

Comments to the Annotated Outline for the First National Nature Assessment

Raimundo Atal and Jason Schwartz

November 4th, 2024

To: U.S. Global Change Research Program (USGCRP)

Re: Proposed themes and topics of the First National Nature Assessment (89 Fed. Reg. 76,867)

The Institute for Policy Integrity at New York University School of Law (Policy Integrity) respectfully submits the following comments to the U.S. Global Change Research Program (USGCRP) regarding the proposed themes and topics of the first *National Nature Assessment* (NNA1). Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decision making through advocacy and scholarship in the fields of administrative law, economics, and public policy.

USGRCP seeks comments on its proposed themes and topics of NNA1 represented in the chapter annotated outlines. USGCRP is conducting the First National Nature Assessment to assess changes in nature as an aspect of global change. For that purpose, NNA1 seeks to “assess the status, observed trends, and future projections of America's lands, waters, wildlife, biodiversity, and ecosystems and the benefits they provide, including connections to the economy, public health, equity, climate mitigation and adaptation, and national security” (89 Fed. Reg. 76,867).

Policy Integrity suggests changes to the outline in general and provides specific comments on some individual chapters.

Please note that this document does not purport to represent the views, if any, of New York University School of Law.

General Comments

1. NNA1 should explicitly consider other important, related initiatives in the U.S. that are part of a broader agenda of measuring and managing nature.

According to the Department of Interior, the NNA1 is part of a broader agenda “complementing the America The Beautiful Initiative, the National Strategy for Natural Capital Accounting (SEED), the roadmap of using nature-based solutions, the Climate Adaptation and Resilience Plans, and others.” (White House, 2024)

But NNA1’s outline does not reference this broader agenda. That omission at least creates the impression of a lack of coordination and may reflect actual lack of coordination. Lack of coordination between these highly related initiatives may result in duplicate work and inconsistencies. Coordination and consistency are important because there are significant overlaps between NNA1 and these other initiatives, which, in many cases, are ongoing and establish explicit roadmaps for action and measurement of nature. NNA1 should build from these initiatives and explicitly state how it positions itself relative to them.

This omission is particularly important with respect to SEED. SEED creates a “U.S. system to account for natural assets” and will produce information that will “help us understand and consistently track changes in the condition and economic value of land, water, air and other natural assets.” An important motivation for SEED is that “the United States needs a unified system of economic and environmental statistics”, which is currently lacking (SEED, p. viii). SEED is already making important progress, including the development of several pilot accounts for land, water, air emissions, and others (OSTP, 2024). See also Atal et al. (2024) for a description of SEED and related efforts.

There are significant and obvious overlaps between SEED and NNA1’s goals. NNA1’s goal is to “assess the status, observed trends, and future projections of America's lands, waters, wildlife, biodiversity, and ecosystems and the benefits they provide, including connections to the economy, public health, equity, climate mitigation and adaptation, and national security” (89 Fed. Reg. 76,867). Both the general aim to track changes in the “status” or “condition” of natural resources—and the specific connection between natural resources and the economy—overlap. It is therefore important that NNA1 position itself in relation to SEED, to avoid duplicate work and to ensure consistency.

Importantly, SEED is a major interagency effort that aims at constructing statistical products using a 15-year phased approach (SEED, p ix). This long timeline illustrates the significant data gaps and challenges in compiling and processing environmental-economic information, and so also raises questions about NNA1’s plans to achieve its stated goals much more rapidly, by just 2026.

NNA1 must explain how its scope of work will differ from SEED, given any differences in timeline. Additionally, NNA1 might need to consider either adjusting its timeline to reflect its ambitious goals, or adjusting its goals given its timeline.

Another relevant omission from the NNA1 outline is reference to the 2022 White House Report to the National Climate Task Force that establishes a roadmap of using nature-based solutions (White House Council on Environmental Quality, White House Office of Science and Technology Policy, White House Domestic Climate Policy Office, 2022). While NNA1 will discuss nature-based climate solutions at length (in Chapters 10 and 11), the outline does not reference this related ongoing initiative.

2. NNA1 should discuss concepts and approaches first, and use consistent definitions throughout.

The outline starts with equity issues (Chapter 2), then solutions (Chapter 3), leaving physical and economic assessments for later. The last chapter (Chapter 12) provides a synthesis of concepts.

NNA1 would benefit from starting with concepts and definitions, make these consistent with relevant federal guidance documents and other ongoing initiatives in the U.S. (such as SEED and OMB's Circular A-4), and then use these definitions throughout.

For example, SEED (p. 1), Circular A-4 (p. 54), and OIRA and OMB's Guidance for Assessing Changes in Environmental and Ecosystem Services in Benefit-Cost Analysis (p. 8) provide definitions of Natural Capital and Ecosystem Services, which NNA1 should adopt or build from. Using these definitions will ensure consistency between NNA1 and these initiatives, as well as between different chapters in NNA1.

3. Avoid conflating Environmental Justice (EJ) with equity and use a consistent definition of EJ throughout.

NNA1, in Chapter 2, identifies five “pillars of environmental justice (distributional, recognition, procedural, epistemic, and reparative) as a guiding framework for increasing nature equity.” (p. 5). Subsequent chapters, however, seem to conflate, or improperly distinguish between EJ and equity. Indeed, many chapters title a subsection as “Environmental Justice (or Equity) Concern,” seeming to suggest the two terms are interchangeable. This conflation is clear in Chapter 7, (p. 28-29) for example, which will discuss “Environmental justice distribution impacts”. The assessment would benefit from clarifying and clearly separating EJ from equity and distribution.

The distinction matters, as the following illustration shows. Metrics identifying differences in equity and distribution can provide insight on the “distributive” aspect of Environmental Justice by illustrating how burdens and benefits are distributed across populations. These metrics can also boost transparency for stakeholders enabling action, and in doing so, advance the distributional and procedural aspects of EJ. But by themselves, they cannot fulfill all the other pillars of EJ. For example, NNA1 could reveal any currently unequal distributions of key ecosystem services (trees preventing urban heat island effects) or environmental burdens (e.g. pollution). While critical to assessing the equitable distribution aspects of EJ, such an assessment alone would be insufficient to address historical inequities or the need for restorative actions to rectify past and current injustices.

We suggest all chapters of NNA1 consistently use a definition of EJ centered on the pillars identified in Chapter 2, which clearly differentiates between EJ and equity. Doing so can help each chapter more effectively advance EJ by going beyond a basic documentation of the unequal distributions of burdens and benefits. Moreover, centering the EJ discussion on these pillars will make NNA1 consistent with the definition of EJ on Executive Order 14,096 (EO 14,096), which differentiates between EJ and equity. This will in turn increase NNA1's consistency with other government initiatives.

4. Minimize overlaps and redundancies between chapters.

Across the outline, we identify multiple overlaps between chapters. For example, compare Chapter 4, Key Topics 1 and 3; Chapter 5, Key Topic 3; and Chapter 7, Key Topic 2:

- a. Chapter 4, Key Topic 1 (p.11) will “assess trends in the condition and health of Nature across U.S. territories and waters, including how they vary in time and space.” It will also “examine future projections of the condition and health of Nature and explore the degree to which changes will vary across different ecosystems.”
- b. Similarly, Chapter 4, Key Topic 3 (p.13) will “assess the status, trends and future projections of attributes of nature that relate directly to outcomes and benefits of nature described in subsequent chapters in the NNA.”
- c. Chapter 5, Key Topic 5 (p. 19) will assess “future scenarios to quantify potential for new drivers, future quantities, direction, and certainty for each of the major drivers” of changes in biodiversity.
- d. Chapter 7, Key Topic 2 (p. 27) will “assess environmental assets for physical extent (stock) and condition (quality) of ecosystems and the flow of nature into the economy” as well as review “future outlook for nature and dependence on natural resources.”

There is considerable overlap between the goals of these different chapters. This overlap is clearest between Chapter 4 and Chapter 7 since both will assess ecosystem “condition” and “extent” (which are often equated with “quality” and “health”).

There is also overlap between Key Topics 1 and 3 in Chapter 4, because the “attributes of nature that relate directly to outcomes and benefits of nature” are included in the definition of ecosystem condition (see United Nations, p. 85 for a definition of ecosystem condition).

In addition, because the future extent and condition of ecosystems (Nature) depend on projections of drivers of change, there is an overlap between Chapter 5 and Chapter 4 and 7.

The Assessment should be careful in avoiding (and other) overlaps between chapters to avoid duplicate work.

References:

Raimundo Atal, Peter Howard, Andrew Stawasz, Derek Sylvan. *Accounting for Nature's Value*. Institute for Policy Integrity (June 2024). <https://policyintegrity.org/publications/detail/accounting-for-natures-value>

WHITE HOUSE, *A Successful Inaugural Year for Natural Capital Accounting in the United States / OSTP*, THE WHITE HOUSE (2024), <https://www.whitehouse.gov/ostp/news-updates/2024/04/23/a-successful-inaugural-year-for-natural-capital-accounting-in-the-united-states/>

WHITE HOUSE, *National Strategy to Develop Statistics for Environmental-Economic Decisions* (2023). <https://www.whitehouse.gov/wp-content/uploads/2023/01/Natural-Capital-Accounting-Strategy-final.pdf>.

OMB, *Circular No. A-4* (2023). <https://www.whitehouse.gov/wp-content/uploads/2023/11/CircularA-4.pdf>

OIRA, *Guidance for Assessing Changes in Environmental and Ecosystem Services in Benefit-Cost Analysis* (2024). <https://www.whitehouse.gov/wp-content/uploads/2024/02/ESGuidance.pdf>

WHITE HOUSE COUNCIL ON ENVIRONMENTAL QUALITY, WHITE HOUSE OFFICE OF SCIENCE AND TECHNOLOGY POLICY, WHITE HOUSE DOMESTIC CLIMATE POLICY OFFICE, *Opportunities for Accelerating Nature-Based Solutions: A Roadmap for Climate Progress, Thriving Nature, Equity, and Prosperity. Report to the National Climate Task Force* (2022). <https://www.whitehouse.gov/wp-content/uploads/2022/11/Nature-Based-Solutions-Roadmap.pdf>

UNITED NATIONS ET AL., *System of Environmental-Economic Accounting: Ecosystem Accounting (SEEA EA)*. White Cover Publication, Pre-Edited Text Subject to Official Editing (2021). <https://seea.un.org/ecosystem-accounting>.

Chapter specific comments

- 1. Chapter 2 should explore not only inequalities in the distribution of ecosystem services, a measure akin to income, but also inequalities in the distribution of natural capital, a measure akin to wealth.**

NNA1 should explore not only how ecosystem services are distributed (as Chapter 2 proposes), but also how natural capital is distributed across different groups of the population. Broadly, ecosystem services correspond to the flow of nature's contributions to people in a given period, whereas natural capital is a measure of the stock of the assets from which ecosystem services emanate. The value of natural capital corresponds to the present value of the flow of ecosystem services into the future. In this sense, while ecosystem services provide a measure that is akin to "income," natural capital provides a measure of "wealth".

While considering the value of both the stock and the flow is more ambitious, the distinction is important, because a high provision of ecosystem services in a particular year may or may not be indicative of a high value of natural capital. For example, a forest may be providing a high amount of timber (high ecosystem services) but, if not managed sustainably, it will not be able to provide this service in the future, resulting in a low value of natural capital.

Data to fully measure both the stock and the flow is not yet fully available, but the Assessment would be enriched if it provides a conceptual distinction between inequities in the provision of ecosystem services (income) and natural capital (wealth). See for example Atkinson and Ovando (2021).

References:

Giles Atkinson & Paola Ovando, *Distributional Issues in Natural Capital Accounting: An Application to Land Ownership and Ecosystem Services in Scotland*, 81 ENVIRONMENTAL AND RESOURCE ECONOMICS 215 (2022).

2. Chapter 4 and Chapter 7 should position themselves in relation to the National Strategy for Natural Capital Accounting (SEED), an important initiative to track nature and its uses in the US.

There is significant overlap between NNA1 Chapter 7 Key Topic 2, Chapter 4 Key Topic 1, and the National Strategy for Natural Capital Accounting (SEED).

Chapter 7, Key Topic 2, seeks to assess “the historical and current economic contributions of nature across key sectors [of the economy]” and, in particular, assess “environmental assets for physical extent (stock) and condition (quality) of ecosystems and the flow of nature into the economy [and] quantify the contribution [...] of key nature dependent sectors on economic output.”

Chapter 4, Key Topic 1 (p.11) will assess “trends in the condition and health of Nature across U.S. territories and waters, including how they vary in time and space.”

In turn, SEED creates a “U.S. system to account for natural assets” and will produce information that will “help us understand and consistently track changes in the condition and economic value of land, water, air and other natural assets.” An important motivation for SEED is that “the United States needs a unified system of economic and environmental statistics” (SEED, p. viii), which is currently lacking. SEED has already made important progress, resulting in several pilot accounts for land, water, air emissions, and others. SEED is a major interagency effort, a phased 15-year approach that seeks to overcome major gaps to connect environmental and economic information. In this sense, Chapter 4 and Chapter 7’s goals, to the extent that they appear to replicate SEED’s goals over a dramatically shorter timeline, seem unrealistic.

We suggest these chapters (and NNA1 in general) clearly position themselves in relation to SEED. It may also be necessary to adapt these chapters’ goals to reflect that collecting the data required

to comprehensively assess the trends and conditions of nature (and their uses) is a major effort that may not be completed by 2026.

References

WHITE HOUSE, *National Strategy to Develop Statistics for Environmental-Economic Decisions. A U.S. System* (2023). <https://www.whitehouse.gov/wp-content/uploads/2023/01/Natural-Capital-Accounting-Strategy-final.pdf>.

WHITE HOUSE, *A Successful Inaugural Year for Natural Capital Accounting in the United States* (2024). <https://www.whitehouse.gov/ostp/news-updates/2024/04/23/a-successful-inaugural-year-for-natural-capital-accounting-in-the-united-states/>

3. Chapter 5 and Chapter 6 provide a good opportunity to discuss monetization

Chapter 5, Key Topic 5, will “reassess the ecosystem goods and services concept in light of multiple knowledge systems and Indigenous values and practices” (p. 19). In turn, Chapter 6, Key Topic 2, will discuss how “different perceptions and valuations lead to different policies and manners of co-production (i.e., rules, whether formal or informal, for deciding how human cultures relate to nature)” (p. 23).

There seems to be some overlap between these two chapters, as ecosystem services is an increasingly dominant concept in the formulation of environmental policy. NNA1 will benefit from avoiding overlaps between these two chapters.

In addition, NNA1 will benefit from including “monetization” as a concept for discussion, separately from the ecosystem services concept (either in Chapter 5 or Chapter 6). Monetization is an important component of recent global and U.S. efforts to measure and manage nature (SEED, p. ix). It is critical for being able to compare alternatives and evaluate trade-offs, which are fundamental for rational policymaking.

However monetizing nature’s value can also be contentious for at least two reasons. First, because the methods for monetization are less mature than methods for physical assessments (SEED p. 16). Second, because there are “different individual and cultural perceptions and valuations [that] present tensions and conflicts – e.g., about what interactions are prioritized.” (NNA1, p. 23).

Thus Chapter 5 and 6 provide a good opportunity to discuss not only the concept of ecosystem services, but also the benefits and limitations of monetization. See for example Sullivan (2014) and Urzedo and Robinson (2023).

References:

Sian Sullivan, *The Natural Capital Myth; or Will Accounting Save the World*, THE LEVERHULME CENTRE FOR THE STUDY OF VALUE SCHOOL OF ENVIRONMENT, EDUCATION AND DEVELOPMENT, THE UNIVERSITY OF MANCHESTER: OXFORD, UK (2014).

Danilo Urzedo & Catherine J. Robinson, *Decolonizing Ecosystem Valuation to Sustain Indigenous Worldviews*, 150 ENVIRONMENTAL SCIENCE & POLICY 103580 (2023).

4. Chapter 10 & Chapter 11 should minimize overlaps and use a consistent definition of Nature-based Solutions.

There is overlap and inconsistencies between Chapter 10 (Key Topic 3) and Chapter 11 (Key Topic 3).

Chapter 10 will assess “Nature-based Climate Solutions (NbCS) for [Climate Change] Mitigation” and “Nature-based Solutions for [Climate Change] Adaptation (NBS)” (p. 39 & 40). These solutions “span from almost entirely nature-based to combined natural and industrial” (p.40).

Chapter 11 in turn will assess “Nature Based Innovations (NBI)”, which are broader than, and include, “Nature-based Solutions” as they can “be applied to a broader range of sectors beyond ‘ecosystems’. For example, NBI categories include: Engineering, infrastructure, agriculture, economics, and education.” (p. 44).

The Assessment would benefit from ensuring consistency in its understanding of Nature-based Solutions.

Sincerely,
Raimundo Atal and Jason Schwartz