



2030 Is Coming Soon— Let's Get to Work

*Having the vision's no solution,
everything depends on execution.*

—STEPHEN SONDEHEIM, 1930–2021

AS THE WORLD grapples with the ever-worsening consequences of the climate crisis and the terrifying prospects of mass extinction, global political leaders have responded with impressive ambition. At the 26th Conference of the Parties on Climate Change in Glasgow in late 2021, some 153 countries updated their emissions-reduction commitments to help prevent global average temperatures from rising more than 2 degrees Celsius by 2030 and improve the chances of reaching global net-zero emissions by 2050. At the same gathering, more than 140 countries pledged to end deforestation by 2030.

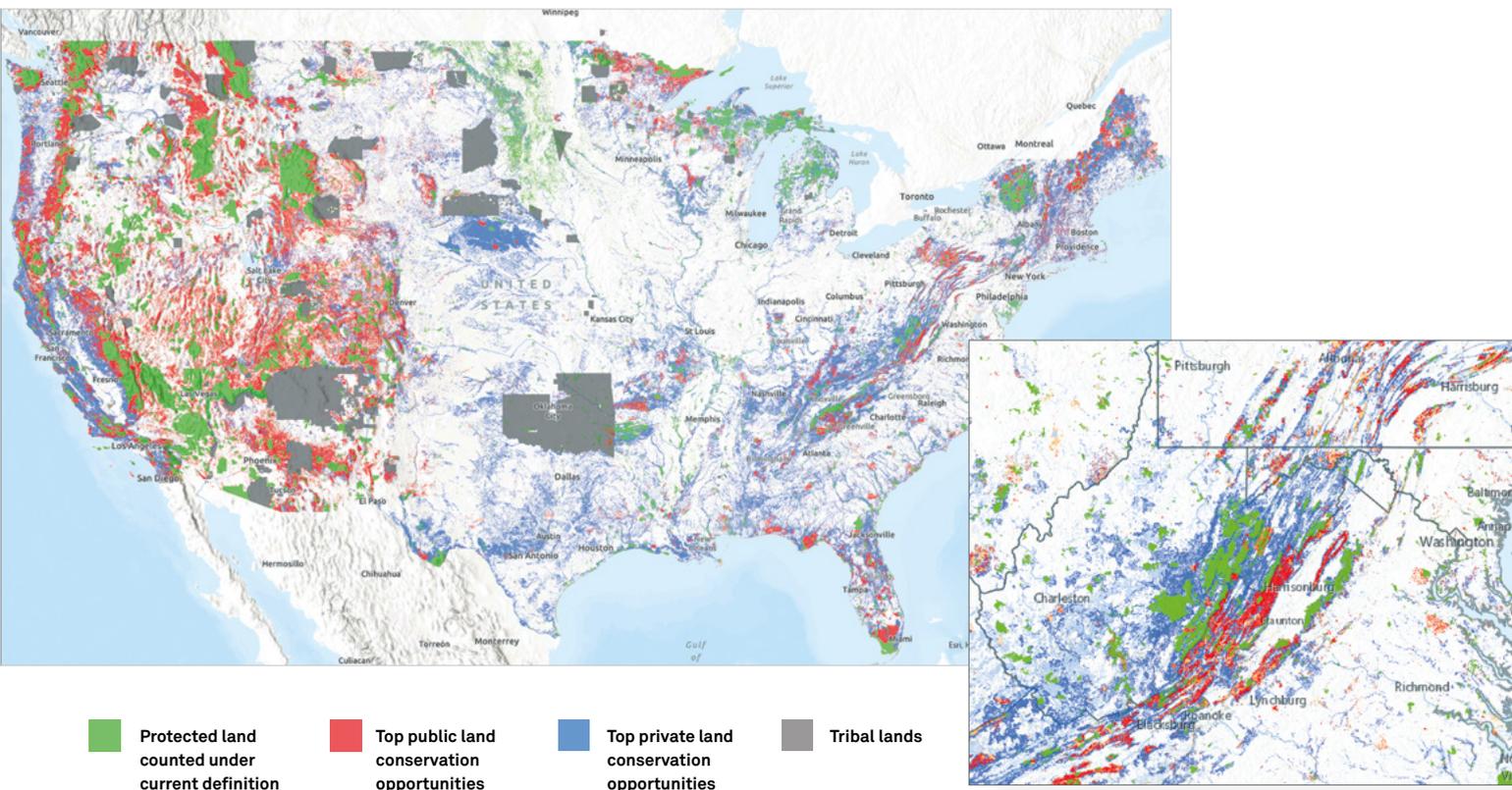
Meanwhile, at the 15th Conference of the Parties on Biodiversity (COP15), held in Kunming, 70 countries agreed to conserve 30 percent of their lands and oceans by 2030 (30x30), as part of an effort to preserve global ecosystems and prevent biodiversity losses. Many other countries are expected to sign on to the commitment this spring, when COP15 concludes. (COP15 was structured as a two-part event due to the pandemic, illustrating the complexities of reaching any kind of global agreement in the current moment.)

If achieved, 30x30 will contribute greatly to efforts to mitigate the climate crisis, primarily through carbon sequestration. Unfortunately, 2030 isn't very far off. We'll need more than good intentions to make progress on this ambitious goal, and land policy will play a central role in the pivot from ambition to implementation.

The Lincoln Institute and its Center for Geospatial Solutions (CGS) have developed a geospatially driven framework for accelerating progress toward the 30x30 goal. Our approach emphasizes the need to think differently about the scope of the problem and its solutions. More specifically, we think stakeholders working on 30x30 need to identify surmountable goals, introduce common accounting of conserved land, integrate environmental and social outcomes, include public and private land in conservation strategies, and build momentum through demonstrated success.

First, we need to set a baseline that accurately assesses the current state of land conservation both nationally and globally. This is more complicated than it might seem. For example, in the United States, where land records are fairly reliable, the USGS Protected Area Database tells us that 13 percent of the country is considered “conserved” explicitly for biodiversity protection. By that metric, we'd need to more than double the amount of conservation we have achieved to date to reach 30x30. If we look only at the continental United States, conserved land drops to about 8 percent, meaning we would need to almost quadruple the amount of land we conserve in the next eight years, an almost insurmountable task.

But changing how land is managed can help meet conservation goals without the need to newly protect an additional 22 percent of the nation's land (440 million acres). For example, public and tribal ownership accounts for just over 25 percent (500 million acres) of land in the United States. That land is not considered



After integrating disparate data sets on issues ranging from land ownership and biodiversity to equity and climate resilience, the Center for Geospatial Solutions (CGS) mapped national land conservation priorities recommended for meeting 30x30 goals. Inset: Conservation areas and opportunities in the mid-Atlantic states. Credit: CGS.

conserved because resource extraction is allowed or there is no explicit mandate to protect biodiversity. In addition, urban and suburban parks, greenways, trails, and other municipal lands that are used for recreation are often not counted as conserved lands. Protected lands in the urban/suburban landscape play a big role in improving people's health, addressing environmental injustice, and creating corridors and habitat for other species. Changing how land is managed, from prohibiting mining and oil exploration to explicitly protecting biodiversity, can help us gain conserved land to count toward 30x30 without requiring us to start from scratch.

Private land protected by conservation easements will also play a big role in meeting our national land protection goals. Currently the National Conservation Easement Database, the accounting system for privately conserved land,

is outdated. We need better incentives for land trusts and private landowners to contribute data on their properties that will build a more comprehensive and accurate national picture of private land conservation. This will also contribute to better management and restoration outcomes.

With a combination of newly conserved land and better management of public lands to meet conservation goals, 33 percent of the continental United States could be conserved very quickly. But without a way to identify the lands that are most critical to support our conservation priorities and a commitment to conserve and count them, progress will be slow.

At the Lincoln Institute, we think a balanced prioritization strategy is needed that looks at a variety of conservation goals—including biodiversity protection, resilient and connected

landscapes, and carbon sequestration—and that considers other overriding objectives, such as protecting highly productive farmland or improving access to nature for underserved communities. We propose a more integrated view and comprehensive approach that looks at the whole country, considers multiple conservation priorities, ensures equitable access to land, and attracts effective conservation financing.

Current efforts to map priorities do not account for the social component of conserving, improving, and restoring lands. Decisions about conservation should be based not only on biodiversity and environmental data but also on data about people and their needs, relationships, and interactions with land. By considering such data, we can protect land for multiple benefits to both people and nature. To illustrate the opportunities before us, CGS created an analysis that can guide collective efforts to protect critical landscapes. True to the collaborative spirit that guides the work of CGS, these maps draw upon and synthesize the collective wisdom of leading scientists and organizations focused on this effort including NatureServe, The Nature Conservancy, and the World Conservation Monitoring Centre. (See page 9 to learn more about the work of CGS.)

By assembling complete and accurate data on public and private lands that are or should be protected, and making this data open and freely accessible to all communities, we can achieve conservation that is inclusive and equitable. In addition, we can integrate other data sets as they become available that will allow us to monitor and manage conserved lands and determine

whether they are delivering on intended outcomes. Rigorous monitoring is essential; without it, we won't know whether we've reduced runoff and pollutants into streams and rivers, established green sinks to mitigate greenhouse gas emissions, or improved community health—and we won't be able to track and celebrate progress toward national and global conservation goals.

Finally, to support national and global efforts to achieve 30x30, we need to establish a management infrastructure that ensures transparency and accountability. Regular communication about land protection efforts, whether those efforts are conducted by small land trusts or government agencies, will create a common framework and language so that all stakeholders can see how they fit into the bigger picture and how even small opportunities can play a role in this global effort. Each country will need a secretariat/management and facilitation structure, as well as effective processes for regularly convening, making decisions, and monitoring progress. Successful global efforts ranging from eradicating polio to halving child mortality to post-World War II reconstruction have relied on the global community investing in and standing up an effective management infrastructure. It has been done before, and we can do it again.

The United States and many other countries are prepared to make massive investments in natural and built infrastructure. This unprecedented public spending could either enhance the protection of or threaten land that is conserved, or should be conserved, to mitigate the climate crisis and preserve biodiversity. But we cannot predict the impact these activities will have on land that we don't recognize. We need to do a better job at land and data management and make this information accessible to all partners to facilitate a larger conversation as soon as possible. And if we are serious about protecting 30 percent of our land and water resources by 2030, we need to move from vision to execution. The Center for Geospatial Solutions at the Lincoln Institute is ready to help. □

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