Indicator Proposal Summary Template

Full name of the Indicator: Ocean Health Index

Custodian Agency(ies): UNEP-WCMC Biodiversity Indicators Partnership Secretariat submission with the National Center for Ecological Analysis and Synthesis, Ocean Health Index

Goal and target addressed: Goal 14 entirely, as well as Target 14.2

What type of proposal (replacement, refinement, adjustment and addition), for replacement, refinement and adjustment, please list the original indicator and its number:

Refinement and expansion of information included to track progress towards Goal 14 as well as Target 14.2: By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.

1. Background and rationale for the indicator proposal

While the focus of SDG Goal 14 is on the conservation and sustainable use of ocean resources for human development, the current targets outlined do not include several of the benefits provided by sustainable oceans. Many of these components are essential for not only knowing the status of marine ecosystems, but also the physical and social health of the people that depend on these ecosystems. For example, jobs and food are two essential foundations for healthy people, and the ocean provides these resources to people around the world. **The OHI would be an excellent overarching indicator for the entirety of SDG Goal 14 because of its specific emphasis on conservation as well as sustainable use of our oceans. The OHI would likewise serve as an excellent refinement and expansion of the indicators for SDG Target 14.2 specifically** because it not only measures the share of coastal and marine areas that are protected, but goes far beyond to also include how sustainably we are managing our coastal ecosystems to achieve healthy and productive oceans by incorporating the full suite of benefits that a sustainable ocean provides to people. **Benefits that a sustainable ocean provides to people are essential to include when considering the goal of sustainable management and protection of marine and coastal ecosystems as protection and sustainable use must go hand-in-hand if we are to truly achieve the goal of long-term sustainable, healthy, and productive oceans.** Using the OHI to monitor progress for SDG Target 14.2 would more comprehensively capture benefits provided to people through sustainable management of our oceans, and also provide information to more effectively focus conservation efforts to maintain our vital ocean and coastal ecosystems. The OHI also incorporates a suite of indicators specifically aimed at quantifying the resilience of ocean and coastal ecosystems which would additionally increase knowledge around how well we are collectively achieving Target 14.2.

2. Information on how and when the methodology has become an international standard and who is the governing body that approves it

The Ocean Health Index is a peer reviewed scientific method published initially in the Journal Nature in 2012 and has been conducted annually ever since, with further improvements and peer-reviewed publications each year (ohi-science.org/publications).

3. Data sources and data availability

Ocean Health Index scores are calculated for 220 coastal countries and territories worldwide. Regions are based on Exclusive Economic Zone boundaries (EEZ). OHI values are not estimated for disputed or unclaimed areas.

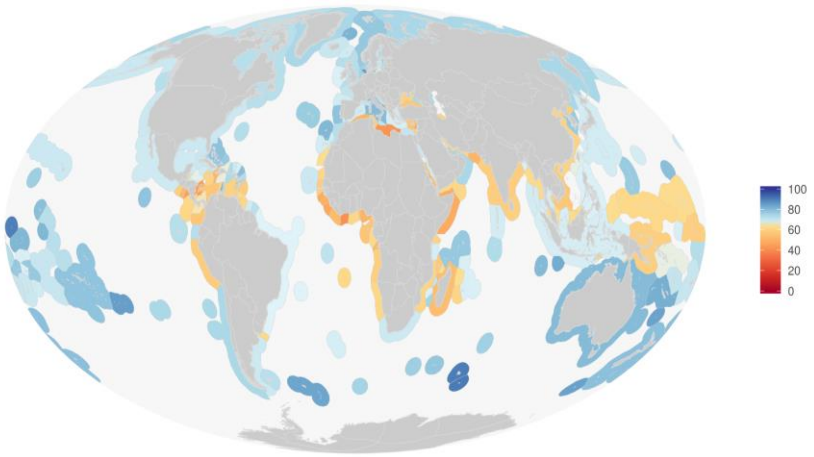

Figure 1: Global Ocean Health Index scores for 2018

The Global Ocean Health Index synthesizes highly heterogeneous information from nearly one hundred sources. Data from each source are formatted and used to calculate Index scores using freely available coding and version control software. The OHI strives to make all data and methods available to anyone who wants to further explore Index results or use the data for other projects. Only pre-existing datasets are used in the model but a good deal of work is involved in standardizing the data to the correct spatial and temporal scale as well as estimating missing data.

Ocean Health Index data is available for download at http://ohi-science.org/data/

A full, detailed list of data sources used in the Ocean Health Index is available at: http://ohi-science.org/ohi-global/layers_table.html

The scripts and data outputs used to format these data are available at: https://github.com/ohi-Science/ohiprep_v2018

4. Confirmation/explanation of joint submission with other partner/co-custodian agencies (if applicable)

UNEP-WCMC Biodiversity Indicators Partnership Secretariat submission with the National Center for Ecological Analysis and Synthesis, Ocean Health Index

5. Conclusion

Taken as a whole, the Ocean Health Index provides a comprehensive view of how well marine ecosystems and the benefits these ecosystems provide to people are being sustainably managed. Although the Ocean Health Index is not currently being considered as an SDG 14.2 indicator, several qualities make it uniquely suited to monitor SDG 14.2 progress for sustainably managing and protecting marine and coastal systems, including:

- The OHI is the first and only ocean assessment tool that integrates key elements from all dimensions of the ocean's health (biological, physical, economic, and social), which is a significant advancement over conventional single-sector assessments.
- A focus on ocean resources and services that people directly relate to and value.
- Annual assessments starting in 2012 that will continue to be updated yearly, providing continuity of methods and data required to monitor progress of SDG targets.
- A commitment to full transparency, with all data and methods readily available
    - Data: http://ohi-science.org/data/ & https://github.com/ohi-Science/ohiprep_v2018
    - The full methodology: https://raw.githack.com/OHI-Science/ohi-global/published/global_supplement/Supplement.html