Net Zero, Energy and Transport Committee

23rd Meeting, 2022 (Session 6), Tuesday 6 September 2022

Evidence session on Scottish biodiversity strategy

Note by the clerk

Introduction

1. <u>At its meeting on 28 June 2022</u>, the Committee agreed to scrutinise biodiversity policy and the proposals for the Scottish Government's new biodiversity strategy.

Background

- 2. The Scottish Government is currently <u>consulting on a new biodiversity strategy</u> with a view to publishing this later in the year. The consultation opened on 20 June 2022 and will close on 12 September 2022.
- 3. The strategy will be the first substantive update of Scotland's overarching biodiversity policy since 2013.
- 4. According to the consultation paper, "the new biodiversity strategy is the starting point in a process which will lead into the development of rolling delivery plans and, through the introduction of a Natural Environment Bill, statutory nature restoration targets".

Evidence Session on 6 September 2022

- 5. At its meeting on 6 September 2022, the Committee will hear from two panels focusing on land and marine environments.
- 6. The Committee is keen to hear views on what will be required of the strategy in terms of addressing the twin challenges of the biodiversity crisis and net zero goals and in particular—
 - overall views on what is needed to address the biodiversity crisis;
 - reflections on the outcomes specified in the consultation;
 - legislative requirements to deliver the outcomes which might be needed; and
 - views on what else needs to happen to deliver the outcomes set out in the consultation document.

- 7. The Committee will hear from—
 - Prof Elisa Morgera, Professor of Global Environmental Law, University of Strathclyde and Director, One Ocean Hub;
 - Suzie Saunders, Policy Advocate, Woodland Trust Scotland;
 - Dr Paul Walton, Head of Habitats and Species, RSPB Scotland;
 - Bruce Wilson, Public Affairs Manager, Scottish Wildlife Trust;

and then from-

- Susan Davies, Chief Executive, Scottish Seabird Centre;
- Calum Duncan, Head of Conservation Scotland, Marine Conservation Society;
- Craig Macadam, Convener, Scottish Environment LINK Freshwater Group and Conservation Director, Buglife.
- 8. The Committee has received written evidence from the following-
 - <u>Woodland Trust Scotland</u> (Submission available in Annexe A)
 - <u>Scottish Wildlife Trust</u> (Submission available in Annexe B)
 - <u>RSPB Scotland</u> (Submission available in Annexe C)
 - <u>Marine Conservation Society</u> (Submission available in Annexe D)

Next steps

9. Further to its scrutiny of biodiversity policy, the Committee will present its conclusions and recommendations in a letter to the Scottish Government.

Clerks

Net Zero, Energy and Transport Committee

Annexe A

Woodland Trust Scotland submission to Net Zero, Energy and Transport Committee on Scottish Biodiversity Strategy consultation

26/08/2022

Woodland Trust Scotland (WTS) welcome the opportunity to give our views on the Scottish Biodiversity Strategy consultation.

The comments that follow are delivered on behalf of UK's leading woodland conservation charity. We have four main aims: ensuring no further loss of ancient woodland, restoring and improving woodland biodiversity, increasing new native woodland creation and increasing people's understanding and enjoyment of woodland.

We own over 1,000 sites across the UK, covering approximately 27,000 hectares (ha). In Scotland we own and care for around 60 sites covering in excess of 11,300ha which include the 5,000ha Glen Finglas estate and significant urban forestry holdings in Glenrothes and Livingston. We combine the promotion of public access with forestry, farming and conservation of the natural and cultural heritage. The Woodland Trust has 500,000 members and supporters.

This submission will provide brief key points in relation to the following from the Woodland Trust's perspective:

- overall views on what is needed to address the biodiversity crisis;
- reflections on the outcomes specified in the consultation;
- legislative requirements to deliver the outcomes which might be needed; and
- views on what else needs to happen to deliver the outcomes set out in the consultation document.

Overall views on what is needed to address the biodiversity crisis

This Scottish Biodiversity Strategy must set out a clear direction for addressing the nature emergency. The Woodland Trust Scotland expects the Scottish Government to set out a bold strategy for biodiversity restoration with a vision, clear targets and objectives to reverse the ongoing decline in Scotland's nature.

Native woodlands are widely recognised as our most biodiverse habitats – for example Scotland's Forestry Strategy states that these woods will deliver most for biodiversity. Similarly, Scotland's ancient woodlands are recognised as irreplaceable by NatureScot. Scotland's woodland habitats include globally important areas of rainforest and Caledonian pine forest. Therefore, we believe that to reverse nature

decline we must reverse the trend of decline in our native woodland habitats and the loss of healthy ancient and veteran trees. Protecting, restoring and expanding our existing native woodlands and trees gives us the opportunity to build back from these core sources of biodiversity.

Reflections on the outcomes specified in the consultation

The 2045 outcomes specified are too broad to do justice to a strategy that is supposed to tackle the nature emergency. For section 1 on Scotland's rural environment the 2045 outcomes do not adequately capture the changes that need to happen. These can be improved through adding more specific wording to the outcomes. We propose that in the final strategy the following is added related to Scotland's native woodlands:

• Scotland's native woodlands covers 10% of land area, with at least a quarter (>25%) of native woodland in 'good' ecological condition, with all the remaining considered to be in improving ecological condition.

• All ancient woodlands are in secure condition – meaning they are under active restoration to prevent further loss.

For section 3 on freshwater environment, the following 2045 outcome must be added in relation to riparian woodlands:

• A network of riparian woodland and healthy river systems present throughout Scotland, which delivers a range of benefits including flood protection, improved water quality and improvements for salmon fisheries, as well as helping to tackle the twin challenges of climate change and biodiversity loss.

For section 5 on towns and cities, where loss of ancient woodland is ongoing due to inappropriate development management and loss of trees close to where people live and work is ongoing, the final strategy outcomes must specify the following:

• No further loss of ancient woodland and veteran trees due to inappropriate development.

• Tree canopy cover increases equitably across Scotland's towns and cities.

The above are general points, which we will develop further in our consultation response to the Strategy.

Legislative requirements to deliver the outcomes which might be needed

Legislative requirements are useful to focus action, as we have seen with the statutory climate change emissions reduction targets. The Scottish Government is committed to an Environment Bill which is expected in 2023. It is expected that bill will set out statutory nature recovery targets – playing a similar function to the net zero targets – focussing funding, planning and action in government and across the wider society.

However, many of the outcomes can be delivered through a process of setting ambitious SMART targets. The Woodland Trust proposes the following targets and actions to deliver recovery in native woodland ecosystems – these are based on conservation evidence, and we believe are deliverable:

• Protect: the threats faced by our native woods must be addressed urgently. Ancient and veteran trees - our living legends - must be protected.

• Restore: 9% of all native woodlands to be in good condition by 2030, reaching 25% by 2045 and no ancient woodland to be in a critical condition by 2030.

• Expand: native woodland covers 7% of land area by 2030 and 10% by 2045.

We understand that the Scottish Government is also proposing to produce five-year delivery plans which will support the delivery of the strategy. Therefore the actions and targets we have set above are high level and designed for the key milestones of the strategy – 2030 and 2045 – and expect that the delivery plans would set out how these targets are reached. Robust delivery plans are not a substitute for clearer outcomes and high-level targets in the strategy itself.

Views on what else needs to happen to deliver the outcomes set out in the consultation document

To deliver recovery in native woodland habitats, the drivers of loss must be addressed. The main drivers of loss of native woodlands and trees are high deer numbers and their impacts, overgrazing by sheep in parts of Scotland, invasive nonnative species such as rhododendron ponticum, and inappropriate development which chips away at trees and woodlands. Some of these drivers of loss are complex to address, such as sustainable deer management to ensure that deer are not impacting woodland and farming interests negatively. Similarly, another key driver of decline for native woodlands is the invasive plant rhododendron ponticum, an issue particularly for Scotland's rainforest along the west coast.

More broadly, funding for nature restoration has always been low in Scotland, compared to the scale of the challenge. The Green Finance Institute has estimated the investment gap for nature restoration in Scotland at around £20 billion over the next decade. While not all this can come from public funding, checks must be put in place to ensure that any non-public investment is responsible. It is also worth mentioning that in some cases, existing public funding could go further if it was better targeted: for example, funding should be phased out from deer fencing to more active deer management to reduce populations.

There is a clear need for public policies to be coherent. For example, the National Planning Framework and local planning policies need to be clear and unequivocal when it comes to development management that results in loss of ancient woodland. These policies should be watertight to guide development in areas that do not result in declines of irreplaceable habitats.

In summary, additional elements that would deliver better outcomes are clear targets and actions, addressing the drivers of loss of biodiversity, funding (more but also better targeted existing funding) and policy coherence.

Briefing - Key asks for the Scottish Biodiversity Strategy

Summary

What Woodland Trust Scotland wants to see in the Scottish Biodiversity Strategy:

- Targets for native woodland restoration
- Increased targets for native woodland expansion
- Whole ecosystem restoration of Scotland's rainforest
- A strategy and targets for Rhododendron ponticum eradication
- Action on reducing deer overgrazing impacts
- Ancient and veteran trees recognised and protected for their biodiversity value

Introduction

This Scottish Biodiversity Strategy must set out a clear direction for addressing the nature emergency. The Woodland Trust Scotland expects the Scottish Government to set out a bold strategy for biodiversity restoration with a vision, clear targets and objectives to reverse the ongoing decline in Scotland's nature. Native woodlands are widely recognised as our most biodiverse habitats and include globally important areas of rainforest and Caledonian pine forest. Therefore, we believe that to reverse nature decline we must reverse the trend of decline in our native woodland habitats. Protecting, restoring and expanding our existing native woodlands gives us the opportunity to build back from these core sources of biodiversity. This briefing sets out the Woodland Trust Scotland's key actions to make the most of the benefits that our native woods can bring for Scotland's nature recovery.

Target for native woodland restoration, including the restoration of all Plantations on Ancient Woodland Sites

To reverse decline in our native woodlands, the Scottish Government must first set the right policies and funding mechanisms to protect and restore these. Woodland restoration and protection need to be given just as much focus as woodland expansion. Existing native woodland fragments are core sites for biodiversity and must be well managed. According to the Native Woodland Survey for Scotland overgrazing by deer and infestation with Rhododendron ponticum are the key threats to native woodland condition which supress the biodiversity value of these woodlands, affect their resilience and that of the species that depend on them. The recent National Forestry Inventory found that only 3% of Scotland's native woods are in favourable condition. Many native woods were also underplanted or replaced with conifers – a practice that no longer takes place – and these have resulted in Plantations on Ancient Woodland Sites or PAWS. Scotland has 70,500ha of PAWS sites which cover

0.9% of Scotland's land. These sites still retain ecological communities associated with ancient woodlands and should be gradually restored. The Forestry Strategy for Scotland recognises that suitably managed native woodlands, ancient woodland, and restored PAWS can contribute the most to biodiversity. To focus grants and action on native woodland restoration the Woodland Trust Scotland has developed the following targets for PAWS and native woodland restoration:

• By 2030 native woodland in 'good' ecological condition has trebled (from 3% to 9%), with most native woodland considered to be improving

- By 2045 at least a quarter (>25%) of native woodland will be in 'good' ecological condition, with all the remaining considered to be improving
- By 2030 no ancient woodland will be in critical condition
- By 2045 all ancient woodland will be in a secure condition.

In addition to the targets set above, the Scottish Government must also deliver on its commitment to develop a Register of Ancient Woodlands and target funding to the protection and restoration of these habitats.

Increased targets for native woodland expansion – building back from existing native woodland sites

Native woodland is estimated to cover around 6% of Scotland's land, according to the National Forest Inventory. Many remaining native woodland sites exist in isolated fragments, but some are part of well-connected havens for biodiversity. For example, Scotland's rainforest is home to lichen and bryophyte species only found in Scotland, and ancient woodlands have been recognised by Nature Scot as irreplaceable for their biodiversity and cultural value. Since 2015 Scotland has had a target for native woodland expansion for 3,000 to 5,000ha per annum. In 2021 that target was replaced with a target for at least 4,000ha per annum and there has been a commitment to review this new target as part of the new Biodiversity Strategy. Despite some progress, native woodland cover remains low and actual annual creation has not significantly increased in recent years despite increases to the overall tree cover target for Scotland (see table in Annex 1 with the overall tree planting targets and actual native woodland delivered).

In a country as nature depleted as Scotland, expanding native woodland should be a priority. This is because these sites are core areas of biodiversity that we can build back from. To help nature's recovery and maximise long-term carbon storage, Woodland Trust Scotland is calling for an increased native woodland expansion target as follows:

- By 2030, native woodland cover has reached 7% of land cover
- By 2045, native woodland cover has reached 10% of land cover

Woodland expansion is a long-term goal, and so we want to see the Scottish Government take a long-term view and set an ambition that native woodland cover will double in the next 60 years, so from the current 6% to 12% of the land area. This expansion would be strategically targeted to areas where most ecological benefits would be delivered: riparian zones, montane woodland, expansion of Scotland's rainforest and connecting native woodland fragments.

We want the proposed targets above to be delivered according to the following conservation principles:

• Native woodland expansion should deliver habitat connectivity, building back from existing native woodland. Decades of habitat network modelling demonstrates that new woodland which connects and expands existing native and ancient woodland is likely to be most beneficial to biodiversity, allowing species to disperse through landscapes, colonise new habitat, and be able to better adapt to changes and pressures. Expanding native woodland networks from existing areas of woodland is the best way to expand native woodland for biodiversity recovery and helps deliver the Government's Nature Networks commitment.

• Woodland expansion targets should go beyond the extent of woodlands, seeking to address the needs of indicator and target wildlife species and communities, ensuring that they have sufficient quality habitat and resources to thrive, whilst acknowledging there are likely to be long time-lags between woodland expansion and biodiversity response

• Any new native woodland expansion should create a diverse structure to support a variety of species. We should seek to create a diverse structure of dense groves, open glades, and open-wooded habitats which blur the boundaries in all new native woodland creation projects. A varied woodland structure will provide more habitat niches and support a greater variety of species as new wooded ecosystems develop.

• Native woodland expansion should be part of a mosaic of habitats contributing to integrated land use and the restoration of functioning ecosystems. New native woodland should not negatively impact existing priority habitats. Small patches of semi-natural habitats (many of which are also in poor condition) can be restored and integrated within native woodland creation designs, creating diverse habitat mosaics, and restoring naturally functioning ecosystems. In upland areas with larger areas of priority habitat, introducing tree and scrub components to create richer habitat mosaics may facilitate the restoration of the open priority habitat.

• Woodland needs to be given the opportunity to expand through natural colonisation. Woodland expansion is not just about tree planting. We need to leave more space for natural colonisation, where seed is given the chance to spread outwards from existing woodlands. Trees establishing in this way are likely to be better adapted to the local context and more resilient in the face of climate change. The pattern of tree growth will also be more variable, with some dense clumps and some more widely spaced/scattered trees, contributing to structural complexity. Amongst other actions, this will require a concerted effort towards managing wild deer populations to sustainable levels.

• Restore natural processes including decaying wood, natural hydrology, and large herbivores at sustainable densities to establish functioning native woodland ecosystems.

Whole ecosystem restoration on Scotland's rainforest through a dedicated Rainforest Restoration Fund

Scotland's rainforest has been recognised as a nature-based solution to the climate emergency and the Scottish Government has stated that the rainforest will be restored and expanded. We want to see the rainforest restored part of the delivery of the Scottish Biodiversity Strategy. As the best way to deliver this The Woodland Trust, Plantlife, RSPB, WWF are proposing a dedicated Scotland's Rainforest Restoration Fund to secure the future of the rainforest. The cost of restoration has been estimated at £500m. This fund is a targeted, multi-year investment programme aimed at the whole ecosystem restoration of this globally important habitat. The immediate aims for the restoration of the rainforest are to:

• Clear invasive Rhododendron ponticum from 134,000ha of the west coast including the 30,000ha of core rainforest sites, a further 24,000ha cleared in a buffer zone around existing woodland areas, and an additional 80,500 ha of other habitat cleared to ensure catchment scale eradication to prevents re-invasion. This can deliver biodiversity benefits and create local jobs as rhododendron control is labour intensive.

• Develop a sustainable grazing management regime over a 25,500ha area in this zone to allow the rainforest to regenerate naturally, which will enable it to sequester more carbon and ensure the long-term survival of its biodiversity.

• Expand and connect existing areas of core rainforest to double its area, providing greater resilience to other threats such as ash dieback, nitrogen pollution and climate change.

A strategy and targets for Rhododendron ponticum eradication

Invasive non-native species, like Rhododendron ponticum, are key drivers of nature loss. Rhododendron ponticum is one of the key threats to Scotland's native woods and it is a particular problem on the west coast affecting Scotland's rainforest. Rhododendron chokes native woodlands and shades out plant species associated with the native woodland habitat. Rhododendron eradication must be done at catchment-scale otherwise there is the risk that the plant reinvades previously cleared areas. The Scottish Government needs to:

- Set an overall aim to eradicate Rhododendron ponticum and set a target for this in the upcoming Biodiversity Strategy
- Commit to a strategy for eradicating Rhododendron ponticum
- At the same time, the impact of other invasive non-native species on Scotland's nature should also be acknowledge in the strategy and the delivery plans must set out how these will be dealt with.

Action on reducing deer overgrazing impacts to allow our native woods to thrive

Many of the actions set out above are being hampered by Scotland's increasing deer populations. These are now out of line with Scottish Government's ambition for peatland restoration and woodland expansion. The solution to solving Scotland's deer problem is provided by the implementation of the Deer Working Group (DWG) Report recommendations. We want to see this Scottish Biodiversity Strategy set out a clear direction for deer management in Scotland that will allow nature to thrive again. This Strategy and the delivery plans that will follow from this provide the opportunity to take forward the Deer Working Group recommendations that do not require legislation and give Nature Scot a renewed focus on urgently reducing deer impacts across Scotland. Action on reducing overgrazing impacts is clearly linked with the restoration and expansion targets set above and should focus on both upland and lowland areas. Furthermore, in the process of the DWG implementation, the Scottish Government should consider if a statutory deer management system is more appropriate than the current voluntary one.

Ancient and veteran trees are recognised and protected for their biodiversity value

Ancient and veteran trees are important for biodiversity; we consider that each tree is an ecosystem, providing a range of habitats for wildlife, plants and fungi that depend on conditions found in and around these trees. These trees also have a vital role as long-term carbon stores, especially in the soil around and beneath them. Scotland's ancient and veteran tree population is of national and international conservation significance – some of these trees are recorded onto an inventory of Trees of Special National Importance. Some of these trees are found within woodlands, and some in the wider landscape such as urban areas and farmland. Woodland Trust Scotland wants to see:

• These trees recognised and protected for their biodiversity value in the Biodiversity Strategy. The Strategy can highlight existing resources such as the Ancient Tree Inventory which also hosts the record of Scotland's Trees of Special National Importance. The Inventory needs to be added to, helping ensure that ancient and veteran trees are mapped, protected from impacts, and incorporated into woodland expansion proposals.

• Future farm payments which support enhanced protection and management of these trees, as many ancient and veteran trees exist on farmland and in hedgerows.

Year	Tree planting	Native woodland creation	Native woodland creation delivered			
	target (hectares)	target (hectares)				
			(hectares)**			
2015-16*	10,000	3,000-5,000	1,093			
2016-17	10,000	3,000-5,000	1,743			
2017-18	10,000	3,000-5,000	3,978			
2018-19	10,000	3,000-5,000	3,211			
2019-20	10,000	3,000-5,000	3,857			

Annex 1

NZET/S6/22/23/1

2020-21	12,000	3,000-5,000	3,989	
2021-22	13,500	4,000	4,360	
2022-23	15,000	TBD	N/A	
2023-24	16,500	TBD	N/A	
2024-25	18,000	TBD	N/A	

* Chosen because it is the year the 'Scottish Biodiversity Strategy: It's in Your Hands' was launched setting a target for native woodland creation for 3,000-5,000ha/annum. In 2015-16 the current Forestry Grant Schemes were also launched.

** Based on approved grants for the following options within the Forestry Grant Scheme: native broadleaves, native Scots pine, native upland birch, native broadleaves in northern & western isles, and native low density.

Annexe B

Scottish Wildlife Trust submission to Net Zero, Energy and Transport Committee on Scottish Biodiversity Strategy consultation

The Committee would like to hear from the Scottish Wildlife Trust to discuss—

Overall views on what is needed to address the biodiversity crisis

In 2010 the international Convention on Biological Diversity set out a 10-year plan, with 20 targets – known as the Aichi targets – for protecting and conserving nature. In Scotland we have failed to meet 11 of these targets. The previous Scottish Biodiversity Strategy failed to galvanise efforts for the protection and restoration of biodiversity. Scotland continues to rate near the bottom of the Global Biodiversity Intactness Index and the State of Nature report showed that 1 in 9 species are under threat of extinction in Scotland.

In the UN Decade of Ecosystem Restoration we need greater drive towards transformative change to conserve and restore nature to the level necessary to support a sustainable society in Scotland. Current societal and economic normalities are preventing sustainable use of natural resources and ecosystem services, resulting in further decline in biodiversity and our quality of life.

The five drivers of biodiversity loss described by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) should be a core focus of the Scottish Biodiversity Strategy. These drivers are:

- 1. Land and sea use change
- 2. Direct exploitation of animals and plants for food and materials
- 3. Climate change
- 4. Pollution
- 5. Invasive non-native species

In addition to these direct drivers of biodiversity loss, there are also indirect drivers such as peoples' disconnect with nature and consequent lack of recognition for the value and importance of nature. All these drivers must be tackled by the new strategy.

Scotland should learn from the experience of other countries and draw on the many National Biodiversity Strategies and Action Plans that have been developed elsewhere. A good example is that in New Zealand - Scotland's partner in the Wellbeing Economy Governments partnership - where the Biodiversity Strategy 2020 includes: • Analysis of the problems nature faces including the 5 drivers of biodiversity loss and the key gaps and issues with the current system and management approach.

• Emphasis on the connection between nature and people and Naturebased Solutions to health, economy and wellbeing.

• Input from the public and experts and a 160-page companion report on biodiversity including an overview of the state, trends and pressures and what was learned from the previous strategy.

• Consideration of opportunities to improve the way we work and that the challenges we face with the current biodiversity system, recognition that nature is at the heart of the economy and the need to work in partnership, commit to action, create connections and be flexible.

• An implementation framework with 13 objectives, each with measurable and time-bound goals for 2025, 2030 and 2050. The approach is built on collaboration, being flexible and adaptive over time and transparent monitoring.

We can achieve considerable positive changes through rapid and improved deployment of policy instruments and collective action. Biodiversity needs to be embedded across government, ensuring policy coherence and considering the synergies and trade-offs between societal goals and alternative pathways. The public sector must play a strong leadership role in tackling the biodiversity crisis, intertwined with the approach to mitigating and adapting to climate change. Sufficient funding and resources are needed for necessary changes and reporting to ensure this is progressed with the necessary urgency.

The National Strategy for Economic Transformation needs to recognise that our economy is embedded in nature. This strategy as it stands clearly identifies the need to transform our economy through investment in nature-based solutions, shift to more sustainable patterns of production and consumption and live within the sustainable limits of our planet. The conclusion is that this transformation is not only a necessity, but it will also create new opportunities for Scotland to prosper. We must ensure that the National Strategy for Economic Transformation and Scottish Biodiversity Strategy align.

Meaningful, legally binding biodiversity targets with associated indicators are needed to assess the progress made to achieving the vision. It is essential that these targets are decided upon and published as soon as possible to ensure progress is made at pace. This should align with those put forward in the proposed EU Nature Restoration Law if Scotland is to ensure they maintain or exceed environmental standards as stated in the EU Continuity Bill.

Around 75% of Scotland's land is used for agriculture. The ongoing land use change and intensification of farming is responsible for a high proportion of biodiversity loss. The Scottish government spends more than half a billion pounds on farm funding every year. Yet, broadly, it is failing to help farmers and crofters to protect and restore Scotland's nature or tackle climate change. If we are to halt and reverse this decline, we need to fully support farmers to deliver public goods through climate and biodiversity benefits. To do so we need to replace the decades-old farm funding system with one that works for nature, climate and people, ensure at least three quarters of public spending on farming supports methods that restore nature and tackle climate change and support all farmers and crofters in the transition to sustainable farming. The changes made need to be connected across the environment at a landscape scale through progressing the Rural Land Use Partnerships and developing nature networks which link different habitats and naturebased solutions allowing species to move through a landscape, increasing their resilience.

Nature networks need to be progressed urgently and decisively in Scotland as they are a critical factor in our response to the climate and nature emergency. The Scottish Wildlife Trust believes there are six priority areas for action if Nature Networks are to be taken forward in an effective and timely manner in Scotland: i. Leadership – There is an important role and opportunity for Nature Scot to lead on strategic thinking, championing, coordination and successful role out of Nature Networks.

ii. National coordination – Biodiversity does not respect local boundaries. National level coordination, dovetailed with local bottom-up approaches will ensure all opportunities are realised.

iii. Guidance for local authorities - The current draft National Planning Framework 4 requires the creation of Nature Networks. However, there is a clear gap between this expectation and the guidance made available to planning authorities.

iv. Opportunity mapping should be used to create local Nature Networks and and identify areas that should be prioritised for biodiversity. The Edinburgh Nature Network used a tried and tested blueprint that can be rolled out nationwide and embeds community engagement at the heart of the process.

v. Set a reporting requirement - The draft National Planning Framework 4 omits any mention of reporting duties in relation to Nature Networks. It is important to make sure planning authorities are clear about where and when different elements of the Nature Network are to be completed and where they are to be submitted for review.

vi. Establish new funding streams - Creating local Nature Networks would require additional investment. Our estimates based on the experience with the Edinburgh Nature Network indicate that c. £1.6m p.a. for two years would provide enough funding to allow the other 31 authorities to get their Nature Network to the same position as that in Edinburgh. This funding is needed urgently and should be provided from central funds by Scottish Government. Additional funding mechanisms are available – such as the Infrastructure Levy – to ensure the next phase of development can be funded and that private sector investment can be unlocked.

Restoration of our rivers and riparian habitats represents a huge opportunity to meet climate and nature targets and provide a myriad of other benefits range from health and well-being improvements nature-based water management. The Riverwoods initiative provides a platform to catalyse a joined-up network of nature restoration projects along a river network. Rivers can act as back bones for nature networks, connecting habitats over a large area, allowing species to move and adapt, increasing their resilience. Protecting riverbanks and supporting regeneration of native river woodlands provides a defined focus that could galvanise the local communities and landowners into actions to improve biodiversity. The changes can be seen in examples such as those on the Tweed Valley and offer transparent investment opportunities.

Nature-based solutions offer a means to make positive changes for biodiversity while also helping deal with local and wider societal challenges, but we must ensure that the interventions meet the International Union for the Conservation of Nature Global Standard for Nature-based Solutions to avoid misuse of the term. There are varied options of nature-based solutions across different environments from urban to marine, which can offer value for money and reduce the inequality in access to the benefits of nature. Optimising these interventions for biodiversity will have ongoing benefits for nature, and for people, that will only improve as they mature. Nature -based solutions should form a significant part of nature networks and be prioritised when taking action to mitigate and adapt to climate change impacts across Scotland.

Financing nature restoration will need a mixture of public and private investment through initiatives such as those proposed in the £1 Billion Challenge. The Trust welcomes the Nature Restoration Fund; however, the scale of the biodiversity crisis requires more than just public funding and a greater effort is needed to encourage private investment in nature restoration. The Green Finance Institute estimates of £15 - £20 billion to restore Scotland's biodiversity indicates the scale of this challenge.

Invasive non-native species (INNS) prevention and eradication needs greater investment. INNS are a significant threat to biodiversity, with over 900 non-native species in Scotland to date. While many of these are not invasive, those that are cost the Scottish economy £246 million a year. To ensure further spread and prevent new arrivals more investment is needed in monitoring, biosecurity and eradication.

Effective marine planning is needed to manage increasing demand for space and resources in the marine environment, and halt declining health of marine ecosystems. If applied correctly, the introduction of a plan-led system of marine planning will help avoid conflict, identify areas for appropriate development, manage resources sustainably and, most crucially, protect and enhance biodiversity.

Reflections on the outcomes specified in the consultation

It is critical that our response to biodiversity loss and climate change converge and align so that they may be dealt with holistically. The two crises are intertwined and so our response must be too. There are many opportunities for common and integrated approaches using nature-based solutions that tackle the crises as one. The Intergovernmental Panel on Climate Change's (IPCC) latest climate report highlights that safeguarding and strengthening nature is key to a liveable future and the Dasgupta Review concludes that "our economies, livelihoods and well-being all depend on our most precious asset: Nature", highlighting that there is great urgency needed to increase protection and restoration of biodiversity for a sustainable future. The Trust are reassured to see that there has been reflection on why previous strategies have not been successful and in particular that "What we have come to understand is that key shortcomings relating to governance and accountability structures and mechanisms for mainstreaming biodiversity into all areas of policy, including economic policy making, have undermined our ambitions". We welcome the commitments detailed in the Strategy to "Spatially identified Nature Networks which are widespread and embedded in land use planning and management" by 2030 and that "On land, Nature Networks at landscape scale demonstrate widespread increasing resilience and health of species and habitats and increases in carbon sequestered across ecosystems" by 2045.

We very much welcome reference to "An independent body (to be determined) to monitor and report on progress". Coupled with the recognition of "An improved monitoring framework and suite of indicators is in place on biodiversity and ecosystem health" and that "Effective monitoring supports the delivery of the statutory targets". The Trust views this as a vital new development on previous approaches that could forward marked change for the benefit of biodiversity if well resourced.

While there are many commendable aspirations the current outcomes presented in the strategy are lacking considerable detail and clarity. To put it bluntly, this is currently a vision document, and we need to see delivery mechanisms in order to assess its merits as a strategy.

If we are to make meaningful positive changes to biodiversity in Scotland, we need more information on what an increase in biodiversity should look like. More detail on overall biodiversity goals and goals for each "environment" - linked closely with the promised delivery plans - would ensure sufficient meaningful improvements in biodiversity are realised across Scotland.

We would recommend the following amendments to the outcomes:

- "substantially" is qualified i.e., from 1950s baseline
- "regenerated" is defined in a glossary of terms

• The leaders pledge for nature is explicitly referenced i.e., reverse biodiversity loss by 2030. This would provide context and a logical steppingstone to the 2050 goal

• There should be more explicit reference to the IPBES drivers of biodiversity lossand how these will be addressed

- There should be explicit mention of the importance of targets
- There should be detailed description of delivery strategies
- There should be mention of the importance of leadership

These outcomes need to be underpinned by legally binding targets and that can be supported by robust data. Much of the data needed to understand the state of biodiversity is available but we need to continue to fully support and resource data collection and monitoring.

We have made suggestions to the original based on this below:

By 2045 we will have substantially restored and regenerated biodiversity, so that at the very least it is equivalent to 1950s baselines, across our land freshwater and seas. Our natural environment of plants, animals, insects, aquatic life and other species will be richly diverse, thriving, resilient and adapting to climate change. To realise this vision, we will implement legally binding targets aimed at addressing

the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services five drivers of biodiversity loss coupled with detailed delivery strategies. A key stage in realising this vision will be reversing biodiversity loss by 2030.

Everyone across Government, business and society needs to play their part and this will require leadership, particularly from government, to mainstream biodiversity thorough all of our activities. Starting from now there will be a concerted effort to make sure people understand the benefits from and importance of biodiversity and are active in their role in the stewardship of nature in Scotland for future generations.

Legislative requirements to deliver the outcomes which might be needed

Biodiversity, like climate change, needs to be a central thread across government if we are to effectively halt and reverse its decline. Biodiversity needs to be considered throughout all policy areas, with integration of a biodiversity duty across all government sectors. Monitoring and reporting of progress made by each policy department, scrutinised by Environmental Standards Scotland.

In order to monitor and report on the progress made we need legally binding nature (biodiversity) restoration targets that are closely linked to those laid out by the EU in the proposed Nature Restoration Law. The Natural Environment Bill, promised in the Programme for Government needs to be progressed with urgency, embedding the key legislative changes and statutory targets needed to restore and protect nature.

National Planning Framework 4 draft requires creation of nature networks – this needs to be fully supported with resources and skills. The language in the National Planning Framework 4 needs greater strength around the environment, nature and climate. In short there are too many "shoulds" around environmental obligations and no "musts". We are in a declared emergency and the tone and expectations from Government must reflect this. If this needs secondary legislation to be brought forward then this must be done.

Introduction of a new Agriculture Bill needs to ensure changes to current farming practices that will halt and reverse the decline in biodiversity. The changes need to fully support farmers to deliver public goods through climate and biodiversity benefits. To do so we need to replace the decades-old farm funding system with one that works for nature, climate and people, ensure at least three quarters of public spending on farming supports methods that restore nature, and tackle climate change and support all farmers and crofters in the transition to sustainable farming. Licencing of grouse moors and implementing the recommendations of the Deer

Working Group to ensure sustainable use of Scotland's uplands, providing ecosystems service for the local community and wider society.

We need to transform our marine environment. The inclusion of Highly Protected Marine Areas in the Programme for Government and confirmation of the intention to protect 10% of Scotland's seas from damaging activities is welcome. However, current legislation only allows for the designation of protected areas for specific features (habitats or species), rather than protecting everything within a specified area. The intention is that the Natural Environment Bill will address this legislative gap, which is another reason why this Bill should be brought forward without delay. Urgent reform of aquaculture regulation is needed to address the environmental impact of existing salmon farms. We also need to see more progress on new policies and, where necessary, legislation to support a fair transition to a modern, climate and nature positive fishing industry.

Views on what else needs to happen to deliver the outcomes set out in the consultation document.

Improving data availability continues to be an area in need of investment. There are a number of data sources currently available, but support of their ongoing management and continued collection of data is essential to ensure we fully understand biodiversity conditions. Support and development of the Scottish Biodiversity Information Forum, as previously promised by Scottish Government in the 2020 Challenge for Scotland's Biodiversity, would greatly improve the availability of good quality biodiversity data.

Investment in skills and knowledge across sectors to ensure effective implementation of nature restoration, from on the ground delivery to green financing initiatives.

The Trust looks forward to discussion around how to achieve "Regular and highquality outdoor learning in – and about – nature from 3-18 years has a key role to play in increasing climate-nature literacy, positive behaviours and an update in the career pathways that will be needed to deliver a nature rich Scotland". More also needs to be done to demonstrate the benefits of biodiversity to older generations who currently have the power and influence to make changes that will benefit future generations.

Clearer guidance and regulation for the business community. The business community is relatively aware of its responsibilities, risks and dependencies in relation to climate change but the same can't be said for biodiversity. More should be done to support organisations such as the Scottish Forum on Natural Capital. The Scottish Government needs to articulate more clearly what the forthcoming Natural Environment Bill will mean for business.

Transparency and community participation. To improve understanding of the biodiversity crisis, what needs done to tackle it and to make sure those taking part in the consultation process are fully engaged we need a fully open governance approach to the forthcoming delivery strategies. We need to see a transparent, accountable and participation focused approach that fosters democratic decisions. Nature Networks, designed using the Ecological coherence protocol (referenced above) will also help achieve this.

Annexe C

RSPB Scotland submission to the Net Zero, Energy and Transport Committee

25/08/2022

Scotland's Biodiversity Strategy to 2045.

Summary

To create the step change in action that nature needs, the Scottish Biodiversity Strategy (SBS) must:

- Be renamed 'Scotland's Nature Emergency Strategy' to communicate its significance and the urgency required to all parts of the Scottish Government
- Include commitments to key actions for achieving the outcomes, with detail to be set out in delivery plans, including:
 - A national programme of ecosystem restoration across Scotland
 - A national programme of species recovery
- Set clear targets alongside the high-level outcomes
- Include actions to improve our protected nature sites

Introduction

RSPB Scotland is part of the RSPB, the largest nature conservation charity in Europe, taking action for nature with a bird's eye view. Together with our partners, we protect threatened birds and wildlife so our towns, coast and countryside will teem with life once again. We play a leading role in BirdLife International, a worldwide partnership of nature conservation organisations.

The potential for positive progress from the Scottish Government has never been higher, with unprecedented environmental ambition from elected officials. The establishment of the £65m Nature Restoration Fund, Scotland's largest ever fund focused on nature restoration, is particularly welcome. It was therefore surprising and deeply disappointing that the consultation for Scotland's next Biodiversity Strategy - which will set the ambition for nature right up to 2045 - fails to set out meaningful actions for nature's recovery.

Nature is being lost around the world faster than ever in human history. Scotland, a country world-famous for its wildlife and landscapes, was recently found to be one of the most nature-depleted countries in the world. Whilst much of the loss of nature is historical, we are still losing nature now: since 1970 around half of our species have declined, with 1 in 9 at risk of national extinction.

This nature crisis, alongside the twin climate crisis, poses an existential threat: unless we act now, the wellbeing and livelihoods of future generations hang in the balance.

Saving nature is also a moral imperative, we cannot just stand by and watch our wildlife vanish. This strategy should be a key vehicle for transformative action. Sadly, it falls short of being the Nature Emergency Strategy that we need at this critical moment. Whilst it does an excellent job at defining the problem, it fails to set clear targets, provide an adequate focus on species recovery and commit to a comprehensive programme of ecosystem restoration. Without addressing these issues, this strategy will not move us on from the existing Biodiversity Strategy or the 2019 Statement of Intent on Biodiversity. We do not feel confident that in its current format, it will drive the change needed for nature by 2045, leading to potentially catastrophic environmental consequences.

The draft strategy includes the best summary of the state of Scotland's nature that we have ever seen from the Scottish Government, accompanied by a robust evidence base. The barriers and reasons for missed biodiversity targets in the past are comprehensively and honestly set out. This is encouraging and creates a shared understanding of the key challenges and drivers that all decision-makers, sectors and wider society can mobilise behind.

The draft strategy thus accurately depicts where we are and where we need to get to. It is therefore all the more disappointing that when it comes to how we get there, it falls down. The foundations are there and some key changes will transform this from another biodiversity strategy into a Nature Emergency Strategy that can really drive action.

Headline actions

To create consistency and continuity across the delivery plans, the SBS should commit to two headline actions that would run from now until 2045:

- A national pipeline of ecosystem restoration programmes operating at scale
- A national programme of species recovery targeted at threatened species and higher taxa

Species matter

Species are the building blocks of living systems. Despite historic losses, Scotland still hosts internationally important populations of wildlife. This has been terrifyingly brought home by the unprecedented bird flu outbreak, which has hammered our seabirds. Scotland holds 60% of the entire world population of great skuas (bonxies), but these birds have undergone massive and sudden declines. Our species like these skuas, our gannets and puffins, our threatened wildflowers, bumblebees, and fish, deserve targeted actions for recovery, to ensure future generations can enjoy and benefit from them.

We believe that the profile of species and species recovery is currently too low in the draft strategy, and not sufficiently integrated. This risks action that fails to measurably and comprehensively deliver directly for biodiversity, to fulfil Scotland's international responsibilities regarding species (e.g. Eurasian curlew, seabirds). Species need to be seen as key flagships for wider ecosystems, generating buy-in, public resonance and targets for operational activities and funding. There must be a commitment in the

strategy to a National Programme of Species Recovery targeted at threatened species and higher taxa.

Ecosystem recovery

The next gap in the strategy is ecosystem restoration. Scotland's rivers, kelp beds, machairs, rainforests and other critical ecosystems are key national assets. They are homes to some of our most iconic wildlife, and yet are degraded and fragmented. We know from some genuinely excellent work on peatlands that the Scottish Government can design, fund and deliver targeted ecosystem restoration. We should tailor and extend that model to other key ecosystems in a phased, rolling programme of ecosystem restoration.

The Scottish Government's Infrastructure Investment Plan recognises the enormous value of the ecosystem services that these natural assets provide (and the benefits of investing in them) but it must be for the biodiversity strategy to provide the detailed steer for prioritising that investment. If the biodiversity strategy doesn't provide this, there will be a huge gap in our ability to invest in the essential infrastructure needed for Scotland's future success.

The current approach in the draft identifies 'Broad landscape types of land and sea'. This does help identify the wider more dispersed actions that will be needed across these land-and sea-scapes, such as reforming agricultural payments, but further clarity is needed to properly target action where it is most needed. We suggest that within these landscape types the strategy needs to specify priority ecosystems. These should be prioritised for properly resourced, targeted restoration, via an ecosystem restoration pipeline of projects.

Suggested Ecosystems for Restoration Programmes:

- Peatlands
- Rainforest
- Moorlands
- Islands (seabirds and other specialist flora and fauna)
- Caledonian pinewoods
- Ancient Woodlands (comprising Ancient Semi-Natural Woodlands and Plantations on Ancient Woodland Sites)
- Kelp beds and priority continental shelf benthic communities
- Rivers
- Lochs and ponds
- Grasslands, machair and extensive cattle systems
- Estuaries and Saltmarsh
- Coastal seabed and Seagrass
- Pelagic seas
- Deep water marine communities

Targets for nature

The lack of SMART targets and indicators alongside the proposed outcomes is a major failing. Targets are key for providing a clear thread and framework that can be implemented via each respective delivery plan. Targets are also key for helping measure progress towards the milestones and vision set out in the strategy. As drafted, it will be difficult to determine progress towards many of the outcomes.

In comparison, the EU Biodiversity Strategy 2030 sets out commitments to a number of key targets to 2030, for example to protect at least 30% and strictly protect 10% of land and sea across the EU, to restore at least 25,000km of rivers to be restored to free-flowing, and to ensure at least 10% of agricultural area is under high-diversity features. It also commits to the EU Restoration Law, which has since been brought forward.

The Scottish Government has committed to a Natural Environment Bill, with nature 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...expected to include outcome targets that accommodate species abundance, distribution & extinction risk, and habitat quality and extent. The targets will reflect the challenges of a changing climate."

We expected a clear link to be made in this SBS to the forthcoming Bill and for more detail about the promised targets. This critical context is absent. We do support the two key milestones that Ministers have defined to deliver the strategy, which match the above commitment to nature restoration targets. We suggest that these should be set out in more detail – either as part of the vision statement, or as an accompanying overarching objectives section. It should be explained that these milestones will be incorporated into a Bill. It is important for there to be clear readthrough between the SBS and the Bill to ensure that a comprehensive package that can drive real impact.

We also suggest that the strategy includes an overall target for area-based restoration measures on 20% of Scotland's land and sea area by 2030, to align with the proposed EU Restoration Law.

Protected areas

The draft even fails to account for our very best natural treasure, our network of protected wildlife areas. These are our very best places for wildlife and we need them to be actively cared for, monitored and managed, and their benefits extended across landscapes through nature networks. Yet Protected Areas hardly feature in the draft strategy and, worryingly, the Scottish Government's commitment to protect at least 30% of Scotland's land and sea by 2030 ('30 by 30') isn't even mentioned, despite that target being a key deliverable of the government's approach to nature's recovery.

Whilst we understand that detailed plans for delivering '30 by 30' are currently being developed by NatureScot and will be set out in a separate strategy, we are surprised at the total lack of mention in this consultation document. '30 by 30' is a key policy

mechanism that should be coordinated with all the other outcomes suggested in this strategy.

In addition, there are more generic actions needed to improve and maintain protected areas across Scotland that must form a key part of Scotland's biodiversity response. The protected area network is a cornerstone of biodiversity conservation in Scotland but not all protected areas are currently in good condition and steps are needed to secure monitoring and management for all sites: this is reflected in the draft strategy.

Conclusion

Scotland can be a leader in restoring nature. This strategy is a chance to make that a reality, but that requires turning ambition into action. We strongly suggest that unless the above recommendations are integrated into the strategy, then it will not result in any benefits for nature or move us along any further than existing strategies. If the above recommendations are included in the strategy, then it will stand a good chance of placing Scotland on a pathway to Nature Positive by 2045.

Annexe D

Marine Conservation Society written evidence to Net Zero, Energy and Transport Committee

The Marine Conservation Society is a UK charity fighting for a cleaner, betterprotected, healthier ocean: one we can all enjoy. A dedicated Scotland conservation programme and office in Edinburgh were established in April 2000. The Marine Conservation Society in Scotland has contributed to the development of previous Biodiversity Strategies, the Marine (Scotland) Act 2010 and delivery, including Marine Protected Area designation and management, and with partner organisations helped set out an Ocean Recovery Plan to 2030 and recommendations for the transformation of sectors such as fisheries and aquaculture that impact upon biodiversity. We welcome the opportunity to provide evidence to the Net Zero, Energy and Transport Committee on the Scottish Biodiversity Strategy.

Overall views on what is needed to address the biodiversity crisis

In 2019, the Intergovernmental Science-Policy Platform on -Biodiversity and Ecosystem Services (IPBES) published the most comprehensive assessment ever conducted on the global state of nature, starkly concluding that nature is undergoing dangerous rates of decline unprecedented in human history, eroding the very foundations of our economies, -livelihoods, food production, health and quality of life worldwide. This nature crisis, together with the climate emergency, create a de facto ocean emergency.

Despite welcome, but slowed, progress on establishing MPA networks, all UK Governments collectively failed to meet 11 of 15 indicators of Good Environmental Status, the previous EU benchmark of ecological health, including commercial fish stocks, indeed most shellfish stocks, and seafloor condition, especially all sublittoral rock and biogenic habitats and soft sediments in Celtic Seas and Greater North Sea.

As stated in the Scotland's Biodiversity Strategy consultation document, Scotland's Marine Assessment 2020 "highlights the increasing impacts of climate change and ocean acidification, and that disturbance of the seabed by bottom-contact towed fishing gear remains a significant pressure. The 'no loss in extent' target for subtidal biogenic habitats has not been met." Some biogenic seabed habitats - meaning those created by living organisms such as maerl, mussels, flameshells, tube-building worms or corals - have declined in extent by 90% or more in some areas.

In order to drive action across society to address this nature emergency on land and sea, we need to enshrine for nature in policy and law the type of approach being used to tackle the climate emergency. In the context of the Scottish Biodiversity Strategy, in keeping with the Ocean Recovery Plan, we are therefore calling for:

1. Ambitious ocean recovery targets enshrined in the forthcoming Natural Environment (Scotland) Bill.

- Programmes of ecosystem restoration including species recovery, which would include for species such as native oyster and seagrass, where some work is underway with the Dornoch Environmental Enhancement Project (DEEP), Seawilding, Restoration Forth and in the Firth of Clyde, but should also systematically consider all Priority Marine Features for which restoration action is possible.
- 3. Completing Scotland's Marine Protected Area network and integrating with a National Nature Network Completing Scotland's MPA network and protecting it from damaging activities, designating at least a further 10% of Scotland's seas as Highly Protected Marine Areas, greatly recovering Priority Marine Feature extent and status beyond the MPA network and, through intertidal sites, integrating with a wider Nature Network.
- 4. Sufficient funding for nature provide and incentivise investment in marine conservation and sustainability to match the scale of the nature and climate emergencies. The funding gap is particularly marked in the global ocean, where 25% of our carbon emissions are captured yet only 1% of global climate finance is spent.
- 5. Mainstreaming of biodiversity across all government departments, national and local. This requirement is most relevant at sea for managing fisheries, aquaculture, all present and future aspects of offshore energy and all other forms of development. As the most widespread pressure at sea that directly removes biodiversity, new policies and where necessary legislation to support a just transition to a climate and nature friendly fishing industry is crucial.

Reflections on the outcomes specified in the consultation

The 2045 outcomes and 2030 milestones for both the Marine and Coastal sections in the draft strategy are rather vague, providing less target detail than the UK Marine Strategy which Scottish Government already require to deliver. The marine and coastal biodiversity outcomes for 2045 need to be SMART and, in keeping with the proposed outcomes for the Rural Environment section (encompassing Farmland, Woodland and Forestry, Soils and Uplands (including peatlands)), need to acknowledge the sector-specific activity that is necessary to achieve outcomes across all components of Scotland's marine environment. At sea, recognising how fishing, aquaculture, offshore energy and other developments and activities, can contribute is essential. Similarly on the coast, it should be recognised that unsustainable development proposals on fragile and diminished habitat such as dune systems, contributes to biodiversity decline and should be discouraged. Otherwise our concern is that the Biodiversity Strategy does not help drive cross-departmental action to halt, then reverse, the decline of marine and coastal nature.

With a commitment to binding nature targets across land and sea in the Natural Environment Bill, the new Scottish Biodiversity Strategy (SBS) needs to set out how those targets will be met, including through subsequent delivery plans and mainstreaming biodiversity delivery across all national and local government.

If we are to have any hope of turning around the decline of nature at sea, by 2030 the Marine Conservation Society would like to see milestones such as, but not limited to:

- At least 30% of Scotland's seas under high level of protection (IUCN Protected Area category 1b (highly protected)) with at least one-third of this (so at least 10% of Scotland's seas) fully protected under a new MPA designation of Highly Protected Marine Area (HPMA) (IUCN Protected Area category 1a (fully protected));
- The entire Scottish MPA network truly protected from damaging activities following a whole-site management approach
- HPMAs targeting recovery of damaged ecosystems and enhancing the provision of ecosystem services such as carbon storage and sequestration ("blue carbon")
- The National Marine Plan and 11 Regional Marine Plans driving active restoration of marine and coastal ecosystems, such as sand dune systems, machair, saltmarshes, native oyster and blue mussel beds and seagrass beds, ensuring all sectors operate within environmental limits and are robustly monitored
- Low impact, demonstrably by-catch free, spatially managed, high-value nature and climate positive fisheries, with healthy and resilient stocks, supporting sustainable fishing opportunities, coastal communities and a growing domestic seafood market.
- All salmon farms in Scotland Aquaculture Stewardship Council certified, well-sited, and operating in harmony with the marine environment, through the avoidance of sea lice hotspots, sensitive habitats, seal haul-outs and wild salmonid interactions, and the adoption of a range of technologies, including offshore, semi-closed and closed systems
- An end to development on sensitive or irreplaceable coastal habitats, such as coastal dune systems.
- Deep-sea mining, deep-sea aggregate extraction and mechanical harvesting of kelp remain prohibited
- A waste-free circular economy, where refill/reuse of consumable products is required and single-use items become redundant.

This is not an exhaustive list but gives an overview of milestones needed for the protection and recovery of nature in our ocean and on the coast. We would urge the Net Zero, Energy and Transport Committee to recommend that SMART nature recovery outcomes and milestones for the marine and coastal sections, and crucially that specific sectoral milestones necessary for that recovery, be identified in Scotland's Biodiversity Strategy.

Legislative requirements to deliver the outcomes which might be needed

To meet Scottish Government commitments on biodiversity, the upcoming Natural Environment (Scotland) Bill in 2023 must contain ambitious nature recovery targets across land and sea, with a new Scottish Biodiversity Strategy (SBS) setting out how those targets will be met through subsequent delivery plans. The bill must specify that the SBS should include policies and proposals to ensure these new nature recovery targets across land and sea will be met.

New Marine Conservation Orders and Inshore Fishing Orders will be required to protect the remainder of Scotland's MPA network from damaging fishing activity.

The Natural Environment Bill must also provide for the legislative powers needed to designate and fully protect Highly Protected Marine Areas from all extractive and damaging activities, in keeping with the Bute House Agreement and international benchmarks.

Any statutory fisheries instruments needed to deliver the inshore cap on fishing activity, and subsequent reduction in activities that "disrupt the seabed" committed to in the Bute House Agreement, and to implement as necessary outcomes arising from the Future Catching Policy consultation.

A Circular Economy Bill that shifts Scotland's economy from a linear "make, use, throw" model to one where refill/reuse of consumable products is required, single-use items become redundant and leaking of plastics and other pollutants into the ocean is stopped.

Views on what else needs to happen to deliver the outcomes set out in the consultation document

As fisheries is the most widespread pressure at sea, directly harvesting biodiversity, we highlight the importance of the Future Catching Policy and promised cap on inshore fishing activity for recovering nature in Scotland's marine area. Setting sustainable catch-limits and protecting critical fish and shellfish habitats, many of which are also Priority Marine Features (PMFs) and "blue carbon" habitats, is crucial for climate and nature smart fishing, therefore future catching policy, access to quota and the inshore cap should require spatial management. The inshore area is particularly important for PMFs, critical fish and shellfish habitat and storing blue carbon, and, when managing fishing, only demonstrably low impact fishing activity should be allowed here.

In addition to the need for the Natural Environment (Scotland) Bill to include statutory nature recovery targets across land and sea, a renewed National Marine Plan and future Regional Marine Plans, the Future Fisheries Management Strategy, forthcoming Future Catching Policy and Inshore Fisheries Management Group proposals, the Sectoral Wind Plan, the work of the Scottish Aquaculture Council, the Marine Nature Conservation Strategy and all other relevant plans, policies, programmes and strategies must all improve the status and health of nature in Scotland's marine area. This is legally required by the Biodiversity Duty in the Nature Conservation (Scotland) Act 2004 and the Sustainable Development and Protection and Enhancement Duty of the Marine (Scotland) Act 2010.

Further detail on the policy interventions across all sectors that we think are needed for nature can be found in the Ocean Recovery Plan.