

Ecosystem Restoration

Summary of feedback on Version 1.0 and changes to Version 2.0

This short document contains an overview of feedback received during the stakeholder consultation phase of Version 1.0 of the Forest Ecosystem Restoration standard (including the public phase from 17 September to 17 November 2020 and the interaction with several organisations that happened after that, including an expert meeting in June 2021) and the pilot testing that happened in the first semester of 2021 in Spain, Chile, France, Zambia, and US. We have also included an overview of the changes we have made to the revised version 2.0, which we are now conducting a consultation on.

We would like to thank everyone that provided feedback to the standard – we greatly appreciate the time spent on this to provide important feedback to Preferred by Nature.

Revisions:

General changes to the document:

1. **Scope expanded.** Only 3 indicators (1.4.1 d, 1.4.2, and .6.3.d) were directly referencing “forests ecosystems”, which has now been changed by “ecosystems”. The name of the standard has also been changed accordingly, from “Forest Ecosystem Restoration” to “Ecosystem Restoration”, in line with the stakeholder feedback received and specifically to ensure the success of the UN Decade on Restoration responding to the call from the 9th World Conference of the Society of Ecological Restoration, of which Preferred by Nature is a member, to “*elevate restoration of non-forest ecosystems (e.g. wetlands, marine ecosystems, grasslands, drylands) as equally important to forests (...)*”.¹ This said, we will be focussing on the next round of pilots to see if additional indicators need to be added for specific ecosystems.
2. **Area for “large projects”** has been reduced from 50.000 ha to 10.000 ha.
3. **Glossary expanded** to include definitions as Agroforestry, Assisted Natural Regeneration, Living Wages, Traditional Knowledge, Reforestation, Validation and Verification.
4. **Section C on Core and Continuous Improvement** indicators explains now that we have based the designation of “core” and “continuous improvement” indicators on our over 25 years international experience auditing as well as on the comments provided by other experts and practitioners around the globe, and that the key factors for this include scale, intensity, and risk.
5. **Section D on cautionary notes** is explicitly outlining now that we consider that protecting and managing responsibly existing ecosystems should always be the first option before undergoing further restoration.
6. **Section E with the Illustrative Elements or Principles from Existing Frameworks for Restoration Design, Monitoring or Implementation** has been moved to an annex and included details on the recently published UN Proposed Principles for Ecosystem Restoration and 2020 ITTO guidelines for landscape restoration in the tropics.

¹ <https://www.ser.org/news/571129/Collective-Action-Needed-to-Ensure-the-Success-of-the-UN-Decade-on-Restoration---Call-to-Action.htm>

7. **Section F on the Proposed Verification Approach** has been clarified to include stakeholder engagement and public reporting. NB: The verification approach, including discussing potential eligibility requirements, will be one of the focus areas for the next period.

Revisions of standard indicators²

Indicator 1.2: **Governance** – Wording revised to make it more auditable.

Indicator 1.4.1: **Landscape context** – Indicator expanded by including examples on environmental, social, and socio-economic conditions.

Indicator 1.4.2: **Landscape context** – Indicator expanded by including examples on threats and degradation drivers.

Indicator 1.4.3: **Landscape context** – Indicator expanded by including examples on functional relationships. “Significance” added also to frame the scope instead of a 5km distance requirement.

Indicator 1.4.4: **Landscape context** – Indicator expanded by including examples on functional relationships. “Significance” added also to frame the scope instead of a 5km distance requirement.

Indicator 1.4.5: **Landscape context** – Indicator expanded by including traditional knowledge and connecting to scale, intensity, and risk of the projects.

Indicator 1.4.8: **Traditional Knowledge** – Added new indicator related to Traditional Knowledge.

Indicator 1.5.1: **Stakeholder engagement** – Revised to add the social and economic dynamics, the consultation on top of engagement, and the required engagement on monitoring.

Indicator 1.5.2: **Stakeholder engagement** – New indicator added on documenting the consultation process.

Indicator 1.6: **Restoration Plan** – clarified the requirement to have the Plan directed to revert the degradation condition.

Indicator 1.6.3: **Plants selection process** – New indicator with several connected requirements on this compiled.

Indicator 1.6.4: **Lessons learnt** – New indicator with requirements on analysing similar restoration projects.

Indicator 2.1: **Respected Boundaries** – Has been split from the “Clear, legal, and protected tenure” original one to differentiate between issues.

² Minor edits made are not detailed here

Indicator 3.1: **Restoration practises** – requirements added to include soil, water, and biodiversity management and conservation.

Indicator 3.2: **Species selection and use** – requirements eliminated to connect with the new requirement in the Restoration Plan. Densities added.

Indicator 3.3: **Alien species** – requirements eliminated to connect with the new requirement in the Restoration Plan.

Indicator 3.4: **Seedling/regeneration survival** – Planting added. Timeframe made more flexible to acknowledge specific contexts (e.g. boreal).

Indicator 3.5: **Restoration threats controlled** – reworded to include monitoring, grazing, and protection of the ongoing restoration.

Indicator 3.6: **Natural ecosystems protection** – Added requirements on species and connection with the Restoration Plan.

Indicator 3.8: **Chemical use** – new indicators have been added for auditability with requirements on control, documentation, assessment and mitigation of risks when highly hazardous pesticides are used, and risks for pollinators.

Indicator 3.9: **Discrimination** – details have been added on types of discrimination and a requirement on public availability.

Indicator 3.11: **Workers' rights** – new indicator added to cover child, forced/compulsory labour, freedom of association and collective bargaining, abusive practises, and working hours.

Indicator 3.12: **Living wage** – reworded from living income.

Indicator 3.11: **Social benefits** – reworded to social impacts and expanded to two indicators to cover dealing with harm or unintended consequences.

Indicator 4.1: **Monitoring** – Monitoring expanded to additional indicators to cover monitoring of the outcomes, monitoring metrics, and monitoring resources.

Indicator 4.4: **Adaptative management** – reworded to connect with the original targets, goals, and objectives.

Stakeholder feedback – summary

We have inserted all comments received in the survey we conducted during the first round of consultation in an excel sheet to allow an easy overview of the comments received for specific principles, criteria and indicators.

The excel sheet can be accessed [here](#).

As part of the consultation process Preferred by Nature asked for specific feedback from stakeholders on key issues, for which we have special interest in receiving feedback. The following topics were covered:

1. Does the standard seem applicable to all biomes (tropical, temperate and boreal)?

Feedback:

- The description is too brief to assess.
- Success of a restoration depends largely on the quality of the soil. Soil fertility, erosion or compaction are more critical issues in some biomes, like the tropics. They seem to have been forgotten in the modus operandi of the restoration- when they should orient choices and be closely monitored. Also, the 5-year and 20-year target in the restoration plan don't match slow growing forests like the boreal or mountain forest.
- Yes, but see more detailed comments regarding regeneration time frames in low-productive boreal forests.

2. Is the standard flexible enough so that it is useful for various approaches to restoration (tree plantations, natural succession, agroforestry, rewilding, enrichment planting, etc.)?

Feedback:

- Are you including plantations in this standard, as defined by FSC? I would advise against it if so. -Although the means of restoration is understandably on trees and natural regeneration, I think it is important that the standard also think more about ecosystem restoration outside of the silviculture/forestry realm so that it is taken seriously by ecologists, botanists, biologists, and others who are not primarily foresters. For example, native plant communities/natural communities are different from "natural vegetation" but are frequently identified and referenced by botanists and ecologists as targets and/or reference points against which to measure a project's progress or success. (For example, a fen which was "restored" to only black ash with an understory of jewelweed would perhaps be judged a success when looked at only through the lens of native trees and vegetation, but most ecologists would not consider this successful restoration without a wider host of native species and water flowage patterns typical to fens present; these are commonly described in natural community/native plant community descriptions of a fen.)
- Also, what about some additional emphasis on wildlife (outside of pollinators) native to certain systems? (Would we consider a project verified and/or successful if the appropriate trees and vegetation are in place, but the location lacks any restoration of associated native wildlife species?) What about water resources? (Would we consider a project successful if the forest has been restored but the streams that flow through it are impaired, have massive erosion or pollution issues, etc.?) This is not to say that we should remove or modify the current forestry points- just that the standard should be broadened to include more non-forestry indicators and/or measures.

- With regards to rewilding, if this is to be used for rewilding projects per your glossary definition, the standard needs to be more comprehensive to be "focused on restoring sustainable biodiversity and ecosystem health by protecting core wild/wilderness areas, providing connectivity between such areas, and protecting or reintroducing apex predators and highly interactive species (keystone species)," per your included definition. I don't see any indicators on core areas, connectivity between protected/wilderness areas, protecting/reintroducing apex predators and keystone species. You may wish to have optional supplemental indicators to that effect in the standard that are specific to rewilding projects if you would like to include them in the standard.
- Reading the standard, I only think in tree plantations, natural succession, managing secondary forests, not in agroforestry.
- The most challenging approaches to cover are agroforestry (which would undoubtedly entail inclusion of exotic species and questions of ultimate ecosystem structure) and natural regeneration (for which protocols and monitoring are still poorly defined in many areas). For natural regeneration, the standard would probably work (with some tweaking), but agroforestry seems to present particular challenges for the standard.
- Need elaboration of those approaches.
- Yes but it is too flexible as it could lead to regular forest management to be certified, as all management has a restoration function after harvest. The clear limit between this standard and where forest management standards like FSC start should be made explicit.
- Generally yes, but see comments related to restoration objectives (which seems now relatively narrowly focused on restoring the 'original' ecosystem).

3. Is the standard applicable at the scale of restoration effort you are involved in (noting the different approaches imbedded in the standard for community, medium, and large-scale operations)

Feedback:

- Fairly easy to envision the standard being applied at smaller scales, but difficult at large scales, especially with diverse landscapes, range of objectives, and many different stakeholders.
- I work on global strategy currently rather than specific on-the-ground projects.
- The livelihoods of the community to provide the basic food needs should be an indicator of restoration. It makes no sense if the restoration is successful and farmers in the community are in hunger and poverty.
- Yes it is applicable but important requirements are not compulsory for smallholders and communities. Clear legal and protected tenure and the identification of traditional land tenure rights. (2.1 and 2.2) should not be voluntary.
- We pass on that one as we're not practitioners.
- There is too much size variation in the medium category and a 50,000 ha cut-off for medium to large seems like an overestimate. I would personally place the medium cut-off at 10,000 ha (at the maximum) since restoration is inherently

complicated work. If a further size distinction is needed, why not just introduce an extra-large size category?

4. Does the “subject and indicators only” approach we have taken (leaving out principles and criteria so that it can be adapted to various accountability systems) and the use of “core” and “continuous improvement” indicators work?

Feedback:

- There is a need to briefly describe the principles and criteria because the indicators may vary with region and cultures.
- It needs to be tested in practice if the pass/fail approach for all compulsory indicators is workable, and if some trade-offs between them need to be included for some topic (criteria). This approach, without clear auditing guidelines and CAR procedures being spelled out, nor requirement of transparency of the audit result, can lead to adjustments done by the auditor on a case by case basis and thus a rather weak certification.
- Yes to both questions – we're generally positive to any reasonable simplifications of how standards/requirements are formulated – the shorter and more to the point, the better. Maybe the approach could even be taken a step further, to become a checklist of verifiers.
- why? (no P&C) It would be useful to provide a justification here. The indicators need to be justified in some way, right?
- Also, I would like to know why you don't include principles or criteria. These are invisible aspects that are guiding the indicators. Why not make these visible?

5. Other comments

- The standard generally stops with achievement of a regenerated forest or agroforest. But, what then? It says little or nothing about future management (thinning, maintenance, utilisation, marketing). While these aspects are arguably outside the scope of "restoration" they are often critical for the success of restoration. Without the regulatory, financial, and marketing structures and activities in place to ensure the commitment and support of local people, most restoration efforts will fail in the long run, even if they are successful in initially establishing a forest. This seems to be a key missing element of the standard: i.e., to look at the enabling conditions to ensure the restored forests remains after establishment.
- The standard's intention was partially described with the theory of change that an increase in accountability will increase investment in restoration. Will Preferred by Nature track progress against (1) increased investments and (2) increased hectares/trees planted using the standard as a way of tracking progress toward planting/GHG sequestration goals?
- I don't see the emphasis of region specific agroforestry systems in the standard.
- I think it would be useful to have a chart that shows what is and what is not acceptable to make that clear from the beginning.
- Is there any relevance/utility of the Nature-based Solutions Global Standard

- are there going to be options/methods recommended should the restoration process start going off track due to invasive species, intermittent fires, etc. and how the landowner would respond to bring things back into line with the restoration plan?
- And the 25 year target...so I gather this is a temporal benchmark. Will there be monitoring annually, or every 5 years to track what is going on? Sort of a interim checklist and at 25 years there is a formal report...here's where we expected to be and here's where we are?
- "I think it is good to include the idea of a reference or target in the standard, but be very open for different ways to interpret this concept.
- I have come to think that good land management always should be aware of the "forces of ecology". This a bit like what economists do: they have an idealised model of "economic man" (or whatever it is called these days) and use it as a reference for whatever it is they look at. I think it is good for land managers to do the same.
- That is not to say that the target necessarily needs to be equivalent with the result of spontaneous, undisturbed flow over centuries of the forces of ecology. But one crosses other Nature at one's peril. One needs to be aware of what the forces of ecology are telling us, and not deviate more than necessary or justified.
- But wise deviation is sometimes needed. This is what we call stewardship. "
- I think that the "market" and the "credibility" of standards are being diluted because there are so many. Many have the same elements, e.g. they are redundant. It would serve Nepcon to have one standard with addenda. The standard would have all the common sustainability criteria and indicators upfront and an addendum for each specific area of concern. Common criteria would be stuff like FPIC, HCV, worker rights, civil rights, traditional rights, worker safety, water quality/quantity protection, legality, tenure, etc. The addendum would be -forest management, palm oil, restoration, aggregates, rubber.
- With the above in mind, could the restoration standard be an addendum to FM certification (either FSC or PEFC)? Could the restoration standard be shortened in this case to only include the restoration specific indicators?
- It seems that maybe a clarification of "scale". Should the hectare limits apply to the size of the ownership or the size of the restoration project?
- On another note, locally we have any number of restoration projects. Many of them span ownerships like stream restoration. It may be state run and only just get permission from the owner and a restoration company does the work and adheres to the regulations. So like the group certification under a forester, you might have a landowner grouped under a contractor or the state. We also have private/public land restoration where owners adjacent to national or state lands might participate in a restoration project. In other words, there are projects that are landscape in scale.
- Another big area and a controversial area is restoration in the aftermath of wildfires. What does restoration mean in this context? And wildfires are not just in western US, but Indonesia, Brazil, Australia, Russia to name a couple. Some propose logging of burned trees, which means harvesting practices (logging). Some think that fire is a natural process and nothing should be done. Fire does

not necessarily kill every tree, but burns a mosaic on the landscape (although the intensity of the fires are changing that to some degree).

- I know that this standard is not to tell anyone “how” to restore, but heavy equipment will be used in many cases. Not sure how to address that in the standard other than best practices, but to maybe in able to make a claim the organisation must meet FSC/PEFC harvest criteria. (heavy equipment is used here in stream restoration as well). How about ploughing on level ground or burning as part of restoration?
- Restoration includes actions to protect forest resiliency, e.g. prescribed fire or thinning in protected areas to protect them against catastrophic fire? Do you think that standard covers that?
- There is no mention of the transparency of the verification process, or report. If there is to be “claims” then transparency is a must.
- There is not mention about the competency of the 3rd party verification organisations. You might require that the verifier be 3rd party and accredited to at least one sustainable agriculture or natural resource certification scheme if there is going to be a claim
- don’t believe that the reference ecosystem is to be maintained as due to e.g. climate change not possible
- Species selection, tension between ecologist-environmentalist
- Capabilities development outside this project
- Add eligibility saying smth that the organisation is not involved in ecosystem destruction. Maybe eligibility first and then confirm in the audit later