NATURE POSITIVE INITIATIVE

Building Consensus on State of Nature Metrics to Drive Nature Positive Outcomes

Consultation brief on draft metrics - 8 October 2024

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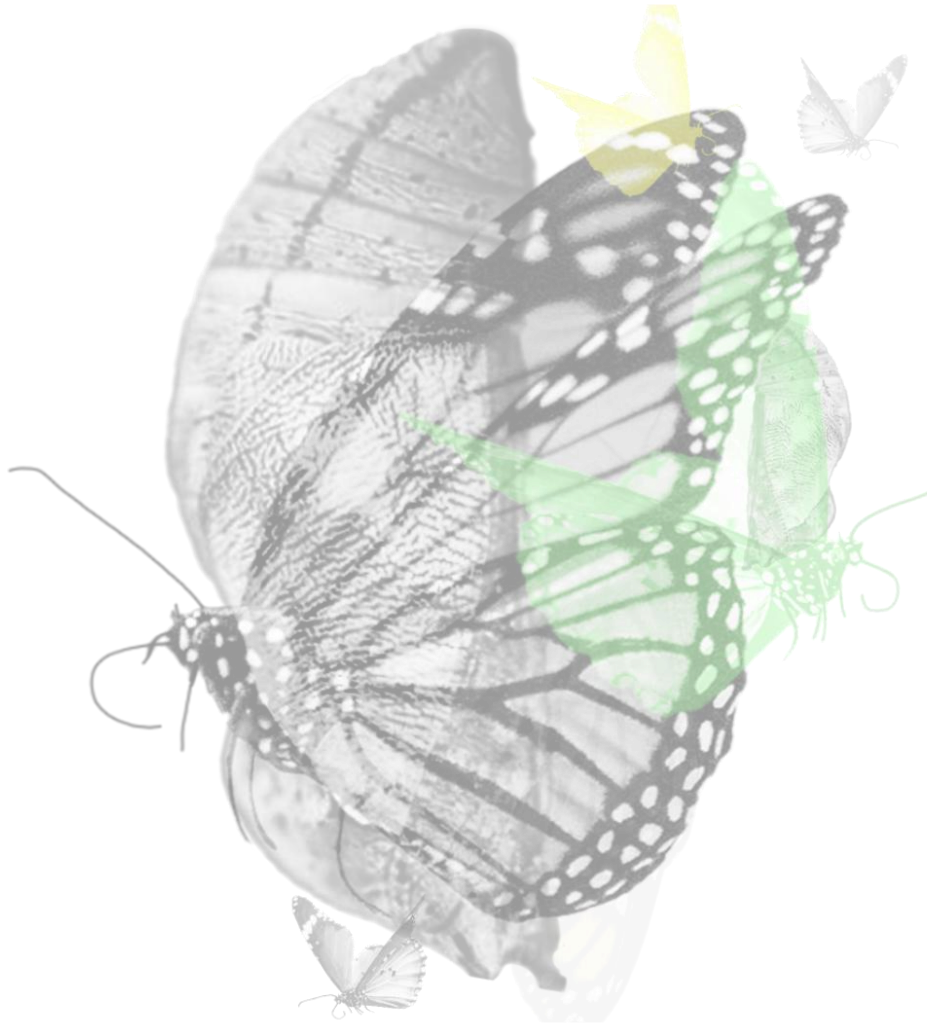
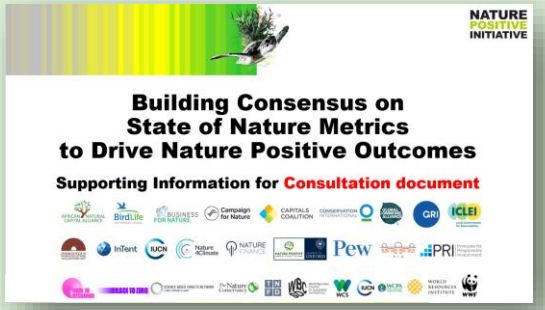


A supporting information pack has been developed to provide additional detail for those wanting to gain further insight into the approach and background of the Consultation Brief. A detailed Glossary of key terms is also provided in the Supporting Information.

Please access the Supporting Information here.



NATURE POSITIVE INITIATIVE

Introduction

Purpose of this consultation brief

The Nature Positive Initiative (NPI), a coalition of many of the world's largest conservation organisations, business and finance coalitions, sustainability standards and target setters, indigenous knowledge and scientific institutes, is convening a process to foster consensus on a small set of metrics to evaluate changes in the state of nature. This initiative is delivered with support from Ernst & Young (EY) and The Biodiversity Consultancy (TBC).

The Problem Statement

Measuring changes in the state of nature in a consistent way is essential to demonstrate nature positive outcomes and track progress to the Kunming-Montreal Global Biodiversity Framework's (GBF) mission to 'halt and reverse nature loss by 2030'. However:

- There is a lack of consensus on credible yet practical metrics to measure the state of nature and nature positive outcomes, which hinders engagement, accountability, recognition, disclosure, and progress tracking.
- Nature is complex, and no single indicator and metric can fully capture the state of nature.
- More than 600 nature metrics are available, so it is therefore challenging for organisations to determine what to measure in a consistent way, leading to inaction.

Building consensus on state of nature (SON) metrics is crucial to effectively monitor whether our actions are truly contributing to nature's recovery. These metrics will be a central component of any nature strategy, complementing and informing important metrics that measure pressure and response.

Please refer to the Supporting Information for more detail on the project background and context.

The Mission

Our mission is to build consensus on a set of measurable indicators and metrics that capture the effectiveness of our efforts to halt nature loss and set it on a path to recovery, thereby delivering nature positive outcomes. We do not aim to develop new metrics or replace those already in use. Instead, we aim to identify the most robust and credible metrics that are also practical and accessible for users to measure and track changes in the state of nature. These metrics can then be integrated into existing and emerging nature standards and applied widely.

A call for urgent action on nature

- Nature underpins the health of the planet and the well-being of all who inhabit it. It provides essential services such as food, medicine, clean air and water, mitigation of climate change, protection from natural disasters, and places for recreation and cultural enrichment. However, nature is in a critical state of decline.
- Nature loss has significant implications for the achievement of Sustainable Development Goals (SDGs). Recognising this, global stakeholders have acknowledged the urgent need to halt and reverse this trend.

Achieving consensus will:

- Align metrics applied by diverse groups of state and non-state actors to establish a consistent understanding on and implementation of how to measure the state of nature; and
- Ensure that strategies and actions targeted at pressures and responses are contributing to nature's recovery; and
- Provide clarity and confidence, today lacking, needed to ignite actions at the scale and speed needed, through a standardised approach; and
- Create accountability through the credible measurement of nature positive outcomes, and establish a basis for credible disclosure, reporting, and legitimate recognition of each actors' contribution.

We are seeking your input

This consultation brief serves as an invitation for you to provide your input on a draft set of SON metrics. To provide a response, please complete our survey which can be accessed here. The survey will close at **midnight on Wednesday, 13 November (GMT)**.

Your feedback will be crucial in shaping the Nature Positive Initiative's Final State of Nature Metrics scheduled for release in early 2025.

Developing consensus on the State of Nature (SON) Metric Framework

Why focus on state of nature metrics?

State of Nature (SON) metrics are essential for monitoring whether our efforts are contributing to nature's recovery, a fundamental aspect of any comprehensive nature strategy. Measuring every aspect of nature is not feasible or practical. Therefore, we seek to identify a small set of metrics that can act as an indication of nature's overall health.

What about pressure and response metrics?

There is a current gap in the use and reporting of SON metrics. Entities more often will measure 'pressure' (e.g. wastewater volume) or 'response' (e.g. volume of wastewater treated) metrics. Yet, few also measure the impact of these pressures or responses on the abundance, diversity, integrity, and resilience of ecosystems, species, and natural processes — the state of nature (e.g. aquatic biodiversity). See Supporting Information.

Where do SON metrics fit in the landscape?

SON metrics complement and are key to inform responses to pressures. A variety of use-cases for these metrics have been identified, including target setting; disclosure; reporting, strategy setting; and understanding impacts, dependencies, risks and opportunities. Additional applications may emerge, for instance, within the public sector or in monitoring the overarching delivery of the GBF and its mission.

The NPI's partners, including the SBTN, TNFD, GRI and WBCSD, recognise the need for SON metrics, and are exploring how these metrics may be integrated into their respective frameworks. While integration will initially be on a voluntary basis, SON metrics could be also be considered for inclusion in regulated standards in the future.

More information on measuring the SON, how these metrics fit within the landscape, and use cases is provided in the Supporting Information.

Our approach to building consensus on a set of SON metrics

- The framework structure and the draft shortlist of metrics presented in this consultation brief were developed with the objective to identify metrics that could provide the scale, diversity, credibility and completeness but also practicality to be used across a variety of scales and users.
- 636 SON metrics were screened to determine their practicality, credibility, scientific basis, responsiveness to changes made by users, flexibility to incorporate new data and techniques, and alignment with existing standards and target setting frameworks. The metrics were also assessed for accessibility to adequate data and their potential auditability. Metrics were chosen based on their applicability and wide use cases for state and non-state actors across realms, scales and geographies, and purposes.
- The metrics were integrated into a structured framework covering aspects such as extent, condition, and function, and defined approaches for 'sensitive' or 'important' ecosystems and species. Metrics were tested with a range of stakeholders from the NPI's working groups, industry, and technical experts.

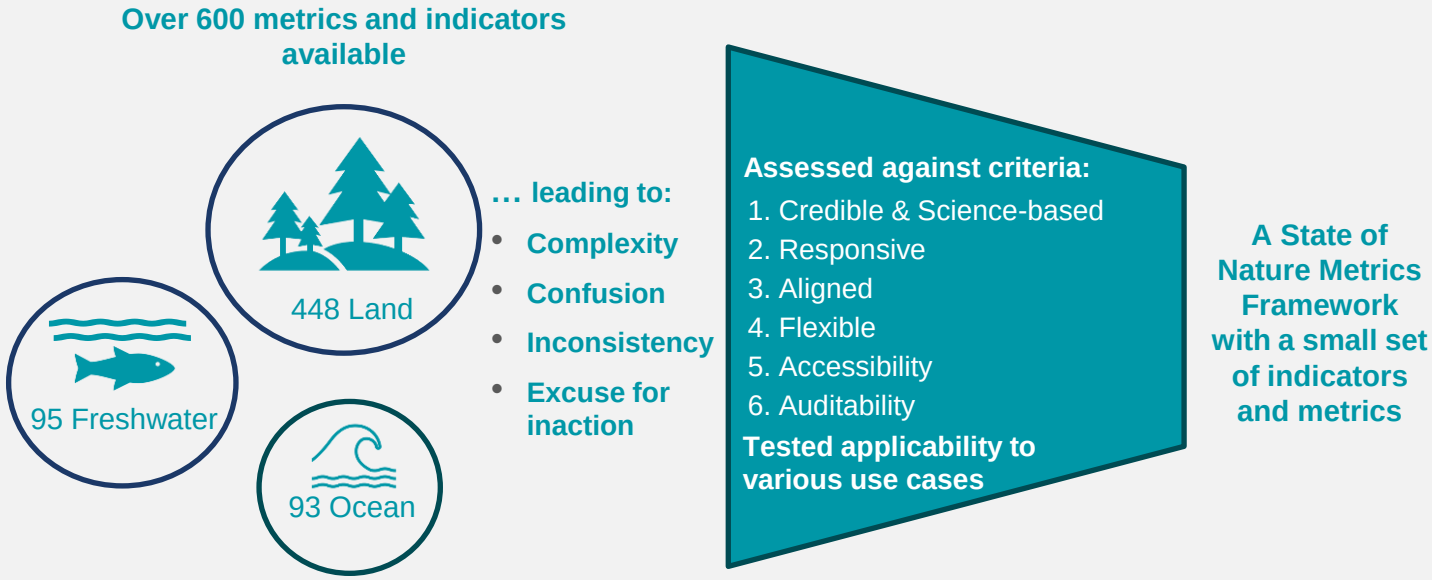


Figure 1: Approach to shortlisting metrics and developing a State of Nature Metrics Framework

Defining the Scope

Focus on the living elements of nature

This initial phase of work primarily focuses on identifying metrics to measure and track 1) species and 2) ecosystems. Natural processes will be addressed in future phases. Understanding these elements are critical to measuring nature positive outcomes.

While there is some agreement on how to measure the non-living, or 'abiotic', elements of nature, such as water, soil, and air quality, there is a notable lack of consensus on measuring changes in the living, or 'biotic', elements of nature, in other words biodiversity. This stems from the complex and less clearly understood relationships between human activities and the living elements of nature.

This project focuses on the biotic elements of nature but recognises their interdependencies. Abiotic components are incorporated within some indicators, such as 'ecosystem condition', because living and non-living elements of nature cannot be entirely separated.

Value chain limitations

Biodiversity degradation can most accurately be monitored at the local level. To meaningfully measure nature positive outcomes, users need granular, location-specific data. However, this can make it difficult to measure changes in the SON at a portfolio or supply chain level (herein referred to collectively as 'value chain'), particularly where there is low traceability to local sites.

The proposed metrics outlined in this brief are applicable to users with location-specific data. We recognise many users will not have complete traceability over their entire value chain, and this will require time and resources to capture. However, identifying the location of pressures and responses as well as change in the state of nature is key. We offer interim strategies to address these challenges on page 5.

Key focus areas for future work

The following important elements to measuring nature and nature positive outcomes have not yet been addressed as part of this initial phase of work due to project constraints. However, the NPI plans to convene processes to address these items as part of future work:

- **Marine and freshwater metrics (currently in progress):** Biodiversity metrics across the marine, freshwater, and terrestrial realms differ considerably in methodology and application. Additional analysis and consultation with stakeholders is required to tailor a suitable set of metrics for marine and freshwater environments.
- **Natural processes and ecosystem services:** The initial phase has focused on metrics for ecosystems and species. Natural processes and ecosystem services, while extremely important, will be addressed in a second phase.
- **Indigenous Peoples and Local Communities (IPLC):** Recognising the depth and value of knowledge held by IPLCs, it is essential to recognize their insights and practices. In the next phase, we aim to convene a process to build consensus on how traditional knowledge can complement state of nature metrics in measuring whether nature is in recovery. Guidance on how the metrics and indigenous knowledge can be applied in relation to IPLCs also needs to be developed.
- **Guidance on making 'nature positive' claims:** Linking an organisation's actions to nature positive outcomes is complex, as multiple entities may impact the same landscape and contribute to its degradation or recovery. Stakeholders highlighted the need for guidance on establishing credible connections between organisational efforts and nature positive outcomes. This initial phase does not provide such guidance but, once consensus on SON metrics is reached, we will convene a discussion on this issue.

The SON Metric Framework

Introducing the Framework

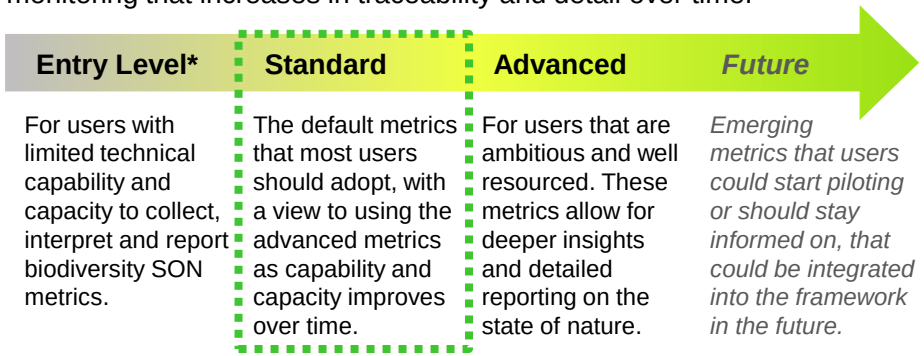
The proposed SON Metric Framework ('the Framework') covers key metrics across ecosystem and species. To ensure that a minimum set of metrics is provided for all users, but that ecologically 'sensitive' features are given appropriate coverage, we propose two types of metrics:

- **Universal metrics –** a set of four indicators and metrics that should be measured by all users.
- **Case-specific metrics** – a set of five additional indicators and metrics triggered under certain conditions (refer to page 6 for more detail on the case specific triggers).

More detail on the Framework is provided in the Supporting Information.

Metric Maturity Scale

The universal and case specific metrics can be applied at different levels of granularity. We have proposed this 'tiered approach' for users of varying sizes and capabilities to get involved, enabling resource-scarce users to get started, moving towards more sophisticated biodiversity monitoring that increases in traceability and detail over time.



*Entry Level metrics should be applied with a timebound plan to move toward Standard or Advanced metrics.

Table 1: Proposed Indicator and Metric Framework

		Indicators (IND)	State of Nature (SON) Metrics: Entry-level	Standard	Advanced	Data type
Universal	Ecosystem	Ecosystem Extent (Change and Classification)(IND 1)	SON E1	SON S1	SON A1	Individual
		Ecosystem Condition (IND 2)	-	SON S2	SON A2	Individual
		Landscape Intactness (IND 3)	SON E3	SON S3	SON A3	Contextual
	Species	Species Extinction Risk (IND 4)	SON E4	SON S4	SON A4	Contextual
	Natural processes	*Planned for future integration*				
Case-specific	Ecosystem	Extent of Highly Threatened or High Local Value Ecosystems (Change and Classification) (IND 5)	SON E5	SON S5	-	Individual
		Condition of Highly Threatened or High Local Value Ecosystems (IND6)	SON E6	SON S6	-	Individual
		Proportion of Natural or Semi-Natural Habitat (IND 7)	SON E7	SON S7	SON A7	Individual
		Condition of Semi-Natural Habitat (IND 8)	-	SON S8	SON A8	Individual
	Species	Species Population Abundance (IND 9)	SON E9	SON S9	SON A9	Individual
	Natural processes	*Planned for future integration*				

Individual and contextual data types

To measure and track Universal and Case-Specific metrics, data should be collected by individuals at site level, but with an understanding of the broader state of nature context in the surrounding landscape:

- **Individual Data** is collected over an area within the users' direct control and is responsive to them.
- **Contextual Data** may be collected from landscape-level indices or public datasets, reflecting the wider landscape's health. These metrics are intended to guide users in understanding broader changes in the overall state of nature and the collective progress towards nature positive.

Promoting a race to the top

The tiered approach provides various entry points suitable for users at any stage of maturity, from entry-level users with limited resources to more advanced users with greater data capacity. This framework is designed to encourage entities to begin their nature positive journey and foster a 'race to the top,' aiming for excellence in biodiversity monitoring.

The maturity scale helps to guide users on how to continuously improve their data quality and transparency over time, strengthen their commitment to environmental stewardship, and improve the credibility of their disclosures and reporting.

Applying the Framework

Use of indicators and metrics

Users should measure and report all 4 Universal Indicators. If case-specific conditions are met, users should then also measure and report the relevant additional Case-Specific Indicators (up to 5 additional). The appropriate metric for each indicator depends on the user's maturity.

All users should aim to adopt the Standard level metrics as a minimum or, where possible, demonstrate leadership by adopting the Advanced metrics. Entry-level metrics are for entities at the beginning of their biodiversity measurement journey, and that have a timebound plan to move to ‘Standard’ and ‘Advanced’ over time.

A single user may adopt a mix of Entry, Standard, and Advanced metrics across different indicators. This may stem from having diverse value chain stakeholders or varying levels of data maturity across multiple sites. An organisation may use Entry-level metrics for one indicator or site where data or experience is limited but apply Advanced metrics for another where they have more comprehensive data or capacity. More detail on how to apply the Framework is in the Supporting Information.

Baselining

Users should apply a 2020 baseline year (or as close as feasible) for monitoring to align with the Global Biodiversity Framework timeline and the definition of nature positive.

Value chain considerations

To meaningfully measure nature positive outcomes, users need granular, location-specific data. However, this can make it difficult to measure changes in the SON at a portfolio or supply chain level (herein referred to collectively as ‘value chain’), particularly where there is low traceability.

Approach to value chains

All users should work towards applying the Universal or Case Specific metrics but will need some level of traceability and location-specific data to begin. The proposed Entry-level, Standard and Advanced metrics are applicable to users with location-specific data.

We recognise many users will not have complete traceability over their entire value chain, and this will require time and resources to capture. As such, users may find themselves applying a combination of the following options, depending on their level of data accessibility and the maturity of their value chain traceability systems:

1. **Location-specific measurement:** Users with location-specific data and the ability to collect the relevant biodiversity data, either through direct measurement or by engaging value chain partners, can apply the Universal and Case Specific metrics.
2. **Estimations using statistical methods:** Users with partial traceability to a particular sourcing region, such as a defined landscape or sub-national jurisdiction, may use statistical methods to estimate changes in certain elements of nature resulting from human pressures or responses. While these methods are insufficient for tracking nature positive outcomes, they can help guide initial steps and priorities toward refined practices.
3. **Set a target to improve value chain traceability:** Users should start measuring and reporting on the proportion of value chain which is traceable and should set timebound targets to increase the traceability. This could be achieved by engaging and collaborating with suppliers and customers to collect location-specific data. As a starting point, users should focus on segments of their value chain where the potential impacts and dependencies on the state of nature could be most material.

Making nature positive claims

Linking actions that deliver or contribute to nature positive outcomes is complex as the degradation or recovery of nature in a single landscape is often impacted by multiple variables and entities at once.

Stakeholders have highlighted the need for guidance on establishing credible connections between actors’ efforts and nature positive outcomes. While this project does not provide specific guidance on using SON metrics for direct attribution of or contribution to nature positive outcomes, these metrics lay the groundwork for answering this questions in the next phase of this process.

Case-specific Triggers

Why Case-specific Metrics?

The Framework reflects the importance of proactive measures for conserving all biodiversity, event those not currently under threat, through its Universal metrics. The Case-Specific metrics are needed to ensure that enough attention is paid to specific priorities (e.g. highly threatened species or common species declining rapidly at a local scale). This approach provides a consistent baseline for biodiversity measurement, with flexibility to address more sensitive or critical biodiversity features with the additional attention and precision they require.

Case-specific Trigger Criteria

Use of case-specific metrics is triggered by a set of criteria that expand as users progress from Entry-level to Advanced metrics. Triggers are categorised by ecosystem, species, and the intensive land use biome:

Category 1: Ecosystems

- Entry-Level: Activities impacting highly threatened ecosystems or interacting with areas meeting Key Biodiversity Area or High Conservation Value criteria.
- Standard: Expands to interacting with Other Priority Ecosystems.
- Advanced: Expands further to impacting ecosystems that meet criteria for Vulnerable or Near Threatened.

Category 2: Species

- Entry-Level: Activities impacting highly threatened species, or species meeting Key Biodiversity Area or High Conservation Value criteria.
- Standard: Expands to interacting with Other Priority Species.
- Advanced: Expands further to impact on species meeting criteria for Vulnerable or Near Threatened, or common species declining rapidly at a local scale.

Category 3: Intensive Land use Biome

- All tiers: Activities within the annual croplands, sown pastures and fields, plantations and derived semi-natural pastures and old fields ecosystem types, as defined in the Global Ecosystem Typology.

Additional detail on the triggers

Threatened species and ecosystems

Ecosystem and Species triggers focus first on highly threatened ecosystems and species, defined using IUCN criteria. At higher metric maturity tiers, the triggers are expanded to include all threatened and near-threatened species and ecosystems. This aligns with Goal A and Targets 1 and 4 of the Global Biodiversity Framework.

Important concentrations of biodiversity

Key Biodiversity Area criteria identify areas with globally significant quantities of biodiversity, whether threatened or not, including geographically restricted features and species aggregations. A location overlapping with an area meeting these criteria contains a high proportion of the global extent of one or more ecosystem types or of the global population of one or more species. The High Conservation Value concept is a similar system widely used in certification schemes and with many national interpretations. This aligns with Goal A and Targets 1 and 4 of the Global Biodiversity Framework.

Addressing local priorities

The concept of 'Other Priority Ecosystems and Species' is introduced once users reach the Standard Level metric maturity. This approach provides the necessary flexibility to give special attention to ecosystems and species that are of high local significance. Local priority features, while defined by the specific context, typically include ecosystems and species that:

- Hold significant value for IPLCs and other local stakeholders, including the provision of important ecosystem services and cultural heritage values.
- Present unique conservation opportunities for the user, such as the presence of locally-important habitats for breeding or seasonal gatherings within the location being assessed.

The identification of these local values is inherently specific to each location and community, ensuring that the metrics resonate with the ecological and cultural context of the area under assessment.

The intensive land use biome

The intensive land use biome includes annual croplands, plantations, sown pastures and other types of agriculture, managed principally for production of goods and services for human consumption and use covers a large portion of the terrestrial realm. Remaining areas of natural and semi-natural habitat are significant reservoirs of biodiversity and ecosystem services, e.g. pollination, habitat for native species.

Draft universal metrics for the terrestrial realm

The draft recommended universal SON metrics are organised around 4 core state of nature indicators (IND) relating to:

- IND1 Ecosystem Extent (change and classification)
- IND2 Ecosystem Condition
- IND3 Landscape Intactness
- IND4 Species Extinction Risk

The following table outlines the universal individual indicators and associated metrics. The baseline year for all indicators is 2020 or earlier, where data is available. For all indicators, both cumulative changes since 2020 and periodic changes (i.e. changes in the interval since the previous report) should be reported.

Key: Green text = definition in glossary

Indicator	Metric no.	Maturity	Metric	Metric Descriptor	Metric Detail	Data type
IND1 Ecosystem Extent (Change and Classification)*	SON E1	Entry-level	**Change in ecosystem extent**	Area (absolute and percentage) of loss, gain and net change in extent of each ecosystem type (ha/year) at ≤30m resolution.	• Show change in extent of ecosystem extent within a location per ecosystem type and per ecosystem asset. • Use spatial data <18 months old. • Classification of ecosystem to be at least GET (Global Ecosystem Typology) Level 3. • Spatial resolution at ≤30m for land-cover change products.	Individual
	SON S1	Standard	**Change in ecosystem extent with ground-truthing**	Area (absolute and percentage) of loss, gain and net change in extent of each ecosystem type (ha/year) at ≤30m resolution with ground-truthing.	• Show change in extent of ecosystem extent within a location per ecosystem type and per ecosystem asset. • Use spatial data <18 months old. • Classification of ecosystem at approximation to GET Level 4. • Spatial resolution at ≤30m for land-cover change products. • Data must be verified on site.	
	SON A1	Advanced	**Change in ecosystem extent at high resolution and with ground-truthing**	Area (absolute and percentage) of loss, gain and net change in extent of each ecosystem type (ha/year), at ≤10m resolution with ground-truthing.	• Show change in extent of ecosystem cover within a location per ecosystem type and per ecosystem asset. • Use spatial data <6 months old. • Classification of ecosystem at approximation to GET Level 5 or 6. • Spatial resolution at ≤10m for land-cover change products. • Data must be verified on site using appropriate statistical sampling models.	
IND2 Ecosystem Condition	SON E7	Entry-level	**N/A**	N/A	N/A	Individual
	SON S2	Standard	*In progress*	*In progress (differing across biomes)*	*The NPI is still in the process of identifying a practical approach to defining condition metrics at standard level, as no single metric can be applied across biomes.*	
	SON A2	Advanced	**Ecosystem condition change by ecosystem type**	Area (absolute and percentage) of extent of each ecosystem type and each ecosystem asset, stating each condition class and change since baseline	• Report absolute and percentage of extent of each ecosystem asset in each condition class and change since baseline, and • Report absolute and percentage of loss, gain and net change in condition ('condition adjusted area') of each ecosystem asset in a location (weighted ha). • Example: Ecosystem A: Extent = 100ha, of which 10% in Excellent, 40% in Very Good, 0% in Good, 30% in Poor and 20% in Very Poor condition. • Show change in the extent of each ecosystem condition based on condition indicators that comprise relevant biotic and abiotic condition variables. Report at least one measure of species composition, selected following UN SEEA guidance for selecting condition variables.	

*This is a two step-process of obtaining ecosystem maps at a relevant granularity, and then measuring the change of the extent of the classified ecosystems, using land-cover change products, since 2020.

Draft universal metrics for the terrestrial realm continued…

Key: Green text = definition in glossary

Indicator	Metric no.	Maturity	Metric	Metric Descriptor	Metric Detail	Data type
IND3 Landscape Intactness	SON E3	Entry-level	**Landscape intactness based primarily on configuration of natural habitat**	Ecoregion intactness score and trend over previous years (+/-) within location and surrounding area	• Report on ecosystem trend for 'surrounding area', a default buffer of 5km for urban assets and 50km for extra-urban. • Data requirement: most recently available data (less than ~12 months old satellite data where possible) which integrates remotely sensed measures of the extent of natural habitat compared to a reference level, fragmentation, and optionally degradation, of natural habitats.	Contextual
	SON S3	Standard	**Landscape intactness based on proportion of original area of each ecosystem type present**	Ecosystem area score, and trend over previous years (+/-) within location and surrounding area.	• Data requirement: most recently available data (less than ~6 months old satellite data where possible). • Calculate the geometric mean of the proportion of ecosystem extent remaining for each ecosystem type compared to a reference level, at a biogeographically relevant subnational scale.	
	SON A3	Advanced	**Landscape intactness based on relative distance from expected collapse of the ecosystem types present**	Ecosystem intactness score and trend over previous years (+/-) within location and surrounding area, and a comparison between natural degradation of condition variables, and those measured within location.	• Data requirement: most recently available data (less than ~6 months old satellite data where possible). • Calculate the geometric mean of the distance of each ecosystem from a collapsed state, using ecosystem condition variables selected based on a conceptual model of ecosystem assemblage. • Document the proportion of the area affected, at a relevant subnational scale.	
IND4 Species Extinction Risk	SON E4	Entry-level	**Species extinction risk score at 5km resolution**	Species extinction risk score and trend over previous years (+/-) showing the contributions of a site and its surrounding area to extinction risk of threatened species	• Spatial resolution at 5km. • Demonstrate the relative contribution of a location and surrounding area to driving or preventing extinctions. • Assessment to be based on the summed proportion of each species ranges present within the location, optionally compared to a reference level, and optionally weighted by threat status.	Contextual
	SON S4	Standard	**Species extinction risk score at 1km resolution**	Species extinction risk score and trend over previous years (+/-) showing the contributions of a site and its surrounding area to extinction risk of threatened species	• Spatial resolution at 1 km. • Demonstrate the relative contribution of a location and surrounding area to driving or preventing extinctions. • Assessment to be based on the summed proportion of each species area of habitat present within the location, optionally compared to a reference level, and optionally weighted by threat status.	
	SON A4	Advanced	**Species extinction risk score at <300m resolution**	Extinction risk score and trend over previous years (+/-) showing the contributions of a site and its surrounding area to extinction risk of threatened species	• Spatial resolution at <300m. • Demonstrate the relative contribution of a location and surrounding area to driving or preventing extinctions. • Assessment to be based on the summed verified proportion of each species area of habitat present within the location, optionally compared to a reference level, and optionally weighted by threat status.	

Draft case-specific metrics for the terrestrial realm

The draft recommended case-specific state of nature metrics is organised around 5 core state of nature indicators relating to:

- IND5 Extent of highly threatened/HLV ecosystems
- IND6 Condition of highly threatened/HLV ecosystems
- IND7 Proportion of natural or semi-natural habitat
- IND8 Condition of semi-natural habitat
- IND9 Species Population Abundance

The following table outlines the case-specific indicators and associated metrics (see page 6 for an overview of 'triggers'). All of these indicators are individual, so users should collect them for the location. The baseline year for all indicators is 2020, where data is available. Report both cumulative changes since 2020 and periodic changes since 2020.

Key: Green text = definition in glossary

Indicator	Metric no.	Maturity	Metric	Metric descriptor	Metric details	Data type
IND5 Extent of Highly Threatened, or High Local Value Ecosystems (Change and Classification)*	SON E5	Entry-level	**Change in ecosystem extent with ground-truthing**	Area (absolute and percentage) of loss, gain and net change in ecosystem extent (ha/year) at ≤30m resolution with ground-truthing.	• Show change in extent of ecosystem extent within a location per ecosystem type and per ecosystem asset. • Use spatial resolution data <12 months old. • Classification of ecosystem at approximation to GET Level 4. • Spatial resolution at ≤30m for land-cover change products. • Data must be verified on site.	Individual
	SON S5	Standard	**Change in ecosystem extent at high resolution and with ground-truthing**	Cumulative and periodic area (absolute and percentage) of loss, gain and net change in extent of each ecosystem type (ha/year), at ≤10m resolution with ground-truthing.	• Show change in extent of ecosystem cover within a location per ecosystem type and per ecosystem asset. • Use spatial resolution data <6 months old. • Classification of ecosystem at approximation to GET Level 5 or 6. • Spatial resolution at ≤10m for land-cover change products. • Data must be verified on site using appropriate statistical sampling models.	
	–	Advanced		N/A	N/A	
IND6 Condition of Highly Threatened, or High Local Value Ecosystems	SON E6	Entry-level	***In progress (applicable for certain biomes)***	*In progress (applicable for certain biomes but differing between biomes)*	The NPI is still in the process of identifying a practical approach to defining condition metrics at standard level, as no single metric can be applied across biomes.	Individual
	SON S6	Standard	**Ecosystem condition change by ecosystem type**	Area (absolute and percentage) of extent of each ecosystem type and each ecosystem asset in each condition class and change since baseline	• Show change per ecosystem asset within a location based on ecosystem condition indicators comprising a selection of relevant biotic and abiotic ecosystem condition variables • Report at least one measure of species composition selected following UN SEEA guidance for selecting condition variables. • Report absolute and percentage of extent of each ecosystem asset in each condition class and change since baseline • Report absolute and percentage of loss, gain and net change in condition ('condition adjusted area') of each ecosystem asset in a location (weighted ha).	
	–	Advanced		N/A	N/A	

**This is a two step-process of obtaining ecosystem maps at a relevant granularity, and then measuring the change of the extent of the classified ecosystems, using land-cover change products, since 2020.

Draft case-specific metrics for the terrestrial realm continued…

Key: Green text = definition in glossary

Indicator	Metric no.	Maturity	Metric	Metric Descriptor	Metric details	Data type
IND7 Proportion of Natural or Semi-Natural Habitat	SON E7	Entry-level	**Area (absolute and percentage) of natural and semi-natural habitat.**	Area (absolute and percentage) of loss, gain and net change in average proportion of natural and semi-natural habitats within each km² at ≤10m resolution.	• Report on the average proportion of natural and semi-natural habitats within each km² in the location and surrounding area, based on land-cover classes. • Spatial resolution of ≤10m for land-cover data.	Individual
	SON S7	Standard	**Area (absolute and percentage) of natural and semi-natural habitat, with ground-truthing.**	Area (absolute and percentage) of loss, gain and net change in average proportion of natural and semi-natural habitats within each km² at ≤10m resolution and with ground-truthing.	• Report on the average proportion of natural and semi-natural habitats within each km² in the location and surrounding area, based on land-cover classes • Spatial resolution of ≤10m for land-cover data. • Ground-truthing of data is recommended.	
	SON A7	Advanced	**Area (absolute and percentage) of natural and semi-natural habitat, at high resolution and with ground-truthing.**	Area (absolute and percentage) of loss, gain and net change in the average proportion of natural and semi-natural habitats within each km² at ≤1m resolution of land-cover data and with ground-truthing.	• Report on the average proportion of natural and semi-natural habitats within each km² in the location and surrounding area, based on land-cover classes • Spatial resolution of ≤1m for land-cover data. • Ground-truthing of data is recommended.	
IND8 Condition of Semi-Natural Habitat	–	Entry-level	**N/A**	N/A	N/A	Individual
	SON S8a	Standard	**Connectance Index**	The percentage of patches of natural and semi-natural habitat which are connected to other patches, using land-cover classes at ≤10m resolution for land-cover products.	• Report on proportion of connected patches of natural or semi-natural habitat in a location, based on how connected different natural patches of habitat are in the landscape. • Use a 5m threshold for connectedness as a default. • Report using land-cover classes using spatial resolution of ≤10m for land-cover products.	
	SON S8b	Standard	**Area (absolute and percentage) of natural and semi-natural habitat meeting criteria to be "core area".**	The area (absolute and percentage) of natural and semi-natural habitat that is "core area", based on proximity of the habitat corridor to an edge of a polygon, and using land-cover classes at ≤10m resolution for land-cover products.	• Report on area (absolute and percentage), based on the amount of natural or semi-natural habitat more than 15m from an edge of a polygon. • Report using land-cover classes using spatial resolution of ≤10m for land-cover products.	
	SON A8	Advanced	**Abundance of species important for ecosystem function**	The number and proportion of triggering species that are important for ecosystem function with: 1) stable or increasing populations, and 2) declining populations	• Describe selection of species important for ecosystem function • Report on abundance of species important for ecosystem function, within semi-natural habitat. • Report changes since the baseline using appropriate abundance indices. • For multiple taxa, report also as an average, calculated as the geometric mean of percentage change in relative abundance compared to the baseline.	

Draft case-specific metrics for the terrestrial realm continued…

Key: Green text = definition in glossary

Indicator	Metric no.	Maturity	Metric	Metric Descriptor	Metric details	Data type
IND9 Species Population Abundance	SON E9	Entry-level	**Change in the number and proportion of triggering species with: 1) stable or increasing, and 2) declining populations**	The number and proportion of species that meet the Entry-Level case-specific trigger criteria* with 1) stable or increasing and 2) declining populations, using change in area of habitat or species range as an abundance proxy	• Report number and proportion of triggering species with 1) stable or increasing populations and 2) declining populations, compared to the baseline, using change in area of habitat or species range as an abundance proxy. • Additionally record and report proportion of loss, gain and net change in area of habitat or range as a proxy for changes in populations of triggering species.	Individual
	SON S9	Standard	**Change in the number and proportion of triggering species with: 1) stable or increasing, and 2) declining populations**	The number and proportion of species that meet the Standard Level case-specific trigger criteria* with 1) stable or increasing and 2) declining populations, based on abundance indices or estimators.	• Report number and proportion of triggering species with 1) stable or increasing populations and 2) declining populations, compared to the baseline, using relevant abundance indices or estimators. • Additionally record and report underlying number and proportion of loss, gain and net change in relative abundance of each triggering species at the location. • For multiple taxa, report also as an average, calculated as the geometric mean of percentage change in relative abundance compared to the baseline.	
	SON A9	Advanced	**Change in the number and proportion of triggering species with: 1) stable or increasing, and 2) declining populations**	The number and proportion of species that meet the Advanced Level case-specific trigger criteria* with 1) stable or increasing and 2) declining populations, based on estimates of absolute abundance.	• Report number and proportion of triggering species with 1) stable or increasing populations and 2) declining populations, compared to the baseline. • Additionally record and report number and proportion of loss, gain and net change in estimates of absolute abundance of each triggering species at the location. • Use direct counts or statistical estimates of density. • For multiple taxa, report also as an average, calculated as the geometric mean of percentage change in relative abundance compared to the baseline.	

*See page 6 for guidance on trigger criteria

Consultation questions

We are seeking your input

This consultation brief is an invitation to provide inputs on the proposed set of metrics. It serves as a platform to gather feedback from a diverse range of organisations across industries and regions, helping us understand the views and needs of different stakeholders.

To structure the feedback on key issues, we have prepared 10 questions targeted at different stakeholder groups. We also welcome any additional feedback that falls outside these topics.

How to provide feedback

Please complete our survey which can be accessed here.

The survey will close at midnight on Wednesday 13 November (GMT).

We would be grateful if organisations could submit one consolidated response. Please note, all feedback received will be aggregated, summarised and anonymised.

Please email questions about the consultation brief to our project team at: metrics@naturepositive.org.

To help us consider your submission, please set out your response against the consultation questions. You may wish to respond to some, or all the questions raised when responding to the survey.

Next steps

Thank you for your valuable participation and feedback to this consultation process. Your input is key to building a meaningful consensus on metrics to evaluate changes in the state of nature.

With the feedback received, we will be aiming to publish the final recommendations put forward in a Nature Positive State of Nature Metrics Report, due for release early 2025.

Questions for all stakeholders

1. Is the proposed metrics framework - including the maturity scale and distinction between universal and case-specific metrics - clear, comprehensive and practical? How could it be improved?
2. Will measuring the proposed 4 universal and 5 case-specific indicators cover an appropriate, minimum set of elements to sufficiently evaluate the overall state of nature of terrestrial ecosystems at a particular location? If not, please specify the gaps.
3. Is the guidance on case-specific triggers provided on page 6 clear and complete? Is it appropriate to expand the conditions for applying case-specific metrics in line with the user's progression from Entry-level to Advanced maturity? Please explain your response.
4. Are the proposed metrics credible, science-based, responsive to changes in pressures over time, flexible to incorporate new data and measurement techniques, aligned with existing frameworks such as the Global Biodiversity Framework, accessible and auditable? If not, please specify which metrics fall short and why.
5. Do you have any suggestions to improve the clarity around applying the framework and metrics across the value chain?
6. While the primary users of these metrics are expected to be corporates and financial institutions, the intent is that they are usable and relevant to a range of land managers and stewards, cities, civil society, governments, private landowners and first nations and indigenous peoples. Do you think this is achievable with the proposed metrics? If not, please explain your response.
7. What additional guidance, support, or incentives are needed to facilitate the adoption of the proposed metrics and progression from Entry-level to Advanced maturity?

Questions for corporates and financial institutions

8. Could your organisation adopt and embed these metrics into your nature strategy and/or measurement framework? If not, please explain the potential barriers.
9. Would your organisation be interested in being considered for piloting the metrics in 2025 in collaboration with the NPI and other key stakeholders?

Questions for assurance providers

10. Could the proposed metrics be effectively assured, and what types of evidence would an entity need to provide (e.g. species monitoring records and spatial polygons/layers)?

About this consultation brief

This Consultation process is convened by the Nature Positive Initiative (“NPI”), with the support of Ernst & Young (“EY”) and The Biodiversity Consultancy (“TBC”).

We acknowledge and thank the more than 100 organisations and individuals including corporations, financial institutions, academics, scientists, and non-government organisations that over the past 6 months joined Working Groups, Focus Groups and meetings to contribute to provide input to this project through stakeholder engagements. This Consultation Brief is part of the NPI’s current initiative to build consensus towards a set of minimum, meaningful state of nature metrics.

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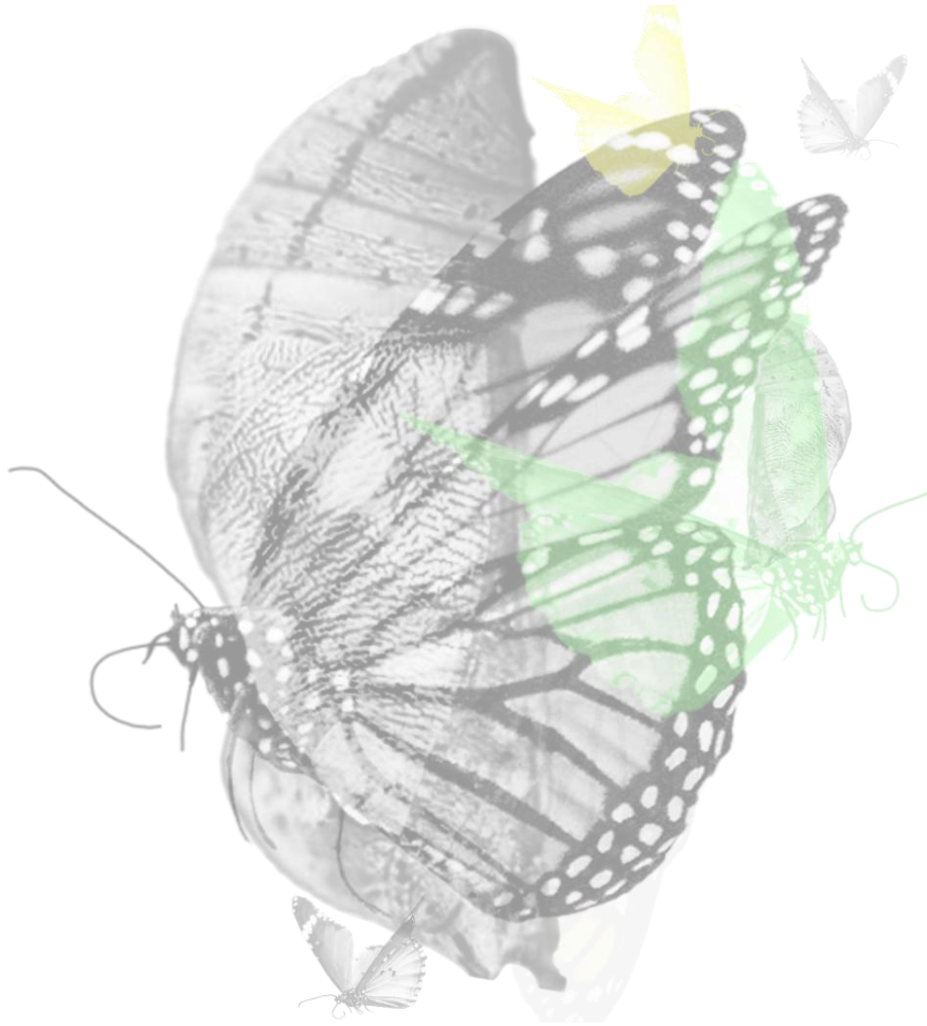

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