September 29, 2023

To:
Brenda Mallory and Ana Unruh Cohen
Council on Environmental Quality
730 Jackson Place, NW
Washington, D.C. 20503
Docket number CEQ–2023–0003

From:
Environmental Policy Innovation Center (EPIC): Tim Male, Jessie Mahr, Phoebe Higgins, Becca Madsen, Reed Van Beveren, Christopher Putney
The Federation of American Scientists (FAS): Erica Goldman, Faith Savaiano, Jessica Blackband, Grace Wickerson
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Comments to the White House Council on Environmental Quality (CEQ)'s National Environmental Policy Act (NEPA) Implementing Regulations Revisions Phase 2 [Docket Number CEQ–2023–0003]

Introduction
As non-profit organizations interested in building federal capacity to deliver on a broad range of climate, environmental, and related infrastructure efforts, we commend CEQ for taking steps to make NEPA processes more efficient and equitable—and for incorporating input on doing so from the many stakeholders affected by NEPA. We see this opportunity, and the recommendations detailed below, as part of a broader conversation about how to achieve the shared goals outlined in CEQ's proposed revisions: full and fair public involvement, an efficient NEPA process, sound decision making grounded in science, and consideration of relevant—and cumulative—environmental, climate change, and environmental justice effects.

Given both the pace of climate change and the long-standing challenges linked to federal permitting, we see innovation around technology, data, and talent as essential to achieving those goals. Effective and well-designed IT systems can only be built with input from strong technical teams, and our recommendations reflect how CEQ can leverage and amplify leading practices with new technology, data, and teaming. The proposed rule also presents an opportunity to go beyond familiar discussions of technology's role in permitting reforms to the practical question of designing an *adaptive* infrastructure into the NEPA process—one capable of responding to forecasted, as well as unforeseen, user needs across and outside of government. Put simply, we believe that any NEPA reforms should be conceived, developed, and deployed with the end users (federal agency staff, applicants, and other stakeholders) in mind, and that regulators must prioritize how those reforms will manifest in requirements for the

technology that will ultimately dictate how federal employees and constituents engage with the process.

As CEQ finalizes these implementing regulations, it should consider and prepare for how it can develop the products and teams that will be integral to realizing its goals. Below, we offer six interrelated recommendations for doing so effectively, as well as applicable use cases and talent considerations, based on our collective expertise:

1. Follow Human Centered Design (HCD) processes.
2. Centralize access to NEPA documents and ensure that a user-friendly platform is available to facilitate public engagement.
3. Pilot interagency programs to coordinate permitting data for existing and future needs.
4. Prioritize digital applications with easy-to-use forms.
5. Bolster the use of decision support tools.
6. Utilize e-NEPA to improve deadline tracking.

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1. Follow Human Centered Design (HCD) processes.

The current scarcity of accessible, NEPA-related project details often leaves the public uninformed and agencies struggling to disseminate crucial information—a considerable obstacle to "full and fair public involvement" in NEPA-related decision making. To address those gaps, CEQ should adopt a human centered design (HCD) approach to NEPA. Leveraging HCD (e.g., user-focused research and direct engagement with "end users" early on in the product design process) has significant potential to identify and alleviate barriers faced by both federal agencies and the public—especially when it comes to closing information gaps around federal projects and the environmental review process.

A key focus of this effort should be how HCD can better enable and promote proactive engagement throughout the NEPA process, i.e., *before* significant resources have been expended on a given project or analysis. For instance, collating and making letters of intent easily searchable by users could streamline the process in the early stage, when needed information has historically been the least available—thereby encouraging stakeholder input when it's most useful. In practice, that means engaging users of the NEPA process directly (federal agency staff, as well as non-governmental stakeholders) and doing so in a way that centers NEPA constituents as *customers* through user research. HCD approaches to NEPA processes and forms, for example, should focus on features, templates, and tools designed to gather and provide key information in as few steps as possible, and to empower agencies to provide transparent and accessible data linked to NEPA projects.[1]

[1] One instructive model for leveraging HCD to these ends is Wildfires.org—a tool built by a non-profit group partnering with the US Forest Service and state agencies to address the wildfire crisis. Relevant stakeholder information is organized in a manner that's accessible, intuitive, and interactive—and the user interface (UI) allows for easily navigable features and viewing options.

Use Case: HCD approaches have been adopted to extraordinary effect over the course of the Biden-Harris administration, particularly vis-a-vis the President's Management Agenda priority to deliver excellent government services by centering "customer experience" (CX). To further this priority—and in response to the President's Executive Order on Customer Experience (CX)—an interagency effort was launched to map "life experiences," such as facing a financial crisis or natural disaster recovery. The life experience user journeys demonstrated challenges that Americans faced while navigating government services within agencies, across agencies, and across levels of government, in order to obtain their needs and allow for the teams that operate those services to better streamline and modernize the products they oversee. This effort was focused on High Impact Service Providers across government, which did not include NEPA, although similar efforts could yield high impact, actionable insights.

Talent Considerations: Developing an HCD requires an approach that pairs policy and program expertise with technical skills. Doing the initial discovery and design sprints necessary to initiate HCD strategy can be outsourced to a cross-agency technical team, such as 18F or the U.S. Digital Service (USDS). Sustaining the execution of that strategy, however, may require hiring new talent, including so-called "IT Specialist" 2210 roles (e.g., product managers, UX/UI designers), as well as Data Science Series 1650 roles. Again drawing inspiration from the CX life experience teams, CEQ should facilitate the flow of interagency teaming and communication to better represent and problem solve the real-life experiences of stakeholders engaging the NEPA process. Where multiple agencies require the same background experience and qualifications to progress NEPA reform, they should consider co-funding and executing a shared certificate hiring process, wherein agencies and candidates alike save time by including multiple, near-identical roles in a single hiring action.

2. Centralize access to NEPA documents and ensure that a user-friendly platform is available to facilitate public engagement.

As part of its efforts to improve public engagement and transparency throughout the NEPA process, CEQ should ensure public access to a centralized repository of NEPA documents, and a searchable, user-friendly platform to explore and analyze those documents. To date, NEPAccess, based at the University of Arizona, has made great strides in developing a searchable platform for historical NEPA documents and past agency actions, with documents from over 65% of all Environmental Impact Statements (EISs) processed in the last 20 years.[2] Yet because many documents are not consistently available (or easily searchable) to the public—and since agencies often employ distinctive, siloed approaches to their documentation—NEPA constituents continue to grapple with long standing

[2] NEPAccess.org serves as a comprehensive knowledge and discovery platform. Through innovative data science and natural language processing, it facilitates the retrieval and analysis of applied scientific data crucial to NEPA's environmental decision-making process. Presently, NEPAccess comprises some 7300 EISs, most of which were produced since 2000. Using the platform, the NEPAccess research team has assessed several elements of agency performance relative to the NEPA process such as public engagement, environmental justice, and cost analysis. Manuscripts detailing this research are forthcoming. Relatedly, the NEPAccess team has separately submitted three comment letters to CEQ pertaining to this research (see documents with Submission Tracking Numbers: ln3-vjo7-e958, ln3-vo8x-hgxc, and ln4-svsi-c96i).

information scarcity and data accessibility gaps.[3] By centralizing searchable historical NEPA documents and related agency actions, the public would gain the ability to understand the environmental assessments, analyses, and decisions that shape projects in their localities. A regularly updated, accessible database that includes both Environmental Assessments (EAs) and EISs would also provide agencies, project stakeholders, and permitting applicants with useful resources they might otherwise not find. For example, at present, federal agency staff conducting local restoration work cannot access documents or historical data from the myriad agencies with relevant projects in the area, limiting their ability to plan and work efficiently. Remedying this scenario not only requires establishing a central repository, but also dedicated digital infrastructure to continually update centralized datasets and an associated dashboard.[4]

Use Case: Although it operates at the state level, one useful model for a permitting system built with public accessibility, transparency, and efficiency in mind is Virginia's Permitting Enhancement and Evaluation Platform (PEEP). PEEP is a centralized, publicly-accessible, online platform where anyone can search and locate historical information as well as details about a permit—including "where" it is in the approval process. Unlike current NEPA processes, PEEP deals with public information sharing proactively, and makes locating a permittee's status or other details intuitive (see also, *Recommendation 6* below). Learn more about PEEP here.

3. Pilot interagency programs to coordinate permitting data for existing and future needs.
Implementation of effective data coordination applications requires a short-term strategy based on current requirements, as well as an adaptive structure for future forecasted and unforeseen needs.

3.1. Pilot programs for existing needs.
At present, NEPA-related decisions across different projects with similar environmental impacts are not evaluated using the same data. For instance, if multiple projects affecting wetlands were considered concurrently—in terms of their potential impacts on the habitats of the same migratory bird species—performing the NEPA analysis with integrated data could help illuminate, and balance, trade-offs more effectively.

To improve the standardization, accountability, and interoperability of data across agencies, CEQ should support pilot programs that deliberately improve analyses based on shared data—such as the National Wetlands Inventory or species distribution maps. This also requires shared standards and definitions for common data classes and elements across NEPA-related federal agencies and components. Doing so will

[3] For reference, the EISs contained in NEPAccess's corpus include, on average, 1084 pages. Due to the size of these documents, a common agency practice is to split EISs into smaller PDF files. On average, each EIS is divided into seven separate PDF files. And because no standard strategy exists for managing documents, each file might contain one–or several—sections, chapters, or an arbitrary portion of the document. In addition, sorting files is not always trivial since no standard method or convention for naming files exists. Lastly, the complexity of these issues is made worse in practice by the volume of documents and files: an average of 442 EISs are generated each year—distributed among 199 Draft EISs, 33 Draft Supplemental EISs, 188 Final EISs, and 22 Final Supplements.
[4] It's our view that dedicated federal investments linked to the agencies who will use these tools (e.g., DOT, EPA, FWS) will be integral to supporting their long-term development and maintenance.

help ensure that decisions about similar impacts are more accurate and informed. And while we do see a "let every flower bloom" approach to developing data systems and tools as useful for innovation purposes—i.e., across agencies or other ecosystems—we believe that improving NEPA processes for the long-term requires enhanced data standardization and interoperability. Such an approach has the added advantage of empowering users to utilize historical NEPA data (e.g., EISs, EAs, or past agency actions) as part of the evidence base. The pilot programs could also provide funding to identify where these overlapping analyses might occur, and to test ideas for integrating efforts.[5]

Use Case: In its implementation of the 21st Century Cures Act, the Office of the National Coordinator for Health IT (ONC) created the United States Core Data for Interoperability (USCDI)—a standardized set of data classes and data elements to enable health information exchange. ONC uses the USCDI in its certification of electronic health records (EHR) systems to ensure data can be transferred easily between systems for ease of patient use. Since the 2020 launch, ONC regularly updates data elements and classes through its USCDI Task Force and public comments, and selects these data elements through a rigorous prioritization criteria. Lastly, e-NEPA implementation could create a similar advisory structure to select key data elements from EAs and EISs to standardize NEPA review processes (for more information on e-NEPA, see *Recommendation 6* below).

Talent Considerations: As mentioned above, undertaking a data project of this size will require multiple positions from the Data Science Series 1650, including data architects, data scientists, and data analysts. Permitting agencies should work with their Chief Data Officers (CDOs) to identify appropriate skills and hire. CDOs are often resource- and FTE-constrained, but serve as high-value partners in this work and should be thought of as necessary leaders to include in NEPA reform implementation conversations.

3.2. Pilot programs for forecasted and future needs.

Beyond current data gaps and existing needs, a changing climate presents many challenges for agencies trying to assess the impact of their decisions on the environment. Given the current pace and scale of environmental change, environmental management decisions need to be made in ways that are adaptive, agile, and anticipate changing conditions across regions and localities. CEQ should ensure that NEPA-related data coordination across agencies allows users to take advantage of complementary data generation and synthesis efforts such as the National Nature Assessment or the National Strategy to Develop Statistics for Environmental-Economic Decisions. By incorporating related agency efforts and directing NEPA agencies to do the same, key data can be analyzed and leveraged by decision makers within the broader context of national conservation or restoration goals.

CEQ's approach could also draw inspiration, where applicable, from Living Evidence models of evidence synthesis—which treat knowledge synthesis as an ongoing (rather than static) endeavor. Living Evidence approaches use continuous workflows and technology solutions for information discovery and

[5] This logic also extends to allowing agencies to adopt each other's Categorical Exclusions (CEs) where appropriate. We applaud CEQ for allowing agencies to establish CEs jointly with other agencies to simplify the process and enhance overall coordination.

processing, yielding constant up-to-date systematic reviews of scientific research that decision makers can utilize. Where bodies of research are particularly inconclusive and rapidly developing, Living Evidence products could serve as essential (if incomplete) inputs throughout the NEPA process.

Use Cases:

- The Biden administration has made significant progress in advancing the consideration of ecosystem services in both cost-benefit analysis and programmatic decision-making. Recently issued federal guidance outlining requirements for valuation of ecosystem services, under OMB circulars A-4 and A-94, underscores the importance of a full accounting of the suite of services provided by the environment (e.g., collateral benefits of shoreline stabilization and carbon sequestration provided by intact coastal ecosystems). As this new rule goes into effect, the application of methodologies to quantify and describe ecosystem service benefits should be considered in NEPA review, including EISs and EAs. The requirements for new methodological approaches will demand consistent and up-to-date access to a growing knowledge base of rigorously vetted ecosystem services values that can be applied in the NEPA context. To this end, CEQ should coordinate with agencies and departments that are current leaders in ecosystem services approaches, such as EPA, USFS, and USGS.

- The upcoming National Nature Assessment (NNA) will take stock of U.S. lands, waters, wildlife, and the benefits they provide to the nation, in order to help understand how they change over time. The NNA is envisioned as a "user-inspired, knowledge driven" report designed to inform decision-making. By coordinating with the NNA team in advance of the 2026 release of the first assessment, NEPA-related information needs can be taken into account. Such an effort would help ensure that individual NEPA decisions are informed by dynamic, forward-looking evidence assessments performed at broader scales.

4. Prioritize digital applications with easy-to-use forms.

The development of digital NEPA applications by each agency, featuring an intuitive and comprehensive form, has the potential to promote consistency and data sharing across agencies while capturing all necessary information and avoiding manual data entry. Application systems may look different from agency to agency depending on their specific needs, but all should embrace similar HCD principles that simplify the user experience—and in effect, address CEQ's request that agencies "prepare concise EISs that are both comprehensive and understandable to the decision maker and the public."[6] Foundational HCD principles applicable in this context include: entering data once, utilizing user-friendly templates or visual aids, and auto populating as much information as possible in *any form*. Eventually, more advanced features could be incorporated into such forms—including things like AI-generated suggestions for application improvements, fast-tracking reviews for submissions that use templates, and highlighting deviations from templates for review by counsel. This process could also incorporate features such as collating comments, tracking issues identified by different agencies in the process, recording the agreed-upon solution, and closing further comments on the same issue. By offering an easy-to-use

[6] See § 1502.7, 88 Fed. Reg. 49924 at 49947. Relevant text is accessible here.

platform that captures all necessary information intuitively, applications could streamline historically complex and duplicative permitting procedures, expedite project assessments, and enhance accountability—ultimately empowering agencies to better aggregate key information from separate NEPA actions.

That said, we would be remiss if we didn't underscore one key nuance in this context. Although technology should play a central role in streamlining forms (and related activities) across the NEPA process, taking a "digital first" approach is not appropriate in all cases. The operative principle, we believe, is doing whatever makes the process as seamless as possible for users—including occasions when a paper form, or an in-person (as opposed to an online) interaction, with agency personnel is warranted. As CEQ works to design improved processes and features around submissions and documents, it should ensure that processes exist for tracking—and coordinating—all interactions with NEPA constituents, including forms and touch-points that are non-digital.

Use Cases:

- The experience of the NEPAccess team is particularly instructive for identifying key data science best practices for structured EISs that lead to structured data streams in the future. These include recommendations such as (1) electronic file format requirements, (2) standardized section formatting, and (3) metadata requirements, among others. EISs, for instance, should be submitted in as few files as possible, contain standardized names for sections and appendices in a fixed order, and require that supporting data and geospatial information be submitted in commonly used electronic formats. Doing so would facilitate improved retrospective analyses of indirect and cumulative impacts. For more detailed technical recommendations, see the attached letter from the NEPAccess team included in Appendix A (below).

- NEPA teams should also draw inspiration from interoperable applications meant to streamline the customer experience *between* agency-provided services, such as LOGIN.GOV. LOGIN.GOV is a secure sign-in service used by the public to log in to participating government agencies that eliminates the need for customers to remember multiple usernames and passwords across government sites. In addition to providing a simplified customer-facing service, it also maintains a suite of developer resources to streamline the process for other agencies to integrate LOGIN.GOV with other platforms.

Talent Considerations: In addition to the aforementioned data science talent, teams should bolster their teams with product management skills. This important skill-set is pervasive in private industry, yet there is no occupational series for technical product roles in the federal government. Product management roles vary greatly in the mix of technical and business skills they require, but they require professionals with a deep understanding of a service, their customer base, and how to relay information effectively between different types of teams. While not commonly described in these terms, many federal employees are already playing product management roles, or exercise much of the skill-set they would need to move into such a position. For these civil servants, agency leaders should consider investing in training for federal employees that bolsters their technical abilities and provides them with a set of tools

to drive agile, adaptive process and project management. In conducting outside hiring for these roles, agencies should strive to use private sector-resonant language to describe the product management needs on their team.

5. Bolster the use of decision support tools.

Federal agency staff need better decision support tools to focus the NEPA process on the subset of decisions that will have the greatest impact—and to ensure that decisions are supported by the latest, synthesized evidence available. Specifically, the NEPA process would benefit from tools designed to help agencies decide whether an EA or EIS is necessary given the profile of the project under consideration. Better triage procedures built into these tools, for example, could effectively eliminate the need for some of the tens of thousands of EAs conducted each year—freeing up agency staff to focus more resources on the analyses that will be most impactful. For the decisions that require the most careful consideration, CEQ should work to ensure that information on the results of earlier decisions is made available. Currently, the information collected when a project is expanded, or an action is taken (e.g., monitoring for the presence of an endangered species), is rarely collated and shared in a format useful for future decision makers. Developing a dedicated process and decision support tools to remedy this common scenario would help ensure that NEPA determinations are closely aligned with actual outcomes.[7]

Use Case: The U.S. Fish and Wildlife Service's (FWS) Information for Planning and Consultation (iPaC) tool is an instructive example of a decision support tool built based on HCD principles. iPaC was designed to ensure that users get the information they need efficiently without overburdening agency staff. Based on tailored questions, it allows users to understand whether their situation requires further actions and not, resulting in fewer *unnecessary* interactions with FWS staff early on—and hence, more informed interactions if and when a need to consult on a particular project does arise.

Talent Considerations: The federal employees who serve as the frontline staff in permitting processes should also be seen as critical "customers" in any reform efforts. Their experiences within their roles give them great insight and historical knowledge into pain points and needs within the system. Technical transformation is challenging for any organization, and special attention needs to be paid to providing federal employees with the training and support they need to perform accurate, well-informed assessments. If resources are invested in federal employees and their critical user experience, leaders can reduce liability and increase efficiency, resulting in more time allocated to other critical parts of the process, such as public engagement.

[7] It is also worth underscoring that because users cannot currently locate or view NEPA documents (especially historical documents), agencies and stakeholders cannot use insights and past findings (or agency actions) to inform other project applications or evaluate outcomes. Indeed, this scenario makes it difficult to assess actual impacts linked to any project. Centralized repositories of documents—and easier access to proposed as well as historical project plans and impacts—would enable better evaluation and forecasting.

6. Utilize e-NEPA to Improve Deadline Tracking.

We applaud that the proposed rule includes tracking and reporting requirements linked to the new deadlines set for EAs and EISs, including that "the lead agency shall annually submit the report to Congress on missed deadlines for environmental assessments and environmental impact statements required by section 107(h) of NEPA."[8] As part of this effort, CEQ should treat the Fiscal Responsibility Act's (FRA) requirement to conduct an "e-NEPA" permitting portal study as an opportunity to design better tracking features linked to deadlines.[9]

EPIC has analyzed deadline tracking data in two regulatory approval processes: approvals of wetland and stream mitigation banks by the U.S. Army Corps of Engineers, and approvals of conservation banks by the California Department of Fish and Wildlife. Both of these approval processes had deadlines set in regulations, yet both grossly missed those deadlines. Our view is that both systems neglected to fully consider how best to track "timestamp" data to evaluate performance against deadlines—and we suspect the same issues will occur with NEPA deadlines if solutions are not carefully considered. For instance, an effective tracking system should differentiate between the "time on the regulator's desk" and the "time on the applicant's desk"—or evaluations will be faulty. Ideally, the proposed e-NEPA system would include a feature to automatically create a timestamp as documents are received, and at every milestone—i.e., each time a request for more information is made of the project proponent, and each time information comes back to the agency.

Use Case: The corrective measures sketched here may sound tedious, but consider again the State of Virginia's Permitting Enhancement and Evaluation Platform's (PEEP). PEEP's timestamp process (detailed in *Recommendation 2*, above) takes less than a minute. PEEP also enables better project management by automatically creating deadlines, sending email reminders, generating automatic reports on whether deadlines are being met, among other activities. The system also works with multiple agencies so that if a permit requires external review, the need is flagged explicitly to prevent it from "falling into a black hole." Lastly, like PEEP, NEPA-related deadline tracking should include a feature to indicate specific reasons for delay when these occur.

Concluding Thoughts

EPIC, FAS, and NEPAccess welcome the opportunity to provide further resources to CEQ, and to any federal agencies, linked these recommendations—and we hope that they are useful in the design and deployment of modern, adaptive permitting systems and an improved NEPA process. In that same spirit of collaboration, we would like to note one key item not included in the proposed rule: implementing regulations that bring Section 101 of NEPA to life. EPIC is submitting a separate communication to CEQ with recommended action on this topic in greater detail and we have included that letter for reference in Appendix B below. Again, we appreciate CEQ's time and attention to these important matters.

[8] See §1501.10(b)(4), 88 Fed. Reg. 49924.

[9] For provisions related to the FRA's e-NEPA study requirements, see: Sec. 110; 42 U.S.C. § 4336(d). For useful background on the NEPA Amendments, see EPA's overview accessible here.

APPENDIX A - NEPAccess Letter on Technical Recommendations for NEPA Modernization

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February 4, 2022

Thomas L. Sharp
Deputy Director for NEPA
White House Council on Environmental Quality

Dear Mr. Sharp,

Subject: NEPA Rulemaking Recommendations

We the undersigned academic researchers write to provide a set of recommendations for your consideration as the CEQ undertakes revisions to the regulations governing the National Environmental Policy Act (NEPA).

Introduction

Since the Act's inception, agencies, researchers, and the public have been largely unable to access the vast store of knowledge generated through the NEPA process—with no centralized document repository, no standard protocol for reporting analyses and data, and no standard approach for documenting public engagement. Today there is an opportunity for NEPA rulemaking to incorporate approaches from modern data science, thereby providing access, transforming the NEPA process into a catalyst for knowledge creation and public participation, and ensuring and enhancing the role of science in federal decision-making.

The NEPAccess team at the University of Arizona is currently using advanced data science techniques to improve access to the NEPA process, increase public engagement, and unlock federal data for research through the knowledge, discovery, and engagement platform www.NEPAccess.org. This team is composed of an interdisciplinary group of researchers drawn from University of Arizona colleges, schools, and centers including the School of Natural Resources and the Environment, James E. Rogers College of Law, Eller College of Management, School of Information, School of Government and Public Policy, and Udall Center for Studies in Public Policy. The NEPAccess 1.0 platform was officially launched in September 2021 at the University of Arizona's DC Center for Collaboration in a public event addressed by CEQ Chair Brenda Mallory.

Our comments focus on ways that NEPA regulations can be used to modernize NEPA processes to greatly improve public access, make NEPA documentation and data more readily discoverable by all stakeholders, and establish best practices.

Our recommendations are based on the NSF- and University of Arizona-funded development of the NEPAccess platform (2018-present), including: all-team working sessions; platform development and

document curation subgroups; public presentations; input from an expert advisory committee; user experience interviews, usage statistics, and beta testing; and stakeholder research.

Our detailed recommendations follow.

Detailed Recommendations

A) Update technical requirements for NEPA submissions.

The following updates to technical requirements for NEPA submissions would facilitate centralized digital repository functions, ease public access, and, through the addition of metadata and geospatial information, enable retrospective scientific analyses of indirect and cumulative impacts.

1. **Centralized repository.** Direct agencies to prepare NEPA documents so that they may be entered into a future centralized, publicly accessible digital repository for all NEPA documentation, including NOIs, Draft and Final EISs, EAs, CatExes, and FONSIs; entails centralized training and technical requirements below.
2. **Electronic file requirements**, updated.
    a. Submit as a single PDF file, containing all sections and appendices, when possible. If it is unfeasible to consolidate the EIS/EA documents into a single file, separate files should have numbered filenames to enable quick and accurate determination of the file sequence.
    b. Include built-in PDF table of contents with bookmarks that hyperlink to each section.
3. **Standardized section formatting.** Section titles within EISs should follow a standard set of canonical CEQ section titles, which should appear in a fixed order. (This eliminates the use of questions and other formats for section titles.) Doing so would allow for improved aggregate analysis and comparisons between EIS processes.
4. **Metadata and taxonomies.**
    a. <u>Unique identifiers.</u> Require a unique identifier for each process, which is associated with each document in the project from Notice of Intent to draft to final to ROD and supplementary documents.
    b. <u>Standardized NEPA process classification taxonomy.</u> Provide and require the use of a standardized taxonomy for process type, decision type, and action type for each NEPA process.
        i. <u>Process type</u> is the type of NEPA process that is being undertaken, such as an EIS or EA.
        ii. <u>Decision type</u> (*as described by current* § 1508.1):
    - **Policy** - Rules, regulations, and interpretations adopted under the Administrative Procedure Act, 5 U.S.C. 551 et seq.; or other statutes; implementation of treaties and international conventions or agreements, including those implemented pursuant to statute or regulations; formal documents establishing an agency's policies which will result in or substantially alter agency programs.

- **Plan** - Official documents prepared or approved by Federal agencies, which prescribe alternative uses of Federal resources, upon which future agency actions will be based.
- **Program** - A group of concerted actions to implement a specific policy or plan; systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive.
- **Project** - Construction or management activities located in a defined geographic area. Projects include actions approved by permit or other regulatory decision as well as Federal and federally assisted activities.
- **Legislative** - the detailed statement required by law to be included in an agency's recommendation or report on a legislative proposal to Congress.

iii. Action type (*examples*): 1. Conservation/Restoration, 2. Recreation, 3. Cultural/Historical, 4. Economic and Urban Development/Commerce, 5. Water Works, 6. Waste Management, 7. Mineral Resource Extraction, 8. Biological Resource Use, 9. Energy generation/transmission, 10. Transportation, 11. Government Facilities/Siting, 12. Military Operations, 13. Law Enforcement/Security, 14. Science/Research

5. **Geospatial information.**
   a. Polygons. Require EIS/EA documents to include geo-JSON (or equivalent) polygons (shapefiles) for project area/footprints, each proposed alternative, and, where practicable, project impacts (e.g., air, water, noise).
   b. Geospatial metadata. Require EIS/EA documents to include additional canonical metadata fields, including: Geospatial coordinates and location tags (text-based). Additional standardized metadata to describe relevant polygons.
6. **Public participation metadata.** Require EIS/EA documents to include public outreach methods, dates and locations of public meetings, number of people in attendance at each meeting, and number of comments received during scoping and during draft and final review.
7. **Supporting data, documents, and analyses.** Submit consultant data, documents, and analyses to centralized repository, with relevant project metadata linked to the process's unique identifier. These include appendices, consultant "Baseline reports," "Supplemental reports," and "Technical reports."

B) Additional measures to increase public awareness and engagement.

The following updates would further increase public awareness and engagement through improvements to the reporting and transparency of public comments and responses.

1. **Reporting and transparency of public comments and responses**.
   a. Require use of standardized searchable format(s) for public comments.
   b. Require agencies to post a complete record of comments received during scoping and for draft and final processes to a central repository (not summarized comments).
      i. Include scoping comments as part of Draft EIS documentation.
      ii. Include Draft comments as part of Final EIS documentation (Final comments and agency responses for EISs are already required).

c. Require standardized metadata for public participation (see above).

C) Closely and explicitly attend to Tribal data sovereignty issues.

Our discussions with a limited set of Indigenous stakeholders and scholars, including our colleagues at the University of Arizona Native Nations Institute, have highlighted the issue of Tribal data sovereignty. A number of revisions to the NEPA regulations could be considered to more closely and explicitly attend to this issue. New regulations to address Indigenous data sovereignty would need to be developed in a proactive manner through further conversation and scoping with Indigenous stakeholders. Examples of possible measures based on our conversations include:

1. **Proactive process.** Establish a proactive, routine process for working with Tribal nations as part of NEPA actions, during which those entities set the terms of data sovereignty measures that should be put in place (e.g., the right to redact certain types of information).
2. **Data sovereignty disclaimer.** A basic disclaimer to highlight the sovereignty that Tribal entities have over their data.
3. **Data-science or metadata solutions.** Agencies might be required to tag certain types of information to facilitate the process of Indigenous stakeholders identifying such data and communicating how such data can be handled within the centralized repository:
    a. Descriptions of federally recognized Indigenous community, government, or Tribe or its attributes, people, resources, or other similar characteristics.
    b. Denote the presence of locations of cultural or religious significance to any Indigenous community, archeological sites, or other resources pertaining to any Indigenous community.
    c. Data used in any NEPA document that was collected from an Indigenous community, even if these data are abstracted, summarized, paraphrased, or otherwise altered or when these data are only one part of a larger analysis that draws data from non-Indigenous sources.

We thank you for your attention and look forward to future opportunities to discuss our recommendations and the future of NEPA.

Sincerely,

(All of the following are signatories in their personal capacity only. Institutional affiliations are included for identification purposes only.)

NEPAccess faculty

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APPENDIX B - EPIC Letter on Section 101 of NEPA

EPIC commends CEQ for its proposal to restore the 1978 NEPA regulation's direction "to use all practicable means to restore and enhance the environment, consistent with the policies of NEPA."[10] As CEQ is likely aware, because the 2020 Rule removed the Policy section, its reinstatement underscores the broader context of the purposes sought through NEPA's review process.[11] As described in CEQ's Federal Register notice for Phase 2 revisions, these purposes are specifically articulated in Section 101(b) of NEPA, and are fundamental to the law's overarching aims—namely, to "attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences."[12] The letter we've authored (below) encourages action to bring Section 101 of NEPA to life by building on the reinstatement of the NEPA Policy section in the proposed rulemaking. We are eager to support such an effort, and to elaborate on any aspects of our reasoning detailed in this letter if doing so is helpful.

September 27, 2023

Brenda Mallory, Chair
White House Council on Environmental Quality
730 Jackson Place NW
Washington, DC 20503

Re: Meeting Request on CEQ Rulemaking Proposal

Dear Brenda,

I am writing to request a meeting with you to discuss an addition to proposed "Phase 2" rulemaking related to National Environmental Policy Act (NEPA) section 101(b)(3).

We believe CEQ should amend your draft rule or initiate new rulemaking that focuses on Section 101 of NEPA and would more clearly require mitigation measures to offset environmental harms resulting from major federal actions. Such a rulemaking would implement the authority provided in Section 101(b)(3) of NEPA. NEPA's Section 101(b) encourages the "Federal Government to use all practicable means . . . [to] attain the widest range of beneficial uses of the environment without degradation . . .." 42 U.S.C. §4331(b)(3). Surely Congress used the phrase "all practicable means" and "without degradation" intentionally to get projects to have better long-term outcomes as opposed to just making those outcomes an optional part of documentation associated with alternatives.

1. **Rationale for Proposed Rulemaking.**

NEPA's Section 101 is foundational to the nation's environmental policy, as emphasized in the Final Report of the National Environmental Conflict Resolution Advisory Committee. This 2005 Final Report of

[10] See specifically, § 1500.2(d), (e), and (f). 88 Fed. Reg. at 49931.
[11] See generally, 85 Fed. Reg. at 43304 (Docket No. CEQ-2019-0003).
[12] 88 Fed. Reg. at 49931, *quoting* 42 U.S.C. § 4331(b) (Section 101(b) of NEPA).

this Federal Advisory Committee was the result of a bipartisan request among Senators in 2000 to investigate "strategies for using collaboration, consensus building, and dispute resolution to achieve the substantive goals" of NEPA. The Final Report, at 1, found that NEPA's "Section 101 articulates a national policy for the environment . . . framing a set of environmental, economic, and social goals that most Americans could agree upon." The problem is that it's a foundation upon which nothing has ever been built.

Missing from "Phase 2" Proposed CEQ Rulemaking on NEPA. The CEQ's proposed "Phase 2" NEPA rulemaking, 88 Fed. Reg. 49924-49988 (July 31, 2023), does an admirable job on the topic of mitigation undertaken voluntarily by an agency or project proponent. The proposed NEPA rules also succinctly set out the policy goal of Section 101(b), stating that "Federal agencies shall to the fullest extent possible: . . . (f) Use all practicable means, consistent with the requirements of the Act and other essential considerations of national policy, to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment." 88 Fed. Reg. at 49967 (proposed text of 40 C.F.R. § 1500.2(f)). The disconnect between the policy goal in § 1500.2(f) and the rest of the proposed rules' treatment of mitigation lies in the *entirely voluntary nature* of the decision by the agency or project proponent to undertake mitigation as part of the proposed action, after any avoidance and minimization efforts. The proposed rules do make clear that *if* mitigation actions are included by the agency or project proponent, *then* monitoring and enforcement of performance of the mitigation is required. Examples include if mitigation measures are required as a condition of a categorical exclusion (88 Fed. Reg. at 49970, proposed text of 40 C.F.R. § 1500.4(d)(3)); and, if mitigation is an element required to support a finding of no significant impact, or a "mitigated FONSI" (88 Fed. Reg. at 49971, proposed text of 40 C.F.R. § 1501.6(c)).

What is missing from the proposed "Phase 2" rulemaking is a mechanism to provide meaningful incentives for–or require as we are suggesting–mitigation applicable to significant, adverse effects. As we set out in our recommendation below, requiring mitigation for proposed actions that warrant an environmental impact statement level of NEPA review is more true to the statutory authority of NEPA's Section 101(b)(3).

Consistent with congressional intent. Section 101(b)(3)'s statement of discretionary authority "to use all practicable means . . . [to] attain the widest range of beneficial uses of the environment without degradation . . ." is supported by congressional testimony during the Senate hearing on what would become NEPA. Senator Henry "Scoop" Jackson (D-Wa.), then Chairman of the Senate Committee on Interior and Insular Affairs in 1969, requested that Professor Lynton K. Caldwell of Indiana University work with his committee to increase their capacity and expertise in undertaking the task of creating the bill draft that would become NEPA. When Professor Caldwell testified before the Senate Committee during the April 16, 1969 hearing on the introduced bill, he broadly described the need for requirements with respect to environmental protection. He stated:

> "Now, these are what I mean by action-forcing or operational measures. It would not be enough, it seems to me, when we speak of policy, to think that a mere statement of desirable outcomes would be sufficient to give us the foundation that we need for a vigorous program of what I

would call national defense against environmental degradation. We need something that is firm, clear, and operational."[13]

Chairman Jackson similarly stated, "The purpose of this legislation is to . . . ensure that present and future generations of Americans will be able to live in and enjoy an environment free of hazards to mental and physical well-being." *Id.*

Consistent with Supreme Court precedent. NEPA's Section 101(b)(3) allows CEQ to create a pathway through rulemaking to require or otherwise provide strong incentives for mitigation of environmental harms that cannot otherwise be avoided or minimized. This Section has also been considered in NEPA litigation. When the Supreme Court found in Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350-353 (1989) that federal agencies are not *required* to include actions to mitigate environmental harms not otherwise avoidable in an environmental impact statement (EIS), the Court specifically noted that "CEQ regulations require that the agency *discuss* possible mitigation measures in defining the scope of the EIS, 40 C.F.R. Section 1508.25(b)." Methow Valley Citizens Council, 490 U.S. at 352 (emphasis added). In finding that there was only a regulatory requirement to "discuss" mitigation measures, the Court declined to find that NEPA's broad statements in Section 101 *required* mitigation measures to be implemented. NEPA's Section 102 (and implementing regulations) setting out the requirements for preparation of an EIS, however, do not prohibit additional regulatory direction to implement Section 101.

Urgency of requested rulemaking. Section 101's discretionary authority calls for "use of the environment without degradation" and therefore requiring or providing incentives for mitigation is particularly important in light of recent amendments to streamline environmental analyses under NEPA's Section 102.

2. Consistency with Wetland Compensatory Mitigation.

The NEPA guidance in 42 U.S.C. §4331(b)(3) is even stronger and more explicit than the executive guidance that provided the basis for the Army Corps of Engineers' environmental offset or compensatory mitigation program for loss of wetlands or stream functions. The Army Corps of Engineers' rulemaking on compensatory mitigation was a result of President George H. W. Bush's policy of "no net loss" of wetlands announced in 1989. This policy was reaffirmed by President George W. Bush in 2002 and again in 2004. The "no net loss" compensatory mitigation program has been widely acknowledged as dramatically slowing the loss of wetlands, although how much wetland loss persists and the complexity of the program for private individuals are consistent issues. *See, e.g.,* Congressional Research Service, "Wetlands: An Overview of Issues, Rpt. No. RL33483 (Jan. 5, 2017). The Army Corps of Engineers' regulatory framework for a Clean Water Act Section 404 Permit uses the term "compensatory mitigation" as the measure of an environmental offset, defined as "the restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved." 33 C.F.R. §332.2. The Clean Water Act's offset requirement has not been altered by the multiple Supreme Court opinions addressing

[13] Hearing before the Committee on Interior and Insular Affairs, United States Senate, *National Environmental Policy*, April 16, 1969, pp. 114-116, quoted in Origins of the National Environmental Policy Act of 1969, Department of Transportation, Federal Highway Admin.

the reach of the Act, including the *Sackett v. EPA* opinion of May 25, 2023, even though the Supreme Court has redefined what aquatic resources are subject to the Army Corps' offset requirement.

3. Proposed Addition to CEQ "Phase 2" Rulemaking.

This rulemaking request is to ensure that all federal agencies fully incorporate NEPA's Section 101(b) guidance, 42 U.S.C. §4331(b), such that every environmental impact statement on a major federal action under NEPA's Section 102(2)(C), 42 U.S.C. §4332(2)(C), includes some form of an environmental offset for harms not otherwise eliminated through avoidance and minimization efforts. The CEQ could issue regulations of general applicability that establish objectives and define the "practicable means" by which an environmental impact statement shall meet the intent of Section 101(b) to offset environmental harm that remains after avoidance and minimization efforts.

Section 101(b)'s guidance to "use all practicable means" could include: specific restoration actions; conservation protections of existing, functional habitat types or natural resources; or, a financial contribution to a federal restoration and conservation fund commensurate with the level of harm and any associated uncertainty with its magnitude, extent, or timing. This is similar to the approach taken in Section 102 of the PEER Act, introduced as a discussion draft by Chairman Carper in the Senate Environment and Public Works Committee on May 18, 2023. Section 102 of the PEER Act contemplates environmental offsets for major federal actions through restoration, preservation, or in-lieu-fee payments to third parties or programs to execute mitigation actions.

Timing for Requested Rulemaking. Most importantly, this NEPA rulemaking should follow closely the proposed "Phase 2" rulemaking implementing the debt-limit bill's NEPA amendments. H.R. 3746, *Fiscal Responsibility Act of 2023* (Pub. L. No. 118-5, June 6, 2023) Title III—Permitting Reform, "*Builder Act"* Section 321. The debt-limit bill's important streamlining of NEPA review for major federal actions also underscores the need for an efficient way to ensure that NEPA's Section 101(b) guidance remains intact: for the "Federal Government to use all practicable means . . . [to] attain the widest range of beneficial uses of the environment without degradation . . .." An over-arching environmental offset program is such a "practicable means" to move forward "beneficial uses of the environment without degradation" such as energy transmission lines and energy grid upgrades, clean energy storage facilities, renewable energy facilities, and other important infrastructure projects.

In addition, the Biden Administration's disappointment with the *Sackett v. EPA* ruling expressed the President's intention to "use every legal authority we have to protect our Nation's waters for the people and communities that depend on them." Statement of the President (May 25, 2023). For a major federal action undergoing review in an environmental impact statement, the proposed environmental offset regulation could require mitigation of loss of wetlands or aquatic function more broadly than the requirements of a 404 Permit issued for the major federal action. The proposed environmental offset regulation could require mitigation from a major federal action with unavoidable impacts to isolated wetlands and other wetlands lacking a "continuous surface connection" with a waterbody, despite the contraction in the scope of Clean Water Act jurisdiction.

Finally, President Biden's Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, 86 Fed. Reg. 7619 (Jan. 27, 2021) announced a whole-of-government approach to the climate crises (Section 201). E.O. 14008, Section 201, states: "It is the policy of my Administration to organize and deploy the full capacity of its agencies to combat the climate crises to implement a Government-wide approach that reduces climate pollution in every sector of the economy; increases resilience to the impacts of climate change; protects public health; conserves our lands, waters, and biodiversity; delivers environmental justice; and spurs well-paying union jobs and economic growth especially through innovation,

commercialization, and deployment of clean energy technologies and infrastructure." The proposed CEQ rulemaking requiring an environmental offset for unavoidable harms would simultaneously promote the streamlined "deployment of clean energy technologies and infrastructure" through simplified NEPA review for major federal actions as directed in the debt-limit bill while also "conserv[ing] our lands, waters, and biodiversity" that will "increase resilience to the impacts of climate change." The requested rulemaking directly implements E.O. 14008 consistent with the NEPA streamlining amendments in the debt-limit bill.

4. **Meeting Request.**

I would greatly appreciate a meeting with you to discuss this proposal for rulemaking or approaches for implementing environmental offsets at your earliest convenience. I am happy to come by your office or meet remotely. I can be reached at tmale@policyinnovation.org or (240) 274-0341 (mobile) at any time.

Thank you for your time and consideration.

Cheers,

Tim Male, Executive Director
Environmental Policy Innovation Center

Cc: John Podesta, Senior Advisor to the President for Clean Energy Innovation and Implementation