some of our net zero aims for the National Park

23000 ha identified in the trees and woodland strategy as preferred areas for woodland expansion

The long-term quality, resilience and connectivity of woodland is threatened by herbivore pressure and INNS – especially Rhododendron

PEATLAND

What do we know?

68,000 ha of peatland
(39% of the land)

- 11,400 ha likely in stable condition
- 11,000 ha targeted for Peatland ACTION (of which 2,829 ha assessed to be unsuitable for restoration)
- 45,600 ha outside of scope of peatland ACTION approach – requires alternative landscape scale action

Current rate of Peatland ACTION is around 175 ha / year. We aim to increase to over 600 ha/year and achieve approx. 8,000 ha restored by 2030

We know the 45,600 ha currently outside of the scope of peatland ACTION requires more research and will need alternative landscape scale action





WATER

What do we know?

The National Park has 98 water bodies including 22 larger lochs, numerous smaller lochs and lochans, and about 50 rivers and large burns.

- 4 High quality
- 45 Good
- 41 Moderate
- 4 Poor
- 4 Bad

Overall 50% classified "Worse than Good"

We know we need a broader set of reporting and indicators to better reflect and target action holistically across our water network.

In the Forth and Teith river catchments within the National Park, salmon continue to have excellent population densities in a very few highly productive tributaries. However, in the upper catchment salmon are struggling to regain their once strong foothold. Historical land use changes, lack of upstream population pressure from the lower river and barriers to migration take a heavy toll on migratory fish species. Without conservation measures in areas such as the nutrient-poor River Larig and the dammed Eas Gobhain, viable populations of salmon are unlikely to persist.

The situation is not quite as bad for brown trout as a species, as there is a component of the population that doesn't migrate. Nevertheless, for those that do migrate, dams prevent them from accessing good quality habitat in the upper reaches of the catchment, and for those that do make it upstream, their offspring are likely to be starved by the lack of vegetation now characterising the upper catchment.

INVASIVE NON-NATIVE SPECIES (INNS)

What do we know?

A range of riparian INNS place considerable pressure on our nature network across the National Park.

We have a good level of monitoring and control in certain areas.

The Native Woodland Survey of Scotland (NWSS) was published in 2014. It stated that the National Park had 5,787 ha of native woodland, with an estimated 7% (396 ha) being adversely affected by the presence of rhododendron.

Rhododendron Ponticum is a major issue in all areas of the National Park – considerable increase in funding and resourcing would be required to fully control it as well as greater awareness of the problem and use of control powers where necessary.

Our Rhododendron strategy identifies priority areas which need to be approached on a landscape scale.





OUR KEY SPECIES

What do we know?

Our National Park holds nationally important populations of rare habitats such as Atlantic rainforests and is home to over 300 national priority species and over 60 designated sites. Whilst Future Nature will take a primarily landscape scale and habitat approach in its delivery and monitoring – some key species will be important indicators and targets for specific action. A few examples of the status and progress on key species are:

1000 water voles were released in a translocation programme 2008 and 2011 to 12 sites in the Loch Ard Forest that they successfully colonised. A 2016 survey showed that 40 new sites had been colonised since the original release and that water voles are now found as far as 10km away from the nearest release site. Water voles had previously been completely eradicated from the Trossachs area due to predation by non-native North American mink. The continued success of this translocation depends on continued surveillance and control of the mink. If they re-invade the controlled areas, the water vole population would decline again. Expansion of the population more widely will be dependent on finding resources to expand the area of active mink control.

HERBIVORE PRESSURE

What do we know?

The Native Woodland Survey of Scotland defined that a sustainable woodland ecosystem requires herbivore impacts to be in the low and medium categories; the national average is 67% in these two categories. The woodlands within the National Park fall below this average at 63% demonstrating a higher level of unsustainable grazing compared to the national level.

We have an estimated 292 756 sheep in the areas of National Park defined as being Less Favoured Areas for agriculture (which covers about 75% of the National Park).

Deer count data would suggest an average wild deer density across the National Park of 12 deer per km² but that figure varies considerably from area to area.

We estimate in terms of livestock units per hectare there are 8 times the number of sheep on the open range than deer.

We know plant communities and natural regeneration of woodland are hugely suppressed by this combined pressure and in most places regeneration is only currently possible with extensive fencing.

Studies elsewhere in Scotland suggest that in areas of the National Park where we want to target natural regeneration of woodland and plant communities deer densities of between 3 and 6 per km² would be required.



White-tailed eagles appeared on Loch Lomond for the first time in over a hundred years in 2021. It is believed that was the first time sea eagles have settled at Loch Lomond since persecution and habitat changes led to their extinction in Britain in the early 20th century, with the last known bird reported in Shetland in 1918. As white-tailed eagle nests can be vulnerable to human disturbance continued monitoring of the birds is needed and some nest safeguarding might be required. Because some individual birds may predate livestock, the Sea Eagle Management Scheme is in place to assist any landowners who may be impacted by livestock losses.

Glen Dochart is one of the best places in the National Park to see farmland wading birds including curlew, lapwing, oystercatcher, redshank and snipe. As a result of their efforts, land managers involved in the Glen Dochart Waders Project saw an 86% increase in the population of breeding waders between 2010 and 2015. The wader population has fluctuated since then and ongoing habitat management is being undertaken by land managers to try to retain the birds at their current levels. Active management for farmland waders is also underway at the RSPB Loch Lomond reserve where these species are currently benefitting.

Black grouse surveys in 2017 and 2018 show estimated number of males at 125 and 121 males respectively with the most important area being around Loch Katrine and The Great Trossachs Forest. Black grouse populations in other parts of the National Park have remained at low levels or have continued to decline despite various management interventions to restore suitable habitat, reduce collisions with deer fences and legal control of predators.



Monitoring and trapping work by Saving Scotland's Red Squirrels shows that now the National Park is almost a red only zone – with the exception of Callander and the Loch Lomond Islands. Efforts continue to protect the important red squirrel populations of the National Park by focusing grey control efforts on the National Park boundary, particularly to the south. We are still seeing no confirmed presence of squirrelpox virus within the NP however the project continues to monitor the situation in the grey squirrel populations in the surrounding area. *(Continued)*



© Scottish Beaver Trial

Beavers are established and consolidating their presence in the upper Forth & Teith, Earn and Fillan/Dochart catchments, and starting to colonise the Lomond catchment including the first translocation into the National Park being carried out in 2023. The population is expected to continue to expand and to continue to undertake wetland ecosystem restoration in the National Park and continued monitoring of their spread and the ecological changes they make is required. The Beaver Mitigation Scheme is in place to assist land managers with any problems that beavers may cause.

Capercaillie were once widespread across the area now covered by the National Park. Despite a national decline, hotspots for them were still present on the Loch Lomond Islands and in the Queen Elizabeth Forest Park when the National Park was established in 2002. Despite many efforts to retain the population, they continued to decline nationally and disappeared completely from the National Park. The last confirmed sightings in the National Park were in 2012, on the Loch Lomond Islands. There is currently no prospect of this species returning to the National Park in the foreseeable future.

OUR KEY SITES

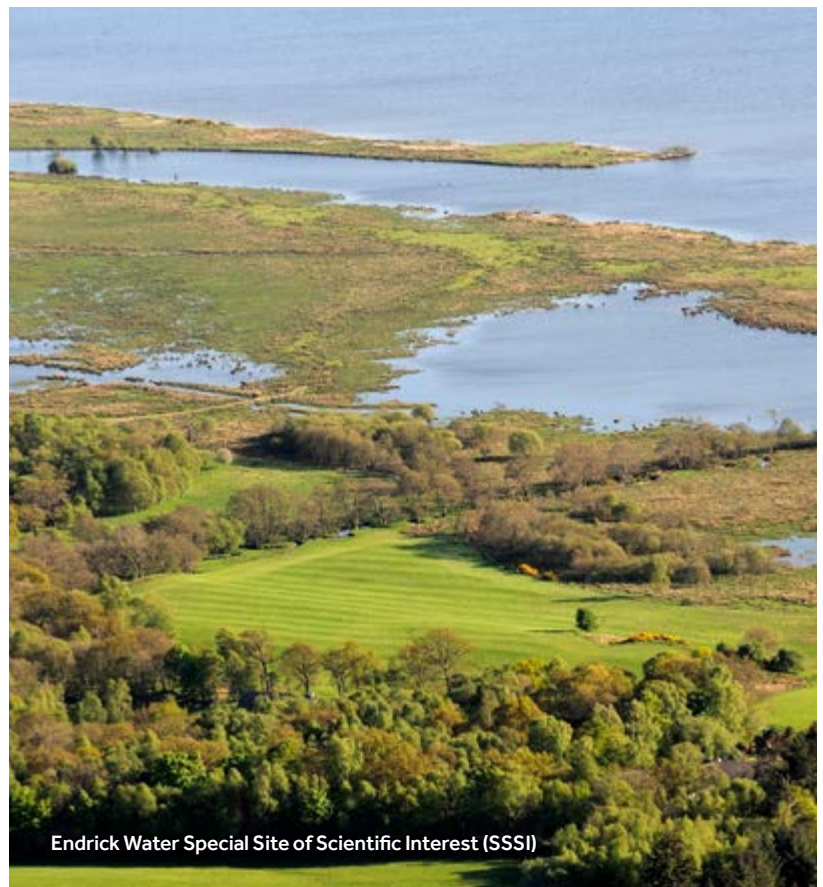
What do we know?

Approximately 80% of our protected sites (which cover a range of habitats from mountain tops, to woodlands and water bodies), are currently in favourable or recovering condition, with approximately 20% in unfavourable or declining condition.

Of the 184 designated features (SSSIs, SACs, SPAs, Ramsars) within the Loch Lomond and Trossachs National Park, there are 29 features currently that have a summary condition of 'unfavourable'.

The key pressures causing unfavourable status to protected habitats and species include heavy grazing and browsing pressure from livestock and wild deer, the presence of Invasive Non-Native Species, pollution and development impacts on water bodies and climate change impacts.

There are 37 out of a total of 67 sites (some of them overlapping, i.e. SSSIs and SACs) where the designated features are under pressure from over grazing. But there are also five sites where designated features are under-grazed proving that this is a complex issue that needs careful collaborative management.



Endrick Water Special Site of Scientific Interest (SSSI)

THE BENEFITS OF NATURE

In terms of economic, social and natural capital benefits of nature specific to the National Park we are currently limited in terms of our baseline knowledge. Many of the methodologies for estimating these figures are new and developing and have yet to be carried out specifically for the National Park.

This is a key area we need to build our understanding of as Future Nature develops to ensure we are realising it's potential for people and communities.



What do we know?

Economic analysis commissioned by the Green Finance Institute identified a £15 to £27 billion gap in financing nature-related outcomes in Scotland.

Peat soils in the National Park hold an estimated potential 20 million tonnes of carbon and other greenhouse gases and may well be our single greatest natural asset in terms of tackling climate change but degraded peat acts as a carbon source rather than a carbon sink.

The National Park's woodland is estimated to hold an estimated 2 million tonnes of carbon.

£400million pounds is estimated to be generated through the visitor economy to the National Park. 60% of visitors list the scenery and landscape as their main reason for coming with an additional 7% specifically listing wildlife.

A 2010 study by SNH (NatureScot) estimated the total visitor spending attributable to nature based tourism was £1.4billion a year with 39,000 jobs.

A NatureScot study in 2020 showed:

- Jobs in the nature-based sector make a significant contribution to the Scottish economy amounting to 195,000 jobs or 7.5% of Scotland's workforce in 2019. (This is likely to be an underestimate, given the difficulty in separately identifying a number of key nature-based sectors).
- Nature-based jobs grew at more than five times the rate of all jobs in Scotland in the period 2015-19 and accounted for one third of all job growth in Scotland in this period.

An RSPB study in 2022 found that between £4.9 and £8 million of tourism spend was attracted to Mull by having White Tailed Eagles there.

Significant further growth in nature-based jobs is anticipated on the back of expansion in activities required to meet our net zero targets. Growth in jobs in nature-based sectors such as blue carbon, woodland planting and restoration and peatland restoration between now and 2030 is expected to be significant.



THE CONNECTIVITY OF OUR LIVING NETWORK

We know that to be resilient and thriving people, communities and nature need to be connected.

OUR NATURE NETWORK

What do we know?

Many of our key habitat networks are fragmented and in particular better connections between our key woodland Sites of Specific Scientific Interest (SSSIs) and improvements in our water and peatland networks are required to build long term biodiversity and resilience.

We are exploring a range of measures to monitor and track the overall connectivity and ecosystem health of the National Park.

OUR COMMUNITIES & VISITORS

What do we know?

Around 2500 young people have an outdoor learning experience with the National Park Authority a year.

Between 170 and 200 volunteers contribute around 14,000 volunteer hours a year to the National Park.

Around 100,000 hours a year of new skills development from projects in the National Park.

Over 30 community identified projects delivered each year.





An aerial photograph of a scenic landscape. In the foreground, there are rolling green hills with scattered trees and a small cluster of buildings. A large, calm lake occupies the middle ground, reflecting the sky and surrounding land. The background shows a vast, open landscape with distant hills under a blue sky with scattered white clouds. A solid green vertical bar is on the left side of the image.

**Where
do we
want to
get to?**

Future Nature - Our commitment

We firmly believe the demonstration of an exciting, inspiring vision for nature is a crucial part of our mission. Our society, its wealth and its heritage is built largely upon the resources that our natural environment has provided us freely for hundreds of thousands of years.

We now know that by the over-exploitation of these resources humanity has devastated biodiversity at a global scale and fundamentally shifted the planetary life-support systems that have allowed us to move from the stone-age to a technologically advanced civilisation. Our duty as stewards of this special place has therefore changed in the face of this crisis.

In 2020 the National Park committed to its Mission Zero plan as a direct response to the climate emergency. We are now committing to Future Nature to make the same level of commitment to addressing the nature crisis.

Through Nature Based Solutions, we can achieve positive outcomes for both climate and biodiversity, such as restoring damaged peatlands that help sequester carbon and other greenhouses gases, creating new woodlands and forests, and restoring rivers to allow natural flood management.

Future Nature is our commitment and call to action to work with partners to achieve an inspiring vision:

A resilient nature-rich National Park, where abundant wildlife and a healthy natural environment provide a wealth of benefits through an extensive, well-connected living network.

It is no longer sufficient to just work to protect what is here now, we must proactively and vigorously re-build and restore a richer nature that will continue to yield us and our world benefits for long into the future.

It is time to pay nature back. This needs to be our legacy.



Future Nature - Vision, objectives and outcomes

Future Nature is guided by a long-term vision matched to the overall Scottish Government objectives to end the decline and ensure the restoration of nature.

Our Future Nature route map will be structured around the following key elements

OUR VISION

Loch Lomond & The Trossachs National Park is a resilient nature-rich National Park, where abundant wildlife and a healthy natural environment provide a wealth of benefits through an extensive, well-connected living network

OBJECTIVE 1

Reverse the decline in nature in Loch Lomond & The Trossachs National Park by 2030 latest.

OBJECTIVE 2

Ensure the widespread restoration of nature across the National Park by 2040.

To allow us to monitor progress towards this long-term vision we have broken it down into three elements – defined by three key outcomes

A resilient, nature-rich National Park with abundant wildlife and a healthy natural environment

Providing a wealth of benefits

An extensive well-connected living network

OUTCOME 1

The status of habitats is improved and the abundance of the species that live there is increased

OUTCOME 2

Economic and social conditions are developed that reward the valuation and active restoration of nature and deliver benefits for local communities, businesses (particularly land-use businesses) and visitors

OUTCOME 3

Habitats and species are connected on a landscape-scale. People and communities feel connected to nature and empowered as part of a resilient, sustainable network

Future Nature - A vision for 2030



In 2030...

Future Nature has a strong and effective partnership

The Future Nature partnership brings together agencies, communities, NGOs and businesses who are working together and effectively progressing towards their shared vision.

The partnership is informed and steered by a strong and established set of indicators and monitoring tools which enable evidence based assessment and planning for nature and it's benefits.

We are addressing key threats to nature

Partnership working and funding support has enabled deer populations and livestock farming to thrive sustainably whilst making space for nature in more naturalised and regenerating landscapes.

Invasive non-native species including *Rhododendron ponticum* and Himalayan balsam are in decline as a result of coordinated and targeted action in catchments across the National Park, with local communities taking a key role in tackling the threat these species cause in and around towns and villages.



All natural water bodies within the National Park are either in favourable or improving condition as a result of the effective reduction in diffuse pollution from surrounding land uses.

Litter levels in and around our sea lochs are starting to reduce as a result of effective waste reduction and recycling strategies and volunteer action to clean up beaches. Marine wildlife is recovering following effective management of the Upper Loch Fyne and Loch Goil Marine Protected Area, with more sustainable fishing practices reducing impacts on sensitive seabed habitats.



We are managing key elements of our nature network

The internationally important temperate rainforests of the National Park (Scotland's Rainforests) are now physically and ecologically connected north to south and east to west, with new establishing native woodland corridors found in between the ancient, semi-natural core areas with an established program of management in existing woodlands especially invasive rhododendron control.

Native broad-leaved woodland and scrub continues to expand in extent both in the lowlands and uplands of the National Park, as a result of decreasing pressure from sustainably managed deer populations, widespread uptake of forestry grant schemes, and new agro-forestry initiatives. Reducing impacts from wild deer populations, combined with close livestock management allow less reliance on deer fencing, with defunct fences starting to be removed.

Sensitively sited productive conifer forests are widespread across the landscape, although the proportion of native broadleaf species and diverse conifers within them has increased within both new schemes and existing forests with those in key locations now converted to native species. The quality and diversity of all woodland types has also improved as invasive non-native species are in decline. Shrubby woodlands have started to regenerate alongside many burns and lochsides in the uplands, providing important ecological linkages to lowland woodlands.

Many degraded upland peatlands in the National Park have been restored or are in recovering condition as a result of restorative management works and lower pressures from wild deer and grazing livestock. Many old artificial drainage systems have been removed and along with the forests of the National Park these mountain bogs are nationally important carbon stores, helping to reduce the impacts of the climate emergency.

Pilot River re-naturalisation projects have taken place on some rivers to create free-flowing water courses which provide improved natural habitats and enhanced flood water storage capacity at a sub-catchment scale. As beaver populations have now recolonised all of the National Park's river catchments, so many rivers and burns in previously open habitats now also have establishing native tree cover growing alongside them from local planting schemes or protected natural regeneration.



Improving water quality and expanding native fish populations support a growing number of fishing activities, which in turn support local businesses. Natural flood management techniques, such as woody dams and retention ponds are widely used to help mitigate flood events, with land managers rewarded through subsidy support and private finance schemes for the important role that their positive management plays to a sustainable, long-term solution to climate change impacts.

All designated sites within the National Park are in favourable condition and form the key nodes in increasingly ecologically healthy landscape-scale ecosystems that embrace all of the lochs, rivers, mountains, moorlands and woodlands of the National Park. Consequently the National Park is fully playing its role as a key node in Scotland's 30 x 30 network of protected areas.



Red squirrel populations have expanded as the main species to be found in all parts of the National Park as grey squirrels retreat in the face of landowner and community-led management programmes. Black grouse populations increase across the National Park reflecting the spread of native woodland mosaics and upland restoration.

Re-naturalised river systems and in-bye grazing areas along the floors of the glens support growing wading bird and abundant wildflower populations. Woodland and other important habitats such as tall herb and arctic alpine vegetation communities in and around Strathfillan are recovering and thriving.

Across the National Park widespread natural ecosystem recovery is taking place, as a result of the successful implementation of ambitious nature restoration policies across land and water, which are being led by local land managers, supported by public agencies and third sector environmental bodies.

Nature is embedded and mainstreamed in processes and governance which are delivering benefits across the National Park

Nature and climate focused place planning in the National Park has encouraged new development that reflects climate change mitigation along with the value of natural capital and ecosystem health.

New developments provide new homes for families as rural employment grows and incorporates high quality landscaping measures such as vernacular design elements and other features that contribute to their sense of place in a rural setting, new native woodland plantings for screening, amenity and biodiversity gains and new wetland features that combine sustainable urban drainage with biodiversity gains and amenity. Low carbon construction techniques and a Net Positive approach means that nature-friendly design have become standard practice, and the National Park is seen as an exemplar of good practice at an international level.

All the larger river catchments within the National Park have Integrated Land Use groups active within them, allowing adjoining land managers and representatives from agencies and local communities to collaborate in collective engagement and decision making on sustainable, integrated land management to ensure that multiple benefits are realised from land and water use. Framework agreements support local groups with resources and data to assist local level decision making and project delivery.

New agri-environment policies and funding from both the state and private sectors have encouraged new approaches to livestock grazing systems and units, enabling farms to viably produce food whilst simultaneously being rewarded for the production of other public goods, such as carbon sequestration and water storage.

Land use and water-related businesses are prospering in the National Park, with increased levels of diversification and investment taking place across the nature conservation, farming, sporting and forestry sectors.



Land is now recognised for its natural capital value and many landowners have engaged in Natural Capital Valuation Schemes which have taken place in several places across the National Park and are supported by private finance and investment. Thriving nature is reflected in a thriving land use and tourism sector, enabling more young people and families to move into the countryside to take advantage of new jobs, skills and other business opportunities.



Landscape visualisation illustrating how business and tourism could enhance Future Nature

We are raising awareness and inspiring others to get involved

Engagement and education opportunities are inventive and widely available. There are multiple opportunities for all communities including normally excluded groups to learn about and experience nature in the National Park in exciting and informative ways. Local communities and visitors to the National Park have a strong understanding of nature and feel connected to it.

They feel engaged and empowered to contribute to efforts to protect it, and impact the issues which negatively affect it. As a result the National Park is recognised as a high quality destination for local communities, all of Scotland's people and travellers alike to experience and help care for Scotland's fantastic landscapes and natural and cultural heritage.

Local communities and visitors to the National Park have a strong understanding of nature and feel connected to it.



What will this look like – a Future Nature Landscape

Existing and past land uses have all shaped the iconic landscape and views which are such a critical part of why people love our National Park.

As we seek ambitious nature restoration across the National Park – this too will impact and continue the long evolution of our iconic landscape.

We have commissioned some work to create some photo montages and landscape visualisations to present as part of the route map to give an idea of the subtle changes Future Nature might deliver on a landscape scale.





**How will
we get
there?**

Our core principles

Our Future Nature principles will guide all of our work. We will:



Work in partnership effectively across communities, agencies, NGOs and businesses



Tackle the key pressures on nature



Discuss and address systemic issues with honesty and energy



Be agile, innovative and evidence-led



Mainstream nature restoration thinking in our organisations and those of other stakeholders



Deliver nature-based solutions which address the climate and biodiversity crisis



Deliver nature restoration where people and livelihoods are integral



Inform, involve and empower all to be involved



Prioritise the protection and restoration of important existing habitats and designated sites



Connect these sites through an integrated approach to land use at landscape-scale

The role of the Future Nature Route Map

The Future Nature Route Map is the first step in a long-term strategy and commitment to restore nature in the National Park.

- It aims to define the problem and where we are now
- It defines where we want to get to
- It maps out a clear structure and initial actions by which we will get there
- It is therefore an overall structure and framework on which more detailed delivery plans, partnerships, projects and monitoring frameworks will continue to build.
- The route map provides the structure to focus work, develop projects and review progress

A landscape scale approach

A core element of Future Nature is to work at landscape scale, embedding nature restoration all across the National Park to develop a well-connected living network.

Thriving, resilient nature can deliver for people and be a key element in our response to climate change. To thrive and be resilient, nature needs to be part of a connected network across the National Park – and across the country.

Future Nature takes a Nature Network approach; reviewing all the key elements of our habitat network, our key species, the threats facing that network and how we best build, improve and connect both its core areas and the links between these core areas across the landscape.

We believe that taking this landscape scale habitat approach is also key to thriving, resilient species in the National Park. Therefore whilst we will at times take approaches which focus on specific priority species, our primary focus will be on the wider habitats required for all species, including our own, to thrive.



OUR WELL-CONNECTED LIVING NETWORK WILL:

Build our three key habitat networks

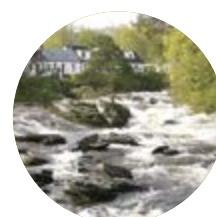
These three networks need to be resilient, high quality and connected in order to function and support the wealth of species, ecosystem services.



WOODLAND



PEATLAND



WATER

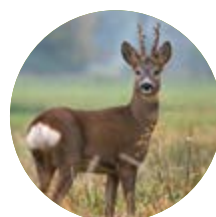
Address the four key pressures which weaken and damage those networks



**WATER
QUALITY**



**INVASIVE NON-
NATIVE SPECIES**



**HERBIVORE
PRESSURE**



**CLIMATE
CHANGE**

Embed nature restoration across our crucial land uses

To deliver a well connected living network we will need to protect and improve key sites such as our designated SSSIs and SACs. We will also need to create new habitats through land use change. Perhaps most importantly we will need to connect and embed our habitat networks across all land uses in the National Park:



AGRICULTURE

delivering nature friendly farming to continue to support livelihoods and food production whilst supporting restoration of our soils, expansion of woodland and reduced grazing pressures



FORESTRY

delivering timber production whilst expanding and improving our woodland network

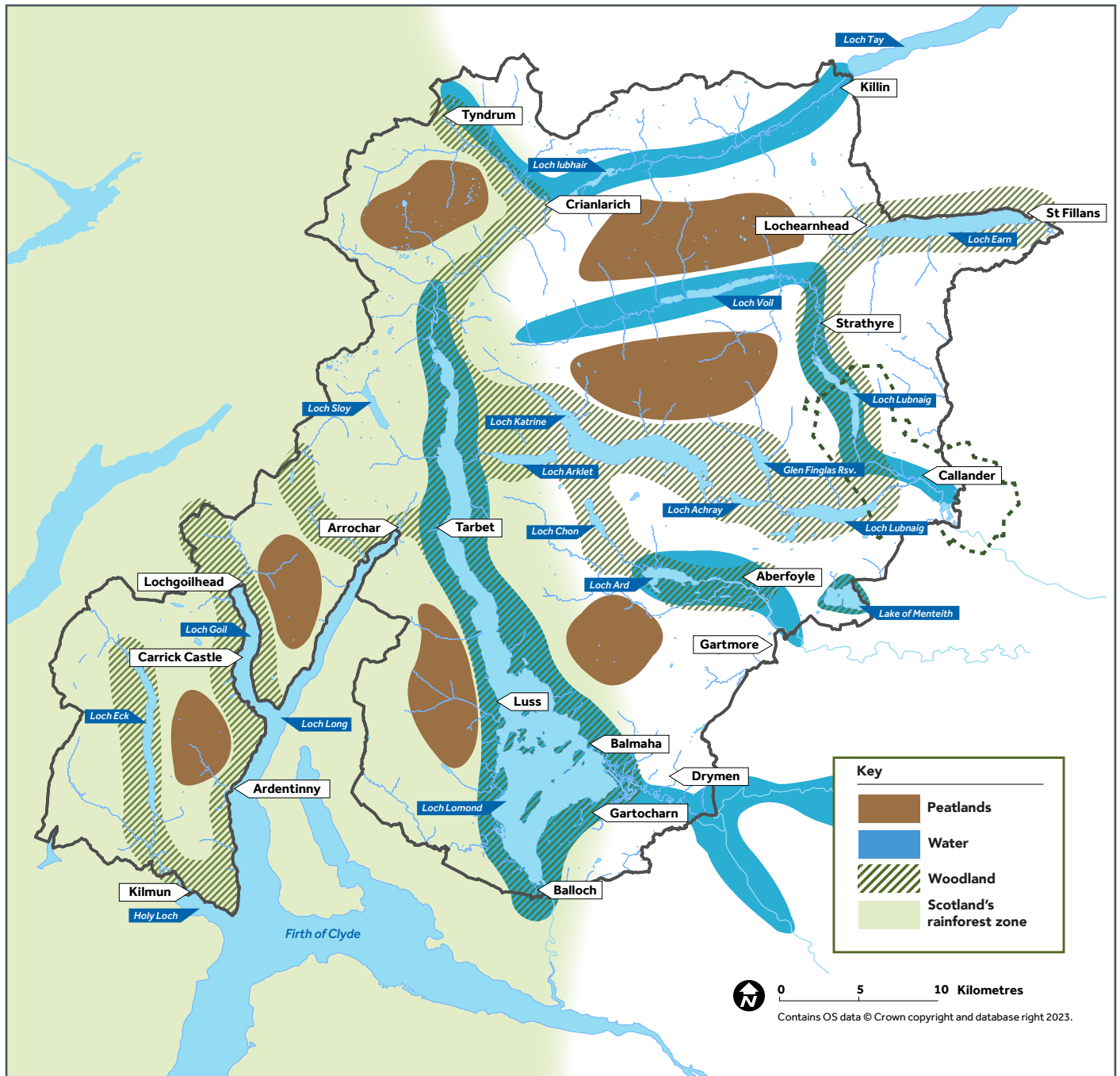


COMMUNITIES

we need to embed nature friendly approaches into our housing, energy, business and recreation activities

WHY PEATLAND, WOODLAND, WATER?

There are many ways to define and categorise habitat networks. For Future Nature we have chosen to focus primarily on three key networks – peatland, woodland and water.





PEATLAND

68,000ha of the land within Loch Lomond and the Trossachs National Park is covered by peatland making it just under 39% of the land area of the National Park.

Healthy peat plays a vital role in carbon storage and combating the effects of climate change, and in maintaining Scotland's water quality and rich biodiversity. Peatlands reduce flood risk and support farming and crofting.

They are also part of the wild landscapes that attract tourists to Scotland. As the extensive upland blanket bogs in the National Park occur in a mosaic with or in close proximity to the full range of upland habitats we have here, many actions that benefit peatlands will also provide benefits to other upland habitats and the species they support. Peatland therefore has a prominent role in public understanding and national approaches to nature-based solutions as well as incorporating many key species and habitats across our upland, grassland and bog communities.



WOODLAND

54,100ha of the land within the National Park is woodland making it 31% of the land area. Our trees and woodlands are of international importance for nature.

The woodland network includes ancient woodlands, large areas of Scotland's remaining rainforest and pine forest and mixed productive forests which support sustainable timber production. Woodland also provides scope to accommodate many recreational activities and a chance to engage first hand with nature.

Our woodland is therefore crucial for people, for nature and in our response to climate change.

The quality and diversity of our woodland network is critical to an enormous diversity of species including woodland plants, fungi, invertebrates, woodland birds and mammals. Some particularly high-profile ones are the bryophytes of the rainforest, red squirrel, badger, pine marten, woodland deer, black grouse, raptors and owls.



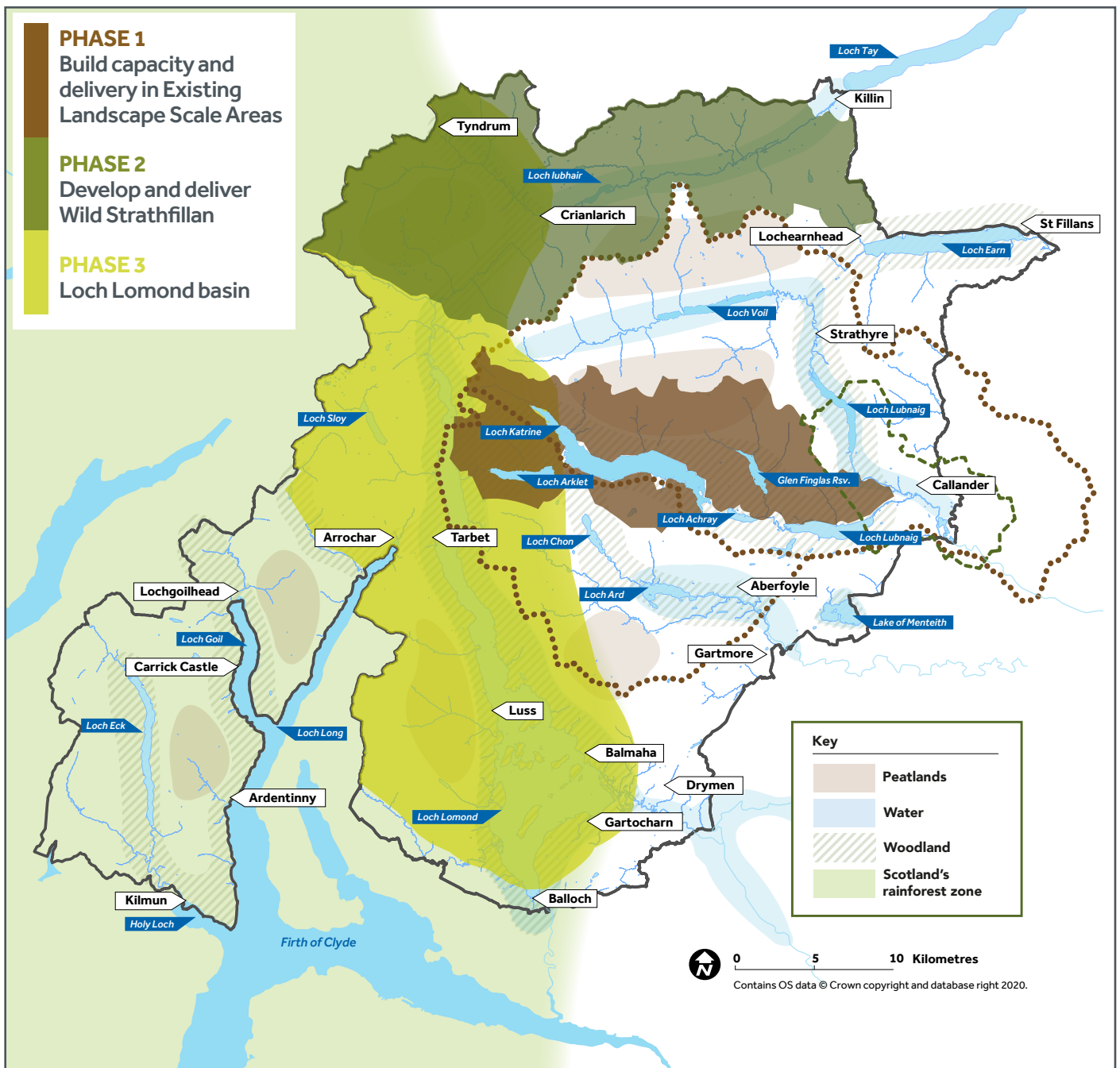
WATER

With 22 large lochs, more than 50 rivers and key wetlands across the National Park - our water network is at the heart of our landscape and is a central focus of what makes the National Park such an attractive place to live and work in and to visit. It's one of the key features in our recreational network and provides renewable energy and a critical water supply for a large chunk of central Scotland.

Water is a basic building block in all our ecosystems, affecting all our habitats and species and is equally affected by the land uses which surround it.

Healthy lochs and rivers support a myriad of species including a huge range of invertebrates and aquatic plants, and many species that are rare or declining such as the freshwater pearl mussel, powan, Arctic charr, lampreys and Atlantic salmon. Wading birds and the expanding spread of water voles and beaver populations are iconic species intertwined with our water network. A healthy water network is therefore a pre-requisite for and an indicator of a healthy, living network.

Landscape scale delivery



Future Nature will focus on delivering nature restoration across Landscape Areas.

Working on a landscape scale means looking across multiple landholdings, land uses and project boundaries to deliver aligned approaches and visions which create connected, resilient and high-quality networks of habitats.

Through Future Nature we therefore need to identify, support and deliver landscape scale delivery by matching:

- Landscape areas with high potential for nature restoration
- Areas where we have the right combination of partners to deliver
- Existing or new projects which have the opportunity to connect and deliver a wider landscape scale approach
- Funding opportunities to support those project

The map on page 38, therefore seeks to show current examples and areas of focus which demonstrate delivery or potential for this landscape scale approach.

We believe we need to take this approach across the whole National Park – which is all important and has high potential for Nature Restoration.

It by no means precludes the development of other landscape scale areas. Those identified on the map will develop in parallel, at different speeds and Future Nature will support these alongside any other opportunities to develop this landscape scale approach.

PHASE 1: Build capacity and delivery in existing Landscape Scale Areas

- The Great Trossachs Forest is a key asset and major landscape scale nature restoration project – it is at the heart of our woodland and water networks
- It also connects and overlaps with Callander Landscape Partnership and Strathard Framework – two further established landscape partnerships with a broad community developed vision and programme of work which includes nature restoration opportunities as well as the Upper Teith SAC where projects by Forth Rivers Trust are aiming to connect river restoration and wider habitat connection.
- Key priorities for these landscape areas are managing INNS on a landscape scale and delivering native woodland expansion

PHASE 2 Develop and deliver Wild Strathfillan

- Strathfillan contains an Important Plant Area, woodland creation opportunities, Caledonian pinewood SSSIs and Ben more SSSI
- Key priorities would be addressing herbivore pressures and woodland expansion and connection as well as peatland restoration

PHASE 3: Loch Lomond basin

- This is the core of our rainforest area and our iconic water body. Developing this project would connect to Wild Strathfillan and The Great Trossachs Forest to create a major landscape scale project as the Heart of Future Nature
- Priorities would be: herbivore pressures, woodland connection, INNS and water quality

Together – the three landscapes

If we can build effective landscape partnerships across these three areas – we could create 1000sqkm of connected landscape scale restoration - over half the area of the National Park

Workstreams and early actions

OUR DELIVERY PLAN

To achieve the long-term vision and objectives we will develop a long-term Delivery Plan based around three pathways:

PATHWAY 1: ACT

Action for Nature: Practical Delivery

PATHWAY 2: FACILITATE

Mainstreaming Nature-Friendly Processes & Practice

PATHWAY 3: INSPIRE

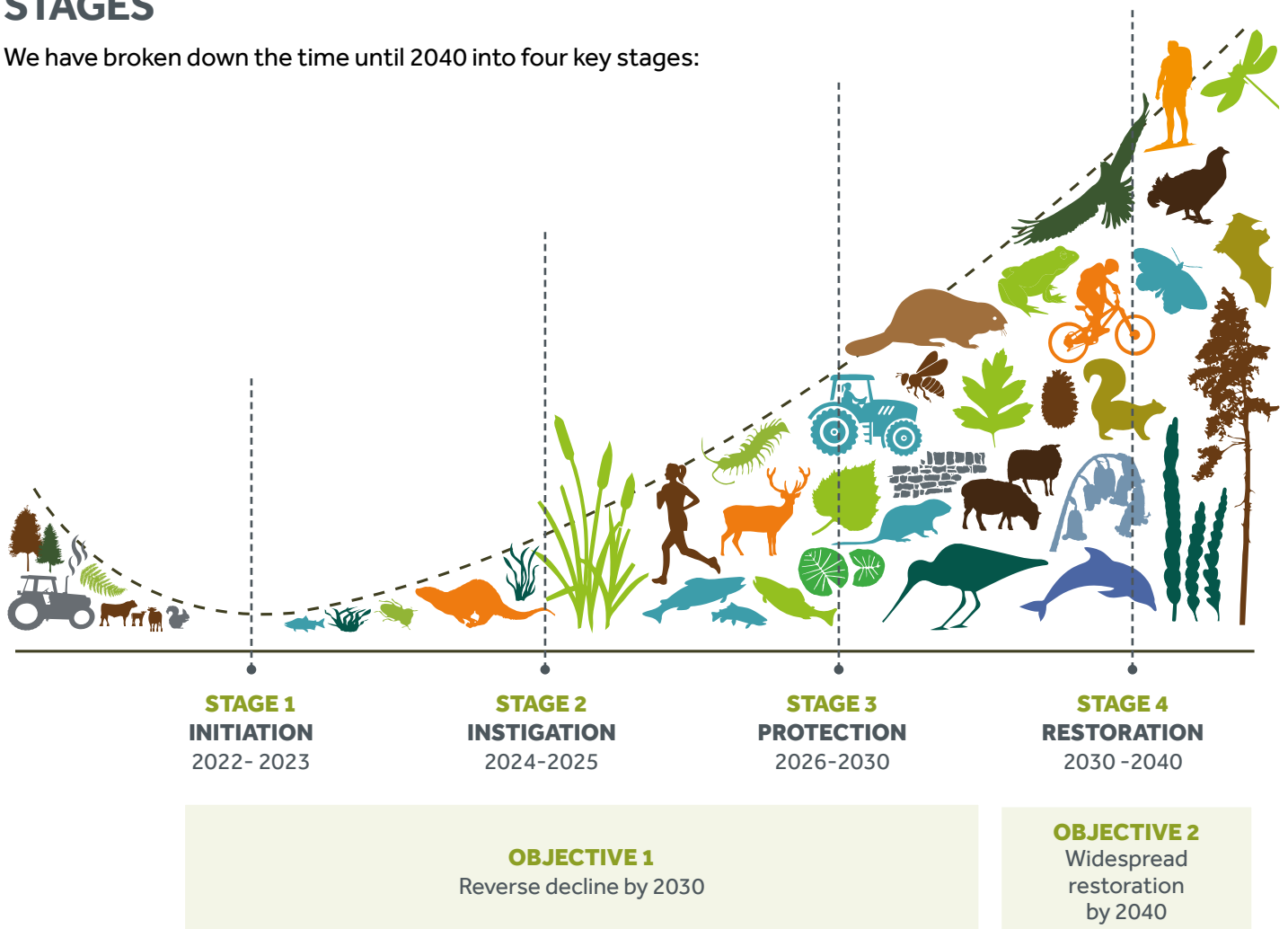
Engaging and Inspiring Action for Nature

This delivery plan will be a large scale and complicated plan, incorporating a range of actions across the National Park Authority team and many other partners and stakeholders.

It will therefore be a live, flexible and developing plan. In this Route Map we will therefore explain the structure of that plan – as well as identifying key stages and early actions.

STAGES

We have broken down the time until 2040 into four key stages:



PATHWAY 1: ACT

ACTION FOR NATURE

The Action for Nature pathway focuses on delivery on the ground. Urgent action which delivers nature restoration is the top priority for Future Nature and the ultimate aim of all three pathways.

We will work to deliver strategies and projects which collectively address our key threats, restore our key habitat networks and protect and connect our nature network.

Key workstreams

KEY AREAS	WORKSTREAM AIM
ADDRESS KEY THREATS	
Herbivore pressure	Support local activity and Scottish Government policy that ensures landscape-scale management of herbivore pressures in uplands and forests is low enough to allow the widespread natural recovery and expansion of native woodlands, and the protection of fragile peat soils.
INNS	Develop a strategic and well-resourced programme of Invasive Non Native Species control with surveillance and management to control Invasive species across the National Park.
Water quality	Develop a strategic programme to address key water quality issues in the National Park – with specific focus on addressing diffuse pollution, discharge and run off.
Climate change	Plan for a National Park resilient to the impacts of climate change and delivering solutions which contribute to our net zero approach.
MANAGE KEY HABITATS	
Woodland expansion	To support the expansion of our woodland network whilst increasing it's percentage of native species and enhancing it's condition, diversity and resilience.
Peatland restoration	Up scale Peatland ACTION and develop broader approach to create an extensive programme of well-resourced peatland restoration works to ensure that all peatland soils are in a healthy condition, providing a range of public benefits.
River and wetland restoration	Develop a holistic programme for our water network which improves water quality, restores rivers and wetlands, restores natural flow conditions and benefits nature and downstream flood impacts.

PATHWAY 1: ACT

ACTION FOR NATURE

Key workstreams (continued)

PROTECT AND CONNECT	
<p>Protect and restore existing nature</p>	<p>Deliver a programme to target improvements in the status of key designated sites and deliver effective and responsive influence to protect and enhance current nature and biodiversity</p> <p>Deliver action plans to protect and enhance key priority plant and animal species and their habitats.</p>
<p>Deliver landscape scale restoration</p>	<p>Develop a strategic 'National Park Nature Network' which is supported as a major development and improves ecological connectivity and resilience at geographically focused areas, through targeted land (and water) management interventions including woodland expansion, wetland restoration and grassland management.</p>

Stage 1 – Initiation: Actions

- Develop INNS status reporting and criteria for main river catchments in the National Park
- Develop National Park water network strategy and delivery plan
- Review woodland network expansion and restoration targets and delivery plans
- Develop Forth Climate Forest partnership
- Produce National Park Herbivore Statement and accompanying monitoring framework
- Publish long term peatland strategy
- Identify priority designated sites for action
- Develop vision and funding for Wild Strathfillan Landscape project
- Expand capacity within The Great Trossachs Forest

Stage 2 – Instigation: Actions

- Extend Riparian INNS management coverage in West & South Loch Lomond
- Ongoing monitoring and maintenance in Fillan, Dochart, Earn, Teith, Forth, Endrick & East Loch Lomond.
- Develop landscape scale water network project and funding
- Increase rate of restoration on priority Peatland Action sites
- Develop new landscape scale approach focused on rainforest in Loch Lomond Basin

PATHWAY 2: FACILITATE

MAINSTREAMING NATURE FRIENDLY PROCESSES AND PRACTICES

To drive and support effective delivery we need to create the right policy, funding and partnership structures. Pathway 2 focuses on those strategic processes and practices which will enable the successful nature restoration delivery we want to see.

Key workstreams

KEY AREAS	WORKSTREAM AIM
Strategy and policy	Embed nature restoration principles and where appropriate projects into all new strategic development plans and policies that cover the National Park.
Nature positive development	Explore enhanced opportunities for the promotion and application of nature based solutions, natural infrastructure, nature networks and 'nature positive development' in new development through the preparation of our new Local Development Plan, ensuring the application of NPF4 reflects the role of the National Park.
Regional land use partnership	Develop a pilot Regional Land Use Partnership and from it delivering a Regional Land Use Framework which creates the correct conditions for collaborative and impactful land use change resulting in greater multiple benefits; including nature restoration.
Agricultural and forestry grants and subsidies	Through engagement with Scottish Government and key partners, use our experience and knowledge to support effective use of grants and subsidies to support land use change and provide leadership, support and input into post-Brexit agricultural subsidy scheme reform.
New funding models	Develop, support and pilot new public and private funding models that support large-scale nature restoration projects in the National Park, such as 'Revere' (i.e. Net Zero with Nature).
Jobs and skills	Support the creation of new and innovative nature-based jobs and skills by engaging with land-based businesses, training providers and research institutions to map out capacity and skills shortages and provide opportunities.

Stage 1 – Initiation: Actions

- Embed Future Nature in new National Park Partnership Plan and Local Development Plan
- Deliver RLUP pilot report
- Engage in and influence national 30 by30 and Nature Networks development
- Complete initial feasibility research for green finance for Wild Strathfillan through the Revere project

Stage 2 – Instigation: Actions

- Deliver initial green finance pilots
- Support roll out of new agricultural support scheme to deliver nature friendly farming in the National Park
- Develop green finance opportunities for key landscape projects across the National Park

PATHWAY 3: INSPIRE

RAISING AWARENESS AND INSPIRING ACTION FOR NATURE

To be successful we need to build a strong network of people who understand the challenge, connect with nature and are supported, engaged and empowered to help deliver the solutions. Pathway 3 focuses on how we support the development of that network.

Key workstreams

KEY AREAS	WORKSTREAM AIM
Pro-nature behaviour	Develop our guiding principles to effectively promote pro-nature behaviours by building understanding of the challenges, nature connections and opportunities for everyone to act.
Nature based visitor experience	Provide high quality nature based visitor experiences which inspire and educate visitors.
Education and outreach	Align and expand our education and outreach opportunities to ensure that everyone learning about the National Park is able to develop their nature literacy.
Community empowerment	Develop support and empowerment of local communities to enable them to make a positive contribution to the protection and restoration of nature.
Volunteering for nature	Further develop volunteering opportunities across the National Park to allow people to actively participate in nature restoration (and climate) action.

Stage 1 – Initiations: Actions

- Development of Nature literacy and connection behaviour change model and programme
- Review and realign our educational and outreach resources and programme with FN priorities and key messages
- RLUP pilot “Lighting a Spark” in Loch Goil
- Develop Citizen Science programme for volunteers to assist with Future Nature Monitoring

Stage 2 – Instigation: Actions

- Review existing Nature Based Tourism and identify opportunities to support growth in funding and delivery
- National Park local schools ‘Nature Network’ scoped and delivered
- Review of community identified nature projects in Strathard





Case Studies

Existing Success and Future Projects

THE GREAT TROSSACHS FOREST

The story so far...

The Great Trossachs Forest is a huge landscape-scale woodland restoration project currently involving four partners: RSPB, Forest and Land Scotland, the Woodland Trust and the National Park Authority – a major conservation project set in the heart of the National Park. It was declared as an NNR by SNH (now NatureScot) in 2015 and is one of the UK's largest National Nature Reserves. In the first 10 years of the 200 year project, more than 2.5 million trees have been planted creating a connected corridor of woodland.

Covering 160 square km, this continuous area managed for the benefit of wildlife and people is creating a forest landscape large enough to include a range of habitats. It is this 'mosaic' of habitats which invertebrates, mammals, birds and other wildlife need to thrive and to adapt to a changing climate.

Despite a relative wealth of wildlife and covering a substantial area of land and freshwater, the habitats in the NNR still face pressures which effect ecosystem health and the associated benefits that these provide. The browsing impacts of wild deer can negatively affect the growth of young trees and also lead to trampling of sensitive uplands habitats such as peatlands. Invasive non-native species such as *Rhododendron ponticum* displace native forest vegetation and along with the deer population require ongoing, proactive management to prevent their populations causing serious damage to the integrity of the NNR.



The future...

The landscape partnership was originally developed as a collaborative project under the Scottish Forest Alliance, with BP as a major funding partner. The SFA has now lapsed and the project was further progressed up until the end of December 2017 using HLF funding. The challenge for these long-term, large scale partnerships is retaining the funding and momentum beyond project funding timescales. There is enormous potential to build on the richness of The Great Trossachs Forest's habitats and species, to continue to tackle the pressures on them and to build on collaborative land use with neighbours to expand the reach of the landscape partnership approach. We are therefore delighted as a first step to have developed a new funding agreement with the existing partners and Scottish Water for a new Project Coordinator for the next two years. A key focus of Future Nature will be to support this Coordinator to rebuild momentum to expand the work of The Great Trossachs Forest for many years to come.



Covering 160 square km, this continuous area managed for the benefit of wildlife and people is creating a forest landscape



WILD STRATHFILLAN

The story so far...

The National Park Authority recognises the special nature and potential of the Strathfillan landscape, both for people and nature and in 2021 began work with local land managers and the wider local community, alongside public, private and charitable organisations, to help bring together ideas and opportunities to support nature restoration and community development. This has included work through the UK wide Revere project to explore the potential for green investment. It has also involved development by Strathfillan Community Development Trust of a local heritage project to collect, collate and tell people's stories of living and working in Strathfillan, and to explore how the landscape and its management has changed over time. The Countryside Trust, working with land managers in the area has also developed ideas for a specialist plant nursery.

The future...

The Countryside Trust has successfully secured funding through the Nature Restoration fund to bring these plans together and develop the detailed information, data and plans require to secure funding for a large scale and ambitious nature recovery partnership to deliver restoration and connection of native woodland, peatland restoration, management of riparian habitats and invasive non-native species.

UPPER TEITH SAC

The story so far...

The Upper Teith SAC and river catchment within Loch Lomond Trossachs National Park faces many pressures, some of which include a lack of in-stream habitat, sparse riparian trees, and nutrient deficiency in places. Working with landowners within the Teith Catchment Initiative, the Forth Rivers Trust have delivered projects to actively target river and riparian improvements through tree planting, green bank protection, in-stream habitat creation, nutrient supplementation, continued INNS control, wetland creation, floodplain reconnection and peatland restoration, tackling some of the key issues facing the catchment.

Starting as a series of smaller riparian tree planting projects, this initiative has scaled up since 2018, gaining momentum to include delivery of river restoration projects which have seen installation of large woody debris in the River Larig and a follow-on project to create new wetland and enhance floodplain functioning in the wider landscape at Inverlochlarig.

The future...

Riparian corridors are a crucial element of our overall habitat network. We're therefore excited that the next phase of the Teith Catchment Initiative will focus on the Calair burn and deliver a holistic package of works to improve biodiversity. Working within the 2,000ha of Ballimore Farm the project will focus on tying together peatland restoration, large scale riparian and landscape-wide broadleaf woodland planting, river restoration, floodplain and other habitat enhancement. Future Nature will aim to support the replication of this approach across the Upper Teith and elsewhere in the National Park.





LOCHGOILHEAD

The story so far

Lochgoilhead is home to just 420 people but growing awareness of the impacts of climate change and biodiversity loss inspired locals to take action to protect the stunning natural environment in which they live. One such project has focused on The River Goil an important spawning ground for endangered Atlantic Salmon and Sea Trout. As recently as 2019, river bank collapse and erosion made it an unfavourable environment for the fish and only three salmon redds were counted during the annual redd count.

Working in partnership with the National Park Authority, The Lochgoil Community Trust, Argyll Fisheries Trust and The River Goil Angling Club came together to deliver a programme of habitat improvements, including planting hundreds of native trees to reduce bank erosion, increase biodiversity and provide shade to help regulate river temperatures. The riverbank was further secured by installing wooden stakes and compacted tree branches which absorb silt and energy.

The future...

Working closely with local communities will be a crucial element in nature restoration in the National Park. The community in Lochgoilhead continue to develop their wider vision for land use in their community and the National Park authority will seek to expand opportunities to secure funding and deliver more community nature restoration projects across the National Park.

Working closely with local communities will be a crucial element in nature restoration in the National Park.

Monitoring progress

There will be two levels to monitoring the progress of Future Nature. This can most simply be described as reviewing:

WHAT DID WE DO?

- Using the delivery plan we will develop detailed workplans which identify key priority projects within the National Park Authority and with partners
- The first key elements of this are identified in this route map through the stage 1 and 2 priority actions
- These will be monitored and reviewed through annual reporting which identifies progress in key projects and any key outputs

HAS IT WORKED?

- We are looking for landscape scale, long term impacts
- To monitor this we have developed a draft set of key indicators and will use a five yearly cycle to assess both if the actions we planned were delivered and if we are moving closer to our vision of nature restoration by 2045

STATE OF NATURE REPORTS

The long-term State of Nature reports will be based around a 'logic model' which breaks down the Future Nature vision into three key outcomes and a series of sub-outcomes and indicators.

These outcomes break down the vision into three key areas through which we will track and monitor the long-term impact of our delivery plan and the progress towards the overall vision.

OUR VISION

Loch Lomond & The Trossachs National Park is a resilient nature-rich National Park, with abundant wildlife and a healthy natural environment provide a wealth of benefits through an extensive, well-connected living network

OUTCOME 1

The status of habitats is improved and the abundance of the species that live there is increased

OUTCOME 2

Economic and social conditions are developed that reward the valuation and active restoration of nature and deliver benefits for local communities, businesses (particularly land-use businesses) and visitors

OUTCOME 3

Habitats and species are connected on a landscape-scale. People and communities feel connected to nature and empowered as part of a resilient, sustainable network

OUTCOMES	SUB OUTCOMES
<p>OUTCOME 1</p> <p>The status of habitats is improved and the abundance of the species which live there is increased</p>	<p>The condition, diversity and resilience of our woodland network is increased. Native woodland is expanding and regenerating.</p> <p>Peatland condition is improved</p> <p>The quality, health and resilience of our water network is improved</p> <p>Herbivore pressure is reduced, allowing widespread natural recovery and expansion of native woodlands, and the protection of fragile peat soils</p> <p>Surveillance and management of Invasive species is increased</p> <p>Key species are thriving</p> <p>The condition of our key sites is improved</p>
<p>OUTCOME 2</p> <p>Economic and social conditions are developed which reward the valuation and active restoration of nature and deliver benefits for local communities, businesses (particularly land-use ones) and visitors</p>	<p>Nature based land use funding is increased</p> <p>Nature based tourism is increased</p> <p>New green jobs are created</p> <p>Natural Capital is increased</p> <p>Ecosystem service delivery is increased</p> <p>Public policy support for nature restoration has increased</p>
<p>OUTCOME 3</p> <p>Habitats and species are connected on a landscape scale. People and communities feel connected to nature and empowered as part of a resilient, sustainable network</p>	<p>The connection, resilience and quality of our Nature network is increasing</p> <p>Communities within the Park and Visitors to it feel an informed and empowered part of our living network</p>

Each **Outcome** will be broken down into a series of **sub-outcomes** – and for each a collection of **indicators** which will help us assess progress against those sub-outcomes.

Indicators by their nature are just that – no one indicator is perfect and you need to look at a range of different indicators and sources of evidence to assess progress on a series of complex issues and outcomes across the National Park.

Many are hard to monitor accurately. We do not have a complete picture of the list of indicators and that list will continue to develop and evolve as different monitoring programmes and technologies develop over the years.

The logic model is however designed to provide the structure and framework through which we can collect and assess evidence and review progress towards the vision.

We have aimed to identify outcomes and indicators based on the principle that we need:

A reasonable and manageable number of sub-outcomes - which best match the overall future nature vision

A set of indicators which cover all elements and pathways - ie includes economic, policy and engagement elements as well as nature and habitats

Indicators which are replicable and affordable – with a baseline now (or soon) and a clear plan on how they will be reviewed in 5 and then 10 years

OUTCOME 1

The status of habitats is improved and the abundance of the species which live there is increased

SUB OUTCOMES	POSSIBLE INDICATORS
The condition, diversity and resilience of our woodland network is increased. Native woodland is expanding and regenerating.	<ul style="list-style-type: none"> % of woodland cover % of native woodland Area of new woodland created NFI Woodland Ecological Condition - Forest Research
Peatland condition is improved	<ul style="list-style-type: none"> Peatland condition map Hectares of peatland restored
The quality, health and resilience of our water network is improved	<ul style="list-style-type: none"> Water body status National Electrofishing Programme for Scotland
Herbivore pressure is reduced, allowing widespread natural recovery and expansion of native woodlands, and the protection of fragile peat soils	<ul style="list-style-type: none"> Number of sheep Average Deer Density Habitat impact assessments
Surveillance and management of Invasive species is increased	<ul style="list-style-type: none"> River catchments in green status for INNS surveillance and management Rhododendron mapping
Key species are thriving	<ul style="list-style-type: none"> Marine and terrestrial biodiversity indicator (NatureScot) National Park Citizen Science eDNA survey 10 indicator species
The condition of our key sites is improved	<ul style="list-style-type: none"> % SSSIs fav condition

OUTCOME 2

Economic and social conditions are developed which reward the valuation and active restoration of nature and deliver benefits for local communities, businesses (particularly land-use ones) and visitors

SUB OUTCOMES	POSSIBLE INDICATORS
Nature based land use funding is increased	<ul style="list-style-type: none"> ££ spent on nature restoration
Nature based tourism is increased	<ul style="list-style-type: none"> ££ nature based tourism Visitor feedback
New green jobs are created	<ul style="list-style-type: none"> Number of nature based jobs / apprenticeships
Natural Capital is increased	<ul style="list-style-type: none"> Value of Nat Cap
Ecosystem service delivery is increased	<ul style="list-style-type: none"> Tonnes CO2 seq
Public policy support for nature restoration has increased	<ul style="list-style-type: none"> Number of policies

OUTCOME 3

Habitats and species are connected on a landscape scale. People and communities feel connected to nature and empowered as part of a resilient, sustainable network

SUB OUTCOMES

The connection, resilience and quality of our Nature network is increasing

Communities within the Park and Visitors to it feel an informed and empowered part of our living network

POSSIBLE INDICATORS

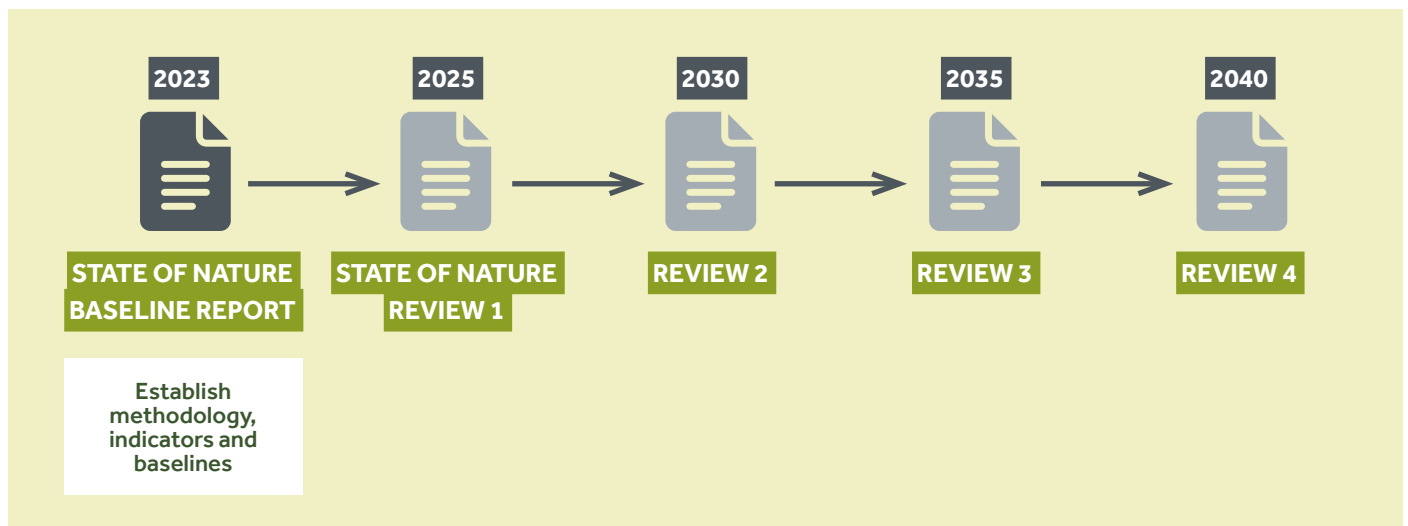
- Habitat opportunity map
- Nature Network map
- Land cover
- Biodiversity intactness (Natural History Museum)

- Volunteer numbers
- Feedback from education programmes
- Number of community projects supported
- Land owner attitude survey
- Visitor and Community Feedback

We are committed to a long-term and consistent structure to monitor and assess progress towards this Future Nature Vision. This year we will complete a review and agree the initial set of indicators which will form the basis of a dashboard and reporting structure.

Using this structure we will commission and report on our first baseline report by the end of 2023 which will establish in detail how the nature crisis is playing out in the National Park. This will further focus our delivery plans and the key indicators and targets which will drive out work in the coming National Park Partnership period.

Timeline



Taking the first step

We believe the Future Nature Route Map provides a handrail which can guide us to a vibrant, nature rich National Park, delivering multiple benefits for nature, people and society.

We have been excited and inspired by the growing strength of the partnership of organisations who have been involved in developing the Route Map.

But it is a first small step. The challenge now is to drive action with energy and purpose, monitor and assess progress with honesty and consistency and drive the large-scale policy changes and the delivery on the ground we need.

**It is time to pay nature back.
This needs to be our legacy.**



Highland Boundary Fault line - Balmaha



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