## Supplementary Online Material for Golden Kroner et al., COVID-era policies and economic recovery plans: are governments building back better for protected and conserved areas?

## **Supplemental Methods**

Review of economic recovery plans and illustrative examples that support Protected and Conserved Areas

To identify economic recovery plans that support PCAs directly or indirectly, we iteratively searched relevant websites, trackers, government portals, news, and reports and extracted relevant examples. We searched the following trackers and websites, using key terms, and listed countries for further follow up on the economic recovery packages.

- IMF Policy Tracker, <u>https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19</u>

summarizes economic recovery packages for each country. Searched key terms: *indigenous*; *green, protect\*, restor\*, conserv\*, biodiv\*, tree\*, ecosyst\*, monitor\*, park, offset, carbon, natur\*, \*forest\*;* Following these searches, we flagged the following countries for follow up: *Canada, Denmark, Korea, Luxembourgh, Norway, Sweden, UK, Austria, Ethiopia, Lithuania, EU, Finland, Kenya, Chile.* 

- Climate Interactive. 2020. GREAT: Green, Resilient, and Equitable Actions for Transformation. Reviewed all cases. <u>https://www.climateinteractive.org/ci-topics/great/</u>
- International Institute for Sustainable Development (IISD). Sustainable Recovery 2020. Searched key terms: *indigenous*; *green*, *protect\**, *restor\**, *conserv\**, *biodiv\**, *tree\**, *ecosyst\**, *monitor\**, *park*, offset, carbon, natur\*, \*forest\*
- <u>https://www.iisd.org/sustainable-recovery/</u>
- Observatory in Latin America and the Caribbean <a href="https://www.cepal.org/en/topics/covid-19">https://www.cepal.org/en/topics/covid-19</a>; Searched: indigenous; green, protect\*, restor\*, conserv\*, biodiv\*, tree\*, ecosyst\*, monitor\*, park, offset, carbon, natur\*, \*forest\*
- Carbon Brief, Coronavirus: Tracking how the world's green recovery plans aim to cut emissions. <u>https://www.carbonbrief.org/coronavirus-tracking-how-the-worlds-green-recovery-plans-aim-to-cut-emissions</u>; filtered under Sector: Nature and reviewed all results.
- OECD Policy Responses to Coronavirus: Tourism policy responses. 2020. <u>https://www.oecd.org/coronavirus/policy-responses/tourism-policy-responses-to-the-coronavirus-covid-19-6466aa20/;</u> searched "protected area\*" and reviewed all results.

We also drew from the following sources:

- Vivid Economics. 2020. Greenness of Stimulus Index. <u>https://www.vivideconomics.com/wp-content/uploads/2020/09/GSI\_924.pdf</u> noted actions listed under "conservation and wildlife protection programs," "Nature Based Solutions,", "Environmentally harmful infrastructure investments," or "Deregulation of environmental standards". Followed up on each example to determine whether there was a potential link to PCAs.
- Report on Asia / Pacific countries' green response to COVID-19
  <a href="https://think.ing.com/uploads/reports/Asias\_green\_response\_100820\_AOT.pdf">https://think.ing.com/uploads/reports/Asias\_green\_response\_100820\_AOT.pdf</a>
  Drew from assessments of "where stimulus is going" by country; followed up on investments
  marked as "green" to determine whether there was a potential link to PCAs.
- Northrop, E., et al. 2020. "A Sustainable and Equitable Blue Recovery to the COVID-19 Crisis." Report. Washington, DC: World Resources Institute. Available online at <u>http://www.oceanpanel.org/bluerecovery</u>

- Feldman-Lopez et al. 2020. Environmental impacts and policy responses to COVID-19: A view from Latin America. Environmental and Resource Economics. <u>https://europepmc.org/article/med/32836838</u>
- Economic Commission for Latin America and the Caribbean (CEPAL): https://www.cepal.org/es/publicaciones/selecciones/covid-19
- African Development Bank <u>https://www.afdb.org/fr/documents/finance-climatique-newsletter-ndeg45-janvier-juin-2020</u>
- Le Plan d'actions prioritaires II ajusté et accéléré (PAP 2A) pour la relance de l'économie Sénégal : http://www.economie.gouv.sn/sites/default/files/2020-10/PAP%20II%20%20Ajust%20pour%20Relance-28.09.2020-vFinal%20final.pdf

## Review of rollbacks to PCAs

Mirroring efforts (e.g. <u>here</u>, <u>here</u>, and <u>here</u>) to track rollbacks to environmental protections in the United States, we compiled information on rollbacks to environmental protections globally, with a focus on conservation policies, their advancement, and/or implementation. The list was compiled by searching news feeds (e.g. Parkwire) and Google (terms including: protected area\*, degazette\*, national park, national park boundary, conservation), reviewing government documents, and reaching out to experts. The list includes legal changes (e.g. laws, regulations, court decisions) that were finalized, in progress, or proposed debated, implemented, or advanced as reported as of March 1, 2020, and affect PCAs directly or indirectly (e.g. through impacts on general environmental regulations, or rights of IPLCs). It also includes statements by officials expressing intent to weaken protections, and information on cuts to budgets and staff that would affect capacity to manage PCAs. Some of these rollbacks to land and water protections may be cases of <u>protected area downgrading, downsizing, and degazettement (PADDD)</u> <u>events</u> – legal changes that temper restrictions, shrink boundaries, and eliminate protected areas (see <u>PADDDtracker.org</u>), but further research is needed to confirm this.

This review is not meant to be a quantitative assessment of rollbacks, but rather provides qualitative information. Understanding the full ecological and social impacts of these recent rollbacks requires further study. The rollback list also does not include:

- Delays to environmental meetings and negotiations
- Changes to donations for conservation work
- Suspensions of enforcement
- Increases in illegal activities deforestation, bushmeat harvesting, etc.
- International environmental policy processes or decisions
- Natural disasters (e.g. floods, fires, oil spills)
- Changes to funding for environmental protection or environmentally harmful subsidies; see <u>Energy Policy Tracker</u> and <u>Vivid Economics 2020</u> for fossil fuel and clean energy spending information
- Appointments of officials who have previously expressed interest in environmental rollbacks

## Additional review

We also searched the following trackers and reports, but searches did not yield additional results:

Observatory of Public Sector Innovation COVID19 Innovative Response Tracker. <u>https://oecd-opsi.org/covid-response/</u>

- Larsen, K. et al. 2020. It's Not Easy Being Green: Stimulus Spending in the World's Major Economies. Rhodium Group. <u>https://rhg.com/research/green-stimulus-spending/</u>
- Devex, "Funding the Response to COVID-19"; search initiatives related to "Environment." Funding flows outside of government support were outside of the scope of this analysis; additional information on multi-lateral, bilateral, philanthropic, private sector, and NGO funds can be found here.<sup>i</sup>

<sup>&</sup>lt;sup>i</sup> https://public.tableau.com/views/COVIDFundingvisualisation/COVID-

<sup>19</sup>funding?%3Aembed=y&%3Atoolbar=no&%3Adisplay\_count=no&%3AshowVizHome=no#1