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Comments in Response to Request for Information to Inform Interagency Efforts to Develop the American Conservation and Stewardship Atlas

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Comments in response to *Request for Information to Inform Interagency Efforts to Develop the American Conservation and Stewardship Atlas*, 87 Fed. Reg. 235 (Jan. 4, 2022)

Submitted on March 7, 2022.

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March 7, 2022

Eric Werwa
Deputy Assistant Secretary for Policy and Environmental Management
U.S. Department of the Interior

Re: Request for Information To Inform Interagency Efforts To Develop the American Conservation and Stewardship Atlas, 87 Fed. Reg. 235 (Jan. 4, 2022).

Dear Mr. Werma,

We appreciate the opportunity to provide comments on the American Conservation and Stewardship Atlas (Conservation Atlas or Atlas). We support ongoing efforts to craft a comprehensive and coordinated plan to conserve Americas' lands and waters. We believe that the Atlas will serve as a valuable informational tool in facilitating the review and verification of ongoing conservation efforts. Once operative, we hope it will also aid in identifying lands and waters that will advance future conservation efforts.

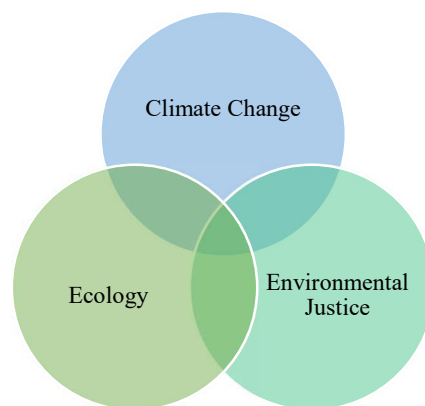
The broad charge set forth in the *Request for Information To Inform Interagency Efforts To Develop the American Conservation and Stewardship Atlas*, 87 Fed. Reg. 235 (Jan. 4, 2022) (Federal Register Notice) is to organize information around three key factors:

- (1) Ecological Condition—providing a “clear baseline of information on lands and waters that are conserved or restored,” to which we would also include lands and waters that could be restored or conserved in the future to provide or improve ecological benefits.
- (2) Social and Environmental Justice—which reflects the important but not strictly ecological goal of “[c]reating more parks and safe outdoor opportunities in nature-deprived communities . . . [and] increasing access for outdoor recreation.”
- (3) Management—the means to achieve and sustain restoration and conservation objectives, the “accessible, updated, and comprehensive tool[s] through which to measure the progress of conservation, stewardship, and restoration efforts.”

Developing a framework for the Atlas is a daunting task because of the volume and complexity of the information involved, the multiple objectives served by the Atlas, and the everchanging nature of relevant information. Our comments focus on what we believe would be a useful framework for the Atlas. Our comments proceed in 5 parts: (1) broad comments about conservation, the Atlas, and the America the Beautiful Initiative; (2) a proposal for providing a universal baseline of ecological health that includes ecological potential, existing conditions, and a landscape health assessment; (3) the benefits and risks of recognizing a continuum of conservation; (4) avoiding a “lemons” market in the conservation sphere by providing transparent information about the purpose, management, efficacy, and durability of conservation projects included in the Atlas; (5) developing an assessment methodology and report card that creates transparency along the continuum of conservation.

I. Broad comments about conservation, the Conservation Atlas, and the America the Beautiful Initiative.

The America the Beautiful Initiative (ATB Initiative) establishes the goal of conserving thirty percent of American lands and waters by 2030. This goal, colloquially referred to as the 30 x 30 target, has three purposes. First, conservation is one way to respond to the risk of catastrophic loss of biodiversity predicted by reports.¹ Second, the ATB Initiative recognizes that “the ‘how’ is just as important as the ‘what,’” and that conservation should strengthen environmental justice goals to expand access to nature and improve urban environments.² Finally, the threat of climate change exacerbates the risks of biodiversity loss and environmental injustices and demands innovative solutions that mitigate damage to ecosystems, communities, and the economy. To summarize, the ATB Initiative and the 30 x 30 target are strategies for addressing three different, but interconnected challenges: the disappearance of nature, inequitable access to the outdoors, and climate change.³ In other words, the 30 x 30 target is an objective on the path to achieving three goals: biodiversity preservation, environmental justice, and climate change mitigation and response.



Although these three goals overlap, they do not do so completely. A mapping analysis conducted by Boston University, explored the lack of congruence between the different goals of the ATB Initiative, finding that only two percent of the coterminous United States satisfied two of the ATB Initiative’s competing priorities (biodiversity and climate change).⁴ Presumably, if the project had included environmental justice, even less land would have qualified.

This observation makes sense and helps clarify why the ATB Initiative must explore ways to maximize a “continuum of conservation.” First, expanding GAP Status 1 & 2 lands may

¹ E. Dinerstein et al., *A “Global Safety Net” to Reverse Biodiversity Loss and Stabilize the Earth’s Climate*, 6 *Science Advances* 2020 (Sept. 4, 2020).

² Year One Report: America the Beautiful 5 (Dec. 2021) [*hereinafter* ATB Year One Report].

³ Conserving and Restoring America the Beautiful 9 (May 6, 2021).

⁴ See Blake Alexander Simmons, Christopher Nolte & Jennifer McGowan, *Working Paper 001: Delivering on Biden’s 2030 Conservation Commitment*, BOSTON U. GLOBAL DEVELOPMENT POLICY CENTER 6 (2021), https://www.bu.edu/gdp/files/2021/01/BAS_Biden_EO_30x30_WP.pdf [*hereinafter* Simmons et al., *Delivering on Biden’s 2030 Conservation Commitment*]. Note that this study articulated the competing priorities of the ATB Initiative slightly differently. This study focused on affordable acreage, biodiversity preservation, and climate mitigation through carbon reduction and sequestration. This study did not address the additional goals of expanding access to nature and addressing environmental injustices.

not achieve biodiversity preservation or environmental justice objectives.⁵ Large-scale land preservation efforts have traditionally focused on lands primarily in the western United States and Alaska, where there are remote, sparsely inhabited landscapes and less commercial agriculture.⁶ However, continuing this approach will not necessarily protect biodiversity. Areas in the southeast have a higher concentration of biodiversity and a lower concentration of protected areas.⁷ Recent estimates suggest that one-third of terrestrial species in the United States are threatened with extinction, but only eleven percent have adequate representation within existing protected areas.⁸ Thus, simply expanding the boundaries of existing GAP Status 1 & 2 lands in the west will not achieve the goal of preserving biodiversity.

Second, remote protected landscapes may not address environmental justice challenges faced by urban communities. Ensuring that communities in densely populated areas enjoy access to nature and a healthy environment requires a different type of land conservation strategy. Third, transitioning to a clean energy economy is critical for climate mitigation, but without thoughtful and deliberate planning, clean energy projects could negatively impact communities and exacerbate biodiversity losses.

In summary, the ATB Initiative cannot reach its goals by simply compiling acreage. Instead, the ATB Initiative will require transparent implementation with clear objectives and full disclosure of the goals, management protocols, and outcomes of conservation projects included in the ATB Initiative.⁹

We urge this Administration to use the Conservation Atlas as a transparency tool. We believe that the Atlas could implement a methodology for displaying a “continuum of conservation” with specificity that distinguishes between conservation practices based on a project’s goals, management practices, and efficacy. To serve this purpose, the Atlas should provide context about ecological health that covers the entire United States, not just areas that are “conserved” within the context of the ATB Initiative. We also recommend that the Atlas adopt a uniform disclosure requirement with a standardized methodology to publish the management priorities and protocols for all projects included within the Conservation Atlas. As described in more detail in Section V, the disclosures should reveal a project’s location, size, goals,

⁵ The GAP Status Code part of the Protected Area Database (PADUS) and is a measure of management intent to conserve biodiversity defined as: Status 1: An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a natural state within which disturbance events (of natural type, frequency, intensity, and legacy) are allowed to proceed without interference or are mimicked through management. Status 2: An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a primarily natural state, but which may receive uses or management practices that degrade the quality of existing natural communities, including suppression of natural disturbance. Status 3: An area having permanent protection from conversion of natural land cover for the majority of the area, but subject to extractive uses of either a broad, low-intensity type (e.g., logging, Off Highway Vehicle recreation) or localized intense type (e.g., mining). It also confers protection to federally listed endangered and threatened species throughout the area. Status 4: There are no known public or private institutional mandates or legally recognized easements or deed restrictions held by the managing entity to prevent conversion of natural habitat types to anthropogenic habitat types. *See* <https://www.sciencebase.gov/catalog/item/56bba50ce4b08d617f657956>.

⁶ Simmons et al., *Delivering on Biden’s 2030 Conservation Commitment supra* note 4 at 3.

⁷ *Id.*

⁸ *Id.*

⁹ Simmons et al., *Delivering on Biden’s 2030 Conservation Commitment supra* note 4 at 6 (“Strategic implementation of the 30x30 target will require clear objectives to understand trade-offs and maximize conservation and climate outcomes.”).

monitoring results, adaptive management strategies, and durability. This information will allow the public to understand the purpose and quality of projects within the ATB Initiatives along a continuum of conservation. A similar assessment methodology has already been implemented within the carbon market, particularly for REDD+ projects with biodiversity benefits. Our comments draw heavily from this international experience. We believe that aligning these approaches provides an additional benefit by creating carbon market opportunities, particularly for conservation projects operating on private land. In this way, the Atlas could align with—and even facilitate—other efforts to financially reward farmers, ranchers, and private forest landowners for taking meaningful steps to reduce greenhouse gases and implement other climate-smart practices.¹⁰

Ensuring that the Atlas focuses on transparency, rather than acreage, will facilitate strategic implementation of the 30x30 target. By providing factual information about ecological health and land management strategies, the Conservation Atlas can serve as a decision-making tool to ensure that the ATB Initiative is implemented in a way that maximizes biodiversity, environmental justice, and climate mitigation outcomes. Thus, the Conservation Atlas is instrumental to the success of the ATB Initiative, even though it is a separate and distinct effort. Clearly defining and coordinating these two efforts is essential to success.

Accessibility is also critical. We believe that the Conservation Atlas must be freely available and accessible to the public. While powerful GIS databases can be used to inform decisions, those tools are often unavailable to the public and to stakeholders lacking sophisticated technology and training. We recognize the wide range of entities that may have an interest in both the social and ecological information contained in the Conservation Atlas, the analytical tools contained in the Conservation Atlas, and the management decisions that flow from that information and analysis. Private landowners, diverse stakeholder groups, state and local governments, Tribal governments, and federal agencies all deserve free and full access to information. Open access to information will support informed, coordinated, collaborative, scalable, and strategic decisionmaking. Open access will also enable more effective monitoring and evaluation. And to produce truly transformative decisions, the interface with the Conservation Atlas must be simple enough to be usable by the lay public. The EPA EnviroAtlas provides a good example of an informative, accessible map platform that could be used for the Conservation Atlas.¹¹

II. Providing a universal baseline by disclosing ecological potential, existing conditions, and an assessment of landscape health.

As noted in the Federal Register Notice, step one in creating the Conservation Atlas is to “to develop and track a clear baseline of information on lands and waters that are conserved or

¹⁰ See, e.g. JOHN M. CRESPI, THE FIRST LEGAL STEP FOR AN AGRICULTURAL CARBON MARKET IS THE GROWING CLIMATE SOLUTIONS ACT OF 2021 CENTER FOR AGRICULTURAL AND RURAL DEVELOPMENT (May 2021) available at <https://www.card.iastate.edu/products/publications/pdf/21pb33.pdf> (discussing the merits of a proposal to reduce entry barriers into voluntary environmental credit markets for farmers, ranchers, and private forest land owners by, among other things, creating a technical assistance system and a third-party verifier certification system for the voluntary carbon credit market).

¹¹ <https://www.epa.gov/enviroatlas>.

restored.”¹² Rather than only providing baseline information for lands and waters that are conserved, we believe that the Conservation Atlas should provide a baseline of information for all lands and waters across the entire United States. The baseline should provide uniform information regarding ecological conditions and existing land uses. Those conditions should be displayed without regard to jurisdictional authority or conservation status. We will refer to this contextual portion of the Conservation Atlas as a Landscape Health Inventory.

The Landscape Health Inventory should include three basic sources of information regarding ecological health: (1) ecological potential based on landscape attributes; (2) existing conditions; (3) a health assessment derived by comparing existing conditions to ecological potential. The Forest Service has already developed and implemented a tool that displays all of this information.

The Terrestrial Ecological Unit Inventory (TEUI) is a system to classify ecosystem types and map ecological units at different spatial scales.¹³ Using important ecological factors such as geology, climate, soils, hydrology, historic vegetation, and current vegetation, the TEUI tool can describe the ecological potential or capability of a landscape on multiple scales.¹⁴ The ecological potential includes landscape attributes such as land elevation, slope angle, and aspect; soil type, slope stability, and erosion potential; temperature, precipitation, and other relevant hydrologic and climatic data; historic vegetation cover type, density, seral stage, and health; contribution to surface and groundwater resources; value as habitat to a range of species; connectivity to important habitat blocks; carbon sink potential; known cultural, historic, archaeological, and paleontological resources.

The TEUI program offers an historic baseline of ecological potential according to a landscape’s physical characteristics, referred to as land-type associations. This information provides an accurate picture of ecological potential and can be compiled on a granular level or on a landscape level. This assessment provides science-based information for designing restoration projects or mitigation strategies. For example, the Forest Service used an early version of the TEUI framework in Northern Arizona to determine historic densities of ponderosa pines as a guide for forest management decisions about forest restoration and wildfire management.¹⁵

The TEUI program also portrays the existing conditions of a landscape including land uses; vegetation cover type, density, seral stage, and health; development; roads; the presence or absence of invasive species; presence and density of wildlife; wildfire hazard; quality of habitat; connectivity; and land disturbances. Leveraging twelve indicators of ecological conditions, the tool provides an assessment of resource conditions and stressors using landscape-scale analytical and reporting units.¹⁶

As part of the existing conditions, it is tempting to include the jurisdictional or regulatory status of land—such as privately-owned, state park, conservation easement, National Park, National Wildlife Refuge, or wetland mitigation bank. This jurisdictional information is useful

¹² *Request for Information To Inform Interagency Efforts To Develop the American Conservation and Stewardship Atlas*, 87 Fed. Reg. 235, 235 (Jan. 4, 2022).

¹³ <https://www.fs.fed.us/soils/teui.shtml>.

¹⁴ *Id.*

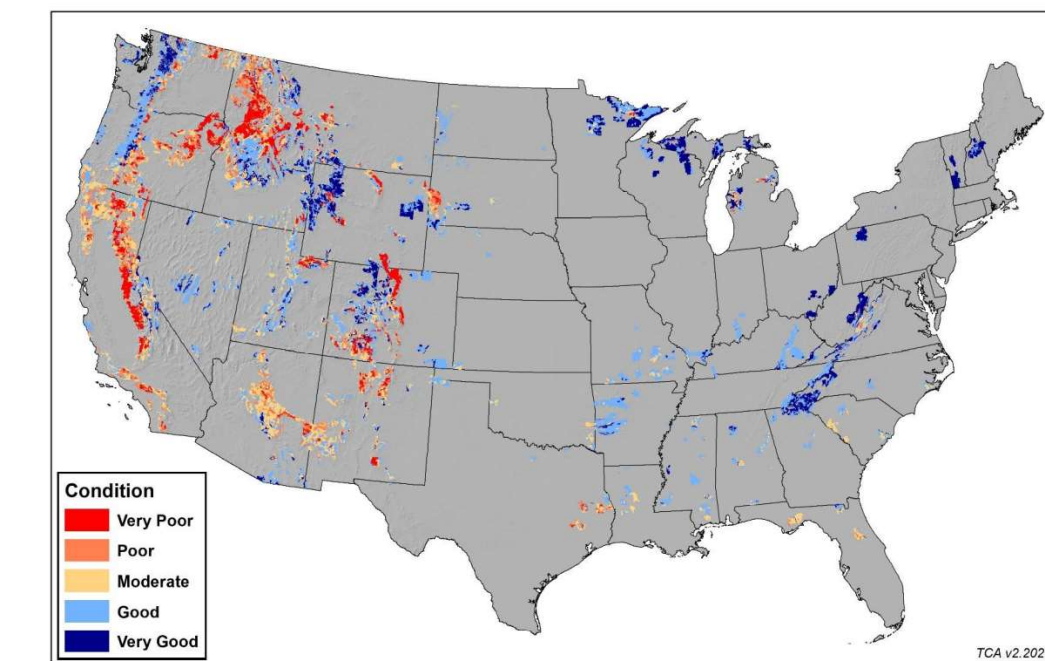
¹⁵ Scott R. Abella, *Using a Terrestrial Ecosystem Survey to Estimate the Historical Density of Ponderosa Pines*, Research Note: Rocky Mountain Research Station, United States Department of Agriculture (June 2011).

¹⁶ Sarah M. Anderson, *Leveraging the National Hierarchy and TEUI* (presentation Jan. 12, 2022).

and relevant, but it should be displayed as part of the management disclosures, which we discuss in Sections IV and V. Within the Conservation Atlas, the map displaying existing conditions should focus on physical characteristics, independent of land use designations or jurisdictional status. Separating these categories of information will facilitate more accurate assessments of landscape health because ownership and management status does not automatically result in healthy ecosystems. If the goal of the ATB Initiative is to prevent the loss of biodiversity and promote environmental justice, the Conservation Atlas should not only catalogue the conservation status of land, but also assist decisionmakers in improving landscape health across jurisdictional boundaries.

Finally, the TEUI tool provides an assessment of landscape health by comparing existing conditions to ecological potential. The terrestrial condition assessment summarizes landscape health according to a color-coded, five-point gradation ranging from “very poor” to “very good.” This summary assessment identifies resource conditions and stressors, and provides an accurate snapshot of ecological health that can be used as a baseline to evaluate the efficacy of conservation strategies, restoration projects, or management protocols. An example of the color-coded map showing the ecological health of forest service lands is pasted below.¹⁷

National Results



Although the TEUI tool has primarily been applied to Forest Service lands, this tool could easily be expanded to include the rest of the United States because much of the information regarding existing conditions has already been gathered or is readily available. For

¹⁷ *Id.* See also David Cleland et al., *Terrestrial Condition Assessment for National Forests of the USDA Forest Service in the Continental US*, 9 Sustainability 2144 (2017) available at https://www.fs.fed.us/pnw/pubs/journals/pnw_2017_cleland001.pdf

example, the USGS has developed databases to depict species range and predicted distribution maps, as well as detailed vegetation and land cover patterns for the continental U.S.¹⁸

This approach is feasible. The technology already exists. It has been tested and implemented in many projects since it was first launched in 2005. It is ecologically sound and scientifically defensible. Expanding this landscape health inventory across the United States would provide a uniform set of data, vocabulary, and assessment that would facilitate cross-jurisdictional communication and collaboration. It would also establish a baseline against which the success of conservation management strategies could be measured.

Our comments focus on the TEUI tool because it already exists. It is likely that other existing tools could also provide a similar service. If a different tool is used, relevant considerations would be best identified by expert land managers and scientists. Regardless of the tool used, the Conservation Atlas should provide contextual information displaying the baseline ecological conditions across the United States. That information must include: (1) ecological potential based on landscape attributes; (2) existing conditions; (3) a health assessment derived by comparing existing conditions to ecological potential.

III. Benefits and risks of recognizing a “continuum of conservation.”

Independent of the landscape health inventory discussed above, the Conservation Atlas can also serve as a unified source of information reflecting a continuum of conservation efforts on federal, state, tribal, and private lands, providing a geospatially organized registry of conservation commitments.¹⁹ Projects included within the Atlas could range from biodiversity-oriented practices on private lands, to migratory corridors protected through a network of zoning laws, to urban forestry programs, to conservation easements on lands threatened by development, to existing National Parks.

There are many benefits to expanding the definition of “conservation” beyond the traditional approach of setting aside and preserving land through legal designations. A couple examples pique the imagination. First, by implementing a range of innovative and effective land management strategies across broad landscapes, we could improve biodiversity and ecological outcomes, even where the lands do not satisfy the criteria for GAP Status 1 or 2. For example, imagine a coordinated network of private land zoning laws, federal and state land management strategies, and stakeholder developed forestry best-practices that implement stream set-back requirements throughout a watershed. Combined, these diverse efforts could improve water quality, as well as fish and wildlife habitat more broadly than would be possible through federal designations alone.

Second, opportunities for biodiversity preservation and environmental justice projects within the built environment have different goals and conservation outcomes than Gap Status 1 & 2 landscapes. For example, urban and community forests and gardens provide heat relief and

¹⁸ USGS, GAP Analysis Project, <https://www.usgs.gov/programs/gap-analysis-project> (last visited May 7, 2022).

¹⁹ David Takacs, *An Aye Aye for an Aye Aye: Making Biodiversity Offsets Sustainable*, 45 Colum. J. Envtl. L. 519, 560 (2020) (noting that no biodiversity offsetting schemes have a centralized mechanism for keeping track of commitments—a failure characterized by experienced environmental consultants as “the biggest failure of the current market”).

wildlife habitat in urban landscapes and expand access to nature in densely populated areas.²⁰ Similarly, reclaiming industrial waterways and restoring degraded riverfronts and watersheds within cities can increase property values, reduce crime, improve water quality, and benefit migratory bird pathways.²¹ These conservation projects meet each of the challenges of the ATB Initiative, even though their impact is localized and would not qualify for GAP Status 1 & 2 characterization.

Third, recognizing and supporting tribally led conservation and restoration priorities, particularly ones designed with Indigenous Traditional Ecological Knowledge, requires an expanded recognition of what constitutes “conservation.”²²

Fourth, cross-boundary problems like wildfire or flood risk mitigation, invasive species management, wildlife migratory corridors, and habitat preservation require collaboration and partnerships between states, tribes, local communities, and willing private landowners.²³

The risk of attempting to build a model that recognizes a continuum of conservation is that the label “conservation” could be used so broadly that it loses meaning. In other words, it could create what economists call a “lemons market.”²⁴ In 1970, G.A. Akerlof recognized that uncertainty can ruin a market, even where there are willing buyers. Analyzing the used car market as a model, he demonstrated that where there are no rules about quality in labeling, buyers infer that the market is overrun with low quality products advertised to be high quality. If the Conservation Atlas liberally labels projects as “conservation,” without providing a way for the public to assess the efficacy and quality of projects, the label will become meaningless. Moreover, without a mechanism to assess the purpose, quality, and efficacy of projects, the ATB Initiative will not have the information necessary to strategically pursue its three underlying goals.

To avoid this, the Conservation Atlas should provide information that allows the public to assess the quality of a conservation efforts included in the ATB Initiative. Otherwise, both the Conservation Atlas and the ATB Initiative face the risk of being seen as greenwashing tools and creating a lemons market in the conservation sphere.

IV. Avoiding a “lemons” market in the conservation sphere by providing transparent information about the quality of management for each conservation effort.

As the request for comments recognized, conservation exists along a continuum that is broader than the GAP Status Categories. To avoid a “lemons market,” in which the public assumes that projects included in the Conservation Atlas lack rigor, the Atlas should include

²⁰ ATB Year One Initiative *supra* note 3 at 8.

²¹ Huang Tuofu et al., *Evaluating the Impact of Urban Blue Space Accessibility on Housing Price: A Spatial Quantile Regression Approach Applied in Changsha, China*, *Frontiers in Environmental Science* 9:696626 (May 2021) available at <https://www.frontiersin.org/articles/10.3389/fenvs.2021.696626/full>

²² ATB Year One Report *supra* note 3 at 9.

²³ *Id.* at 13.

²⁴ George A. Akerlof, *The Market for “Lemons”: Quality Uncertainty and the Market Mechanism*, 84:3 Q. J. Econ. 488-500 (Aug. 1970). See also JOHN M. CRESPI, THE FIRST LEGAL STEP FOR AN AGRICULTURAL CARBON MARKET IS THE GROWING CLIMATE SOLUTIONS ACT OF 2021 CENTER FOR AGRICULTURAL AND RURAL DEVELOPMENT (May 2021) available at <https://www.card.iastate.edu/products/publications/pdf/21pb33.pdf> (providing an excellent discussion of this concept within the context of the carbon market for agricultural land uses).

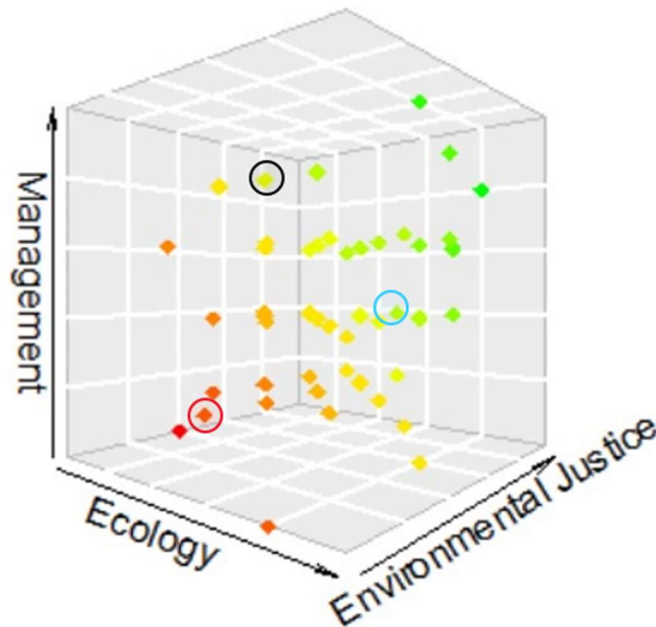
information about two critical elements: (1) ecological health and (2) project management protocols.

Ecological Health: The Atlas must include a universal baseline of ecological health that is independent of a project's conservation status. We described this element in Section II. Ecological health should be presented as a factor that is independent of the conservation status of a project. Presenting this information separately provides two benefits. First, it enables recognition that the ecological health of a landscape fluctuates independently from conservation status. Second, it emphasizes the principle that ecological health should inform management protocols of all conservation projects if the ATB Initiative is going to achieve its underlying purposes of preserving biodiversity, mitigating climate change, and improving environmental justice outcomes.

Project Management Protocols: The Conservation Atlas should also include management information about each ATB Initiative project. At a minimum, the management information should describe a project's purpose, management protocols, monitoring results, adaptive management strategy, and durability. This information will allow the public to distinguish between projects situated along the conservation continuum by assessing the quality of management, transparency, and efficacy. We expand upon how this information could be collected and publicized below in Section V.

Publishing information about ecological health and management protocols would allow the public to distinguish between projects based on their quality according to the three separate objectives identified in the request for information: (1) ecological condition, (2) environmental and social justice, and (3) management. Very few projects will maximize all three objectives, which is the point of recognizing a continuum of conservation. As the ATB Year One Report demonstrated, many beneficial projects prioritize one of these three objectives.

The 3D graph below illustrates how these three factors are related, but distinct. The bullet points below the graph describe three hypothetical projects that are similar to projects listed in the ATB Year One Report. Each project would be located at a different point within the conservation continuum as indicated by the different colored circles within the graph. Although each of the hypothetical projects we describe below would be characterized as "conservation," they do not offer equivalent benefits. While we support the idea of expanding the concept of conservation to include each of these types of projects, we also recommend that the Atlas should provide information enabling the public to distinguish between different types of projects in order to understand the benefits offered by each.



- **Black Circle:** Some projects may have excellent management protocols and advance social and environmental justice, but have poor ecological outcomes. This could occur for a variety of reasons. Perhaps the project is located in an area that was devastated by wildfire or was heavily contaminated by prior land uses. Even though the ecological health of the project is characterized as “very poor,” and will likely remain so for years to come, the management of the project could be excellent. Imagine that the project is located on a permanent conservation easement with specific, time-sensitive ecological goals responsive to ecological threats in the area. Suppose that the project also has a monitoring program designed to reflect progress towards its ecological goals, it publicizes the monitoring results, and it has specific adaptive management triggers that are responsive to the monitoring outcomes. Despite the poor ecological health of the project area, the management protocols are high quality. Ideally, over time, the ecological health of the area will improve as a result of good management. This type of project might be located along the continuum in the location circled in black.
- **Blue Circle:** Another project may have moderate ecological health even though the project is located in an area without permanent legal protection, lacks an ecological objective, does not disclose monitoring information, and has not developed an adaptive management strategy. However, perhaps this project prioritizes social and environmental justice outcomes. An example of this type of project could be a program regreening vacant lots into functional parks, vegetable gardens and rain gardens in Baltimore, Maryland.²⁵ This type of project might be located along the continuum in the location circled in blue.

²⁵ *Id.* at 9.

- **Red Circle:** Finally, some projects may have poor ecological outcomes, management protocols that are not focused on prioritizing biodiversity, and no monitoring program or climate mitigation practices. An example of this type of project could be a state park dedicated to offroad vehicle recreation, a reservoir stocked with non-native fish and managed for motorized boating adventures, or a developed campground dedicated to seasonal motorhome usage. As recognized by the Recreation Economy for Rural Communities,²⁶ these types of projects may have social benefits for a local economy and provide outdoor recreation opportunities even though they do not contribute to preserving biodiversity or mitigating climate change. This type of project might be located along the continuum in the location circled in red.

The purpose of the graph provided above is illustrative only. We do not recommend that the Conservation Atlas attempt to use a similar graph in order to situate projects along the continuum. Instead, Section V recommends that the Conservation Atlas adopt a methodology that prioritizes transparent disclosures rather than value judgments. One could think of this management information as analogous to environmental and social governance disclosures for companies that claim to provide a social benefit as part of their business. The Securities and Exchange Commission does not attempt to value or rate publicly held companies, but it does demand transparency so that the public can make informed investment decisions. The Conservation Atlas could provide a similar service. Rather than attempting to value or rate the quality of a conservation project, the Atlas could require standardized transparent disclosures that would allow the public to make informed decisions regarding the quality and value of a conservation effort undertaken as part of the ATB Initiative.

V. Developing an assessment methodology and report card that creates transparency along the continuum of conservation.

The Atlas should include disclosures from each conservation effort undertaken as part of the ATB Initiative and documented in the Atlas. This would allow the public to assess the quality of a conservation project by focusing on management attributes. Information about the location and size of the project, as well as the project's goals, management protocols, monitoring results, adaptive management strategies, and durability are critical for assessing the quality of a project. This section explores ways in which the Conservation Atlas could collect and display this information.

The first task in designing disclosures is to identify critical elements that define projects undertaken as part of the ATB Initiative. In this regard, the ATB Initiative and the Conservation Atlas should build off lessons learned in other conservation projects with biodiversity goals. An

²⁶ *Id.* at 17.

empirical study of 80 international REDD+ projects²⁷ provided five recommendations to ensure that REDD+ projects deliver on their conservation goals.²⁸ These recommendations are:

- (1) Projects should carefully document the existing status of biodiversity and threats, and use this information to select appropriate interventions.²⁹
- (2) Biodiversity objectives should clearly describe the species or ecosystems that will be conserved, including quantitative, time-bound targets that permit later assessment of whether the goals have been met.
- (3) Projects should carefully select interventions that will address the threats to biodiversity and achieve the desired biodiversity goals.
- (4) Monitoring should be planned early in the design of the project and should be crafted to both document progress toward biodiversity goals and enable adaptive management.
- (5) Projects should make explicit plans for how monitoring results will be used for informing future implementation through a formal process of adaptive management.³⁰

Building off these recommendations, we suggest that the ATB Initiative and Conservation Atlas adopt the following hallmarks of “conservation”:

- (1) Identification of an ecological and/or environmental justice benefit.
- (2) Specific objectives to be met to achieve or maintain that benefit.
- (3) A monitoring plan for ensuring achievement of the benefit.
- (4) Adaptive management with specific triggers.
- (5) Reporting requirements.
- (6) Transparent disclosure of the project’s durability.³¹

²⁷ REDD+ is a framework created by the UNFCCC to guide activities in the forest sector that reduce emissions from deforestation and forest degradation. It encourages the sustainable management of forests and the conservation and enhancement of forest carbon stocks in developing countries. UNFCCC, United Nations Climate Change, *What is REDD+?* <https://unfccc.int/topics/land-use/workstreams/redd/what-is-redd> (last visited February 13, 2022). Most REDD+ projects apply the Climate, Community, and Biodiversity Standards (the organization that created the Sustainability Landscapes Rating Tool) to communicate the quality of a conservation project. Panfill & Harvey, *REDD+ and Biodiversity Conservation* at 144.

²⁸ Steven N. Panfill & Celia A. Harvey, *REDD+ and Biodiversity Conservation: A Review of the Biodiversity Goals, Monitoring Methods, and Impacts of 80 REDD+ Projects*, *Conservation Letters* 9(2) 143-150 (March/April 2016).

²⁹ *Id.*

³⁰ *Id.* at 148-49.

³¹In addition to the Panfill article discussed above, these hallmarks reflect similar concepts proposed by authors in a variety of contexts. Compare Maria L. Banda, *The Bottom-Up Alternative: The Mitigation Potential of Private Climate Governance After the Paris Agreement*, 42 *Harv. Envtl. L. Rev.* 325, 351 (2018) (recommending a framework to assess the mitigation potential or effectiveness of different private climate governance schemes using the six criteria of integrity, uptake, ambition, resilience, transparency, and materiality); K. King Burnett, John D. Leshy, Nancy A. McLaughlin, *Building Better Conservation Easements for America the Beautiful*, ___ *Harv. Envtl. L.* ___ at 8 (forthcoming) (recommending that conservation easements only be counted toward the America the Beautiful goal if they are (a) “limited to lands with demonstrable conservation values; (b) drafted to protect those values; (c) durable—that is, subject to clear limits on how they may be modified post-donation; and (d) held only by entities that have the capacity and obligation to monitor and enforce compliance with their conditions); Brian Gray,

Disclosures related to each of these elements would allow the public to assess the quality of conservation projects by differentiating between different management practices. This approach would allow the Atlas to display a wide variety of conservation practices, without suggesting that they provide equivalent benefits.

One benefit of this approach is that it distinguishes between individual operators based on the quality of their management instead of categorically labeling practices as “conservation” or “not conservation.” For example, some advocacy groups argue that federal grazing allotments should be characterized as “conservation.”³² However, of the hundreds of millions of acres leased by the BLM and the Forest Service for grazing, recent studies show that at least a third of these lands are “failing health standards.”³³ The most recent rangeland health report available from the BLM found that of the 150 million acres assessed, forty-two percent failed to meet the applicable rangeland health standards, and seventy percent of the reported failures were due to livestock overgrazing.³⁴ Despite these results, the BLM admitted that “no appropriate action has been taken” on a federal level to ensure significant progress toward meeting rangeland health standards.³⁵ Instead, the majority of grazing permits are renewed with little or no environmental review and without imposition of requirements to improve rangeland health.³⁶ Similarly, the Forest Service does not have any grazing or rangeland health regulations in place and most grazing permits are renewed without conducting any environmental analysis.³⁷

Despite this pattern, not all field offices operate this way. The Dillon Field Office (DFO) in southwest Montana manages more than 900,000 acres of public land that includes grazing allotments.³⁸ In 2002, the DFO began monitoring rangeland health using a watershed assessment program to evaluate and improve rangeland health.³⁹ The DFO posts online copies of the watershed assessments, which are conducted on a ten-year cycle that coincides with the ten-year terms of grazing leases. The results of watershed assessments drive management decisions regarding grazing leases. For example, in 2018, seven of the seventeen grazing allotments failed one or more of the rangeland health standards. Where livestock grazing was the determinative

Jennifer Harder & Karrigan Bork, *Implementing Ecosystem-Based Management*, 31 Duke Envtl. L. & Pol’y F. 215, 223 (2021) (describing five governance requirements identified by the Public Policy Institute of California that must be met for successful ecosystem based management: (1) explicit goals for desired ecosystem conditions, benefits, and beneficiaries; (2) metrics and time specific performance measures to assess goal achievement; (3) strong, transparent, and collaborative science; (4) regulatory alignment across multiple agencies with transparent governance and administration; (5) reliable funding for habitat improvements, ongoing operations and maintenance, science and monitoring and administration.”).

³² Michael C. Blumm, Kacey Hovden, Gregory Allen, *Federal Grazing Lands and Their Suitability as “Conservation Lands” in the 30 by 30 Program*, Environmental Law Reporter, Vol. 52 (2022) available at <https://ssrn.com/abstract=4024699> or <http://dx.doi.org/10.2139/ssrn.4024699> (noting that a coalition of fifty-five hunting and fishing organizations as well as the American Farm Bureau urged the Administration to include federal grazing lands in the conservation count).

³³ *Id.* at 4.

³⁴ *Id.* at 13 (citing Public Employees for Environmental Responsibility, *America’s Rangelands Deeply Damaged by Overgrazing*, (Mar. 5, 2020), <https://peer.org/americas-rangelands-deeply-damaged-by-overgrazing/>).

³⁵ *Id.*

³⁶ *Id.* at 15.

³⁷ *Id.* at 16.

³⁸ *Id.* at 18.

³⁹ *Id.* at 19.

factor in failing a riparian standard, the grazing allotment permit was adjusted to require fencing around a wetland in poor riparian health so that livestock would be excluded from the area.⁴⁰

This management approach taken by the DFO meets each of the hallmarks of conservation identified above. The rangeland health standards identify an ecological benefit to be preserved and establish specific objectives to meet or maintain that benefit (factors 1 and 2). The watershed assessments serve as a monitoring plan to ensure achievement of the rangeland health standards and the terms of grazing permits are adapted to meet the rangeland health standards (factors 3 and 4). Online publication of the watershed results satisfies reporting requirements and ensures transparency (factor 5). The durability of the program is based on federal laws and regulations (factor 6).

The example of disparate management practices on federal grazing lands demonstrates the importance of distinguishing between operators by publicizing the quality of management protocols for projects characterized as “conservation.” Rather determining whether grazing qualifies as “conservation” or “not conservation,” the Conservation Atlas should focus on providing specific information regarding the quality of individual grazing management practices. The assessment methodology and report card discussed below would reveal the quality of management provided by each field office or operator included within the Atlas. This approach rewards good management practices and provides an incentive for improvement. Creating transparency along the continuum of conservation enables the Atlas to take an inclusive approach without suggesting that all operators or all projects provide equivalent benefits.

A. Using the Sustainable Landscapes Rating Tool as a potential model.

A methodology already exists for assessing the quality of a land-use project with reference to biodiversity, communities, and the climate.⁴¹ The Climate, Community & Biodiversity (CCB) standards are used internationally to validate agriculture, forestry, and land use projects within the carbon market.⁴² The CCB standards developed a tool called the Sustainable Landscapes Rating Tool, which enables rapid assessment of key conditions for jurisdictional policies and governance that support sustainable landscapes.⁴³ Using an objective, evidence-based rating system, the Sustainable Landscapes Rating Tool provides a snapshot of a project’s capacity to establish and ensure management strategies that are consistent with achieving the project’s conservation goals.⁴⁴ Investors rely upon the results of the assessment in conducting due diligence.⁴⁵

There are two elements to the Sustainable Landscapes Rating Tool: an assessment methodology and a report card. The assessment methodology uses a grade sheet to evaluate the

⁴⁰ *Id.* at 20.

⁴¹ VCS FactSheet, Climate Community and Biodiversity Program, <https://verra.org/wp-content/uploads/2016/05/CCB-Factsheet-3.1.pdf> (last visited Feb. 11, 2022). The CCB Standards were first developed in 2005 following an intensive two-year international stakeholder development process, expert review, public comment, and field testing. Since then, they have undergone two additional revisions, each of which involved stakeholder participation and public participation.

⁴² Verra, Climate, Community & Biodiversity Standards <https://verra.org/project/ccb-program/> (last visited Feb. 11, 2022).

⁴³ CCBA, Sustainable Landscapes Rating Tool, <https://www.climate-standards.org/sustainable-landscapes-rating-tool/> (last visited Feb. 12, 2022).

⁴⁴ *Id.*

⁴⁵ *Id.*

various aspects management aspects of each project. The grade sheet identifies (1) criteria defining each project, (2) indicators of quality for each criteria, (3) guidance for rating the quality of each indicator, and (4) a section for written comments to justify the rating. A segment of the assessment sheet for the criterion of land use planning is reproduced below.

| Criteria – enabling conditions | Indicators – elements of quality | Guidance on Rating (A, B, C or ID Insufficient Data) | | | Level 1- Public information 2- From interviews | Rating A, B, C, or ID (Insufficient Data) | Justification and Evidence Justify the rating (A, B, C, ID) given for each indicator Provide links to supporting evidence in the form of policies, strategies, plans, maps, reports etc. Explain clearly where rating is based on national and/or sub-national frameworks. Identify which national or subnational law/institution/practice is the subject of the rating. Users may explain trends or expected changes to rating, providing supporting evidence such as reports and plans. |
|--|---|---|--|---|--|---|--|
| | | A (High) | B (Medium) | C (Low) | | | |
| 1. Land use planning and management | | | | | | | |
| 1.1 Land use plan/zoning | 1.1.1 Formally adopted | Adopted by law and regulations require that it is respected. | Agreed by government and stakeholders but not fully legally adopted. | Does not yet exist. May be in development. | 1 | | |
| | 1.1.2 Covers entire jurisdiction | Covers entire jurisdiction land area | Covers 50% or more of jurisdiction land area | Covers less than 50% of jurisdiction land area | 1 | | |
| | 1.1.3 Developed through a participatory process | Consultations were held with all groups of stakeholders in the jurisdiction (including all levels and relevant departments of government, relevant private sector organizations, large and small producers, NGOs, | Consultations have been conducted with some but not all groups of stakeholders about the land use plan/zoning and/or not meeting all other conditions for A. | There is no evidence of consultations with stakeholders about the land use plan/zoning. | 1 | | <i>Guidance (please delete): Users should provide a reference for the analysis of stakeholder groups used for the rating and evidence of stakeholder groups that were invited to and participated in consultations. Evidence that stakeholder input influenced the plan/zoning may include a written statement or minutes of a meeting explaining of how stakeholder input was <u>taken into account</u> or other relevant documentation.</i> |

Although this sample includes only the first criterion, the grade sheet is comprehensive and includes many other categories (114 to be exact). In Appendix I, we recommend a smaller assessment methodology that focuses on factors relevant to the ATB Initiative.

Once the assessment has been completed, the results are summarized in a standardized, color-coded report card.⁴⁶ A sample of the report card for a project in San Martin, Peru is set forth below. The excerpted portion is specific to the criterion of land use planning shown in the assessment sheet above.

⁴⁶ CCBA, Sustainable Landscapes Rating Tool, Guidance 4 (2017) (available for download at <https://www.climate-standards.org/sustainable-landscapes-rating-tool/>) [hereinafter CCBA Sustainable Landscapes Rating Tool].

Sustainable Landscapes Rating Tool¹ - Summary
- assessing jurisdictional policy and governance enabling conditions

| | | | | | |
|---|---------------------|------------------------|------------------------|---|----------------------------|
| Jurisdiction: XXXX | Country: XXX | Date assessed: XXXX | Assessed by: XXXX | How assessed: literature review, interviews | |
| Main export commodities: e.g. coffee, cocoa, palm oil | | | | | |
| Government pledges/commitments to sustainability: e.g. New York Declaration on Forests, Rio Branco Declaration | | | | | |
| National Ratings: e.g. Forest 500 (2016) - 4/5 including 5/5 for policies and 3/5 for transparency. Transparency International Corruption Perception Index (2016) – 35, 101/176. World Bank Ease of Doing Business (2017) – 54/190 including 103/190 for starting a business, 37/190 for registering property, 16/190 for getting credit, 86/190 for trading across borders. Economist Intelligence Unit (2017) | | | | | |
| Sub-national Ratings: none available | | | | | |
| A – high, full, clear | B – medium, partial | C – low, not addressed | ID – insufficient data | Level 1 Public information | Level 2 From interviews |
| 1. Land use planning and management | | | B | | |
| 1.1 Land use plan/zoning | | | B ² | | |
| 1) Formally adopted | | | B | | |
| 2) Covers entire jurisdiction | | | B | | |
| 3) Developed through a participatory process | | | B | | |

This report card provides accessible, standardized information about each conservation project, allowing a potential investor or the public to evaluate the efficacy and quality of each conservation project. When used to validate a project for the carbon market, an independent auditor applies the standards at two stages: the project design stage and after implementation to verify benefit delivery.⁴⁷ The Sustainable Landscapes Rating Tool could provide a model for developing a standardized assessment methodology and conservation label that could be used in the Atlas.

B. Adapting the Sustainable Landscapes Rating Tool to the goals of the Conservation Atlas.

Not every factor in the Sustainable Landscapes Rating Tool is relevant to the ATB Initiative and the Conservation Atlas. Many factors focus on the quality of protection afforded by legal policies on public landscapes and the socio-economic implications of land use planning in developing countries. These criteria may not be relevant for many projects in the Atlas, particularly voluntary private conservation projects. Moreover, there are some factors relating to implementation, adaptive management, and achievement of ecological objectives that are not in the Sustainable Landscapes Rating Tool that should be included in the Conservation Atlas.

To accurately display conservation along a continuum, the Atlas should include criterion addressing each of the hallmarks of conservation. Specifically, the assessment methodology should address: (1) whether the project has identified specific landscape goals within the context of maintaining biodiversity and other ecosystem values;⁴⁸ (2) whether the project has a data and monitoring system in place that is public;⁴⁹ (3) whether the monitoring results are publicly available and used for adaptive management; (4) project efficacy—whether the project is meeting its goals;⁵⁰ and (5) the durability of the project.

These factors are each included in a proposed assessment sheet and report card attached to the end of these comments as Appendices 1 & 2.

⁴⁷ *Id.*

⁴⁸ See CCBA, Sustainable Landscapes Rating Tool *supra* note 35(Criteria 1.5.1). This criteria has been modified from the original text in the CCB Sustainable Landscapes Rating Tool.

⁴⁹ *Id.* (criteria 1.9).

⁵⁰ *Id.* (criteria 1.9.5)

Requiring management practice disclosures provides a consistent, standardized way of communicating the quality of a conservation project as it relates to biodiversity and ecosystem service outcomes. By focusing on management protocols instead of jurisdictional designations, the Atlas can display a continuum of conservation projects, recognizing that biodiversity and environmental justice can be supported through a wide variety of conservation practices. Creating a set of formalized metrics that the general public can understand engenders transparency. The individualized assessment methodology allows for a range of conservation goals and accurate depiction of their results. Publicizing an assessment of management protocols may incentivize land managers to adopt best practices, resulting in better outcomes for biodiversity and ecosystem services across all projects.

C. Displaying the report card and assessment information within in the Conservation Atlas.

The platform used by the EPA EnviroAtlas is a great template for the Conservation Atlas.⁵¹ The EPA's interactive map is informative and user-friendly. The map scale can be adjusted and the data sets can be overlapped or segregated to make unique map displays of environmentally relevant information. Additionally, the base map can display aerial imagery, political maps, road maps, or topographical maps. Additionally, the map platform is highly accessible. It does not require the user to purchase Arc-GIS or any other special software. Anyone with a highspeed internet connection can browse the information provided on this web-based map.

The EnviroAtlas platform effectively uses pop-up windows to provide more detailed information about a specific location and data layer. This same structure could be used to provide initial cursory information about a conservation project. The simple pop-up window could delineate the boundaries of a conservation project and identify its conservation goals. Those small pop-up windows can expand to provide more detailed information. The expanding pop-up window could be used to provide a copy of the most recent report card for a conservation project. This summary assessment would enable a reader to assess the size, purpose, and quality of a conservation project in a specific area with a brief glance. A secondary link on the pop-up window could provide access to the detailed project assessment, allowing readers to obtain more information about each project's goals, monitoring protocols, adaptive management strategies, and efficacy results by viewing the assessment methodology grade sheet.

The boundaries of projects included in the ATB Initiative could be layered over maps from the landscape health inventory discussed in Section II. This approach would provide an accurate portrayal of landscape health and allow users to differentiate between the purposes, quality, and efficacy of conservation projects included in the ATB Initiative.

VI. Conclusion

The ATB Initiative provides an exciting opportunity to achieve three interrelated goals: biodiversity preservation, promotion of social and environmental justice, and climate change mitigation. The Conservation Atlas can serve as a tool in advancing these goals. We see the Atlas as a dynamic and iterative product that brings together information from multiple sources to support more effective and efficient Initiative implementation.

⁵¹ <https://www.epa.gov/enviroatlas/enviroatlas-interactive-map>

To serve its purpose, the Conservation Atlas should include two critical sources of information. First, the Atlas should include a universal baseline of ecological health for the entire United States that includes (1) existing conditions (2) ecological potential and (3) an ecological health assessment. Second, the Atlas should provide transparent information about the management protocols and priorities for all projects included within the ATB Initiative. Publicizing management information in a standardized format will enable the public to distinguish between projects situated along the continuum of conservation. This information could be collected and publicized through an assessment methodology similar to what is used by carbon markets for projects that claim to provide a social or biodiversity benefit. The disclosures should reveal a project's location, size, goals, monitoring results, adaptive management strategies, durability, and other relevant information. By providing this information, the Atlas can serve a transparency function while also recognizing a continuum of conservation efforts.

In closing, we thank you for allowing us the opportunity to provide comments and we commend the Administration for undertaking this Initiative. We hope that our comments will facilitate the development of the Conservation Atlas.

Sincerely,



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Appendix 1—Proposed Assessment Methodology Grade Sheet

To create this assessment sheet, we reproduced the relevant factors of the Sustainable Landscapes Rating Tool, removed less relevant elements, and added additional factors focused on implementation and efficacy. Language that has been changed from the original Sustainable Landscapes Rating Tool is indicated. For reference, the numbers from the original Sustainable Landscapes Rating Tool have been retained.

| Indicators – elements of quality | Guidance on Rating | | |
|--|---|--|---|
| | A | B | C |
| Identification of Specific Landscape Goals including Map and Strategy to Maintain Biodiversity and Other Ecosystem Values | | | |
| 1.5.1 Sustainable landscape goals are identified* <i>*Modified from criteria in original rating tool.</i> | Sustainable landscape goals, specifying measurable objectives have been identified and published for the entire project. | Sustainable landscape goals have been identified but not for the entire project and/or not published and/or not including measurable objectives. | Sustainable landscape goals have not been identified. |
| ***Adaptive management strategies are identified with specific triggers. <i>***not included in original rating tool</i> | The landscape goals include adaptive management strategies with objective triggers where monitoring data indicates that measurable objectives are not met. | Landscape management strategy references adaptive management, but lacks objective criteria or specific triggers and/or lacks a commitment to adaptive management | No adaptive management strategy. |
| 3.1.1 Map and assessment of biodiversity and ecosystem values exists | An assessment and a map of spatial distribution exist of areas important for different biodiversity and other ecosystem service values including water regulation across the entire jurisdiction. | The map and assessment are based on national and global data but not on data and analysis from the jurisdiction and/or a map exists but does not identify areas important for biodiversity and all also ecosystem services including water regulation. | Map and assessment of areas important for biodiversity and other ecosystems services do not exist for the jurisdiction. |
| 3.1.2 Strategy and/or action to preserve or | A strategy and/or action plan to maintain | The strategy and/or action plan for | Does not exist. May be under development. |

| | | | |
|--|---|---|---|
| maintain biodiversity and ecosystem values plan exists | biodiversity and other ecosystem service priorities has been formally approved and adopted, potentially integrated into other land use strategy/action plan(s). | biodiversity and other ecosystem service priorities has been developed but is incomplete and/or not formally approved or adopted. | |
| 3.2.1 Biodiversity and ecosystem services have legal protection | Legally designated protected areas ensure some protection for all major biodiversity and ecosystem service priorities. | Some major biodiversity and ecosystem service priorities are not included in legally protected areas but are protected by other measures established by government (e.g. payment for ecosystem services). | Some major biodiversity and ecosystem service priorities are not protected by measures established by government. |
| 3.2.2 17% or more of the jurisdiction land area is legally protected | 17% or more of the jurisdiction area is legally protected (in line with Aichi Target 11 of the Convention on Biological Diversity). | 8.5% or more of the jurisdiction area is legally protected. | Less than 8.5% of the jurisdiction area is legally protected. |
| 3.2.3 Sufficient resources for management and protection | Management and protection of protected areas are little affected by availability of financial and other resources. | Management and protection of protected areas are somewhat affected by availability of financial and other resources. | Management and protection of protected areas are greatly affected by availability of financial and other resources. |
| Monitoring and Reporting Systems, including access to information | | | |
| 1.9.3 Biodiversity and other ecosystem services | Monitoring system is in place and providing endorsed reports on changes in biodiversity and ecosystem services in the jurisdiction. | Monitoring system is in place but report not produced within last three years and/or covers part of changes in biodiversity and ecosystem services in the jurisdiction and/or not endorsed by government. | Not in place. May be under development. |
| 1.9.2 GHG emissions monitoring | MRV system is in place and providing government endorsed | Preliminary or partial MRV in place (e.g. only for forests) and/or report | Not in place. May be under development. |

| | | | |
|---|---|--|--|
| | reports on land use GHG emissions in the jurisdiction that have been periodically verified by an independent third party. | has not been verified by an independent third party and/or not endorsed by government. | |
| 1.9.5 Monitoring information is available and used | Monitoring systems provide information to local actors, organizations and/or subnational governments that is used for local planning and management activities. | Monitoring systems provide limited information or only to some local actors, organizations or subnational governments and/or these stakeholders do not have the capacity or resources to use it. | Monitoring information is not provided or used within the jurisdiction. |
| 4.4.1 Land use information is publicly disclosed | All non-confidential information related to land use policies, planning, and management is publicly disclosed. | Some but not all non-confidential information related to land use policies, planning, and management is publicly disclosed. | No information related to land use policies, and/or planning, and/or management is publicly disclosed. |
| Implementation including enforcement | | | |
| 1.8.4 Implementation Transparency | Implementation reports are available on results (e.g. progress towards targets). | Implementation reports are available on activities conducted. | Implementation reports are not yet available. |
| 3.2.4 Biodiversity and ecosystem services are effectively protected | Forest cover and/or other relevant priority habitat type has mostly been maintained in the protected areas. | Forest cover and/or other relevant priority habitat type is reducing in protected areas but at lower levels than the average reduction in all areas outside protected areas. | Forest cover and/or other relevant priority habitat type is reducing in protected areas at the same or greater levels than the average reduction in all areas outside protected areas. |
| 4.5.1 Mechanisms exist to address requests for information and resolve grievances | Mechanisms exist and are functioning, addressing requests for information and resolving grievances related to land use. (public reports demonstrate that the | Mechanisms exist but information is lacking about their functioning. | Mechanism(s) addressing requests for information and/or resolving grievances related to land use do not exist. |

| | | | |
|---|---|---|--|
| | mechanisms are functioning). | | |
| 4.5.2 Grievances are resolved in a timely way with redress | The vast majority of grievances are resolved with redress where appropriate within the timeframe set for the mechanism. | The majority (more than 50%) of grievances are resolved with redress where appropriate but often not within the set timeframe. | Grievances are rarely resolved. |
| *** Landscape objectives achieved consistent with timeframe identified in plan <i>***not included in original reference tool</i> | Monitoring data indicates that specific, measurable objectives are achieved according to timeframe identified in landscape goals. | Monitoring data indicates progress toward objectives, but landscape goals not met or timeframe not met | No progress toward landscape goals and/or no data regarding progress toward specific, measurable objectives. |
| ***Adaptive management <i>***not included in original reference tool</i> | Where landscape goals are not being met, monitoring data is used to implement adaptive management strategies consistent with previously identified triggers | Monitoring data is used, but adaptive management strategies are not implemented consistent with previously identified triggers. | No adaptive management. |

Appendix 2—Proposed Report Card or Conservation Label

We also used the report card from the Sustainable Landscapes Rating Tool to develop a simplified report card that could be used as a conservation label within the Atlas.⁵² The color-coded grade assessments facilitate quick communication. Criteria that are not applicable to a specific project (for example, land use plan/zoning would not likely be applicable to a project on private land) can be indicated as N/A.

| | | | |
|---|--|------------------------------------|-----------------------------------|
| Project Name: | Location: (HUC ID) | Size: | |
| Date Assessed: | Landscape Health Assessment: | | |
| Jurisdictional Status and Management Authority: | | | |
| Brief Description of Project Objectives: | | | |
| | | | |
| Criteria | Grade | | |
| | A – high, full, clear | B – medium, partial | C – low, not addressed |
| | ID – insufficient data | | |
| 1.1 Land use plan/ Zoning category = | | Summary Assessment for | |
| 1) Formally Adopted | | | |
| 2) Covers entire jurisdiction | | | |
| 3) Developed through a participatory process | | | |
| 1.5 Sustainable landscape goals & Biodiversity and ecosystem services protection Summary = | | | |
| 1) Sustainable landscape goals are identified | | | |
| 2) Landscape goals incorporate adaptive management | | | |
| 3) Map and assessment of biodiversity and ecosystem values exists | | | |
| 4) Quality of strategy to preserve biodiversity and ecosystem services | | | |

⁵² The heading for the report card has been altered from the original Sustainable Landscapes Assessment Tool Summary to provide more relevant information for the Conservation Atlas.

| | |
|---|--|
| 5) Biodiversity and ecosystem services have legal protection | |
| 6) 17% or more of jurisdiction is protected | |
| 7) Sufficient resources for management and protection | |
| 1.9 Monitoring and reporting systems | |
| Summary = | |
| 1) Biodiversity and other ecosystem services monitored | |
| 2) GHG emissions monitored | |
| 3) Monitoring information is available and used | |
| 4) Land use information public | |
| Implementation including enforcement | |
| Summary = | |
| 1) Implementation transparency | |
| 2) Efficacy of biodiversity and ecosystem service protection | |
| 3) Mechanisms to request information and resolve grievances | |
| 4) grievances redressed and resolved in timely manner | |
| 5) Achievement of landscape objectives according to monitoring data | |
| 6) Adaptive management strategies implemented where necessary | |