

Consultation response to Scottish Government

Scottish Biodiversity Strategy

Scottish Wildlife Trust

12 September 2022

The Scottish Biodiversity Strategy has the potential to deliver transformative change. However, we are disappointed that the delivery mechanisms, pathways, timescales, and resources to achieve flagship policies to combat the nature crisis are absent The Scottish Wildlife Trust welcomes this opportunity to respond to the Scottish Government's consultation on the draft Scottish Biodiversity Strategy.

Our Response

Q1. Using your own knowledge and the evidence presented, to what extent do you agree that there is a nature crisis in Scotland? Why do you think that?

We wholeheartedly agree that there is a nature crisis globally and in Scotland. The State of Nature Reportⁱ, Biodiversity Intactness indexⁱⁱ, IPBES reportsⁱⁱⁱ, IUCN data^{iv} and other sources^v all confirm what Scottish Government has already recognised that the nature crisis is one of the greatest threats we face. The State of Nature Report, published by more than 70 leading nature conservation organisations, sets out the grave plight of Scotland's wildlife, where nearly half of the country's species have declined in the last 25 years, and one in nine is threatened with extinction. We also strongly endorse the evidence presented in pages 7-9 of the draft Strategy.

The Trust manages nearly 120 nature reserves across Scotland, and we are experiencing the declines in our day-to-day work. You only have to step outside to see the evidence in terms of the lack of native woodland and the barren hillsides. There is an absence of familiar species whether that is raptors in the skies, waders at the water's edge or fewer butterflies and moths in our meadows. That is not to say there are not success stories such as the osprey, pine marten, otter and beaver which are just some of the reminders that we can work together to make a real difference and that it is not too late to act.

However, we feel the time for discussing whether we are in nature crisis is over. There is enough scientific evidence and widespread understanding of the issue that the new Biodiversity Strategy must be absolutely clear that the time for debating this issue is over and now is the time for action.

There is a vitally important leadership role for Government here and this question is no doubt intended to gauge public awareness of the biodiversity crisis, but extreme care must be taken that this approach does not inadvertently diminish the perceived scale of the crisis or the need for urgent action.

Q2. What do you see as the key challenges and opportunities of tackling both the climate and biodiversity crises at the same time?

Challenges

Time is against us; the UN Decade of ecosystem restoration runs from 2021 through 2030 and we will soon be in 2024. If we are to meet the 2030 target included in this draft, we need a paradigm shift in urgency, funding and action. Action needs to be taken now to prevent further biodiversity decline. The challenge lies in how to motivate and catalyse action as soon as possible and change behaviour. Some sections of society will be reluctant or find it hard to change and there will be concerns around the unknowns, but rapid change is vital. It is important that we embark on a 'just transition' in climate and nature but we cannot delay the transition any longer.

In Scotland we have previously focused on climate in environmental policy, and this is now relatively well mainstreamed across Government. We rapidly need to put nature on a par to the approach to the climate crisis and implement solutions that tackle the nature and climate crises together. Tackling both crises individually will miss the best solutions for people, climate and nature over the long term. For example, only planting fast growing, non-native tree species in monocultures would absorb carbon quickly, but have considerable detrimental impacts on biodiversity and can impact

water courses. It requires a balance to be found that will allow biodiversity to thrive while also absorbing carbon and helping deal with the impacts of climate change. Nature-based solutions^{vi} offer a means to tackle these crises holistically, while also having greater positive impacts on society. Scottish Government must adopt a formal definition of nature-based solutions to ensure the greatest benefit is realised. We recommend the IUCN definition:

"Nature-based solutions are actions to protect, sustainably manage, and restore natural and modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human wellbeing and biodiversity benefits".

As the draft strategy acknowledges "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". The vision presented here, and the subsequent delivery strategies will need to articulate how we are going to mainstream biodiversity.

Target setting will be vital to the success of mainstreaming this strategy and galvanising action. Government must be charged with delivery of meaningful, legally binding biodiversity targets which will be brought forward by the Natural Environment Bill. The current timetable for this Bill and the subsequent nature targets is too slow and could mean we do not have targets in place until the latter stages of this decade when it will be too late for Scotland to make an adequate contribution in the Decade on Ecosystem Restoration and to meet our own targets for 2030. Targets alone will not be sufficient, and they must be backed by resources at all levels for action to take place.

The Trust is very pleased to see the commitment to appoint "An independent body (to be determined) to monitor and report on progress". We see this as a vital new development on previous approaches and a key step to delivering meaningful change. Without such a body in tandem with legally binding targets, there will not be momentum behind delivering positive change.

In many ways setting biodiversity targets is harder than equivalent targets for climate and we must begin the process now of working with scientists and experts to develop appropriate targets which align with those put forward in the proposed EU Nature Restoration Law^{vii}. The Government must also be clear about what "legally binding" means in relation to nature targets.

The poor data availability and reliance on voluntary efforts we have in Scotland is a real challenge in creating our nature positive economy. The recommendations of the Scottish Biodiversity Information Forum review^{viii} should be taken forward and acted upon, as previously promised by Scottish Government in the 2020 Challenge for Scotland's Biodiversity^{ix}.

There is a problem with the scale of our ambition. Projects and action to deliver for biodiversity often happen in isolation and we need to get better at joining up action across a landscape scale. Only by doing this will we achieve the changes necessary to meet the 2030 and 2045 ambitions in this draft. This lack of join up and coordination of our investments in blue and green infrastructure represents a significant barrier to utilising private sector investment as we lack the scale required.

Despite some recent modest increases in funding, we still do not fund biodiversity adequately. There will always be a need for species and habitat specific funding and there should be greater detail in this document regarding the importance of such specific programmes.

There is a lack of skills and knowledge across all sectors surrounding biodiversity, this must be addressed. We must become better at understanding our impact and dependencies on ecosystems and acting accordingly.

To be able to tackle both crises simultaneously change will need to be made within many sectors and it will require cooperation across sectors. We must be honest with all stakeholders about the scale of the challenge and move as quickly as possible to avoid "cliff edge" situations where drastic change is required in short time frames.

Opportunities

Without biodiversity we would not be able to survive. Protecting and restoring biodiversity provides massive opportunities, however, we must remember that more importantly it is an urgent necessity. Healthier ecosystems mean increased ecosystem services for people and more nature-based solutions that can help with reducing poverty, improving our health and wellbeing, increasing equality and reducing the risk of natural disasters^x. The multiple benefits provided through protection and restoration of biodiversity means with proper resourcing and management the value provided by biodiversity will be much greater than other alternative investments, helping the economy and people prosper over the long term.

Nature-based solutions provide multiple opportunities to tackle not only the biodiversity and climate crises but also help improve societal health and wellbeing. For example, Cumbernauld Living Landscape project, led by the Trust, works with the community of Cumbernauld to improve the local natural environment and connect people to nature, helping increase biodiversity, reduce the impact of climate change and benefit the physical and mental health and wellbeing of residents.

The Scottish Government is committed to both a wellbeing economy^{xi} and delivering the Sustainable Development Goals (SDGs)^{xii}. Healthy ecosystems are the key underpinning of both the SDGs^{xiii} and a wellbeing economy^{xiv}. Getting our Biodiversity Strategy right represents an opportunity to support the delivery of these key Scottish Government aspirations.

The Return on Investment (RoI) from nature is well known and it is established^{xv} that there are huge opportunities to maximise benefits from public spending. Additionally, there are significant "win-win" opportunities for private finance to help derive private return and wider social and environmental benefits.

Tackling the biodiversity and climate crises together will require innovation and will create opportunities for new employment in multiple sectors, <u>for</u> example more people could be employed restoring woodlands or managing green spaces in the urban environment but also within finance institutions and engineering companies who will require ecologically literate staff. This is often referred to as the "green collar" revolution.

The Scottish Government states in this consultation that it wants to maintain or exceed European standards, however, we have already fallen behind as the EU Biodiversity Strategy to 2030 has been published. A robust strategy which gives more detail around implementation will allow Scotland to meet the high standards to which it aspires. There is also an opportunity for Scotland to show leadership internationally and inspire other countries to transform its approach to biodiversity.

Q3. Is the draft vision clear enough?

We broadly welcome the direction of the vision, but it would benefit from being clearer, more specific and being injected with some urgency. We recommend that:

- "substantially" is qualified i.e. from 1950s baseline
- "regenerated" is clearly defined

- A direct reference is added to what is required by 2030 (such as the leaders pledge for nature to reverse biodiversity loss by 2030) to provide more direction and inject urgency into the approach.
- There should be reference to the IPBES drivers of biodiversity loss and a need to address them all.
- There should be mention of the importance of leadership and taking initiative in the biodiversity crisis.

We have made suggestions (underlined) based on this below:

<u>We will reverse biodiversity loss by 2030</u> and 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.

<u>We will</u> take a holistic approach and <u>address all the drivers of biodiversity loss identified by the</u> <u>Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Scotland will</u> <u>show international leadership in acting quickly and decisively to address the biodiversity crisis.</u>

We will take a participatory approach so that everyone across government, business and society will play their part and we will mainstream biodiversity thorough all of our activities. There will be a concerted effort to make sure everyone understands the benefits from and importance of biodiversity and are active in their role in the stewardship of nature in Scotland for future generations.

To further install confidence, we would suggest a glossary of terms is added to the documents so there is reduced ambiguity.

Q4. Is the draft vision ambitious enough?

We agree with Scottish Environment LINKs submission that the vision should better reflect the scale, pace and transformative nature of the change needed to restore nature and reference the wider socio-economic benefits that this will deliver to society. We would add that clearer links to how this strategy will be delivered and the Statutory Nature Targets, promised in the forthcoming Natural Environment Bill, are needed to give greater focus on delivery.

Q5. Do you have any suggestions for a short strategic vision which would form the title for the strategy?

Our suggestion for a simplified strapline is:

"Scotland's Nature Emergency Strategy"

Rural Environment

Q6. Do the 2045 outcome statements adequately capture the change we need to see?

We struggle to understand the purpose of the illustrations provided. There have been no infographics provided for the other environments. With proper explanation and the same efforts made for each environment the infographics could be a useful way to demonstrate the outcomes.

Q7. Are the 2030 milestones ambitious enough? Are we missing any key elements?

Further to the milestones and outcomes provided the Trust would also like to see the following considered in the outcomes:

- Nature-based solutions play a significant part in the management of the rural environment, providing benefits for climate adaptation, carbon sequestration, biodiversity and tackling other societal challenges on a local, national and global level.
- Agroecology is a prolific management technique within rural Scotland applying ecological principles and concepts that benefit biodiversity, mitigate climate change, reduce waste and prioritise local supply chains. Strong links to the Agriculture Bill and the payments to farmers should be included in the outcomes for biodiversity.
- Deer range, grouse moor management and upland agriculture land use is significantly reduced, and the farmers and landowners in the Scottish uplands are supported and compensated to provide ecosystem services through nature-based solutions, such as peatland restoration and native reforestation (see rainforest restoration). Rural businesses have diversified, and new businesses have developed to improve biodiversity and make the most of the natural environment. Wildlife and adventure tourism is a key source of income for local communities as people come to see the increasing biodiversity of the Scottish uplands and enjoy the wild landscapes.
- Licencing of grouse moors would be a route to sustainable management of moorlands, which comprise a range of habitats, including dry and wet heath, Atlantic heath, blanket bog, tall herb vegetation, species rich and upland grasslands. Upland breeding species such as golden plover, dunlin and curlew can also thrive in these habitats. When managed well, moorlands can deliver significant nature and carbon benefits.
- Greater emphasis on the benefits of native woodlands needed throughout. The biodiversity value of native mixed woodland in comparison with commercial non-native conifer plantations is considerably greater.
- We want to see Scotland's rainforest restored as part of the delivery of the Scottish Biodiversity Strategy. As a partner in the Alliance for Scotland's rainforest, we are supporting the proposal of 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.
- A key part of the picture is species specific work and there is detail lacking around how the draft Strategy will address species specific action. For example, how will specific strategies i.e. beaver and salmon interact with this document and in turn with the targets from the Natural Environment Bill. The Trust supports a national programme of species recovery targeted at threatened species. The Trusts work on the Saving Scotland's Red Squirrel programme show how successful this targeted support can be.

Q8. What are the key drivers of biodiversity loss in this outcome area?

Climate change is increasing the risk of flooding and droughts, these can be severely detrimental to biodiversity.

Herbicides and pesticides have removed many species from our agricultural land, having wider damaging effects on the non-target species such as birds and pollinator species.

The use of large agricultural machinery has resulted in the loss of thousands of kilometres of hedgerows across the country. Hedgerows can be biodiverse havens for wildlife and should be restored as nature-based solutions where possible.

Taking too much from the land and not letting nutrients and carbon cycle back into the soils has damaged the soil structure and meant that artificial NPK fertilisers are added to improve productivity. The addition of fertilisers damages the soil structure further and pollutes waterways.

Loss of native woodland habitat and Scotland's rainforest and associated species due to land use changes, over grazing and invasive non-native species. Invasive Rhododendron ponticum growing across 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.

The spread of non-native tree species such as Sitka spruce from plantations into surrounding areas. Loss of native mammal species such as the water vole and red squirrel due to historical introduction of invasive non-native predators / competitors (American mink and grey squirrel).

Q9. What are the key opportunities for this outcome area?

Adopting a more diverse model for managing the rural environment will provide greater opportunities for businesses and employment. Moving away from the traditional agricultural and upland management more skills will need to be developed for innovative land uses and to restore habitats.

The mainstreaming of nature-based solutions within the rural environment of Scotland will allow for the provision of multiple benefits along with sustainable food production. Efforts to improve biodiversity will help boost pollinator populations that will benefit the sustainability of crop production in Scotland.

Licencing of grouse moors would be a route to sustainable management of moorlands, which comprise a range of habitats. Well managed moorlands can deliver significant nature and carbon benefits and re-wetting of raised bog and blanket bog will provide considerable benefits for biodiversity, while also reducing drought and wildfire risk^{xvi}.

Creating a nature rich and healthy Scotland would increase revenue opportunities from wildlife tourism. Tourism is one of seven growth industries in Scotland, contributing more than £4 billion to our economy each year, but has been significantly impacted by the Covid-19 lockdown. Spending on nature-based tourism is estimated to contribute nearly 40% of all tourism spend, supporting 39,000 full-time equivalent jobs^{xvii}. Outdoor-based nature tourism can play a key role in the green recovery, improving societal health and wellbeing and creating rural jobs.

There needs to be species focused outcomes to protect threatened species requiring targeted intervention. Some species will fail to survive or increase their range through ecosystem restoration alone. One example of Scottish species that would fail/ have failed without considerable focused conservation effort is the red squirrel.

Prioritising the control of invasive species that pose the most immediate direct threat to the survival of important Scottish native species. One INNS that we believe should be given high priority is the grey squirrel. In the absence of human intervention, the invasion of the grey squirrel in Scotland is likely to drive the iconic native red squirrel to extinction within a few decades, as has happened in much of the rest of the UK. There is an opportunity for the Scottish government to fund the continuation of the strategic grey squirrel control work that has to date been carried out by the Saving Scotland's Red Squirrels (SSRS) partnership^{xviii}. SSRS is currently in a transition phase and

seeking long-term funding commitments to help ensure the survival of the red squirrel in Scotland for future generations.

The Convention on Biological Diversity^{xix} refers to species as one of the three pillars of biodiversity and this should be reflected in the outcomes for all environments.

Q10. What are the key challenges for this outcome area?

There remains considerable disconnect between the apparent drivers and values of some traditional landowners and farmers and the changes in land use needed for sufficient biodiversity gains. Transformational change is needed in both farming and wider land use practices to improve the efficiency of food production and ensure meaningful increases in biodiversity.

A challenge will lie in finding the balance of using rural land for the best possible means and the conflicts of interest that will emerge. This will mean that some areas previously used for food production might be given up to nature-based solutions, such as wetlands which would help manage flooding and drought while also storing carbon and improving biodiversity. Using opportunity mapping and landscape scale collaboration will ensure evidence based and inclusive approach to land use changes.

Invasive species control and the associated public perception - for example there is some negative public perception around grey squirrel control. Public education of the threat of INNS to native biodiversity and the importance of tackling them directly is needed. Cross border cooperation is also an essential part of controlling the spread of invasive non-native species, requiring both collaboration between UK nations and internationally.

Increasing visitors to Scotland's natural environment will need better management to ensure both people and wildlife can thrive.

Marine Environment

Q11. Do the 2045 outcome statements adequately capture the change we need to see?

There is a considerable lack of evidence provided in this section. As mentioned in our response to previous questions, a great deal more is needed to support the outcomes and demonstrate the existing conditions for each environment. The outcomes are vague and need to be accompanied by SMART 2030 and 2050 targets in order to provide 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.

It is important that there is a robust plan for how we will reach these goals and what meeting the outcomes means in practice. The interlinked but diverse nature of habitats within the marine environment means that the impacts of human activity whether negative or positive will be felt differently. We implore that the outcomes have subcategories that have more specific targets that promote the uniqueness of the variety of habitats and benefit the biodiversity can bring to communities.

There needs to be an element of site protection, species protection and wider seas sustainable management and protection. To tackle the intertwined climate and nature crises there needs to be a paradigm shift from just protecting remnant habitats and ecosystems to recovering and restoring ecosystems on a large scale. The 2030 milestones must go further to protect our seas.

Protected Areas

Scottish Government has continued to claim that 37% of the sea area is protected, but without more robust management and enforcement measures this is not a reality. Biodiversity is being severely impacted and protected features are being destroyed even in designated protection areas due to a lack of urgency and the activities of marine industries.

To make a significant positive impact on marine biodiversity at least 10% of Scotland's seas should be fully protected (i.e., category 1a under IUCN definitions^{xx}), in which no extractive, damaging or depositional activity is permitted. Such IUCN *fully* protected sites are akin, perhaps somewhat confusingly, to the Highly Protected Marine Areas committed to in the Bute House agreement.

There also needs to be at least 30% of Scotland's seas under high levels of protection (at least a third of which is fully protected, as above) - under IUCN definitions. There should therefore be at least a further 20% that conforms with IUCN category 1b, which will allow only small-scale, low-impact, sustainable activities at levels that allow and/or facilitate ecosystem recovery to take place. 20% of Scotland's seas should also be managed for active recovery and restoration, to enable habitats such as seagrass and native oyster beds to return to pre-industrial levels.

Species Protection

There needs to be an element of dedicated species protection, including Scotland's seabird strategy and marine mammal strategy which should be implemented in full to ensure populations become self-sustaining and increasing.

Wider Seas Management

Effective marine planning^{xxi} 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.

Scotland's fisheries management framework must have the recovery of ocean nature at the very heart of management and decision-making, ensuring healthy flourishing seas that in turn are supporting resilient, net zero, nature positive coastal communities.

Deep-sea mining and deep-sea aggregate extraction should be prohibited in the Scottish marine area.

Protection of critical fish and shellfish habitats throughout Scotland's marine areas is crucial, and therefore we think that the future catching policy, and access to quota, should be linked to spatial management. The inshore area is particularly important for providing critical fish and shellfish habitats, many of which are Priority Marine Features (PMFs), and this should be recognised as a geographical area in which only lower impact activities are allowed.

Q12. Are the 2030 milestones ambitious enough? Are we missing any key elements?

As with the other "environment" milestones, the marine environment milestones are too broad to comment on meaningfully. While the milestones are appropriately ambitious, a great deal more detail is needed to be able to measure actions that would achieve the milestones.

The Trust supports the 2030 milestones laid out by Scottish Environment LINK, that by 2030:

- Scotland's seas are at or beyond Good Environmental Status; ecological decline is halted, marine ecosystems are recovering, and a climate and nature positive fishing framework is in place.
- Scotland's integrated marine planning and fisheries management framework has the recovery of ocean nature at the very heart of management and decision-making, ensuring healthy flourishing seas that in turn are supporting resilient communities through a net zero, nature positive and circular coastal and marine economy.
- Low impact, demonstrably by-catch free, high-value nature and climate positive fisheries, with healthy and resilient stocks, support sustainable fishing opportunities, coastal communities and a growing domestic seafood market.
- The National Marine Plan and 11 Regional Marine Plans drive the restoration of marine ecosystems throughout Scotland's marine area, ensuring all human activities operate within environmental limits and are robustly monitored
- Scotland has a waste-free circular economy, where refill/reuse of consumable products is required, where single-use items become redundant.

The Trust also supports the comments as set out in the Scottish Environment LINK response that more needs to be done to ensure ecological processes and linkages between the ecosystems is restored within the marine environment, and the Trust supports the steps suggested to achieve this milestone and the following visions for the marine environment:

- Complex, interconnected seabed habitats support a variety of species throughout their life stages, from spawning and nursery grounds for fish and shellfish, securing refuges and foraging areas for small and large marine species alike.
- Pelagic ecosystems, the foundation of marine food webs, are functioning and connected; migratory routes for fish and mammals are free of anthropogenic hazards.
- Fragile and stable deepwater communities, including coldwater coral gardens, sponge fields, seamounts and sediment communities remain undisturbed in perpetuity, allowing recovery from historic damage.

Q13. What are the key drivers of biodiversity loss in this outcome area?

Scotland's Marine Assessment 2020^{xxii} identified climate change and bottom-towed mobile and pelagic fishing activities as the key pressures facing marine biodiversity, despite this fisheries management measures have only been implemented in a handful of designated inshore MPAs and we await the proposed Future Catching Policy for Scotland's fisheries. While the regulatory framework affords consideration of MPAs for licensable activities, including aquaculture and renewable energy developments, existing consents authorised prior to designation are able to continue within MPAs. Other Area-Based Measures, such as fisheries management areas, do not necessarily restrict fishing methods that cause the most damage to seabed habitats. In short, despite covering 37% of Scotland's seas (including Other Area-Based Measures), the majority of the MPA network continues to exist in name only without ecosystem-based spatial fisheries management, or measures to spatially manage other human activities.

Overfishing and associated direct damage e.g., through bottom trawling and dredging is a significant driver of biodiversity loss at sea and transformation of fisheries management is essential to achieving the biodiversity recovery in the marine environment. Indirect damage such as bycatch, entanglement and ghost fishing are also a major impact of the fishing industry.

Avian influenza^{xxiii} has considerably impacted the population of sea bird species and more needs to be done to protect wild bird population from the disease.

Low abundance and a change in distribution of species at upper trophic levels results in a lack of food sources and ultimately a loss of apex predators, as the ecosystems can no longer support them^{xxiv}.

Marine INNS have out competed and predated native species^{xxv}.

Pesticide use in aquaculture can have considerable toxic effects on wild marine species^{xxvi}.

Plastic pollution is one of the key drivers of biodiversity loss in the marine environment^{xxvii}

Q14. What are the key opportunities for this outcome area?

The variety of habitats within the marine environment provide ample opportunities for nature-based solutions for mitigating and adapting to climate change, while also providing opportunities for local communities. Restoration of blue carbon habitats can make significant contributions to the storage and ongoing sequestration of carbon from the atmosphere^{xxviii}. Many of these habitats will also have considerable contribution to reducing the impact of storms, sea level rise and tidal flooding that can damage coastal communities and coastal/ marine industries^{xxix}.

There are already some very positive actions being taken in blue carbon habitats through marine ecosystem conservation and restoration, with native oyster^{xxx} and seagrass^{xxxi} restoration projects underway and reported increases in cetacean sightings^{xxxii}. These should continue to be supported as they provide significant opportunities for both biodiversity and community engagement in marine habitat restoration. Some aquaculture companies are putting their farms through the Aquaculture Stewardship Council certification process.

Q15. What are the key challenges for this outcome area?

The key challenges are adequately addressing the drivers of biodiversity loss in our marine environment and the related activities that drive them. Namely:

- An unsustainable footprint of capture fisheries in Scotland's seas, particularly the use of heavy, bottom-towed fishing gear, currently operating beyond environmental limits.
- An unsustainable footprint of aquaculture in Scotland's inshore seas, currently operating beyond environmental limits.
- Continued plastic and chemical pollution (although progress is being made in the public consciousness of this issue and through initiatives such as the carrier bag charge).
- Increasing spread of marine invasive non-native species, particularly with warmer seas.
 Pacific oysters represent a threat of becoming invasive in Scotland if spread from oyster farms or transportation. This has become a significant issue in Southeast England and should be monitored closely^{xxxiii}.
- Increased offshore renewables as we move away from fossil fuels and imported energy. Ensuring projects are delivered in a way that avoids negative biodiversity impacts. However, there are also opportunities here as the seabed around wind turbines becomes, in effect, a no-take zone.
- The ongoing increase in marine development and the lack of understanding of the cumulative impacts of development and various marine activities.

Freshwater Environment

Q16. Do the 2045 outcome statements adequately capture the change we need to see?

There is a considerable lack of evidence provided in this section. As mentioned in our response to previous questions, a great deal more is needed to support the outcomes and demonstrate the existing conditions for each environment. The outcomes are vague and need to be accompanied by SMART 2030 and 2050 targets in order to provide 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.

We strongly push for a greater investigation of the available evidence for the health of freshwater habitats and species. The publication provides very little evidence despite them being one of the most monitored ecosystems in Scotland^{xxxiv}.

Q17. Are the 2030 milestones ambitious enough? Are we missing any key elements?

There is a significant lack of detail in the freshwater milestones, and the document does not address issues such as microplastics, pesticide use, pharmaceuticals, etc. The strong connection between urban, agricultural, coastal and marine environments needs to be demonstrated in the outcomes, for example pollution from nitrogen fertilisers impacting water quality in rivers which then discharge into the sea. Rivers are an important network that impacts and is impacted by other environments and land uses and this link should be fully recognised in the milestones. Initiatives such as Riverwoods^{xxxv} demonstrate the complexities of river systems and the effects of land use on the health of rivers.

The Riverwoods initiative aims to create a network of thriving riparian woodlands and healthy river systems across Scotland through collaborative efforts by scientists, landowners, local communities, finance professionals and conservation NGOs. This collaborative approach will be essential to achieving the outlined outcomes for all environments, not only freshwater ecosystems. Many organisations and landowners are already undertaking river restoration projects, and Riverwoods will provide an opportunity to help join these up across Scotland. We will collectively share knowledge of the science underpinning riparian restoration, support landowners to carry out practical work, identify and address evidence gaps, showcase best practice and explore novel forms of financing to enable riparian restoration to be carried out at scale.

Restoring rivers and their associated riparian habitats is a means to make considerable, meaningful positive impacts on biodiversity. Rivers act as nature networks, connecting habitats over a large area, allowing species to move and adapt, increasing their resilience. Protecting riverbanks and supporting regeneration of river woods 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 as promoted by the Riverwoods initiative.

Restoration of our rivers and riparian habitat represents a huge opportunity to meet climate and nature targets and provide a myriad of other benefits ranging from health and well-being improvements and nature-based water management.

There needs to be a strong element of species protection and restoration of their natural range, such as the ongoing reintroduction of beavers which have a vital role to play in tackling the biodiversity crisis. We believe that the strategy needs to include how the national beaver strategy will play into the outcomes and milestones.

Q18. What are the key drivers of biodiversity loss in this outcome area?

Invasive non-native species have a major impact on the freshwater environment, with an ongoing upward trend of invasive non-native species having a negative effect on biodiversity^{xxxvi}

Pollution from a number of different sources has had an extremely detrimental impact on freshwater ecosystems^{xxxvii}, including wastewater, agricultural runoff^{xxxviii}, runoff from hard surfaces and plastics and other litter

Erosion due to heavy rainfall and an inability of the system to cope with excess water and flow speeds as a result of historic straightening of rivers and built-up flood plains.

Climate change has caused water temperatures to increase, this is having an adverse effect on freshwater species^{xxxix} and increasing the risk of harmful algal blooms which kill species in the water column^{xl}.

Scotland's rivers have been affected by changes in both water flow and quality arising from drainage, diversion and straightening of channels for forestry, agriculture and urban developments. Sources of nutrient enrichment both from point sources, such as sewage discharges, and diffuse pollution from run-off of soil, nutrients and pesticides from farmland and forestry also lead to a deterioration in the quality of these habitats. More recently changes to water levels from abstraction for hydropower generation and water-supply industries have impacted on our freshwater habitats and the wildlife these support^{xli}.

Q19. What are the key opportunities for this outcome area?

Restoring freshwater ecosystems will offer a nature-based solution to the impacts of climate change. As heatwaves and flood risk increase these ecosystems will store water in times of heavy rainfall and provide water sources in times of drought. These habitats in the urban environment will have considerable influence on human health and wellbeing, helping keep our towns and cities cool and store runoff during heavy rainfall. Initiatives such as Riverwoods^{xlii} demonstrate the complexities of river systems and the effects of land use on the health of rivers. The Riverwoods initiative aims to create a network of thriving riparian woodlands and healthy river systems across Scotland through collaborative efforts by scientists, landowners, local communities, finance professionals and conservation NGOs. This collaborative approach will be essential to achieving the outlined outcomes for all environments, not only freshwater ecosystems.

We welcome the outcome for 2030 that "Beavers, salmon recovery and riparian woodland evident as growing ecological components of restored rivers and wetlands". Achieving a thriving national population of beavers which is spread throughout Scotland's lochs and rivers will unlock a huge range of benefits, including boosting biodiversity and creating new opportunities for wildlife tourism. We strongly welcome the Scottish Government's support for expanding the current range of the species into new areas of Scotland. There are more than 100,000 hectares of suitable woodland habitat around the country^{xliji}.

River basin management plans (RBMP) are ways in which we currently manage rivers at a catchment scale. Planning for the next RBMP due in 2027 should begin now so that key actions can be identified and put in place from the start of the plan period^{xiiv}. The National Planning Framework is an opportunity to ensure that floodplains, rivers and other freshwater habitats are properly protected from inappropriate development. In particular, the planning process should include more comprehensive assessments of the impacts of instream structures proposed for hydro-schemes and flood prevention works to ensure no detrimental effects to the full range of freshwater biodiversity.

Q20. What are the key challenges for this outcome area?

The highly interconnected aspect of the freshwater environment with wider ecosystems means it will easily be impacted by land uses through pollution, erosion and urban infrastructure expansion.

Invasive non-native species are a considerable threat to river systems. For example, giant hogweed and Himalayan balsam are prolific and can be difficult to eradicate, in part due to inaccessible locations, such as steep riverbanks.

The interconnectedness of a freshwater system will require cooperation and coordination between a number of stakeholders and the changes made by some stakeholders could have considerable impact downstream.

Preference must be given to schemes that prioritise nature-based solutions when managing flood risk and drought. Hard engineering options will only exacerbate the problems and they must be a last resort when looking to mitigate and adapt to the impact of climate change.

Coastal Environment

Q21. Do the 2045 outcome statements adequately capture the change we need to see?

There is a considerable lack of evidence provided in this section. As mentioned in our response to previous questions, a great deal more is needed to support the outcomes and demonstrate the existing conditions for each environment. The outcomes are vague and need to be accompanied by SMART 2030 and 2050 targets in order to provide 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.

Q22. Are the 2030 milestones ambitious enough? Are we missing any key elements?

Milestones need to have an aspect of species protection, habitat restoration and wider ecosystem recovery and connectivity. Many of the points made in the marine environment section are applicable here due to the overlapping nature of the two "environments".

Q23. What are the key drivers of biodiversity loss in this outcome area?

As mentioned in the marine section, there needs to be an element of dedicated species protection, including Scotland's seabird strategy and marine mammal strategy should be implemented in full to ensure populations become self-sustaining and increasing.

Q24. What are the key opportunities for this outcome area?

The diversity of coastal habitats offers many opportunities for nature-based solutions to increase resilience to climate change impacts, reduce pollution and improve the health and wellbeing of people, all while supporting high biodiversity. It is essential that we fully realise the benefits afforded by the regeneration of Scotland's coastal habitats and consider the diversity of human uses for the coast, ensuring these are sustainable and inharmony with the natural environment.

Q25. What are the key challenges for this outcome area?

Coastal environments are being damaged by multiple human activities from different sources. Pollution from on land run off and rivers, and pollution washing in from the ocean, as well as impact from increasing visitors and development means that there is an accumulation of many negative impacts in the coastal environment. Coupled with the impacts of climate change such as sea-level rise, increasing storms and changes in sea temperatures coastal environments are extremely vulnerable to further damage and loss of biodiversity.

The ongoing avian flu outbreak is a continuing challenge as mentioned for the marine environment.

Urban Environment

Q26. Do the 2045 outcome statements adequately capture the change we need to see?

There is a considerable lack of evidence provided in this section. As mentioned in our response to previous questions, a great deal more is needed to support the outcomes and demonstrate the existing conditions for each environment. The outcomes are vague and need to be accompanied by SMART 2030 and 2045 targets in order to provide 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.

The urban environment can support many diverse areas of high biodiversity value. These habitats offer a number of additional values for the urban population. Biodiversity in the urban environment is an essential component making our towns and cities pleasant places to live and work.

Q27. Are the 2030 milestones ambitious enough? Are we missing any key elements?

Nature networks need to be implemented by all local authorities and ensure that other networks such as transport and water, compliment rather than hinder the inclusion of nature in our towns and cities. For nature to thrive in the urban environment habitats need to be connected to allow movement of species through the environment. A nature network will allow for this movement, increasing resilience to the impacts of climate change. Edinburgh Nature Network^{xiv} is a blueprint for how these initiatives could be implemented in towns and cities across Scotland.

Nature-based solutions need to form a key part of urban development and should form a key aspect of the milestones

The Trust would like to see a requirement that all new development have a positive impact on biodiversity, integrating biodiversity into all aspects of the design and retrofitted where appropriate^{xlvi}.

Q28. What are the key drivers of biodiversity loss in this outcome area?

Urban spread is a major driver of biodiversity loss. As our population increases and our social dynamic changes more buildings are needed to ensure everyone is adequately housed. This continues to reduce biodiversity as space is taken from the environment. The increasing infrastructure needed to deal with the growing urban population will also demand more space from the natural environment.

Pollution from the urban environment is prolific, entering water courses and soils, impacting biodiversity.

Building on brownfield sites which can be areas of high and unique biodiversity^{xivii}. Through better management and protection these areas can thrive further and provide a wealth of benefits for the surrounding urban areas, such as health and wellbeing benefits for the local community.

Q29. What are the key opportunities for this outcome area?

There are multiple different opportunities for nature-based solutions to be used in the urban environment to improve resilience to climate change, have positive effects on our mental and physical health and increase biodiversity. These interventions can come in multiple forms and sizes, offering diverse habitats and ways to increase people's interactions with nature.

Nature-based solutions are reported to be 50% cheaper compared to hard engineering alternatives used to provide the same service^{xlviii}. The added benefits provided by nature-based solutions also means that they can provide 28% of additional value, through improved health and wellbeing, job creation and opportunities for leisure and tourism.

Increasing biodiversity in the urban environment is shown to have a considerable impact on resident's and visitor's mental and physical health^{×lix}. An increase in biodiversity in our towns and cities will mean more people have access to high quality green space and that people are able to have more meaningful experiences with nature instilling a greater appreciation and sense of stewardship for biodiversity in Scotland. Local communities take ownership of their green spaces, helping monitor and maintain them, which may also have positive impacts for social cohesion and health and wellbeing^l.

Developing a "positive effects for biodiversity" approach will require investment in natural capital creating new jobs and requiring new skills. Project managers, site workers and architects focused on the delivery of environmental benefits will be needed to deliver net positives for biodiversity. The Climate Change Committee has recommended to the Scottish Government that climate investment should be used to support post Covid-19 economic recovery -much of this can be through nature-based solutions and securing positive effects for biodiversity would help deliver this.

Q30. What are the key challenges for this outcome area?

Despite a strong rhetoric in the draft National Planning Framework 4 (NPF4), there are no clear delivery mechanisms to really ensure the transformational change that is required. The wording in NPF4 and the associated NatureScot guidance on Developing with Nature seems largely to still be about encouraging enhancement with no mandatory and specific requirements. The legal status of the Developing with Nature guidance is not clear.

Integrating nature networks into the systems of urban development requires transformational changes and systematic update of existing urban development frameworks. The Connecting Nature project^{li} aimed to breakdown 'siloed thinking' and ensure holistic consideration of nature within existing policy and governance frameworks.

Without a strong government position and legal enforcement on mandatory biodiversity net gain or other consistent measurable tools that could be implemented across Scotland, the Local Planning Authorities will struggle to implement and enforce biodiversity enhancement measures in Local Development Plans.

There is high competition for limited space in the urban environment, which often results in natural spaces being low priority as these spaces do not provide the traditional return on investment. It is essential that we demonstrate the value of these spaces within the urban environment.

Better understanding is needed of what interventions will result in a high biodiversity area in urban spaces. There will be a challenge in the promotion and protection of brownfield sites^{lii} for biodiversity and effective management will be needed.

Across our land and at sea

Q31. Do the 2045 outcome statements adequately capture the change we need to see?

All the outcomes put forward lack considerable detail and should be coupled with SMART targets which can inform delivery plans and determine progress. There is a considerable lack of baseline and supporting evidence provided and no explanation on how the provided information has informed the outcomes. A great deal more information is needed to demonstrate the current state of various environments and understand how interventions are influencing biodiversity in each case. There also seems to be a considerable imbalance in effort made to understand the different environments.

Q32. Are the 2030 milestones ambitious enough? Are we missing any key elements?

There is no mention of a programme of species recovery or ecosystem restoration. The ongoing loss of species and habitats in Scotland need targeted outcomes. A habitat-focused approach, working to restore specific ecosystem types via dedicated programmes of action, including species focused areas, will allow effort to be targeted to where it is most needed. The strategy outlines broad "environments" and within these there is a need to identify specific ecosystems for targeted action and restoration. The strategy should highlight Scotland's key ecosystem types^{liii}, setting out both a 2045 and 2030 vision for each habitat which highlights the need to restore ecological processes and linkages between them, along with the key steps required to get there.

There is no mention of protected areas throughout the strategy despite this intervention being a key method for biodiversity conservation and restoration if properly resourced and managed.

It is important that there is a suit of delivery plans for how we will reach these goals and what meeting the outcomes means in practice. Greater connection to the delivery plans should be included, even if these plans have not yet been produced.

The historical approach of only tacking either the nature or climate crisis individually represents a huge challenge that we must overcome. We need at scale, cross policy, cross industry, cross society action.

Q33. What are the key drivers of biodiversity loss in this outcome area?

The outcomes need to be informed by the five drivers of biodiversity loss identified by IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services). 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 people's 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 and for each environment.

Q34. What are the key opportunities for this outcome area?

We very much support the goal of landscape scale Nature Networks across Scotland, as we have consistently advocated for nature networks (and the National Ecological Network in the previous

Scottish Biodiversity Strategy). The Trust published a briefing highlighting why we need to act urgently and decisively to deliver Nature Networks by outlining six priority areas for action if Nature Networks are to be taken forward in an effective and timely manner in Scotland^{liv}.

Nature networks should also be developed at a national scale, as biodiversity does not respect local boundaries. National level coordination, dovetailed with local bottom-up approaches will ensure all opportunities are realised.

We encourage the inclusion of the marine environment in nature networks. The land and sea ecosystems do not function in isolation, for example sea birds can have both on land nesting sites and at sea feeding and breeding grounds, so it is important to consider the links between land and sea habitats.

Opportunity mapping should be used to investigate the most appropriate land uses and identify areas that should be prioritised for biodiversity and maximise the effectiveness of Nature Networks. The Edinburgh Nature Network^{IV} is a tried and tested blueprint that can be rolled out nationwide and embeds community engagement at the heart of the process.

We wish to see greater detail on the framework, scope and governance of nature networks in Scotland. The framework for nature networks needs to be intertwined with all other relevant policy frameworks, including agriculture, planning and health and wellbeing.

For wider society to fully appreciate and advocate for the natural environment nature networks and the supporting policy frameworks need to be transparent and inclusive. Local communities should feel empowered to implement local changes and feel able to consult experts to ensure they are doing the best for nature and community resilience.

Q35. What are the key challenges for this outcome area?

Ensuring policy coherence is necessary to ensure successful nature networks. This will require considerable review to ensure that relevant policies support the development and implementation of nature networks in a way that enhances other services within Scotland. To achieve this collaboration will be needed between different departments within and between various levels of government, especially local government.

Q36. To what extent will these outcomes deliver the Vision?

The outcomes do not address all the issues, and not all the issues driving biodiversity loss are mentioned. For success, and to achieve the outcomes in this document, and those that are missing, mainstreaming biodiversity across all policy areas is critical. The issue of scale also needs to be considered: the outcomes are not at a 'Scotland' scale and there are instances where the link between nature and climate is not clearly made.

What might be missing?

Please see the response to previous answers where we have highlighted what is missing. In addition, there needs to be recognition that our economy is embedded in nature and that the Biodiversity Strategy and National Strategy for Economic Transformation (NSET) are closely linked and need to be coherent, with NSET giving priority and funding to this strategy. Moving away from focusing soley on GDP as a measure of our economic performance and instead building a sustainable, inclusive and resilient wellbeing focused economy. As a founding member of the Wellbeing Economy Governments^{IVI}, Scottish Government should continue the good work in the pursuit of innovative policy approaches and to understand the changes needed. Moving to a wellbeing focused economy

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would have a considerable impact on the weight our economy and society give to the natural environment.

Q37. What evidence and information should we use to assess whether we have delivered the Vision?

There is significant detail lacking in the evidence provided in determining the outcomes. The rural landscape section is the only area where a reasonable amount of evidence has been provided, though this is also lacking. A Nature Recovery Plan published by the Trust, RSPB Scotland and WWF Scotland lays out a number of actions needed to increase biodiversity levels across Scotland^{Ivii}

There is a lack of information on how the changing climate will impact biodiversity – how species composition, location and phenology will change.

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^{Iviii}, as previously promised by Scottish Government in the 2020 Challenge for Scotland's Biodiversity^{lix}, would greatly improve the availability of good quality biodiversity data. Existing data is available but needs considerable resources to continue to collect and manage high quality information by NatureScot^{IX}, Marine Environmental Data and Information Network^{Ixi} and the National Biodiversity Network^{Ixii}

We welcome the acknowledgement of the need to see progress across all outcomes to see the necessary increases in biodiversity. The environments need to be expanded to show the wider diversity of habitats and what biodiversity increases will mean for the different environments.

Robust and challenging legally binding 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. Robust scientific data is needed to fully understand the changes to biodiversity in all environments and the wider impacts of the actions to upscale biodiversity in Scotland, much of which is available, but continual investment is needed in monitoring to ensure we fully understand what is needed to improve biodiversity in a meaningful way and that we understand the changes.

The European Union proposed Nature Restoration Law^{|x|ii|} will set out a number of biodiversity targets that will restore damaged ecosystems and bring back nature across Europe. If Scotland wishes to continue to align with EU policies close attention should be given to the decisions made and serious consideration given to making similar proposals.

Conditions for Success

Q38. Have we captured the key enabling factors which are essential in order for our strategy to be successful?

It is encouraging to see reflection on why previous strategies have not worked 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".

The identified "conditions for success" will be crucial for helping address previous shortcomings. However, the NGO community is well used to being told that these things already exist, indeed we have been told they existed for previous biodiversity strategies. It needs to be clearer in terms of what has meaningfully changed this time?

We have concerns (for example our response to the Draft NPF4 consultation^{kiv}) that other parts of Government are not committed to the holistic approach outlined in this document and it is vital that this truly is a whole Government approach. The strategy must detail how this change will occur.

Without delivery strategies we do not consider this a complete strategy. These delivery strategies must be comprehensive and specific, measurable, attainable, time-based and realistic. We acknowledge that these cannot be delivered in time for the strategy launch but we need to see clear signposting around the delivery mechanisms and how it is envisioned this strategy will be delivered.

The Governance section misses out legally binding targets their importance and how this strategy relates to them should be referenced here, all though we do note its inclusion in outcomes.

We agree that for the strategy to be successful there needs to be strong high-level strategic leadership that will oversee the achievement of targets and monitor the progress made. Trusted robust governance which ensures policy coherence and strategy alignment is essential, along with sufficient investment from multiple sources. This must include the independent body referred to in this consultation report.

The whole of society approach is key to implementing successful projects that allow us to meet the targets of the biodiversity strategy. Nature-based solutions are a key intervention that will allow us to restore nature in a way which tackles climate change and benefits communities. For the greatest benefits to be felt by local communities they need to be consulted through the entirety of a project, contributing to the initial design, through to the ongoing monitoring and management of an intervention. Engagement in this process needs to be thorough in terms of citizen interaction. This could be avoided by creating multiple arenas for discussion and focusing on the process of community engagement^{lxv}.

Private sector finance and how communities interact with this rapidly evolving area will be vitally important. Consideration should be given to putting the "Interim Principles for Responsible Investment in Natural Capital" on a more statutory footing and how the "Land Rights and Responsibilities Statement" can be more widely incorporated.

There needs to be far greater emphasis on the importance of evidence, monitoring and data – getting this right will be a condition for success for this Strategy but also for wider policy such as forestry, agriculture and planning.

Q39. Are there good examples of enabling conditions in other strategies we could learn from?

Scotland should learn from the experience of other countries and draw on the many National Biodiversity Strategies and Action Plans^{lxvi} 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^{lxvii} 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 Nature-based Solutions to health, economy and wellbeing.

- Input from the public and experts and a 160-page companion report^{lxviii} on biodiversity including an overview of the state, trends and pressures and what we 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.

At present we do not see this draft Scottish Biodiversity Strategy as a complete strategy – the essential delivery component is missing. We are aware delivery mechanisms are to come later but we must increase pace and urgency if we are to meet the 2030 and 2045 milestones and outcomes given in this consultation document. We need to see an increased focus on delivery for biodiversity over high-level rhetoric. The implementation plans are fully costed so that the scale of investment required is clear and provision can be planned in advance.

There is a pressing need for the Scottish Government to clearly articulate how it sees the multitude of landscape scale initiatives, strategies, plans and guidance documents coming together to deliver landscape scale change. We know from personal experience and our work with communities across Scotland that there is real confusion surrounding the landscape scale approaches especially the Regional Land Use Partnership and the Land Use Strategy. The Nature Networks brought forward by the new National Planning Framework and in this Biodiversity Strategy provides the opportunity to provide coherence to the biodiversity elements of these strategies. However, guidance and funding must be provided as per our priorities outlined above.

The lack of policy coherence across policy which impacts biodiversity is noticeable. The Scottish Government must be clear about the hierarchy of this Strategy and make sure its delivery is across policy areas and meaningfully tacking the "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" which the consultation highlights.

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^{lxix} if Scotland is to ensure they maintain or exceed environmental standards as stated in the EU Continuity Bill^{lxx}. This would require Scotland to develop a Nature Restoration Plan, working with scientists, stakeholders and communities to ensure effective interventions.

Q40. Can you set out how you think any of the proposals set out in the consultation might help to eliminate discrimination, advance equality of opportunity and foster good relations?

We need to see a transparent, accountable and participation focused approach that fosters democratic decisions, in other words an Open Governance Approach. Key to this will be involving local communities.

An excellent opportunity for ground up engagement and action is the Nature Networks commitment from the Programme for Government and draft NPF4. We have suggested that the Edinburgh Nature

Network is used as a blueprint. This Nature Network was created by applying the environmental decision-making process outlined in the Ecological Coherence Protocol^{Ixxi} and has also been used in the Inner Forth project^{Ixxii}. It has community engagement at its heart and if applied in the correct manner can be a very inclusive approach.

Nature-based solutions offer a means to improve equality through more equitable access to the benefits of nature. The Strategy offers a way to increase the use of nature-based solutions throughout Scotland, but we need to ensure they are implemented in a way that benefits the provision of social housing and affordable communities^{lxxiii} and other facilities for residents. Recommendations from New York^{lxxiv} demonstrate that local communities need to be included in every aspect of the project to ensure a sense of ownership, belonging and social cohesion is maintained and improved. Knowledge provided by those who live and work in the area is key to a successful project. They are aware of the local conditions and how areas are used by the community. Taking this information into account will improve the success of the project for climate, biodiversity and local people.

Can you provide any evidence which informed your conclusions?

We have provided references to all the evidence we have referred to in our answers.

We see ourselves as a key delivery partner for many of the aspirations laid out in this document so many of our conclusions are formed from practical experience and expertise held within the Scottish Wildlife Trust. Additionally, we have already highlighted key peer reviewed studies in answer to question one which emphasise the scale of our biodiversity loss and the urgency of acting on the biodiversity and nature crisis meaningfully without delay. We also strongly endorse the evidence presented in pages 7-9 of the consultation report.

At the Trust we have a particular emphasis on landscape scale conservation which engages with and involves communities of place and interest. For this reason, we have particularly highlighted the benefits of taking an opportunity mapping-based approach under the Nature Networks. Evidence for this approach can be found in our briefing referenced above.

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