

A definition of "protect" or "conserve" under 30x30

A clear and consistent definition of "protected" or "conserved" is needed to establish priority values and required mechanisms for implementation of 30x30 for addressing the biodiversity and climate crises. The definition must be functional, such that it can be translated to assessing the qualification of any particular parcel on land or water in advancing the goal of 30x30. Last, the definition must be general enough that it is applicable to the variety of stakeholders involved in a national effort. We believe the following definition meets those requirements:

For the purposes of 30x30, "protect" or "conserve" means the establishment of enduring measures that support secure and thriving biodiversity, contribute to climate adaptation, and provide ecosystem services, such that the intrinsic value, natural character, resources, and functions of the covered area are maintained or enhanced now and into the future, both individually and as part of an interconnected network of healthy lands and waters.

This definition includes the following interpretations:

- The phrase "enduring measures" means the set of legally binding tools or instruments that ensure society's designations of the lands and waters for 30x30 advance the purposes stated in the definition. This includes the requirements that:
 - 1. the duration of the measure is for as long as is reasonably possible in a given domain. For example, "enduring measures" on public lands will on average be longer-duration than measures on private lands, given the vagaries of U.S. social norms and law; and
 - 2. these measures must be accounted for and verified on an ongoing basis.
- Given the set of values in the definition, all aspects of 30x30 implementation including the term "support" means that best available science will be used to allocate resources to achieve the stated purposes.
- To "secure and thriving biodiversity, contribute to climate adaption, and provide ecosystem services" is underpinned by fundamental principles of conservation biology²:
 - 1. "represent all native ecosystem types and successional stages across their natural range of variation;
 - 2. maintain viable populations of all native species in natural patterns of abundance and distribution;
 - 3. maintain ecological function and ecosystem services;
 - 4. maximize carbon sequestration by natural ecosystems; and
 - 5. address environmental change to maintain evolutionary processes and adapt to the impacts of climate change."

Further, addressing Principle 2 should recognize that imperiled species deserve additional attention, and that addressing Principle 5 will require concerted efforts to protect areas identified as climate refugia, increased functional connectivity, and restoration to ensure long-term ecosystem functionality and integrity.

- The phrase "maintained or enhanced" includes the recognition that restoration or management activities, natural processes such as fire or succession, and other dynamics mean that "protected" or "conserved" does not mean "static."
- The phrase "both individually and as part of an interconnected network of healthy lands and waters" signifies that individual parcels protected or conserved under the aegis of 30x30 are locally relevant and that they contribute to representation of biodiversity more broadly as part of a national system.
- As 30x30 is implemented, we anticipate the institutionalization of a social norm of protecting or conserving areas for nature, i.e., as an emergent property.

¹ Depending on context, either term may be used. While most conservationists differentiate the terms "protect" and "conserve," many people think of them synonymously.

² From: Dinerstein et al. 2019. A global deal for nature: Guiding principles, milestones, and targets. Science Advances: DOI: 10.1126/sciadv.aaw2869, citing Noss, RF and Cooperrider AY, 1994 Saving Nature's Legacy, Island Press & Defenders of Wildlife.

EXAMPLE decision support tool for determination of "protected" or "conserved" under 30x30

The definition of "protected" or "conserved" for 30x30 should be translatable into a key that allows a user to determine whether any particular location and agreement qualify for inclusion, for example:

A given parcel or specific area of land or water ("covered area") qualifies as protected or conserved under 30x30 if it meets the following conditions:

- 1. Are the activities on the covered area governed by a legally binding agreement or social contract such as law, regulation, or policy ("agreement")?
 - a. Yes go to 2.
 - b. No Stop: while this area may advance conservation or other goals, it cannot qualify as contributing to the goal of 30x30.

For example, an easement on private lands backed by a contractual agreement with a state or a land trust would count, but an area designated as a "good will" gesture lacking any recourse for harmful actions would not.

- 2. Does the agreement specify that the implementation of its terms will be accounted for and verified on an ongoing basis?
 - a. Yes go to 3.
 - b. No Stop: while the agreement may offer protections on paper, the lack of accountability means it cannot qualify as contributing to the goal of 30x30.

For example, an area protected under 1, above, but not allowing independent verification of compliance would not count.

- 3. Is the duration of the agreement as long as is reasonably possible given the context of the area of interest and parties involved?
 - a. Yes go to 4.
 - b. No Stop: while the agreement may advance relevant purposes in the short-term, it cannot qualify as contributing to the goal of 30x30.

For example, a 10- or 15-year agreement may be all that is available under private lands conservation programs and could be considered suitable, but a 5-year agreement when longer terms are available would not.

- 4. Does the agreement prioritize activities on the covered area that advance the purposes of the conservation of native biodiversity, climate adaptation, and/or ecosystem services, and limit activities that would permanently or significantly impair those purposes?
 - a. Yes go to 5.
 - b. No Stop: while the agreement may advance other purposes, it cannot qualify as contributing to the goal of 30x30.

For example, an agreement could allow limited road-building to access and manage or restore an area, but prohibit an activity like a highway or resource extraction that permanently or significantly harms conservation/protection.

- 5. Is the agreement reasonably expected to result in the overall maintenance or enhancement of the intrinsic value, natural character, resources, and functions of the covered area for an appropriate duration?
 - a. Yes go to 6.
 - b. No Stop: while the agreement may produce one or more outcomes relevant to some purpose, it is inadequate to qualify as contributing to the goal of 30x30.

For example, an agreement that is expected to result in restoration of natural habitats would count, but one that allowed the continued yet slower degradation of natural conditions would not.

- 6. Does the covered area contribute to the purposes of 30x30 individually and as part of the nation's network of protected or conserved lands and waters that ensure representation of biodiversity, advance climate adaption, and provide nature's services to society?
 - a. Yes Congratulations: barring information to the contrary not covered in this decision support tool, the covered area can be considered to contribute to the goal of 30x30.
 - b. No Stop: while the agreement may meet one of the requirements of local or the protected areas network, it is inadequate to qualify as contributing to the goal of 30x30.

This will likely result in "Yes" in most every case, but if a parcel were to not add any representation, redundancy, or resiliency for biodiversity, or if the owner/manager were to somehow "exclude" it from recognition as part of the national network, then it is conceivable that this would not be met.