

Principles and Safeguards for Natural Climate Solutions

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1 Protect, manage, and restore ecosystems to maintain or increase climate benefits.

Protecting threatened high-carbon ecosystems can avoid emissions and help protect biodiversity; the benefits are immediate and difficult to replace once lost, making ecosystem protection a top priority. Improved management can be applied at low cost over large areas, and can have substantial and enduring co-benefits. Restoring degraded land to native vegetation can increase biodiversity while increasing carbon stocks to levels consistent with the potential of the site over the long term. While important, restoration should not be viewed as an alternative to or replacement for protection.

2 Consider risks from climate extremes, natural disturbances, and socioeconomic events.

Many NCS will take time to reduce net greenhouse gas emissions; exceptions are avoiding deforestation and forest degradation, delaying harvest, and reducing emissions from agricultural soils. Calculations of expected benefits must consider climate change and other factors that are likely to impact the outcomes of NCS.

3 Engage Indigenous Peoples and local communities, and work to mitigate inequalities and injustices.

Natural climate solutions should be implemented with full engagement of Indigenous Peoples and local communities in ways that respect land, culture, and human rights. The historical legacies and ongoing effects of institutional racism necessitate particular care to include the knowledge and interests of these communities. Participatory engagement, negotiations, and consent are critical.

4 Enhance human welfare and “do no harm.”

Natural climate solutions should aim to generate a net enhancement to human welfare, while doing no harm to impacted parties. If the tradeoffs between the private and public benefits from policy choices are clearly defined and quantified, potential negative outcomes can be identified and mitigated to the greatest extent possible. Unless natural climate solutions can be demonstrated to have clear overall benefits to society and impacted stakeholders, and private costs mitigated, they are unlikely to be adopted.

5 Practice full-system accounting so that all effects on the carbon cycle are assessed, and the contributions of a given natural climate solution can be evaluated.

Assessing the climate impacts of natural climate solutions requires a systems approach because of the connections between agriculture, forests, land use, food and fiber production, and energy production. It is therefore essential to practice full-system carbon accounting, including the effects of activities on ecosystems and their ability to maintain or increase carbon stocks, as well as impacts on fossil fuel emissions from related economic sectors. Full-system accounting should be complemented with effective monitoring and reporting.

6 Ensure that carbon credits used to finance natural climate solutions meet the highest standards of quality, integrity, and offset eligibility.

There are numerous financing models for natural climate solutions. Regulatory and voluntary carbon markets could be a significant source of funding for scaling up NCS, but their use needs to follow strict guidelines to ensure real climate benefits. Offsetting should only be used as a complement to—not substitute for—rigorous decarbonization efforts; this includes both immediate use as emissions are being reduced, as well as long-term use to offset hard-to-abate emissions. All carbon credits must be backed by thorough monitoring and accounting of both risks and benefits (as outlined in previous sections) to ensure quality and integrity.

To learn more and read the paper in full, visit woodwellclimate.org/ncs-principles.



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149 Woods Hole Road, Falmouth, MA 02540 USA ■ +1 508-540-9900 ■ woodwellclimate.org