SCOTTISH BIODIVERSITY PROGRAMME – SUMMARY DOCUMENT

1. Background

The Scottish Government (SG) and Scottish Natural Heritage (SNH) have long recognised the importance of the natural environment to our prosperity as a nation and to people's health and well-being, as well as our responsibility to address the global challenges of climate change and biodiversity loss.

The link between biodiversity and climate change is now well established and well understood, both in terms of impact and of joined-up, nature based and nature rich solutions. Scottish Ministers have stated that the challenges facing biodiversity loss are as important as the challenge of combatting climate change. Recent publications such as The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment on Biodiversity and Ecosystems (2019), the Net Zero – The UK's contribution to stopping global warming' report (2019), and the State of Nature Scotland report (2019) clearly identify investment in nature and the restoration of natural resources such as peatlands as a significant contributor to climate change and biodiversity improvements, and to people's wellbeing. These reports underpin new commitments by SG and have highlighted the need to mainstream biodiversity across SG, public bodies, and our wider society. They have also led to increased collaboration with the climate change portfolio, and increased awareness of the impacts of biodiversity loss among stakeholders, business and the general public.

2. Scottish Biodiversity Programme

The Scottish Biodiversity Programme (SBP) is co-led by SG and SNH and has been created to oversee and coordinate all current and planned activity on biodiversity, to secure a common understanding of priorities and an agreed approach to delivering them. The Programme covers all aspects of biodiversity work in Scotland: policy, strategy, reporting, international work, evidence base, communications and public engagement, mainstreaming and funding. A programme approach allows us to manage the volume of work and the high level of co-ordination required across the various organisations and delivery partners, ensuring that we are focused on achieving the most important deliverables.

3. Biodiversity Programme Board

A Programme Board has been established which is co-chaired by Bridget Campbell (Director Environment and Forestry Directorate - SG) and Francesca Osowska (Chief Executive - SNH) and includes staff from both SNH and SG as well as specialist advisors. The structure of the programme is shown in Annex 1, with details of the groups shown below.

4. Biodiversity Advisory Group

The purpose of the Programme Advisory Group is to provide expert technical advice, share experience and act as a sounding board on specific aspects of the programme.

5. Biodiversity Stakeholder Group

The purpose of the Biodiversity Stakeholder Group is to bring together a wide range of interests and provide a forum for open and constructive dialogue, sharing information, updating on progress and exchanging views to help achieve the objectives of the Scottish Biodiversity Programme.

6. Project 1: Scotland's Biodiversity Strategy to 2020

This project will complete the current set of activities to deliver the *2020 Challenge for Scotland's Biodiversity* and *Route Map to 2020.* It covers all reporting against the Scottish Biodiversity Strategy: 2020 Challenge and Route Map until 2020.

The following deliverables for Project 1 are identified as:

- Aichi Targets Progress Reports
- SBS Progress Report to Parliament
- Route Map Report 2017-2019
- Route Map Final Report 2015-2020
- Stakeholder Conference – Spring 2020

The project is supported by a number of working groups with representation from agency, NGO, and science communities The groups were established to take forward key areas of work considered critical to the delivery of the SBS Strategy, and to help co-ordinate biodiversity activity across Scotland to achieve enhanced value and sharing of effort.

The Scottish Biodiversity Strategy (SBS) Working Groups are:

- ***Habitats and Species*** - Role: to provide advice to the SBS coordination group on a number of aspects of species and habitat conservation and contribute to Aichi reporting assessment process
- ***Landscape Scale Conservation*** - Role: to provide advice to the SBS coordination group on landscape conservation.
- *Science Support* - Role: to provide advice on evidence and research requirements to ensure delivery of the SBS and Route Map.
- ***Invasive non-Native Species Action*** - Role: To prioritise and coordinate action on non-native species in Scotland
- ***Protected Areas*** - Role: Responsible for strategic oversight and direction of protected area policy and practice and its contribution to the SBS challenge and route map to 2020
- ***Marine Conservation Programme Board*** - Role: Delivery of the Strategy for Marine Nature Conservation in Scotland's Seas

Two additional strands of work contribute to the work of Project 1:

- *Re-Route – Scotland's Youth Biodiversity Panel* - This is a gathering of young people committed to developing biodiversity work.
- *Biodiversity Challenge Fund* - which has been established to distribute up to £4m of funding to groups on activities which support the Aichi targets.

7. Project 2: Engaging Internationally on Biodiversity

We want to demonstrate leadership on the global stage and are taking an active role in the development of the post-2020 framework and targets for the next decade, which will be agreed in Kunming, China in October 2020. This includes arranging a

Thematic Workshop for regional and sub-national governments in Scotland in April 2020 which will contribute to developing new international targets. The workshop, delivered in partnership with the secretariat of the Convention on Biological Diversity, will welcome 200 delegates from regional and sub-national governments to discuss the contribution that they can make to improving biodiversity. The Workshop will consider positions which will help influence the new international framework and targets.

The overarching purpose of this project is to prepare the way for the successful delivery of a new SBS 2030 challenge and the following deliverables for Project 2 requirements and interests, including participating in Open Ended Working Group (OEWG) meetings and scoping and developing inputs to the 2020 COP 15.

- **A Regional Preparatory Workshop** on 1-3 April, 2020 for around 200 people comprising primarily representatives of regional, sub-national and national governments, to be held at the Royal Botanic Gardens in Edinburgh in partnership with CBD and others.
- A Workshop output – for example, an **'Edinburgh Declaration'** – which will establish a legacy for Scotland and help to bring the voice of the regions and subnational governments to the CBD, and more specifically to the COP15

8. Project 3: Future Strategic Framework for Biodiversity.

The current Strategy; *Scotland's Biodiversity It's in Your Hands* was published in 2004 and runs to 2030. A supplement to that: the "2020 Challenge for Scotland's Biodiversity" (SBS 2020), was published in 2013 with a "A Route Map to 2020" detailing key delivery actions to 2020.

SBS 2020 includes the Aichi biodiversity targets formulated under the United Nations Conventions on Biological Diversity (CBD) in Aichi, Japan 2010. New international biodiversity targets for 2030 are due to be agreed in Kunming, China at CoP15 in October 2020. The revision of the CBD targets in 2020 is a trigger for a fresh look at how best to deliver ambitious and effective improvement to Scotland's biodiversity and an opportunity to explore options for what shape this might take for the next ten years to 2030.

The main objective of this project is to put in place the policy framework and supporting activity that will deliver a step change in action for Scotland's biodiversity. The deliverable for Project 3 is identified as:

- A future strategic framework and supporting activities that will deliver for biodiversity in Scotland

9. Project 4: Biodiversity Evidence Base and Reporting:

To identify and address gaps in the evidence base to support a future strategic framework for Biodiversity in Scotland (this includes the State of Nature report published in October 2019 and a further SoN in 2021; supporting Scottish

Government in its production of National Performance Framework reporting, including the development of a new combined marine and terrestrial indicator and to report on Convention on Biological Diversity at a Scotland level and contribute to UK reporting.

The deliverables for Project 4 are identified as:

- Deliver a joint State of Nature 2019 and 2021 reports
- Continue reporting on indicators, and devising new combined marine and terrestrial indicators
- Provide evidence to underpin a futures strategic framework for biodiversity and related outputs
- Report on Scotland's progress towards the Convention on Biological Diversity goals agreed at Kunming in 2020.

10. Project 5: Communications and Public Engagement:

This project aims to engage public interest and raise the profile of biodiversity/nature with stakeholders and the public, increase public awareness of the impacts of biodiversity loss and importance of nature based solutions to climate change. The project aims to deliver multiple benefits of developing a sustained knowledge, understanding and interaction with nature.

The main deliverables for project 5 are identified as

- Stakeholder engagement and communications strategy
- Key messages and narrative
- Infographics and digital materials
- Suite of public information campaign/programme and materials
- News releases and other promotion of planned work

11. Project 6: Mainstreaming Biodiversity:

The primary objective of this project is to ensure that decision-makers across the Scottish Government, and in other public bodies, third sector and private sector organisations take biodiversity into account in their plans and take action that maximises biodiversity benefits and reduces or avoids adverse impacts.

This is a wide-ranging and long-term project which will take years to deliver results across the range of bodies who have the potential to contribute to positive biodiversity outcomes. The project potentially covers a very wide range of public and private organisations throughout Scotland. We are developing the work on the basis that it will need to be scaled to the budget and resources available.

However we do not wish to limit the overall scope and ambition of the project.
We are adopting a phased approach, focusing on those areas where we have existing networks and contacts to facilitate collaboration, with a view to identifying quick wins, effecting change in areas of high impacts, and building to other priority areas as resources allow.

The main deliverables for project 6 are identified as:

- Analysis of and response to IPBES Report Policy Pathways
- A targeted plan for engaging priority areas and industry sectors
- Fulfil PfG commitment to write to Parliament setting out our analysis of the current position on biodiversity and proposed areas for priority action
- Improved recognition of, and reporting on, the statutory biodiversity duty on public bodies and consideration of whether this can be extended to the private sector in some form.
- Strengthen the biodiversity elements of agri-environment schemes operated by Scottish Government
- Work with Planning to develop new policy on improving biodiversity outcomes for consultation during development of the new statutory Scottish Planning Policy incorporated within National Planning Framework

12. Project 7: Future Funding for biodiversity:

The objective of this project is in the first instance to develop a comprehensive, detailed understanding of the current funding landscape and identify where further focus is required in order to increase positive biodiversity outcomes. The project is dependent on the outcomes of other projects across the programme including, in particular, Project 3 which will deliver the future strategic framework for biodiversity. An element of flexibility is needed in order to ensure future funding will meet requirements. With this in mind the objectives of this work may be revisited over time.

This project will consider any potential sources of current and future funding for biodiversity including the public, private and third sectors. It recognises the need for increased funding capacity and will consider delivery for all eco-types in the terrestrial, marine, urban and peri-urban environments. It will also consider innovative and developing approaches which may present new opportunities.

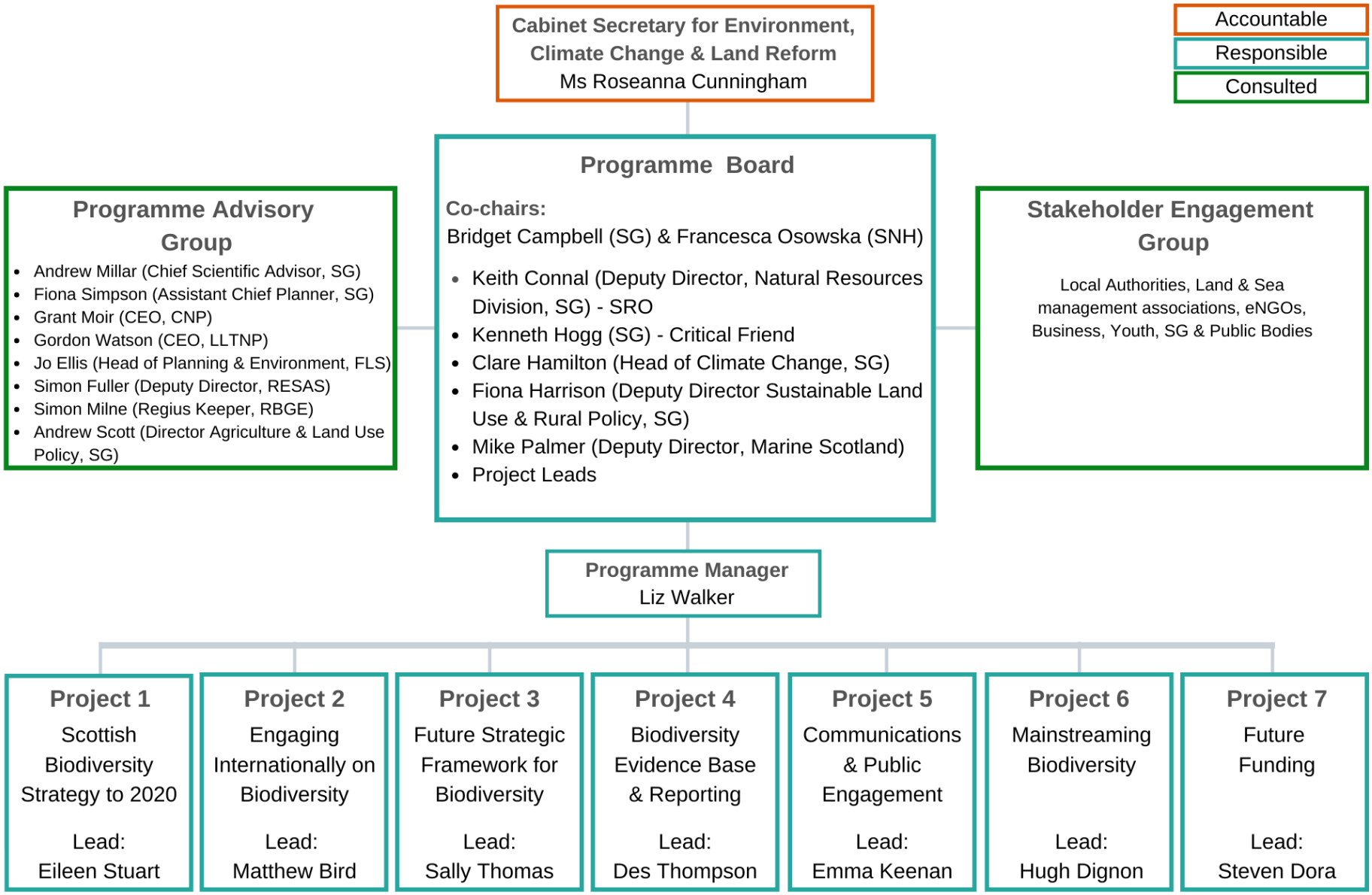
The main deliverables for Project 7 are identified as

- mapping of existing funding arrangements (specifically drawing out what is spent on biodiversity and on what)
- identification of areas that require enhanced effort to ensure positive outcomes for biodiversity
- reports to the Board on operability of environmental green finance initiatives including, in the first instance, a summary report on innovation around the economics of ecosystems and biodiversity and environmental green finance.

Annex 1.

Annex 1 – paper 1

Scottish Biodiversity Programme - Governance



Scottish Biodiversity Programme

Stakeholder Engagement Group

Terms of Reference

Scottish Biodiversity Programme – Stakeholder Engagement Group

Terms of Reference (ToR)

1) **TITLE**

Stakeholder Engagement Group

2) **PURPOSE**

The purpose of the Stakeholder Engagement Group is to bring together a wide range of interest including local authorities, businesses, eNGOs, land and sea management associations, public bodies and youth groups. Meetings will provide a forum for open and constructive dialogue, sharing information, updating on progress and exchanging views to help achieve the objectives of SBP.

3) MEMBERS

Theme	**Organisation**
Scottish Biodiversity Programme	Francesca Osowska (SNH – CEO) Bridget Campbell (Director EnFoR) Keith Connal (Deputy Director – Natural Resources Division) Project Leads Eileen Stuart (SNH) – Project 1 Matthew Bird (SG) – Project 2 Sally Thomas (SNH) – Project 3 Des Thompson (SNH) – Project 4 Emma Keenan (SNH)- Project 5 Hugh Dignon (SG) – Project 6 Steven Dora (SG) – Project 7 Liz Walker - Programme Manager Rebecka Bergh – Programme Support Officer
Local Authority	Cosla

	Local Biodiversity Action Plan Officers
	Central Scotland Green Network
	Glasgow and Clyde Green Network
Land & sea management associations	Scottish Land & Estates
	Scottish Fishermen's Association
	National Farmers Union Scotland
	Association of Deer Management Groups
	Game and Wildlife Conservation Group
	Scottish Game Keeper's Association
	CONFOR
eNGOs	Scottish Environment LINK
Public bodies	SEPA
	Cairngorm National Park
	Loch Lomond and Trossachs National Park
	Scottish Forestry
	Forestry and Land Scotland
	Crown Estates
Youth	Members of the Youth Parliament
	Young Scot
	2050 Climate Group
Professional	CIEEM
Education and Research	Edinburgh University
	RBGE
	James Hutton Institute

- The Stakeholder Engagement Group meeting will be co-chaired by Bridget Campbell and Francesca Osowska and attended by Keith Connal, the SRO, Liz Walker, the Programme

Manager and Rebekah Bergh, the Programme Support Officer as well as the Programme Project Leads.

4) MEETINGS

- Stakeholder Engagement Group meetings will take place twice a year at Victoria Quay, Edinburgh unless otherwise agreed. Meetings will last a maximum of 2 hours unless otherwise agreed;

5) MEETING PAPERS

- Stakeholder Engagement Group meetings will be arranged and co/ordinated by the Programme Manager and Programme Support Officer who will be responsible for recording and circulating Minutes and Action Notes;
- A standard agenda will be agreed by Stakeholder Engagement group members. Additional ad hoc agenda items will be generated by the Chair and SRO.
- The Programme Support Officer will circulate meeting agendas and papers to Stakeholder Engagement Group members by email no later than five working days prior to each meeting;
- Draft Minutes and an Action Note of each meeting will be circulated to the Stakeholder Engagement Group members no later than five working days following each meeting. Draft minutes of the previous meeting will be approved at each meeting and then circulated to all Stakeholder Engagement Group members no later than five working days following the meeting.

6) REVIEW OF GROUP

The role and Terms of Reference of the Stakeholder Engagement Group will be reviewed annually.

Terms of Reference Agreed: _____

Date: _____

CBD

UNEP

Convention on Biological Diversity

Distr.
GENERAL

CBD/WG2020/2/3/Add.1
6 January 2020

ORIGINAL: ENGLISH

OPEN-ENDED WORKING GROUP
ON THE POST-2020 GLOBAL
BIODIVERSITY FRAMEWORK
Second meeting
Kunming, China, 24-29 February 2020

ZERO DRAFT OF THE POST-2020 GLOBAL BIODIVERSITY FRAMEWORK

Addendum

APPENDICES:

PRELIMINARY DRAFT MONITORING FRAMEWORK FOR THE GOALS AND PRELIMINARY DRAFT MONITORING FRAMEWORK FOR TARGETS

Note by the Co-Chairs and the Executive Secretary

1. The present addendum contains two appendices to the zero-draft text of the post-2020 global biodiversity framework (CBD/WG2020/2/3, annex I). It comprises preliminary draft monitoring frameworks for the 2030 and 2050 Goals (appendix 1) and the 2030 action targets (appendix 2) of the framework. The appendices tabulate, for each of the goals and targets of the post 2020 global biodiversity framework (column A), suggested elements to be monitored (column B). These are implicit and explicit elements of each of the goals and targets that should be monitored in assessing progress towards them. They also constitute issues that should be reflected in reporting processes. For each of these elements corresponding indicators (column C), where available, have been identified. Many of these indicators could be disaggregated for different scales (i.e. national, regional and global), species and ecosystems. The list of indicators also responds to the request from the Subsidiary Body on Scientific, technical and Technological Advice, in recommendation 23/1, to include information on the availability of indicators for targets included in the zero draft of the global biodiversity framework.

2. The present addendum is being provided for the information of participants in the second meeting of the Open-ended Working Group on the Post-2020 Global Biodiversity Framework. It will be revised and updated in the light of the outcomes of the second meeting of the Working Group, the comments received on the peer review of indicators and other submissions called for in recommendations 23/1 as well as the twenty-fourth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice.

APPENDIX 1. PRELIMINARY DRAFT MONITORING FRAMEWORK FOR THE 2030 AND 2050 GOALS

	A	B	C
	Draft 2050 Goals	**Suggested elements of the goals for monitoring**	**Suggested indicators**[1]
1	No net loss by 2030 in the area and integrity of freshwater, marine and terrestrial ecosystems, and increases of at least [20%] by 2050, ensuring ecosystem resilience.	Change, and rate of change, in extent of natural ecosystems and biomes (overall, for each biome/ecosystem type, and for intact areas, e.g. primary forests).	Forest area as a proportion of total land area. Trends in forest extent and/or tree cover. Trends in primary forest extent.* Continuous Global Mangrove Forest Cover Live coral cover. Species Habitat Index. Wetland Extent Trends Index. Biodiversity Habitat Index. Red List for Ecosystems.*
		Change in ecosystem connectivity and fragmentation.	*To be identified*
		Change in ecosystem integrity resilience and degradation and rate of ecosystem restoration.	Proportion of land that is degraded over total land area Global Ecosystem Restoration Index. Cumulative human impacts on marine ecosystems. Ocean Health Index. Vegetation health index* Human footprint*
2	The percentage of species threatened with extinction is reduced by [X%] and the abundance of species has increased on average by [X%] by 2030 and by [X%] by 2050.	Number of extinctions.	Number of species extinctions (birds and mammals). Number of extinctions prevented.
		Change in conservation status.	Red List Index.
		Change in species abundance.	Living Planet Index. Biodiversity Intactness Index.

[1] Except where identified with an asterisk (*), the indicators used in this table have been identified by the Biodiversity Indicators Partnership and/or are used to monitor progress towards the Sustainable Development Goals.

	A	B	C
	Draft 2050 Goals	**Suggested elements of the goals for monitoring**	**Suggested indicators**[1]
3	Genetic diversity is maintained or enhanced on average by 2030, and for [90%] of species by 2050.	Change in genetic diversity of crops and breeds, in situ and ex situ.	Number of plant genetic resources for food and agriculture secured in medium- or long-term conservation facilities (SDG Indicator 2.5.1a). Proportion of local breeds classified as being at risk, not at risk or at an unknown level of risk of extinction. Comprehensiveness of conservation of socioeconomically as well as culturally valuable species.
		Change in the genetic diversity of wild relatives.	Red List Index (species used for food and medicine and wild relatives of domesticated animals).
4	Nature provides benefits to people contributing to: (i) Improvements in nutrition for at least [X million] people by 2030 and [Y million] by 2050; (ii) Improvements in sustainable access to safe and drinkable water for at least [X million] people, by 2030 and [Y million] by 2050; (iii) Improvements in resilience to natural disasters for at least [X million] people by 2030 and [Y million] by 2050; (iv) At least [30%] of efforts to achieve the targets of the Paris Agreement in 2030 and 2050.	Change in nutrition.	Change in nutrient availability from biological resources, especially for vulnerable populations.*
		Change in access to water.	Proportion of bodies of water with good ambient water quality. Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe WASH services). Percentage of population using safely managed drinking water services. Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type. Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (SDG Indicator 6.4.2).
		Change in trends in natural based disasters.	Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population (SDG indicator 11.5.1).
		Trends in the carbon sequestered in natural systems.	IPPC data*

	A	B	C
	Draft 2050 Goals	**Suggested elements of the goals for monitoring**	**Suggested indicators**[1]
5	The benefits, shared fairly and equitably, from the use of genetic resources and associated traditional knowledge, have increased by [X] by 2030 and reached [X] by 2050.	Change in the amount of monetary benefits shared.	Number of countries with indigenous peoples and local communities that received monetary or non-monetary benefits from granting access to traditional knowledge associated with genetic resources for its utilization* Amount of monetary benefits (in United States dollars) received from the utilization of traditional knowledge associated with genetic resources* Disaggregated information for the indicators reflecting benefits shared under relevant international ABS agreements and instruments* Number of countries that have received monetary or non-monetary benefits from granting access to genetic resources for their utilization* Amount of monetary benefits (in United States dollars) received from utilization of genetic resources*
		Change in the amount of non-monetary benefits shared.	Number of research and development results shared* Number of collaborations in scientific research* Number of participations in product development* Number of transfers of technology* Number of people trained* Number of jobs created* Number of joint ownerships of relevant intellectual property rights*

APPENDIX 2. PRELIMINARY DRAFT MONITORING FRAMEWORK FOR THE 2030 ACTION TARGETS

	A	B	C
	Draft 2030 targets	**Suggested elements of the targets for monitoring**	**Suggested indicators[2]**
	Reducing threats to biodiversity		
1	Retain and restore freshwater, marine and terrestrial ecosystems, increasing by at least [50%] the land and sea area under comprehensive spatial planning addressing land/sea use change, achieving by 2030 a net increase in area, connectivity and integrity and retaining existing intact areas and wilderness.	Change in extent and rate of change of natural ecosystems and biomes. Land-use change for agriculture* Forest area as a proportion of total land area. Trends in forest extent (tree cover). Change in cropland extent.	Continuous Global Mangrove Forest Cover. Live coral cover. Species Habitat Index. Wetland Extent Trends Index. Biodiversity Habitat Index.
		Spatial planning.	Proportion of land and sea area under spatial planning regimes that adequately integrate biodiversity.
		Change in ecosystem connectivity.	*To be identified*
		Change in rate of habitat degradation.	Proportion of land that is degraded over total land area. Cumulative human impacts on marine ecosystems. Vegetation health index.* Ocean Health Index.
		Habitat restoration.	Area of land restored, by ecosystem* (and resulting benefits)* Global Ecosystem Restoration Index.

[2] Except where identified with an asterisk (*), the indicators used in this table have been identified by the Biodiversity Indicators Partnership and/or are used to monitor progress towards the Sustainable Development Goals.

	A	B	C
	Draft 2030 targets	**Suggested elements of the targets for monitoring**	**Suggested indicators[2]**
2	Protect sites of particular importance for biodiversity through protected areas and other effective area-based conservation measures, by 2030 covering at least [60%] of such sites and at least [30%] of land and sea areas with at least [10%] under strict protection.	Change in extent of protected areas and other area-based conservation measures.	Protected area coverage. OECM coverage.
		Coverage and representativity of protected areas and other area-based conservation measures (ecosystems, and key areas).	Protected Area Coverage of Key Biodiversity Areas. Protected area coverage of ecoregions. Protected Area Representativeness Index. Species Protection Index.
		Connectivity of protected areas	Protected Area Connectedness Index (PARC-Connectedness).
		Protected area management	Protected Areas Management Effectiveness Governance of protected areas and OECMs (public, private, community, IPLC
3	Control all pathways for the introduction of invasive alien species achieving by 2030 a [50%] reduction in the rate of new introductions, and eradicate or control invasive alien species to eliminate or reduce their impacts by 2030 in at least [50%] of priority sites.	Change in the number of countries Measures put in place to control introduction pathways, by pathway, distinguishing intentional (release) and unintentional (escape, stowaway, contaminants and corridors)	Legislation for prevention and control of invasive alien species (IAS), encompassing "Trends in policy responses, legislation and management plans to control and prevent spread of invasive alien species" and "Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species (also, SDG indicator 15.8.1). Number of species assessed for risk. Number of Parties to, and counties applying, relevant international legal instruments that for controlling pathways (BWM Convention; IPPC, OIE, Biofouling guidelines; World Customs Organization Safe Framework of Standards)* Number of countries monitoring priority invasive alien species*
		Change in the rate of invasive alien species introductions	Trends in the numbers of invasive alien species introduction events. Trends in the numbers of invasive alien species introduction events compared to BAU trends*

	A	B	C
	Draft 2030 targets	**Suggested elements of the targets for monitoring**	**Suggested indicators[2]**
		Change in the rate of invasive species eradications or controlled	Trends in invasive alien species vertebrate eradications. Trends in invasive alien species control* Use of biocontrol*
		Change in the impact of invasive alien species	Red List Index (impacts of invasive alien species) Economic impacts of invasive alien species* Cost of control of invasive alien species population* Loss of cultural value associated with native biodiversity*
4	Reduce by 2030, pollution from excess nutrients, biocides, plastic waste and other sources by at least [50%].	Change in the trends in nitrogen waste	Nitrogen Use Efficiency. Nitrogen + Phosphate Fertilizers (N+P205 total nutrients). Trends in Loss of Reactive Nitrogen to the Environment. Trends in Nitrogen Deposition.
		Change in the rate of pesticide use.	Amount of pesticide use*
		Change in the rate of plastic pollution.	Index of Coastal Eutrophication (ICEP) and Floating Plastic debris Density. Proportion of reusable, recyclable or where viable alternatives do not exist recoverable.
		Change in amount of other pollutants (including light and noise).	*To be identified*
		Change in the impact of pollution on biodiversity.	Index of Coastal Eutrophication (ICEP) and Floating Plastic debris Density Proportion of bodies of water with good ambient water quality. Red List Index (impacts of pollution).
		Change in the number of countries with effective waste and pollution management programmes and policies.	Number of countries with effective waste management plans*

	A	B	C
	Draft 2030 targets	**Suggested elements of the targets for monitoring**	**Suggested indicators[2]**
5	Ensure by 2030 that the harvesting, trade and use of wild species, is legal and at sustainable levels.	Number of countries with regulations in place to address illegal and/or unsustainable harvest.	Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing. Progress by countries in the degree of implementation of the international code of conduct for responsible fisheries (FAO stats)* Percentage of Parties with legislation in Category 1 under CITES NLP. Proportion of traded wildlife that was poached or illicitly trafficked (SDG Indicator 15.7.1).
		Change in the conservation status of socioeconomically important species. Red List Index (species used for food and medicine and wild relatives of domesticated animals).	Proportion of local breeds classified as being at risk, not-at-risk or at unknown level of risk of extinction. Comprehensiveness of conservation of socioeconomically as well as culturally valuable species.
		Change in the area of forests under sustainable management certification.	Area of forest under sustainable management: total FSC and PEFC forest management certification.
		Change in the health of fisheries.	Proportion of fish stocks within biologically sustainable levels Inland fishery production. Marine Trophic Index.
		Change in percentage of fisheries under sustainable management certification.	MSC Certified Catch.
		Change in the impacts of the harvest, trade and use of biological resources on biodiversity.	Red List Index (impacts of fisheries, forest specialist species, impacts of utilisation and impacts of internationally traded species). Living Planet Index (forest specialists, farmland specialists and trends in target and bycatch species). Wild Bird Index (forest & farmland specialist birds).

	A	B	C
	Draft 2030 targets	**Suggested elements of the targets for monitoring**	**Suggested indicators[2]**
			Proportion of traded wildlife that was poached or illicitly trafficked.
6	Contribute to climate change mitigation and adaptation and disaster risk reduction through nature-based solutions providing by 2030 [about 30%] [at least XXX MT CO2=] of the mitigation effort needed to achieve the goals of the Paris Agreement, complementing stringent emission reductions, and avoiding negative impacts on biodiversity and food security.	Trends in the amount of carbon stored in ecosystems and emissions avoided.	Indicators related to REDD+
		Trends in the restoration of degraded ecosystems.	Soil Carbon*
		Trends in use of nature-based solutions.	Percentage of countries with NBS included in NDCs amount of GHG Mt reduction coming from NBS in national plans*
		Trends in disaster risk reduction.	Number of people with reduced vulnerability due to NBS (e.g. coastal protection from mangroves, coral reefs).
		Trends in the resiliency of biodiversity to the impacts of climate change	Bioclimatic Ecosystem Resilience Index (BERI). Reef Fish Thermal Index. Red List Index (reef-building corals). Climatic impacts on European and North American birds. Average marine acidity (pH) measured at agreed suite of representative sampling stations. Large Reef Fish. Species range shifts*
Meeting people's needs through enhanced use and benefit-sharing			
7	Enhance the sustainable use of wild species providing, by 2030, benefits, including enhanced nutrition, food security and livelihoods for at least [X million] people, especially for the most vulnerable, and reduce human-wildlife conflict by [X%].	Change in benefits	Estimates of numbers of people benefiting from wild harvest of fish, wildlife, medicinal plants etc* Estimates of value of wild harvest of fish, wildlife, medicinal plants etc* Change in nutrient availability from biological resources, especially for vulnerable populations*
		Change in incidence of human-wildlife conflict.	Incidence of human-wildlife conflict*

	A	B	C
	Draft 2030 targets	**Suggested elements of the targets for monitoring**	**Suggested indicators[2]**
8	Conserve and enhance the sustainable use of biodiversity in agricultural and other managed ecosystems to support the productivity, sustainability and resilience of such systems, reducing by 2030 related productivity gaps by at least [50%].	Change in trends in pollinators and benefits.	Red List Index (pollinator species). Pollination yield-gap*
		Change in soil health.	Soil carbon* Soil organic matter. Soil rooting depth.
		Change in trends in the use of natural pest controls.	Application of integrated pest management.
		Change in the use of biological friendly agricultural processes.	Indicators used to assess progress towards target 15.2 of the Sustainable Development Goals maintained by FAO.
		Change in the agricultural area under sustainable management.	Areas of agricultural land under conservation agriculture. Proportion of agricultural area under productive and sustainable agriculture.
		Change in trends in the genetic diversity of crops and domesticated animals protected.	Number of plant genetic resources for food and agriculture secured in medium or long-term conservation facilities (SDG Indicator 2.5.1a).
9	Enhance nature-based solutions contributing, by 2030, to clean water provision for at least [XXX million] people.	Change in the number of people with access to sufficient amounts or quality freshwater.	Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe WASH services). Percentage of population using safely managed drinking water services. Total renewable water resources.* Proportion of bodies of water with good ambient water quality (SDG Indicator 6.3.2).
		Change in the number protected forested watershed, and inland water ecosystems essential for the provision of water.	Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type.

	A	B	C
	Draft 2030 targets	**Suggested elements of the targets for monitoring**	**Suggested indicators[2]**
		Change in water use intensity.	Human appropriation of fresh water (water footprint). Change in water use efficiency over time. Change in water use efficiency over time (SDG Indicator 6.4.1). Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (SDG Indicator 6.4.2).
10	Enhance the benefits of green spaces for health and well-being, especially for urban dwellers, increasing by 2030 the proportion of people with access to such spaces by at least [100%].	Change in the extent of urban green space.	*To be identified*
		Change in the number of people with easy access to natural environments.	*To be identified*
11	Ensure that benefits from the utilization of genetic resources, and related traditional knowledge, are shared fairly and equitably, resulting by 2030 in an [X] increase in benefits.	Change in the amount of monetary benefits shared.	Number of countries with indigenous peoples and local communities that received monetary or non-monetary benefits from granting access to traditional knowledge associated with genetic resources for its utilization.* Amount of monetary benefits (in United States dollars) received from the utilization of traditional knowledge associated with genetic resources.* Disaggregated information for the indicators reflecting benefits shared under relevant international ABS agreements and instruments.* Number of countries that have received monetary or non-monetary benefits from granting access to genetic resources for their utilization.* Amount of monetary benefits (in United States dollars) received from utilization of genetic resources*

	A	B	C
	Draft 2030 targets	**Suggested elements of the targets for monitoring**	**Suggested indicators[2]**
		Change in the amount of non-monetary benefits shared	Number of research and development results shared* Number of collaborations in scientific research* Number of participations in product development* Number of transfers of technology* Number of people trained* Number of jobs created* Number of joint ownerships of relevant intellectual property rights*
		Change in the number of countries participating in relevant international agreements and with legislative, administrative and policy frameworks or measures on access and benefit sharing	Number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits (SDG indicator 15.6.1). Number of Parties to the Convention on Biological Diversity (CBD) that have deposited the instrument of ratification, acceptance, approval or accession of the Nagoya Protocol. Number of Contracting Parties to the International Treaty on Plant Genetic Resources for Food and Agriculture. Number of countries that have reported legislative, administrative and policy frameworks or measures to implement the Convention's provisions on access and benefit-sharing. Number of countries that have reported legislative, administrative and policy frameworks or measures to implement the International Treaty on Plant Genetic Resources for Food and Agriculture. Total number of transfers of crop material from the Multilateral System of the International Treaty on Plant Genetic Resources for Food and Agriculture received in a country.

	A	B	C
	Draft 2030 targets	**Suggested elements of the targets for monitoring**	**Suggested indicators[2]**
	Tools and solutions for implementation and mainstreaming		
12	Reform incentives, eliminating the subsidies that are most harmful for biodiversity, ensuring by 2030, that incentives, including public and private economic and regulatory incentives are either positive or neutral for biodiversity.	Change in the value of subsidies harmful to biodiversity	Trends in potentially environmentally harmful elements of government support to agriculture (producer support estimate). Fuel subsidies for fisheries. Subsidies for pesticide use and fertilizer use.
		Change in the value of positive incentives for biodiversity.	Number of countries with biodiversity-relevant charges and fees. Number of countries with biodiversity-relevant taxes. Number of countries with biodiversity-relevant tradable permit schemes.
13	Integrate biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts, ensuring by 2030, that biodiversity values are mainstreamed across all sectors and that biodiversity-inclusive strategic environmental assessments and environmental impact assessments are comprehensively applied.	biodiversity values integrated into national and local planning, development processes, poverty reduction strategies.	*To be identified*
		biodiversity values integrated into national accounts.	*To be identified*
		Application of biodiversity-inclusive strategic environment assessments and environmental impact assessments.	Number of countries systematically applying environmental impact assessments that integrate biodiversity considerations.* Number of countries systematically applying strategic environmental assessments that integrate biodiversity considerations.*
14	Reform economic sectors towards sustainable practices, including along their national and transnational supply chains, achieving by 2030 a reduction of at least [50%] in negative impacts on biodiversity.	*To be identified*	
		Change in the number of private-sector organizations which reflect biodiversity in their planning, valuation, and impact assessment processes.	*To be identified*

	A	B	C
	Draft 2030 targets	**Suggested elements of the targets for monitoring**	**Suggested indicators[2]**
15	Resources, including capacity-building, for implementing the framework have increased from all sources so that by 2030 resources have increased by [X%] and are commensurate with the ambition of the targets of the framework.	Change in the size of flows of financial resources for biodiversity.	Official development assistance for biodiversity.
		Change in expenditure on biodiversity.	Information provided through the through the financial reporting framework*
		Change in the number of Parties which have developed national financial plans for biodiversity and have this plan fully resourced.	Information provided through the through the financial reporting framework*
16	Establish and implement measures in all countries by 2030 to prevent potential adverse impacts of biotechnology on biodiversity.	Change in the number of Parties to the Convention on Biological Diversity that have adopted and implemented necessary biosafety legal, administrative and other measures.	Percentage of Parties that have the necessary biosafety legal and administrative measures in place* Percentage of Parties that implement their biosafety measures* Percentage of Parties that have the necessary measures and means for detection and identification of products of biotechnology* Percentage of Parties to the Cartagena Protocol on Biosafety implementing the relevant provisions of the Protocol*
		Change in the number of Parties to the Convention and the Cartagena Protocol that have carried out scientifically sound risk assessments and manage the identified risks.	Percentage of Parties that carry out scientifically sound risk assessments to support biosafety decision-making* Percentage of Parties that establish and, as applicable, implement risk management measures* Percentage of Parties to the Cartagena Protocol on Biosafety implementing the relevant provisions of the Protocol*
		Change in the number of Parties to the Convention and the Cartagena Protocol that have shared and have access to biosafety-related information for the safe use of the products of biotechnology.	Percentage of Parties with mechanisms to facilitate the sharing of and access to information on biosafety* Percentage of Parties to the Cartagena Protocol on Biosafety* implementing the relevant provisions of the Protocol*

	A	B	C
	Draft 2030 targets	**Suggested elements of the targets for monitoring**	**Suggested indicators[2]**
		Change in the number of Parties to the Convention and the Cartagena Protocol that have systems in place for restoration and compensation for damage to conservation and sustainable use of biological diversity.	Percentage of Parties with legal and technical measures for restoration and compensation* Percentage of Parties to the Nagoya – Kuala Lumpur* Supplementary Protocol implementing the relevant provisions of the Supplementary Protocol*
17	People everywhere take measurable steps towards sustainable consumption and lifestyles, taking into account individual and national cultural and socioeconomic conditions, achieving by 2030, just and sustainable consumption levels.	Change in the trends in the use of resources.	Ecological Footprint. Human Appropriation of Net Primary Production (HANPP). Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP (SDG indicator 12.2.2). Food loss index and food waste index (SDG Indicator 12.3.1).
		Change in the number of countries with policies in place to promote sustainable consumption.	Number of countries with sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or target into national policies (SDG Indicator 12.1.1)
18	Promote education and the generation, sharing and use of knowledge relating to biodiversity, in the case of the traditional knowledge, innovations and practices of indigenous and local communities with their free, prior and informed consent, ensuring by 2030 that all decision makers have access to reliable and up to date information for the effective management of biodiversity.	Change in the rate of generation and access of biodiversity information available.	Growth in Species Occurrence Records Accessible through GBIF. Proportion of known species assessed through the IUCN Red List. Species Status Information Index.

	A	B	C
	Draft 2030 targets	**Suggested elements of the targets for monitoring**	**Suggested indicators[2]**
19	Promote the full and effective participation of indigenous peoples and local communities, and of women and girls as well as youth, in decision making related to the conservation and sustainable use of biodiversity, ensuring by 2030, equitable participation and rights over relevant resources.	Change in the number of countries involving indigenous peoples and local communities in decision-making processes.	
		Change in the number of countries recognising traditional knowledge, practices and innovations, traditional occupations and customary use.	Index of Linguistic Diversity.
		Change in the number of countries with legislation or policies to ensure women's access to land, forests, protected areas, coastal areas and other key biological resources, and their associated benefits.	Percentage of NBSAPs that include actions on ensuring women's leadership and representation in decision-making bodies at all levels* Number of Parties that have developed and implemented national gender action plans or strategies for biodiversity* Number of Parties that have guidance or instructions to integrate gender considerations in biodiversity conservation and sustainable use programmes/projects*
		Change in the participation of women in environmental governance.	Percentage representation of women in sector-specific environmental governance bodies (including communal land governance bodies, forest groups, water governance bodies and fisheries management bodies)*
20	Foster diverse visions of a good quality of life and unleash values of responsibility, to effect by 2030 new social norms for sustainability.	Change in the number of people aware of the importance of biodiversity.	Biodiversity Barometer.
		Change in the number of people taking action for biodiversity.	Global Biodiversity Engagement Indicator.

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