**Table 1. Companion table with additional details about new indicators**

(corresponding to Section “g” of the Comments Template as follows: If you are suggesting the inclusion of additional indicators please provide information on if the indicator is currently operational, the organization supporting its development, its baseline (i.e. the year data is first available) and how frequently the indicator is updated (i.e. monthly, yearly, every two years etc.).

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| **Indicator** | **Description** | **Operational?**  | **Organization supporting development** | **Baseline year** | **Frequency of update** |
| ***Irrecoverable carbon*** | Irrecoverable carbon is carbon in ecosystems that should be protected because (1) it can be influenced by direct and local human action, (2) it is vulnerable to loss during a land-use conversion and (3) if lost, it could not be recovered within 30 years (the timeframe by which we need to reach net zero emissions). | Yes.Goldstein et al 2020. “Protecting irrecoverable carbon in Earth’s ecosystems” in Nature Climate Change. Map based on this framework is under development, with target publication of fall 2020. Paper: [https://rdcu.be/b3koV](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Frdcu.be%2Fb3koV&data=02%7C01%7Cagoldstein%40conservation.org%7Ca52d7b5399f6484ad4da08d7d58e37b5%7Cc4de61a999b44c6a962ebd856602e8be%7C0%7C1%7C637212679121023771&sdata=4SldNV6S572jOy6jtwu6m%2FjLxvbJhPyUMSz40H0%2Fazk%3D&reserved=0) | Conservation International | 2020 | The state of the world’s irrecoverable carbon can be monitored at least annually using Conservation International’s map (in development). The data will be publicly available, and we are in discussions to additionally host it on other platforms (e.g., Global Forest Watch). |
| ***Critical Natural Capital/Ecosystem Services*** | Mapping the places around the world that are highest-performing in terms of providing regulatory, provisioning, and cultural ecosystem services to all humanity, as well to the world’s most vulnerable people. | Yes | Conservation International. Observations and models from researchers at Stanford University, King’s College London, Cornell University, Colorado State University, and elsewhere. | 2010 | The current suite of datasets used covers a range of dates across the past decade, but the methods developed here can be applied to other datasets that are updated more regularly. |
| ***Trends.Earth*** | Proportion of land that is degraded over total land area | Yes | Trends.Earth is a tool developed by Conservation International with funding from the GEF in close collaboration with the UNCCD, NASA, Google, UN-Habitat and the GEO Land Degradation Neutrality (GEO-LDN). The broad user base includes over 2,500 users from over 180 countries. Project webstite: http://trends.earth/docs/en/ | Dependent on the country data |   Countries are required to assess land degradation in their territories every 4 years for UNCCD and SDG 15.3 reporting. Trends.Earth supports the best global datasets and methods for computing the indicator using earth observation data and estimating area. Trends.Earth data is updated annually and tool will be supported until at least 2030. |
| ***Connectivity Status Index*** | A measure of a river’s connectivity along four dimensions: (1) longitudinal (connectivitybetween up- and downstream), (2) lateral (connectivity to floodplainand riparian areas), (3) vertical (connectivity to groundwater andatmosphere) and (4) temporal (connectivity based on seasonalityof flows). | Yes | WWF | 2019 | WWF will confirm frequency of updates. The methodology and data behind the index are available here: <https://figshare.com/articles/Mapping_the_world_s_free-flowing_rivers_data_set_and_technical_documentation/7688801>. |
| ***IPLC land/seascape tenure* *and recognition*** | Extent of land and water under IPLC tenure, management, occupationNumber of countries with NBSAPs and/or national reporting mechanisms on area-based conservation measures that include submissions of IPLC governance and managementNumber of countries with formal and informal mechanisms for recognition of IPLCs in land and water tenure, use or other rights that lead to biodiversity conservation and sustainable livelihoods | Each of the data layers is operational independently. The collaboration of a united layer will be completed in 2020. | Contributors would include:Landmark.com (WRI)World Database on Protected Areas (UNEP WCMC)Other Effective Area-based Conservation Measures (UNEP WCMC)Indigenous and Community Conserved Areas Registry (UNEP WCMC)Conservation Atlas (CI) | Most of these databases are continuously managed and updated on monthly or annual bases. Organizational commitments exist for management | Several global and national databases exist that can contribute to assessing indicators; many local knowledge systems can also contribute to larger scales |
| ***System of Environmental-Economic Accounting (SEEA)*** |  The internationally accepted framework for incorporating nature into national accounting systems | Yes | United Nations | Rigorous data generated by countries implementing accounts can be used for consistent measurement of progress over time. | See <https://seea.un.org/> for more details. Each country may have different updating baselines. |
| ***PADDD* *(Protected area downgrading, downsizing, and degazettement)******\*Alternative names:******Changes to size and status of protected and conserved areas***  | Number, spatial extent, and causes of legal or policy changes that temper restrictions, shrink boundaries, or eliminate protected areas. Concept should also be applied to OECMs.*\*Alternative: adjust the indicator(s) to track both “positive” and “negative” changes to protected and conserved area size and status:* *upgrades, downgrades, expansions, downsizes, establishments, and degazettements.*  | YesConcept defined in [Mascia and Pailler 2011](https://doi.org/10.1111/j.1755-263X.2010.00147.x).Technical guidance provided in [Mascia et al. 2020](https://zenodo.org/record/3608263#.XxmXqyhKg2w).At least 30 [peer-reviewed manuscripts and technical reports](https://resilienceatlas.s3.amazonaws.com/PADDD/PADDD%20Annotated%20Bibliography%2010.23.2019.pdf) provide evidence about extent, patterns, trends, causes, risks, and impacts.[Golden Kroner et al. 2019](https://science.sciencemag.org/content/364/6443/881) provides recent global synthesis of data.Peer-reviewed data is available for download on [PADDDtracker](https://www.padddtracker.org/). | Conservation International, UNEP-WCMC |  Reporting could be done annually by Parties and the baseline depends on the age of the protected areas system.. Requires adding new attributes to the World Database of Protected areas and OECMs. | Annual reporting. Parties along with regular reporting of protected area and OECMs to UNEP-WCMC. Requires adding new attributes to the World Database of Protected areas and OECMs. |