Template for the review of the document on scientific and technical information to support the review of the proposed goals and targets in the updated zero draft of the post-2020 global biodiversity framework

TEMPLATE FOR COMMENTS

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General comments

This document, SBSTTA 24/3/Add2 provides information to support the scientific and technical review of the proposed goals and targets in the updated zero draft of the post-2020 global biodiversity framework (GBF).

In this peer review submission, Conservation International appreciates the opportunity to draw attention to the importance of providing Nature's Contributions to People (NCP), and the role of the post-2020 GBF to ensure that the places essential for delivering high levels of ecosystem services, and therefore NCP, are kept healthy. Therefore, we suggest that the GBF will need to specify which places are of highest priority and what actions are needed to maintain them, from the goal level down to the indicator level. Without this approach, there is the risk of implementing broader efforts that may maintain places that are important for species or ecosystem representation - but that allow the loss of places providing vital ecosystem services that underpin NCP, like those that support food security, water regulation, climate mitigation and others. Focusing interventions on areas that are both important for species or ecosystem representation and vital ecosystems services can support efficient investments of effort.

The current structure of the GBF has acknowledges the importance of ensuring Nature's Contributions to People, but there is a lack of alignment between the benefits to people and the ecosystems that provide them as written in the 2050 Goals, the 2030 Milestones and Action Targets and the monitoring framework. We propose restructuring these elements around the categories of Nature's Contributions to People as described in the recent IPBES report[1] at the goal level and highlight a few specific ecosystem services of high importance for human wellbeing and the ecosystems that provide them at the Target and indicator level. Modifying the structure in this way will provide useful consistency to the formulation of goal and associated targets while

[1] Nature's contributions to people include: habitat creation and maintenance, pollination and dispersal of seeds and other propagules, regulation of air quality, regulation of climate, regulation of ocean acidification, regulation of freshwater quantity, location and timing, regulation of freshwater and coastal water quality, formation, protection and decontamination of soils and sediments, regulation of hazards and extreme events, regulation of organisms detrimental to humans, energy, food and feed, materials and assistance, medicinal, biochemical and genetic resources, learning and inspiration, physical and psychological experiences, supporting identities, and maintenance of options. Adapted from: IPBES. (2017) Update on the classification of nature's contributions to people by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. https://ipbes.net/sites/default/files/downloads/pdf/ipbes-5-inf-24.pdf.

maintaining the desired focus on action at the target level.

Goal/milestone level: Nature is contributing regulating, provisioning, and non-material elements that humans need, both now and in the future, and places most important for providing these contributions are conserved, sustainably managed, and restored.

Target level:

1. Water: Ensure benefits from nature related to water quality and water quantity for human use, through the conservation, sustainable management, and restoration of 100% of the ecosystems most important for delivering these contributions.
2. Food: Ensure benefits from nature important for food security and nutrition through the conservation, sustainable management, and restoration of 100% of the ecosystems most important for delivering these contributions.
3. Climate: Ensure benefits from nature important for climate change mitigation, adaptation and disaster risk reduction through the conservation, sustainable management, and restoration of 100% of the ecosystems most important for delivering these contributions

Indicators: As the goals and targets will define desired outcomes and, potentially, actions, at a high level then the indicator framework should provide the specificity needed to monitor progress towards achieving the 2030 mission.

For the goal and targets we propose above, we suggest monitoring:

- Extent: the extent (area) of places most important for delivering ecosystem services, measured as the area of an ecosystem.
- Condition: the quality of places most important for delivering ecosystem services, measured as biotic i.e., (composition, structure, functional), abiotic (i.e., physical, and chemical state), and landscape (including freshwater), and seascape characteristics.
- Flows: the flows of ecosystem services, measured through biophysical measurements (e.g., volume of water).

For example, for the target focused on water quality, the indicators would include the extent and condition of ecosystems such as the area of wetlands that provide water filtration and purification and/or regulating services. They would also include measures of the flow of the desired ecosystem service, in this case regulation of water purification, which would be measured by flows of removal of nutrients and other pollutants by ecosystem components through for example, nitrogen retention.

Use of the SEEA by all countries is included in the updated zero draft of the GBFG as a headline indicator for Target 13. Also, many of the indicators needed to monitor the condition and extent of areas important for NCP are already included in the SEEA. Some 100 countries have expressed interest in SEEA implementation and there are efforts underway to support them in data development to do so. Therefore, if the GBF indicators are aligned with the SEEA indicators, then these countries will already be gathering necessary data to monitor many elements of the GBF related to NCP and will be doing so using standards that allow for replication and comparison as official statistics.

Specific comments

Page	Paragraph	Comment
3	11	Conservation International supports suggestions made by a wide coalition of organizations to refine the draft mission statement to clarify that it aims for a net gain in the status of biodiversity and nature's contributions to people ('nature positive') by 2030. Paragraph 11 suggests two approaches to further define the draft mission statement. We are convinced that only the approach that provides a clear path to net gain of biodiversity and nature's contributions to people by 2030 ('curve A') reflects the level of ambition that is needed if we are to keep the biosphere operating in a manner that produces the goods and services on which humankind is dependent, as well as to effectively combat the interrelated biodiversity, climate, and health crises. This is confirmed in para 18 of the document, which states that, 'to reach the 2050 Vision, a significant net increase in both area and integrity of natural ecosystems is needed. (...) Models, scenarios and other studies suggest that an increase in the extent of natural ecosystems of the order of 10 to 15 per cent, globally, across all ecosystem types, by 2050 may be feasible. A viable pathway towards such an outcome requires that a path to net gain, or at minimum no net loss, be achieved by 2030.' This requires that ambitious actions start immediately. We know that achieving a net gain in ecosystem extent and species abundance (ref. para 27 of the document) and preventing human-induced extinctions of known threatened species (ref. para 58 of the document) by 2030, necessitates transformative changes in land and sea use, resource use efficiency, production and consumption patterns (particularly for food), resource mobilisation and inclusive decision-making. These changes will require the political will to agree and implement ambitious targets for 2030. Building on the increasing momentum for nature conservation, additional immediate actions will be required in other areas, including to enhance the enabling conditions for ambitious nature positive actions. Monitoring of progress and complementary scenario analysis may further define other critical elements of the solution. We suggest support revisions to the graphic in line with the comments made above.
8	36	We suggest including a reference to the recent geospatial advances that allow for the mapping of the global distribution of places that can be considered "high performing" in terms of delivering ecosystem services or "Nature's Contributions to People", per IPBES. Conservation International and partners with the Natural Capital Project[2] have mapped the places globally that provide the highest levels of a range of multiple ecosystem services.[3] The NCPs mapped are related to water quality regulation (nitrogen, sediment), food provision (pollination, grazing, riverine and marine fish), timber and fuel production,

[2] Partners on mapping multiple ecosystem services: Natural Capital Project, Stanford University, University of Minnesota, King's College London and many additional data providers. Further details on data and methodology can be provided upon request. Note these maps are pre-publication drafts and subject to change.

[3] Rebecca Chaplin-Kramer, Rachel A Neugarten, Richard P Sharp, Pamela M Collins, Stephen Polasky, David Hole, Richard Schuster, Matthew Strimas-Mackey, Mark Mulligan, Carter Brandon, Sandra Diaz, Etienne Fluet-Chouinard, Larry Gorenflo, Justin A Johnson, Patrick W Keys, Kate Longley-Wood, Peter B McIntyre, Monica Noon, Unai Pascual, Catherine Reidy Liermann, Patrick R Roehrdanz, Guido Schmidt-Traub, M. Rebecca Shaw, Mark Spalding, Will R Turner, Arnout van Soesbergen, Reg A Watson. bioRxiv 2020.11.08.361014; doi: https://doi.org/10.1101/2020.11.08.361014. This article is a preprint and has not been certified by peer review.

		flood regulation and coastal risk reduction, and other human needs (access to marine and terrestrial areas for recreation and gathering of resources). To maintain 90% of current levels of provision of these NCPs, we would need to conserve 39% of land and 24% of marine exclusive economic zones.
13	54	We suggest also recognizing that evidence also suggests that widespread legal changes undermine protected area durability and efficacy.[4]
13	56	We suggest incorporating information about the proportion of land and marine areas that would be necessary for maintaining high levels of ecosystem services. The Global Critical Natural Assets analysis mapped the places globally that provide the highest levels of a range of multiple ecosystem services. To maintain 90% of current levels of provision of these NCPs, we would need to conserve 39% of land and 24% of marine exclusive economic zones.[5] While some of this can be achieved through sustainable management, any target on protected areas should be prioritizing these places most important for NCPs alongside areas important for other aspects of biodiversity.
19	74	We suggest including a reference to the concept of irrecoverable carbon, the carbon that is vulnerable to release upon land use conversion and, once lost, is not recoverable on timescales relevant to avoiding dangerous climate impacts as introduced in the 2020 *Nature Climate Change* paper.[6] Avoiding catastrophic climate change requires rapid decarbonization and improved ecosystem stewardship particularly of those ecosystems that are highly responsive to direct, localized action and the magnitude and recoverability of their carbon stores.
23	92	We suggest referring to the potential wider usage of SEEA for other indicators in the GBF. The SEEA Ecosystem Accounting framework also has considerable applicability to monitoring several the targets beyond Target 13.[7]
30	117	Conservation International's preparing a forthcoming spatial analysis of indigenous peoples and local communities' land tenure for over 45 countries. This information could be of use for tracking the implementation of components of this target. We will inform the Secretariat when this analysis is published.

Comments should be sent by e-mail to secretariat@cbd.int by 22 March 2021

[4] Golden Kroner, R. E., Qin, S., Cook, C. N., Krithivasan, R., Pack, S. M., Bonilla, O. D., Cort-Kansinally, K. A., Coutinho, B., Feng, M., Garcia, M. I. M., He, Y., Kennedy, C. J., Lebreton, C., Ledezma, J. C., Lovejoy, T. E., Luther, D. A., Parmanand, Y., Ruíz-Agudelo, C. A., Yerena, E., Zambrano, V. M., and Mascia, M. B. (2019). The uncertain future of protected lands and waters. Science, 364(6443), 881–886. https://doi.org/10.1126/science.aau5525

[5] Chaplin-Kramer, R., et al. in prep. Global Critical Natural Assets.

[6] Goldstein, A., Turner, W.R., Spawn, S.A. et al. Protecting irrecoverable carbon in Earth's ecosystems. Nat. Clim. Chang. 10, 287–295 (2020). https://doi.org/10.1038/s41558-020-0738-8

[7] https://unstats.un.org/unsd/statcom/52nd-session/documents/BG-3f-SEEA-EA_Final_draft-E.pdf