

Technical FAQs

This document should be read in conjunction with the Nature Positive Initiative’s consultation brief on draft metrics, titled Building Consensus on State of Nature Metrics to Drive Nature Positive Outcomes, which was launched on 8 October 2024. The following set of FAQs are designed to guide readers through the background rationale to the draft metrics and help facilitate responses to the consultation questions by providing more detail for technical reviewers. Please visit naturepositive.org/metrics for more information on the consultation.

We recognise that many of the questions metrics users may have relate to the practical implementation of the metrics and reporting. This will be covered in two ways: (i) through future practical guidance developed by the Nature Positive Initiative once the standardised set of metrics has been consulted on and finalised, and (ii) via methodological decisions made by reporting standard setters when these metrics are incorporated. Readers are encouraged to respond to question 7 in the consultation to highlight specific areas where further guidance would be especially helpful.

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1. Objectives and use cases

1.1 How do these metrics fit into the broader landscape of similar initiatives, including the ongoing Kunming-Montreal Global Biodiversity Framework (GBF) work?

Building consensus on state of nature (SON) metrics is crucial to effectively monitor whether our actions are truly contributing to nature's recovery. We recognise that there are many ongoing initiatives that are already focused on developing metrics, and our intention here is to fill a gap in that ongoing work by building a wide consensus around state of nature metrics rather than developing new metrics. We have been working closely with the developers of many of these other initiatives throughout the process so far. The metrics framework also includes a 'future metrics' component to highlight relevant ongoing developments that users might want to be aware of. The NPI's partners, including the SBTN, TNFD, GRI and WBCSD, recognise the need for SON metrics, and are exploring how these metrics can be integrated into their respective frameworks.

The Nature Positive goal of 'halting and reversing nature loss by 2030 on a 2020 baseline, and achieving full recovery by 2050' is synonymous with the GBF's 2030 mission to 'take urgent action to halt and reverse biodiversity loss to put nature on a path to recovery'. To achieve this, we need a set of metrics that help us to accurately determine whether nature is declining or recovering. Additionally, the GBF's Target 15 states all large businesses must assess and disclose impacts and dependencies on nature. Consensus over a single set of comparable metrics that robustly measure the impact organizations are having on the state of biodiversity and ecosystems will be key to helping deliver this target effectively. We have also carefully mapped our proposed metrics to the GBF targets. More detail can be found on slide 5 of the consultation brief and slides 22-24 of the supporting information. In addition, these metrics relate to the Mission of the GBF to halt and reverse nature loss.

1.2 Are all the metrics freely available and accessible?

At the entry level (i.e. for a time-bound period), the metrics are designed to be able to be measured using data which is available free of charge or where there are free options to derive the data. At standard and advanced levels, organisations may need to collect or obtain more granular data, as locally-specific fine-resolution data is warranted, especially in cases of impacts on highly threatened species and ecosystems. Improvements in remote sensing and automated field data collection make this increasingly feasible and affordable. A review of indicative costs associated with the metrics set will be incorporated in a future document.

1.3 Are all metrics intended to be applied or just a selection?

The metric set is designed to be a minimum core set, and the entry level has a low data requirement. Organisations should therefore seek to measure the whole set – at least at entry level – in the interim and set time-bound targets to move to reporting at standard level. For very large organisations, reporting could be progressively rolled-out across locations; we plan further guidance on this as and when the metrics are adopted.

1.4 Is one maturity level intended to be applied across the whole organisation?

Not necessarily. Especially for large organisations, it may be more practical to start by using different maturity levels and then improve over time. The ‘standard’ metric set should be suitable for most organisations, especially for their direct operations, but where there are capacity constraints or data gaps, organisations may start reporting at an entry level and set time-bound targets to reach standard level, and to encourage actors to begin their nature-positive journey. Additionally, maturity level may vary by site-specific data maturity, as outlined in the example on pages 15-16 of the Supplementary Information. We expect reporting frameworks to provide further guidance on this as and when the metrics are adopted.

1.5 Can these metrics realistically be applied across value chains or investment portfolios?

Biodiversity is location-specific, so nature positive outcomes are also location-specific. Therefore, this metrics set focuses on measurement at known locations.

Where financial institutions can obtain location-specific data, for example for own operations and for project finance, the metric set can be used as presented. In other cases, financial institutions can use their opportunities to engage with clients to encourage adoption of these metrics. They should also look to set and report on targets based on the proportion of their investments for which state of nature metrics are being measured and reported.

For value chains, where you can narrow down the location to at least a defined sourcing area*, you can use the entry-level set and appropriate statistical techniques to estimate changes in the state of nature. However, such estimates are very sensitive to the scale of analysis and other factors, and so provide limited confidence in tracking progress towards nature positive outcomes. Organisations are therefore encouraged to increase the proportion of their value chain for which more precise location data is available over time, and the entry level metrics should only be used temporarily. Where Organisations

do not have traceability to sourcing area, they should look to report the proportion of their value chain with good traceability and set targets to improve it over time.

*See page 21 of Supplementary information for definition

1.6 Can I use these metrics if I'm a public body? Are these metrics only intended to apply to corporates and financial institutions?

Yes, the metrics have been designed to be applicable to all types of users. They can be adapted to corporate reporting, but also used to monitor changes in the state of nature at either a site level or across a whole landscape or region.

1.7 Will the metrics allow for performance comparisons to be made among businesses even though nature is location specific?

The intention of the metrics set is to drive and track progress towards nature positive outcomes, first at specific locations and then at broader scales. Comparisons between businesses are not a primary objective of the metric set. Meaningful comparisons between organisations would be challenging since they would need to: 1) reflect organisational and local targets, 2) take account of local context, including but not limited to: socio-economic context, relative difficulty of restoring different ecosystems, background trends in ecosystems and species, and 3) take account of data and measurement differences, especially the metric maturity tier used and the specific data used by each business.

2. Scope

2.1 This is a very small set of metrics to measure something as complex as nature. Why are there so few?

This metric set is designed to be a *minimum* set for demonstrating and reporting on progress to nature positive outcomes. It cannot, and does not pretend to, capture all the fabulous breadth and complexity of biodiversity, but rather to capture important changes – these proxies then gauge whether nature is in decline or recovery. Currently, the state of nature universal metrics cover ecosystem extent, ecosystem condition, landscape intactness, and species extinction risk as developed through a 6 month consultation with technical experts across NPI member organizations and in consultation with more than 100 institutions and actors. This covers elements of living aspects of nature and terrestrial species indicators, with consultation currently underway to better encompass marine and freshwater systems. In many cases, organisations may also want to use other, often more granular metrics state of nature

metrics as well, e.g. metrics relating to other specific biomes, species or activities in addition to the state of nature metrics to capture additional complexities. These SON metrics are designed to work alongside metrics focused on pressures and responses which are also critically important.

2.2 Why is genetic diversity not covered, only species and ecosystems?

Genetic diversity is an important dimension of biodiversity. While technology makes it increasingly feasible to collect genetic data, there are not as yet standardised metrics that are both feasible to collect and appropriately actionable in all circumstances. This will be kept under review and genetic measures may be included as case-specific metrics in future updates of the metrics set. A “future metrics” element of the framework has also been developed to capture ongoing development work that users may want to be aware of.

2.3 Why only terrestrial metrics covered? Can you give more detail on how and when freshwater and marine metrics will be developed?

We recognise the vital importance of measuring the state of nature across all three realms and that each is unique in its requirements for metrics. The initial focus on terrestrial metrics was a pragmatic choice that aided the development of the overall framework of indicators, maturity levels and case-specific triggers. Freshwater and marine experts are currently being consulted on the potential adaptations the framework may need for these realms, in addition to appropriate metrics that capture the living elements of these systems. During these initial conversations, we will identify a roadmap to develop these indicators and metrics; we expect this process to continue into 2025.

2.4 Why are contextual metrics included? Aren't they going to be difficult to report and influence?

Nature is complex and interconnected, the state in one location can be heavily impacted by others. A landscape-scale perspective is needed to truly track progress towards the overall nature positive goal. Contextual metrics are intended to guide Organisations in understanding broader changes in the overall state of nature and collective progress towards nature-positive outcomes. The term ‘contextual’ is intended to communicate that these metrics will respond to that collective progress and are unlikely to be responsive to the actions of an individual user of the metric set. The metrics set includes two contextual metrics which reflect 1) the wider landscape's health and 2) the contribution of a location to preventing extinction. The proposed metrics are increasingly available as pre-computed data layers or can be computed

independently. There is no requirement that users of the metric set collect data from the broader landscape.

2.5 Why does the intensive-land use biome require case-specific metrics? What about other biomes?

The intensive land-use biome covers a large portion of the terrestrial surface of the earth. It is managed principally for production of food, goods and services, rather than for nature, and so the case-specific metrics relating to semi-natural habitat help to better measure the state of nature. While biodiversity in such landscapes is typically a tiny fraction of that in natural habitat, the large area means that they can make a substantial contribution to halting and reversing nature loss. Furthermore, there is increasing evidence that patches of semi-natural habitat (e.g., regularly mowed strips on the margins of arable fields) can support important ecosystem services, such as pollinators and natural predators, which are important for maintaining sustainable productivity. Therefore, in addition to the core metrics for extent of natural habitat and abundance of highly-threatened species, a set of biome specific metrics focusing on the extent and condition of semi-natural habitat is proposed. Over time, additional case-specific metrics could be added for other biomes where there is a compelling reason to do so.

2.6 Why are metrics based on economic models / global biodiversity models not included in the framework?

Estimating impacts on nature in your value chain, can be a great start and can help prioritise specific components of your value chain and enable you to start setting targets to avoid and reduce impacts, as well as to prioritise areas for further data collection and engagement with value chain actors. However, such methods are only approximations of actual positive and negative impacts, often relying on broad assumptions and having wide margins of error. Therefore, they cannot be used to track and report actual progress towards nature positive outcomes, and Organisations wishing to demonstrate that will need to use location-specific metrics, such as those in this set.

2.7 Why is Ecosystem condition not included at all at Entry level and marked as “in progress” at Standard level? What is the process going forward?

Ecosystem condition is an important complement to ecosystem extent as it underpins the integrity of an ecosystem.

At the ‘Advanced’ level, the metrics set includes bottom-up measures of ecosystem condition that are based on fine-level ecosystem classifications. Such metrics are explicitly connected to the processes structuring and ecosystem and its risk of collapse and so can provide confidence that measurements are robust. However, they require

significant expertise and data to establish and measure, and therefore are not appropriate for Entry and Standard levels.

No location-specific metric of ecosystem condition is included at Entry or Standard levels because our review did not identify a metric and available data layer which met the design criteria and were available across terrestrial biomes.

Since ecosystem condition is an important metric, we are continuing to explore several options:

1. *Providing a short-list of metrics suitable for individual biomes.* This would focus on metrics based largely on ecosystem structure (e.g., canopy cover and height for forests) which can be remotely sensed. This option has the advantage of being simple for the end user, but some biomes would not be covered (e.g., structure metrics for grassland biomes can be challenging to define and measure remotely).
2. *A standard metric of species composition.* The species to be measured would vary by biome, but there would be a standard metric (e.g., geometric mean abundance) for aggregating and reporting the data. This would require location-specific data collection. Technology is making this increasingly affordable for many biomes.
3. *A combination of 1 and 2*
4. *A 'condition scoring' approach.* Such approaches assign ecosystems to categorical condition classes using a set of biome-specific criteria based on readily observable or measurable ecosystem characteristics. Once established and tested, such approaches are simple to understand and can be applied rapidly and with limited data. However, they can require significant effort to design and test, and may be susceptible to bias between different observers.

Since the intention of Entry level is to have a low barrier to uptake, these options would not be suitable at that level, so are being explored for the Standard level. We welcome feedback on the potential options.

3. Metrics

3.1 Why is a 2020 baseline required if organisations have only started collecting location specific information across value chains more recently?

The year 2020 aligns with the Nature Positive Goal of 'halting and reversing nature loss by 2030 on a 2020 baseline, and achieving full recovery by 2050' and with many of the GBF targets. Organisations should use 2020 for a baseline date, or earlier. In cases where data availability makes this untenable, then a later date may be needed.

3.2 Where the metrics refer to specific resolutions, is this the resolution of the landcover product or data layer, or of the input data used?

The resolution refers to the minimum resolution of the landcover product or data layer; remotely sensed input data should have the same or finer resolution.

3.3 Landcover maps can have significant uncertainty. How credible is using landcover to measure change in ecosystem extent?

Landcover maps are affordable and available at regular intervals. However, they often have accuracy of 75-80%. This means that on their own they may mis-detect some changes in natural habitats. The proposed metric set partially addresses this by recommending a minimum resolution of <30m, which addresses some known issues with coarser landcover maps (e.g., 100m products). Nevertheless, there will be remaining uncertainty, so this is only suitable at entry level. At standard and advanced levels, more robust measurement is required, incorporating both ground-truthing (verifying remotely-sensed categorisation with ground data or very high resolution imagery) and a fine-level ecosystem classification.

3.4 Why is the Global Ecosystem Typology (GET) used for ecosystem classification? Why do some metrics stipulate 'approximations to' specific levels of the GET?

Ecosystem classifications are necessary to enable measurement and interpretation of metrics of ecosystem extent and condition. The Global Ecosystem Typology provides a scalable and consistent approach to classifying ecosystems at various levels of granularity. And as a typology, it provides a framework for understanding the level of granularity provided by national or other ecosystem classifications. The GET is proposed as a basis for national reporting under the Global Biodiversity Framework, and is referred to by frameworks such as TNFD. The phrase 'approximation to' is used to indicate some flexibility because in some parts of the world, detailed mapping of ecosystem types is not available, especially at finer levels of granularity.

3.5 How do I obtain ecosystem classifications and maps aligned with the GET?

Many countries make national ecosystem classifications and maps available. The [Global Ecosystem Atlas](#) will shortly provide an entry point to obtaining quality-assured maps of ecosystem classifications. The Global Ecosystem Typology will shortly publish global GET level 3 maps.

NB that the ‘indicative maps’ currently available on the Global Ecosystem Typology website are NOT suitable for use with this metrics set as they are maps of the area within which particular ecosystem functional groups may occur, not maps of actual extent.

3.6 The case-specific triggers focus largely on highly threatened species and ecosystems. But Nature Positive also requires protecting and restoring common biodiversity. How does this framework incorporate that?

The proposed metric set includes common biodiversity in four ways.

- First, the measures of ecosystem extent and condition will capture the status of many species, including common ones.
- Second, the inclusion of Key Biodiversity Area (KBA) criteria in the case-specific portion of the set encompasses areas with high proportions of the global population or distribution of species and ecosystems (including migratory and congregatory species), whether threatened or not. (KBA criteria B, C and D).
- Third, the case-specific portion of the set includes the concept of ‘other priority species’ with the intention that this should include species of local value, including species for which the user has significant opportunities to contribute to their conservation.
- Fourth, for the intensive land-use biome, the framework includes at advanced level tracking of species important for ecosystem function (which could include for example farmland birds).

Together, these four elements are intended to capture a wide range of biodiversity, including common and wide-spread biodiversity, while remaining feasible and practical to apply.

3.7 What are ‘other priority species or ecosystems’ and how might they be identified?

Both ecosystem and species triggers include “Other Priority Ecosystems or Species” at higher metric maturity tiers. This is designed to encompass local – as opposed to global – values of ecosystems and species. Precise definitions of ‘other priority features’ will be locally-specific but should include ecosystems and species:

- Of importance for local values of nature, including provisioning ecosystem services and cultural values.
- For which the user has a disproportionately high opportunity to contribute to their conservation locally, for example where locally important breeding or seasonal congregations occur within the location being assessed.

Identification of local values of nature is necessarily context specific. Identification of local values of nature should involve local stakeholders and is likely to require social, as well as nature, expertise. Identifying local conservation opportunities should also

involve local stakeholders and conservation groups, and can make use of local conservation action plans where these exist.

3.8 SON S9 refers to ‘abundance indices’ – what are these and what might be considered an appropriate index?

Abundance indices are standardised measures of the number of individuals of a species within a defined area that do not explicitly attempt to measure the ‘true’ size of the total population but rather aim to be a proxy of it. For instance, abundance indices could be based on the number of birds detected along a fixed sampling route in a defined period of time or the number of rodents trapped within a unit of time. The most appropriate index will depend on the species and the context. A good starting point is to review whether there is an existing widely-accepted index for the species and habitat type in question. In all cases, the methodology used should be reported.

3.9 Will these metrics be effective where there are rare or hard-to-detect species?

For rare or hard-to-detect species, the sampling effort required to measure relative or absolute abundance with a reasonable degree of confidence can be unfeasibly high. In such cases, it may be more appropriate to use an ecosystem metric which incorporates a species-specific measure of ecosystem condition. The reasons for choosing an ecosystem metric and how the ecosystem metric is a proxy for the species should be clearly documented and reported.

3.10 The framework defines a category of “future metrics”, but these are not listed in the consultation brief. What is the plan for these?

The ‘future’ category is to signpost metrics which may in future be suitable but which are not yet ready for inclusion. For now, the consultation focuses on metrics which are widely available & accessible and can be used now; future metrics will be included in a later version.