

Comments on the Notice of Proposed Rulemaking Update to the Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act Docket No. CEQ-2019-0003

Submitted by **The National Wildlife Federation**

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Attachment 1: Dwinnell, S. P. H., et al., Where to forage when afraid: Does perceived risk impair use of the foodscape? ECOLOGICAL APPLICATIONS 29(7):e01972. 10.1002/eap.1972 (2019.)

Attachment 2: Tímea Kiss, Fiala K., et al., Long-term hydrological changes after various river regulation measures: are we responsible for flow extremes?, Hydrology Research 50.2, 418-430 (2019.)

Attachment 3: Maxwell C. Wilson, Chen X-Y., Corlett R., et al., *Habitat fragmentation and biodiversity conservation: key findings and future challenges*, LANDSCAPE ECOL. 31:219–227 (2016).

Attachment 4: Didham RK, Kapos V, Ewers RM, Rethinking the conceptual foundations of habitat fragmentation research. OIKOS 121:161–170 (2012).

Attachment 5: Fahrig L., Effects of habitat fragmentation on biodiversity. ANN REV ECOL SYST 34:487–515 (2003).

Attachment 6: Nicholas Pinter, Huthoff F., et al, Modeling residual flood risk behind levees, Upper Mississippi River, USA, ENVIRONMENTAL SCIENCE & POLICY 58: 131-140 (2016).

Attachment 7: Reuben A. Heine and Nicholas Pinter, Levee effects upon flood levels: an empirical assessment, HYDROL. PROCESS. 26, 3225–3240 (2012).

Attachment 8: K. J. Feeley 1 & J. W. Terborgh, Direct versus indirect effects of habitat reduction on the loss of avian species from tropical forest fragments, ANIMAL CONSERVATION 11: 353–360 (2008).

Attachment 9: Robert E. Criss, Mingming Luo, *River Management and Flooding: The Lesson of December 2015–January 2016, Central USA*, Journal of Earth Science, Vol. 27, No. 1, p. 117–122 (February 2016).

Attachment 10: Pinter, N., A.A. Jemberie, J.W.F. Remo, R.A. Heine, and B.A. Ickes, *Empirical modeling of hydrologic response to river engineering, Mississippi and Lower Missouri Rivers*. RIVER RESEARCH AND APPLICATIONS, 26: 546-571 (2010).

Attachment 11: Remo, J.W.F., N. Pinter, and R.A. Heine, *The use of retro- and scenario- modeling to assess effects of 100+ years river engineering and land cover change on Middle and Lower Mississippi River flood stages*. JOURNAL OF HYDROLOGY, 376: 403-416 (2009).

Attachment 12: Reply Declaration of Nicholas Pinter, Ph.D. in Support of Plaintiffs' Motion for Preliminary Injunction, NWF et al v. Corps of Engineers, Case No. 14-00590-DRH-DGW, (S.D. ILL), 2014.

Attachment 13: Declaration of Nicholas Pinter, Ph.D. in Support of Plaintiffs' Motion for Preliminary Injunction, Case No. 14-00590-DRH-DGW, (S.D. ILL), 2014.

Attachment 14: *Amicus Curiae* Brief of National Audubon Society, Defenders of Wildlife, Florida Wildlife Federation, and Apalachicola Riverkeeper, *State of Florida v. State of Georgia*, Supreme Court Case No. 142, Original (Before the Special Master) (October 21, 2016).

Attachment 15: Final Determination of The U.S. Environmental Protection Agency's Assistant Administrator for Water Pursuant To Section 404(C) Of The Clean Water Act Concerning The Proposed Yazoo Backwater Area Pumps Project, Issaquena County, Mississippi at 5 (August 31, 2008).

Attachment 16: Huntington, H.P., et al, Evidence suggests potential transformation of the Pacific Arctic ecosystem is underway. NATURE CLIMATE CHANGE (2020).

Attachment 17: Team Louisiana, The Failure of the New Orleans Levee System During Hurricane Katrina, A Report prepared for Secretary Johnny Bradberry Louisiana Department of Transportation and Development, Baton Rouge, Louisiana State Project No. 704-92-0022, 20 (December 18, 2006), Executive Summary and Chapter 7.

Attachment 18: Peer Review Comments on the U.S. Army Corps of Engineers, Draft Environmental Impact Statement: Bolinas Lagoon Ecosystem Restoration Project Feasibility Study (June 2002).

Attachment 19: Bolinas Lagoon Ecosystem Restoration Project: Recommendations and Restoration Management. A Working Group of the Sanctuary Advisory Council Gulf of the Farallones National Marine Sanctuary (August 2008).

Attachment 20: U.S. Fish and Wildlife Service, Fish and Wildlife Coordination Act Report for the Pearl River Basin, Mississippi Federal Flood Risk Management Project Hinds and Rankin Counties, MS (January 2020).

Attachment 21: Letter from the Mississippi Department of Transportation to the Rankin-Hinds Pearl River Flood Control & Drainage Control District (September 5, 2018)

Attachment 22: September 6, 2018 Comments of the National Wildlife Federation on the Integrated Draft Feasibility Study & Environmental Impact Statement Pearl River Basin, Mississippi Federal Flood Risk Management Project Hinds & Rankin Counties, MS.

Attachment 23: September 5, 2018 Comment Letter from 56 groups on the Pearl River Project.

Attachment 24: July 3, 2018 Letter from 25 Organizations to Col. Derosier, Commander Vicksburg District, U.S. Army Corps of Engineers.

The National Wildlife Federation appreciates the opportunity to provide these comments on the Notice of Proposed Rulemaking, Update to the Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (Docket No. CEQ-2019-0003), referred to throughout these comments as the NPRM.

The National Wildlife Federation is the nation's largest conservation education and advocacy organization with almost six million members and supporters and affiliate conservation organizations in 52 states and territories. The Federation has a long history of working to protect and restore the nation's rich array of natural resources and the fish and wildlife that depend on those resources. The National Wildlife Federation has extensive experience working with, interpreting, and using the National Environmental Policy Act (NEPA) and its current implementing regulations to improve project planning and environmental outcomes. Our members, who use and enjoy the outdoors for recreation, hunting, fishing, livelihood, and other important uses, have relied on the current regulations to help protect the valuable natural resources we all rely on.

The National Wildlife Federation has a vital interest in ensuring that NEPA—the *Magna Carta* of environmental law—works as intended to ensure that federal agencies carefully consider and evaluate impacts of their actions on the natural world before deciding whether or how to proceed.

General Comments

On behalf of our almost six million members and supporters, the National Wildlife Federation urges the Council on Environmental Quality (CEQ) to withdraw the NPRM and retain the existing CEQ regulations that properly implement NEPA. As detailed below, the changes proposed in the NPRM are illegal and contrary to the important purposes of NEPA. These changes would strip away decades of well-settled requirements and approaches that have served to protect communities, natural resources, and wildlife.

NEPA is the fundamental tool for ensuring a proper vetting of the impacts of major federal actions on wildlife, natural resources, and communities; for identifying less environmentally damaging alternatives; and for giving the public a say in federal actions that can have a profound impact on their lives and livelihoods. NEPA improves planning, including by reducing adverse environmental impacts of federal actions and by improving the quality of federal restoration and other projects. NEPA also plays a key role in giving vulnerable communities a voice in federal projects that may disproportionately impact them.

The deeply flawed changes proposed in the NPRM would unravel this vital tool with profound impacts on the health, safety, and well-being of people and wildlife across the country. Vulnerable frontline and indigenous communities would be at particular risk of having their voices silenced and their health and safety concerns ignored. The natural resources that allow wildlife to thrive; are cherished by wildlifewatchers, hikers, hunters, anglers, and outdoor enthusiasts across the country; and support a vibrant outdoor economy will lose under the NPRM.

¹ Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, 85 Fed. Reg. 1684 (Jan. 10, 2020).

At their core, the changes in the NPRM would silence public input and eviscerate informed, science-based decision-making by the federal government. Among many other unacceptable and illegal changes, and as explained in more detail below and in other comments, ² the NPRM would:

- Eliminate NEPA review for many projects: The NPRM excludes many projects from environmental review and public input under NEPA. Among other things, the NPRM creates new tests for determining whether NEPA applies at all to a project (including by changing the definition of "major federal action") and allows agencies to exempt a project from NEPA review by determining that some other type of analysis would serve the same purpose. These changes could allow agencies to move forward with often controversial projects—including building pipelines, roads, dams, floodgates, and levees—without NEPA review or public comment.
- Ignore severe environmental, public safety, and health impacts: The NPRM severely limits the types of impacts examined when a NEPA review is carried out. By stating that an analysis of cumulative effects "is not required," the proposed regulation would eliminate review of a project's role in exacerbating climate change and many other types of harm. This would also dispense with review of the effects of rising sea levels, stronger storms, and other climate change impacts on the effectiveness and resilience of a proposed project. Agencies could also ignore many types of severe impacts based on the NPRM's elimination of all references to "indirect" effects, and its directive to review only impacts with a "reasonably close causal relationship" to the proposed action. These changes encourage agencies to ignore long-term impacts such as toxic pollution from gold or copper mines; the risks of new levees diverting floodwaters onto other communities; and loss of wetlands caused by reservoir management practices that starve a river of the water flows needed to sustain those wetlands.
- Allow projects to be approved even if critical scientific and technical information is missing: The NPRM gives agencies the green light to make decisions without scientific and technical information essential to making a reasoned choice among alternatives. The NPRM would amend the regulations to specifically state that agencies "are not required to undertake new scientific and technical research to inform their analyses." This could let agencies approve navigation infrastructure, major river dredging projects, reservoir operating plans, and large flood projects without conducting the research needed to understand the project-specific impacts of those projects on flooding, habitat loss, or ecosystem health.
- Significantly weaken the review of alternatives: The NPRM significantly weakens the assessment of alternatives during a NEPA review, dramatically undermining NEPA's fundamental purpose of exploring less environmentally harmful approaches to achieving the project purpose. The NPRM eliminates the requirements to "rigorously explore and objectively evaluate all reasonable alternatives" and to consider reasonable alternatives not within the jurisdiction of the lead agency. The NPRM instead directs a much less extensive review, requiring only that agencies "evaluate reasonable alternatives to the proposed action." These changes, along with

² The National Wildlife Federation has also joined in a companion set of detailed technical comments that supplement the arguments made in this comment letter and raise many additional issues of concern. These companion comments, which represent the collective comments of 327 organizations and tribal nations, were submitted into the record by the Partnership Project and are also available at https://protectnepa.org/wp-content/uploads/2020/03/Final-Draft-Comment-Letters 9 20.pdf. The National Wildlife Federation has also joined in a number of additional, less technical, comment letters.

the proposed changes to the "purpose and need" statement provision of the current regulations, virtually guarantee that many cost-saving, reasonable alternatives with fewer adverse environmental impacts will not be considered.

- Allow agencies to ignore critical public input: The NPRM creates loopholes that could be used by federal agencies to ignore public comments, effectively silencing the communities and individuals that could be harmed most by a federal action. The NPRM would let agencies ignore public comments that they deem are not "specific" enough or do not include reference to data sources or scientific methodologies. The NPRM improperly places the burden on the public to list any and all possible impacts of a proposed project; to provide specific language changes; and to "explain why an issue raised is significant" to the consideration of impacts to the environment, the economy, employment and potential alternatives. Comments most likely to be ignored include those from the general public; those from frontline communities without resources to fund technical reviews; and those that rely on traditional knowledge rather than technical data. The NPRM also creates new hurdles to challenging a flawed environmental review in court.
- Allow project applicants to write their own environmental reviews without conflict of interest safeguards: The NPRM eliminates longstanding safeguards designed to protect the independence and integrity of environmental reviews. Under the current regulations, federal agencies prepare NEPA reviews, and agencies can only hire consultants to assist in a NEPA review after obtaining disclosures of any conflicts of interest or financial stakes the reviewing consultant may have in the project. The NPRM, however, lets companies prepare their own NEPA reviews—despite their clear interest in obtaining project approval. Agencies could also hire contractors without obtaining a conflicts of interest disclosure.

The NPRM also proposes multiple regulatory changes that clearly seek to limit or eliminate judicial review of NEPA decisions and documents under the judicial review provisions of the Administrative Procedure Act (5 U.S.C. § 701-706).³ However, it is fundamental black letter law that CEQ lacks the authority to interpret the Administrative Procedure Act through its NEPA regulations in a manner that would bind other federal agencies or that would warrant judicial deference, let alone limit by regulation judicial review of NEPA challenges.

The National Wildlife Federation calls on CEQ to withdraw the deeply flawed NPRM and retain the existing NEPA implementing regulations that have properly served the nation for decades.

³ For example, the proposed regulations attempt to: establish burdensome commenting requirements (§ 1503.3); purport to define "final agency action" for purposes of judicial review (§ 1500.3(c)); purport to interpret the judicially-created exhaustion doctrine (§ 1503.3(b)); purport to instruct federal courts on what causes of action exist and what remedies are available (§1500.3(d)); and direct agencies to self-certify compliance with the regulations with the notion that said certification would act as a shield from courts' traditional "hard look" at agency compliance by creating a "conclusive presumption" of compliance (§ 1502.18). These issues are addressed in more detail in the companion set of detailed technical comments referred to in footnote 2, *supra*.

Detailed Comments

As detailed in these comments,⁴ the regulations proposed in the NPRM are illegal and unacceptable. The proposed changes violate the plain language of NEPA, clearly stated Congressional intent, longstanding case law, and common sense. The NPRM would eviscerate implementation of both the letter and spirt of NEPA, and must be withdrawn.

A. The NPRM is Fundamentally Inconsistent with the Language and Purpose of NEPA

The NPRM is fundamentally inconsistent with the plain language and clear purpose of NEPA. Collectively, the extensive array of changes in the NPRM would transform NEPA's action-forcing mechanisms into little more than a paperwork "check-the-box" exercise that ignores major impacts and public input.

NEPA establishes "a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality." NEPA directs that:

"In order to carry out the policy set forth in this chapter, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may—

- (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- (2) assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- (3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
- (4) preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;
- (5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
- (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources."

NEPA also "authorizes and directs that to the fullest extent possible . . . all agencies of the Federal Government shall":

⁴ As detailed in footnote 2, *supra*, The National Wildlife Federation has also joined in a companion set of detailed technical comments that supplement the arguments made in this comment letter and raise many additional issues of concern.

⁵ 42 U.S.C. § 4321.

^{6 42} U.S.C. §4331(b).

"include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on--

- (i) the environmental impact of the proposed action,
- (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
- (iii) alternatives to the proposed action,
- (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
- (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

 \dots [and] study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources."

During the debates leading to the bipartisan passage of NEPA, Senator Jackson stated on the floor of the U.S. Senate "that we do not intend, as a government or as a people, to initiate actions which endanger the continued existence or the health of mankind. That we will not intentionally initiate actions which will do irreparable damage to the resources which support life on earth." Rather, "The basic principle of [NEPA] is that we must strive, in all that we do, to achieve a standard of excellence in man's relationship to his physical surroundings. If there are to be departures from this standard they will be exceptions to the rule and the policy. And as exceptions they will have to be justified in the light of public scrutiny."

From the very beginning, Courts fully acknowledged the action-forcing nature of NEPA and the high bar that Congress established for satisfying NEPA's mandates. For example, early case law makes clear that agencies are "compelled to take environmental issues into account" and that "Congress did not intend the Act to be a paper tiger." Courts stressed that the procedural requirements of NEPA must be carried out "to the fullest extent possible." Courts ruled that NEPA applied broadly and that to "separate the consideration of magnitude of federal action from impact on the environment does little to foster the purposes of the Act, i.e., to 'attain the widest range of beneficial uses of the environment without degradation, risk to health and safety, or other undesirable or unintended consequences." Courts made clear that Congress was concerned with "all potential environmental effects that affect the quality of the human environment," including cumulative effects, and indirect effects.

⁷ 42 U.S.C. §§ 4332, 4332(C)(i)–(v), 4332(D).

^{8 115} Cong. Rec. 40,416 (1969).

⁹ 115 Cong. Rec. 29,056 (1969).

¹⁰ Calvert Cliffs' Coordinating Committee v. Atomic Energy Commission, 449 F.2d 1109, 1114 (D.C. Cir. 1971); Flint Ridge Development Co. v. Scenic Rivers Association of Oklahoma, 426 U.S. 776 (1976).

¹¹ See, e.g., Calvert Cliffs' Coordinating Committee, 449 F.2d at 1114; Flint Ridge Development Co., 426 U.S. at 776.

¹² Minnesota Public Interest Research Group v. Butz, 498 F.2d 1314, 1321 (8th Cir. 1974).

¹³ Hiram Clarke Civic Club c. Lynn, 476 F2d 421, 427 (5th Cir. 1973) (emphasis added).

¹⁴ E.g., Hanley v. Kleindienst, 471 F.2d 823, 831 (2d Cir. 1972), cert denied, 412 U.S. 908 (1973).

¹⁵ Minnesota Public Interest Research Group, 498 F.2d at 1322.

1978, the Supreme Court ruled that "NEPA places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action." ¹⁶

The current regulations, which were issued in November 1978 with the benefit of extensive public outreach and significant public input, carefully follow the clear and unambiguous language of NEPA, explicitly stated Congressional intent, and well-established case law.¹⁷ The NPRM would upend these carefully developed regulations through extensive changes that would essentially reduce NEPA reviews to the very "paper tiger" rejected by the courts.

The many highly significant problems with the NPRM start at the very beginning, with the changes proposed for § 1500.1. Among other changes to this section, the NPRM deletes the quoted language in the bullets below, which accurately describes the fundamental purpose of NEPA:

- "NEPA is our basic national charter for protection of the environment";
- Section 102 of NEPA "contains 'action forcing' provisions to make sure that federal agencies act according to the letter and spirit of the Act";
- The purpose of NEPA's action forcing provisions "is to tell federal agencies what they must do to comply with the procedures and achieve the goals of the Act"; and
- The federal agencies "share responsibility for enforcing the Act so as to achieve the substantive requirements of section 101" of the Act.¹⁸

The NPRM replaces these accurate statements with language that fundamentally misconstrues and minimizes the important purpose and function of NEPA. The NPRM replacement language incorrectly states that the "purpose and function of NEPA is satisfied if Federal agencies have considered relevant environmental information and the public has been informed regarding the decision making process." ¹⁹ Among many other problems, this language ignores NEPA's action-forcing mandates, including ensuring that the public has an opportunity to provide input into—and not just be "informed regarding"—federal decisions that can have a profound impact on their lives.

The NPRM then goes on to change virtually every provision of the existing regulations with language designed to eliminate critical environmental reviews, dramatically reduce the scope of impacts that are reviewed, silence experts and the public, and facilitate federal actions with no meaningful regard to the

¹⁶ Vermont Yankee Nuclear Power Corp. v. Nat. Res. Def. Council, Inc., 435 U.S. 519, 553 (1978) (emphasis added). ¹⁷ 43 Fed. Reg. 55990 (November 22, 1978); see e.g., 38 Fed. Reg. 10856, 10865 (CEQ "adds additional language to former section 4 to emphasize that NEPA expands the traditional mandates of agencies covered by the Act" to comport with both "legislative history of the Act, see, e.g., Hearings on S. 1075, S. 237, and S. 1752 Before Senate Committee on Interior and Insular Affairs, 91st Cong., 1st Sess. 206 (1969); 115 Cong. Rec. (part 30) 40416 (1969) (remarks of Senator Jackson), and by early and consistent judicial opinion. See, e.g., Calvert Cliffs v. Atomic Energy Commission, 2 ERC 1779, 1780–81 (D.C. Cir. 1971); Zabel v. Tabb, 1 ERC 1449, 1457-59 (5th Cir. 1970)); see also, Jamison E. Colburn, Administering the National Environmental Policy Act, 45 ENVTL. L. REP. NEWS & ANALYSIS 10287, 10308 (2015); Council on Environmental Quality: Statements on Proposed Federal Actions Affecting the Environment; Interim Guidelines, April 30, 1970, Sections 5(b) and 7(a) (filed with Fed. Reg. May 11, 1970), available in Environmental Quality, The First Annual Report of the Council on Environmental Quality, Transmitted to Congress, August, 1970, p. 288 (available at https://www.slideshare.net/whitehouse/august-1970-environmental-quality-the-first-annual-report-of); Council on Environmental Quality, Guidelines, Preparation of Environmental Impact Statements, 38 Fed. Reg. 20550, 20551 (August 1, 1973).

¹⁹ Proposed § 1500.1, 85 Fed. Reg. at 1712.

environmental, public health, and public safety implications. The changes proposed by the NPRM unquestionably violate both the letter and spirit of NEPA.

B. The NPRM Improperly Eliminates NEPA's Applicability to a Wide Variety of Federal Actions

The NPRM attempts to exclude many projects from NEPA review, including by changing the definition of the critical term "major federal action" to exempt actions from NEPA review even though they are likely to have significant impacts on the environment, eliminate NEPA coverage for entire categories of activities, and encourage agencies to eliminate NEPA review for other types of activities. The NPRM also seeks to exempt many more projects from NEPA review by vastly expanding the use of "functional equivalents" to all federal agencies, which would let agencies use any "other type of analyses or processes under other statutes" in place of the NEPA review process. ²⁰ These changes, like the entire NPRM, must be withdrawn.

1. The NPRM Rewrites the Threshold Standard for NEPA Applicability

The NPRM proposes fundamental changes that would illegally change the standard used to make the threshold determination of whether or not NEPA applies. The proposed changes to the definition of "major federal action" would exempt actions from NEPA review even though they are likely to have significant impacts on the environment, eliminate NEPA coverage for entire categories of activities, and encourage agencies to eliminate NEPA review for other types of activities.

As CEQ is well aware, it has long been settled that when interpreting whether an action is a "major federal action significantly affecting the quality of the human environment" triggering NEPA review, the phrases "major federal action" and "significantly affecting" are not to be considered independently, but instead as complementing and reinforcing one other. For example, in 1974, the U.S Court of Appeals for the Eighth Circuit ruled that this construction was essential for advancing the clearly-stated purposes of NEPA:

"To separate the consideration of the magnitude of federal action from its impact on the environment does little to foster the purposes of the Act, i.e., to 'attain the widest range of beneficial uses of the environment without degradation, risk to health and safety, or other undesirable and unintended consequences.' By bifurcating the statutory language, it would be possible to speak of a 'minor federal action significantly affecting the quality of the human environment,' and to hold NEPA inapplicable to such an action. Yet if the action has a significant effect, it is the intent of NEPA that it should be the subject of the detailed consideration mandated by NEPA; the activities of federal agencies cannot be isolated from their impact upon the environment."²³

²⁰ As discussed in detail in the companion technical comments referred to in footnote 2, *supra*, the National Wildlife Federation also opposes the proposed changes that would improperly exclude projects from NEPA review in various other ways, including expanding the use of categorical exclusions, allowing use of mitigated categorical exclusions, and stating that actions that are non-discretionary, in whole or in part, are not subject to NEPA.

²¹ Proposed §1508.1(q), 85 Fed. Reg. at.1729.

²² 42 U.S.C. § 4332.

²³ Minnesota Public Interest Research Group v. Butz, 498 F.2d 1314, 1321-1322 (8th Cir. 1974).

The current definition of "major federal action" properly explains this legally-required construction by stating that "major reinforces but does not have a meaning independent of significantly." This interpretation properly aligns with NEPA's intent that federal agencies incorporate thoughtful consideration of environmental impacts into all levels of decision-making.

The NPRM brushes aside this longstanding, legally sound interpretation by severing the two key phrases "major federal action" and "significantly affecting." Under the NPRM, agencies would be required to comply with NEPA only if its action first, would be considered "major" and second, would potentially have significant environmental impacts. Under this construction, NEPA review would no longer be required if the federal action is not considered "major" even if there are significant environmental impacts. This interpretation yields unacceptable results, as even federal actions with disastrous environmental consequences would escape NEPA review if they action itself was deemed not to be "major."

The NPRM also proposes changes that would encourage agencies to remove entire categories of activities from NEPA review, regardless of the potential environmental significance of those actions. These changes include the proposed exemption for projects with "minimum Federal funding or minimal Federal involvement" and certain loan programs run by the Farm Service Agency and Small Business Agency. The NPRM goes even further, encouraging agencies to identify any other actions they deem to be "non-major." These changes severely erode the Act's purpose of incorporating environmental considerations into federal decision-making.

CEQ's current definition of "major federal action" has provided legally required, consistent, and highly workable guidance to agencies for decades. The NPRM's proposed changes to this definition are clearly an attempt to limit the applicability of NEPA. The immediate result of these proposed changes would be mass confusion and uncertainty over NEPA's applicability. The long-term results would be far less consideration of potential environmental impacts in the federal decision-making process, in direct violation of NEPA.

2. The NPRM Authorizes and Encourages Widespread Use of "Functional Equivalents"

The proposed changes to § 1501.1(5) and § 1507.3(b)(6) would allow every federal agency to use any "other type of analyses or processes under other statutes" as functional equivalents of the "detailed statement" required under NEPA.²⁹ These proposed changes violate the plain language of NEPA, an extensive body of longstanding case law, and common sense. These changes, like the entire proposed rule, must be withdrawn.

The proposed changes are in direct conflict with the plain language of NEPA and clearly stated Congressional intent. Section 102 of NEPA explicitly requires that all Federal agencies comply with NEPA

²⁴ Id.

²⁵ Proposed § 1508.1(q), 85 Fed. Reg. at 1729.

²⁶ Id.

²⁷ Id.

²⁸ Proposed § 1507.3, 85 Fed. Reg. at 1728.

²⁹ Proposed § 1501.1(5), 85 Fed. Reg. at 1712; Proposed § 1507.3(b)(6), 85 Fed. Reg. at 1727-28.

"to the fullest extent possible" including the requirement to prepare a "detailed statement." Well-settled case law confirms that NEPA's procedural mandates are not discretionary and that Congress' use of the phrase "to the fullest extent possible" imposes a high standard for agency compliance. For example:

- The Supreme Court has ruled that the phrase "to the fullest extent possible" is a "deliberate command that the duty NEPA imposes upon the agencies to consider environmental factors not be shunted aside in the bureaucratic shuffle" and that Congress did not intend this language to "be used by any Federal agency as a means of avoiding compliance with the directives set out in section 102."31
- The U.S. Court of Appeals for the Second Circuit has stressed that in using the language "to the fullest extent possible" Congress "was not creating a loophole to avoid compliance, but rather was stating that NEPA must be followed unless some existing law applicable to the agency made compliance impossible."³²
- The U.S. Court of Appeals for the District of Columbia has stressed the high standard imposed by the phrase "to the fullest extent possible":

"Of course, all of these Section 102 duties are qualified by the phrase 'to the fullest extent possible.' We must stress as forcefully as possible that this language does not provide an escape hatch for footdragging agencies; it does not make NEPA's procedural requirements somehow 'discretionary.' Congress did not intend the Act to be such a paper tiger. Indeed, the requirement of environmental consideration 'to the fullest extent possible' sets a high standard for the agencies, a standard which must be rigorously enforced by the reviewing courts." 33

The U.S. Court of Appeals for the Fourth Circuit has likewise ruled that:

"The [language 'to the fullest extent possible'] does not render the procedural requirements of NEPA 'discretionary.' Rather, the words are an injunction to all federal agencies to exert utmost efforts to apply NEPA to their own operations. In short, the phrase 'to the fullest extent possible' reinforces rather than dilutes the strength of the prescribed obligations."³⁴

The NPRM also blatantly ignores—and cannot be reconciled with—the extensive body of case law that guides the use of functional equivalents. This case law restricts the use of functional equivalents to

³⁰ E.g., Jones v. Gordon, 621 F. Supp. 7, 13 (D Alaska 1985) (citing 42 U.S.C. §4332) (NEPA mandates "that 'all agencies of the Federal Government' shall 'to the fullest extent possible' incorporate the EIS into their decision making"), judgment affirmed in part, reversed in part on other grounds, 792 F.2d 821 (9th Cir. 1986).

³¹ Flint Ridge Development Co. v. Scenic Rivers Ass'n of Oklahoma, 426 U.S. 776, 787 (1976) (referring in part to legislative history).

³² Monroe County Conservation Council v. Volpe, 472 F.2d 693, 699 (2d Cir. 1972) (citing Conf. Rep. No. 91-765, 91st Cong., 1st Sess., U.S. Code Cong. & Ad. News, pp. 2767, 2770 (1969)).

³³ Calvert Cliffs' Coordinating Committee, Inc. v. US Atomic Energy Commission, 449 F.2d 1109, 1114 (D.C. Cir. 1971) (emphasis added).

³⁴ Ely v. Velde, 451 F.2d 1130, 1138 (4th Cir. 1971) (internal quotation marks omitted).

situations where "the agency's organic legislation mandated specific procedures for considering the environment that were 'functional equivalents' of the impact statement process." 35

Courts have ruled that certain activities carried out by the Environmental Protection Agency (EPA) under the Clean Air Act, ³⁶ Resource Conservation and Recovery Act, ³⁷ Safe Drinking Water Act, ³⁸ and Ocean Dumping Act ³⁹ are the functional equivalent of compliance with NEPA, and that as a result, EPA is not required to comply with NEPA in those circumstances. These decisions have focused extensively on the acknowledgment that, in carrying out the statutory mandates of the pollution control laws at issue, EPA's mission was focused solely on protecting the environment. ⁴⁰

However, these cases do **not** establish a blanket exemption from NEPA for agencies charged with implementing an environmental statute. For example, in ruling that EPA's decision to cancel most uses of DDT was the functional equivalent of NEPA compliance, the U.S. Court of Appeals for the District of Columbia made clear that:

"We are not formulating a broad exemption from NEPA for all environmental agencies or even for all environmentally protective regulatory actions of such agencies. Instead, we delineate a narrow exemption from the literal requirements for those actions which are undertaken pursuant to sufficient safeguards so that the purpose and policies behind NEPA will necessarily be fulfilled."⁴¹

The U.S. District Court in Alaska similarly concluded that:

"The mere fact an agency has been given the role of implementing an environmental statute is insufficient to invoke the 'functional equivalent' exception. To extend the doctrine to all cases in which a federal agency administers a statute which was designed to preserve the environment would considerably weaken NEPA, rendering it inapplicable in many situations. Given that NEPA requires that 'all agencies of the Federal Government' shall 'to the fullest extent possible' incorporate the EIS into their decision making, it is clear Congress did not intend this result. See 42 U.S.C. §4332."

³⁵ Texas Committee on Natural Resources v. Bergland, 573 F.2d 201, 207 (5th Cir. 1978), *cert. denied*, 439 U.S. 966 (1978) (*citing* Environmental Defense Fund, Inc. v. Environmental Protection Agency, 489 F.2d 1247 (D.C. Cir 1973); Portland Cement Association v. Ruckelshaus, 486 F.2d 375 (D.C. Cir. 1973)).

³⁶ Portland Cement Association v. Ruckelhaus, 486 F.2d 375 (D.C. Cir. 1973).

³⁷ State of Alabama ex rel. Siegelman v. U.S. EPA, 911 F.2d 499 (11th Cir. 1990); Alabamians for a Clean Environment v. EPA, 871 F.2d 1548 (11th Cir. 1989).

³⁸ Western Nebraska Resources Council v. EPA, 943 F.2d 867 (8th Cir. 1991).

³⁹ Maryland v. Train, 415 F.Supp. 116 (D. Md. 1976).

⁴⁰ Applying the functional equivalence doctrine to EPA in some cases has support in NEPA's legislative history. 115 Cong. Rec. 40425 (December 20, 1969) (colloquy between Senator Boggs and Senator Muskie, differentiating between "what we might call the environmental impact agencies rather than the environmental enhancement agencies", identifying as the later the Federal Water Pollution Control Administration and the National Air Pollution Control Administration, later subsumed into EPA).

⁴¹ Environmental Defense Fund v. EPA, 489 F.2d 1247, 1257 (D.C. Cir. 1973).

⁴² Jones v. Gordon, *621 F. Supp. 7,* 13 (D Alaska 1985), judgment affirmed in part, reversed in part on other grounds, 792 F.2d 821 (9th Cir. 1986).

Courts have rejected application of the functional equivalency doctrine to agencies other than EPA, including use by the Forest Service for timber harvests, 43 the National Marine Fisheries service for issuance of permits under the Marine Mammal Protection Act, 44 and the U.S. Fish and Wildlife Service for sport hunting regulations in national wildlife refuges around the country. 45 The U.S. Court of Appeals for the Fifth Circuit has highlighted the inapplicability of functional equivalents for agencies whose missions are not focused solely on protecting the environment:

"Unlike an agency whose sole responsibility is to protect the environment, the Forest Service is charged with the management of the nation's timber resources. Its duties include both promotion of conservation of renewable timber resources and a duty to ensure that there is a sustained yield of those resources available. As the legislative history of the NFMA clearly points out, the Forest Service must balance environmental and economic needs in managing the nation's timber supply. The careful considerations mandated by section 1604(g) [of the National Forest Management Act] do not exempt the Forest Service from preparation of environmental impact statements."

CEQ now proposes to violate NEPA's clear statutory mandate and this extensive case law by opening up the use of functional equivalents to **every** federal agency, regardless of their mission or statutorily-mandated processes. Inexplicably, the proposed rule would allow the use of functional equivalents even where courts have explicitly rejected their use in the past, including by agencies whose missions and actions clearly are not focused solely on environmental protection.

For example, the proposed rule would allow the use of functional equivalents by the U.S. Army Corps of Engineers (Corps) despite the fact that the Corps: (1) has multiple missions and project-specific mandates that are in direct conflict with environmental protection, including navigation, hydropower, and many types of flood control efforts; and (2) must consider economic development—and currently must maximize national economic development—when planning flood damage reduction and navigation projects. It is equally clear that the Corps plans, constructs, operates, and issues permits for many projects that unquestionably harm the environment. For example:

• The Corps' operation and maintenance (O&M) of the Upper Mississippi River-Illinois Waterway system has caused—and continues to cause—extensive harm to the environment, as documented by the U.S. Geological Survey and the U.S. Fish and Wildlife Service. Among many other adverse impacts, these O&M activities have destroyed critical habitats including the rivers' backwaters, side channels and wetlands; cut the river off from extensive portions of its floodplain; altered water depth; destroyed bathymetric diversity; caused nonnative species to proliferate; severely impacted native species; led to high levels of nutrients and suspended sediments in the river system; and degraded floodplain forests.⁴⁷ A Final Biological Opinion

⁴³ Texas Committee on Natural Resources v. Bergland, 573 F.2d 201 (5th Cir. 1978), *cert. denied*, 439 U.S. 966 (1978).

⁴⁴ Jones v. Gordon, 621 F. Supp. at 7.

⁴⁵ Fund for Animals v. Hall, 448 F. Supp. 2d 127 (D.C.C. 2006).

⁴⁶ Texas Committee on Natural Resources v. Bergland, 573 F.2d at 208.

⁴⁷ U.S. Geological Survey, Status and Trends of Selected Resources of the Upper Mississippi River System, December 2008, Technical Report LTRMP 2008-T002. 102 pp + Appendixes A–B (Upper Midwest Environmental Sciences Center, La Crosse, Wisconsin) at 3; U.S. Geological Survey, Ecological Status and Trends of the Upper Mississippi River System 1998: A Report of the Long Term Resource Monitoring Program (April 1999); Johnson, B. L., and K. H. Hagerty, editors.

issued in 2000, concludes that the "continued operation and maintenance of the 9-foot Navigation project will jeopardize the continued existence of the Higgins eye pearly mussel (Lampsilis higginsi) and the pallid sturgeon (Sacphirhynchus albus)." 48

- In 2007, the Corps recommended construction of the Yazoo Backwater Pumping Plant, a federal water resources project that the Corps acknowledged would drain and damage at least 67,000 acres of ecologically significant wetlands.⁴⁹ The significance of the damage to the environment and to fish and wildlife identified in the project's final supplemental EIS compelled EPA to use its Clean Water Act § 404(c) authority to stop the project.⁵⁰ This authority has been used sparingly to stop only the most egregiously damaging projects, with EPA using this authority to stop just 13 out of more than two million § 404 activities in the history of the Clean Water Act.⁵¹
- In 2007, the Corps issued a permit authorizing construction of one of the largest individual surface coal mines ever approved in West Virginia. The permit authorized six valley fills, associated sediment structures, and other discharges of fill material that would disturb some 2,278 acres and bury 7.48 miles of streams under 110 million cubic yards of excess spoil. The damage to the environment from this permit was so significant that in 2011, EPA again used its Clean Water Act § 404(c) authority to stop the activities that the Corps had approved.⁵²

The proposed rule creates additional chaos in the environmental review process by allowing agencies to create ad hoc processes on a case-by-case basis for using functional equivalents. This would remove any semblance of certainty from the NEPA process. Other federal agencies, states, Tribes, and members of the public would never know whether NEPA or some other process would be applied to a specific federal action.

C. The NPRM Improperly Eliminates Analysis and Consideration of a Vast Array of Impacts

The NPRM improperly eliminates analysis and consideration of a vast array of impacts for those actions that remain subject to NEPA under the proposed revisions. These changes cannot be reconciled with the plain language of NEPA or the extensive body of case law which makes clear that the "sweep of NEPA is extraordinarily broad, compelling consideration of any and all types of environmental impact of

⁴⁸ U.S. Fish and Wildlife Service, Biological Opinion for the Operation and Maintenance of the 9-Foot Navigation Channel on the Upper Mississippi River System (2000) at 1.

⁴⁹ Outside experts determined that the Yazoo Backwater Pumping Plant project would drain and damage 200,000 acres of ecologically significant wetlands.

⁵⁰ Final Determination Of The U.S. Environmental Protection Agency's Assistant Administrator For Water Pursuant To Section 404(C) Of The Clean Water Act Concerning The Proposed Yazoo Backwater Area Pumps Project, Issaquena County, Mississippi (August 31, 2008) (available at https://www.epa.gov/sites/production/files/2015-05/documents/yazoo-final-determination_signed_8-31-08.pdf).

⁵¹ EPA Website, Chronology of CWA Section 404(c) Actions (available at https://www.epa.gov/cwa-404/chronology-cwa-section-404c-actions).

⁵² Final Determination of the U.S. Environmental Protection Agency Pursuant to § 404(c) of the Clean Water Act Concerning the Spruce No. 1 Mine, Logan County, West Virginia, January 13, 2011 (available at https://www.epa.gov/sites/production/files/2015-

^{12/}documents/1 spruce no 1 mine final determination 011311.pdf).

federal action."⁵³ The NPRM's proposals to eliminate review of many "indirect" effects and all "cumulative" effects are unquestionably illegal.

1. The NPRM Allows Agencies to Ignore Indirect Effects

The NPRM removes all references to indirect effects from the NEPA regulations.⁵⁴ The NPRM also imposes affirmative limits on any review of indirect effects that agencies would still carry out by directing agencies to review only those impacts with a "reasonably close causal relationship to the proposed action or alternative."⁵⁵ These changes violate the statutory requirements of NEPA, extensive case law, and common sense. These changes, like the entire proposed rule, must be withdrawn.

a. NEPA Requires the Evaluation and Consideration of Indirect Effects

An extensive body of case law makes clear that NEPA's statutory language requires consideration of "indirect" or "secondary" effects (in addition to direct and cumulative impacts), including the following cases that were decided before adoption of the 1978 NEPA regulations:

In 1974, the U.S. Court of Appeals for the Eighth Circuit ruled that NEPA "is concerned with indirect effects as well as direct effects. There has been increasing recognition that man and all other life on this earth may be significantly affected by actions which on the surface appear insignificant." The Court went on to highlight some of the significant indirect effects of logging on water quality, erosion, and aesthetic values:

"Logging creates excess nutrient run-off which causes algal growth in the lakes and streams, affecting water purity. Logging roads may cause erosion and water pollution and remain visible for as long as 100 years; this affects the rustic, natural beauty of the [Boundary Waters Canoe Area], recognized as unique by the Forest Service itself." ⁵⁷

• In 1975, the U.S. Court of Appeals for the Ninth Circuit ruled that an EIS did not meet NEPA's requirements because it failed to analyze the "secondary" or "induced" effects of siting a highway interchange in an agricultural area. The Court noted that a highway may "induce residential and industrial growth, which may in turn create substantial pressures on available water supplies, sewage treatment facilities, and so forth." The Court highlighted that "[f]or many projects, these secondary or induced effects may be more significant than the project's primary effects." The Court also reaffirmed that "grudging *Pro forma* compliance with NEPA is not enough," and directed that the "new EIS should include a full study and analysis of the environmental effects of the interchange itself and of the development potential that it will create. To require less would defeat the important objectives of . . . NEPA." For the NEPA is not enough.

⁵³ National Helium Corp. v. Morton, 455 F.2d 650, 656 (10th Cir. 1971) (quoting Calvert Cliffs' Coordinating Committee v. United States Atomic Energy Commission, 449 F.2d 1109, 1122 (D.C.Cir.1971)).

⁵⁴ These changes are found throughout the NPRM, including proposed §§ 1501.9, 1502.16, and 1508.1, 85 Fed. Reg. 1684 and throughout.

⁵⁵ See NPRM changes to the definition of "effects or impacts" at proposed § 1508.1(g), 85 Fed. Reg. at 1728-29.

⁵⁶ Minnesota Public Interest Research Group v. Butz, 498 F.2d 1314, 1322 (8th Cir. 1974) (emphasis added).

⁵⁷ Id.

⁵⁸ City of Davis v. Coleman, 521 F.2d 661, 666-677 (9th Cir. 1975).

⁵⁹ Id. at 667.

⁶⁰ Id. at 679 (emphasis added) (citing Lathan v. Brinegar, 506 F.2d at 690, 693 (9th Cir. 1974)).

In 1976, the U.S. Court of Appeals for the Second Circuit enjoined continued construction of a
postal facility until the Postal Service conducted an EIS that examined the indirect impacts of the
Postal Service leaving its current location, including urban decay and blight, unemployment, and
increased traffic:

"More importantly, the Postal Service wholly neglected consideration of possibly major environmental effects associated with this project. The transfer of 1,400 employees alone could have several substantial environmental effects, including (1) increasing commuter traffic by car between the in-city residents of the employees and their new job site (only one bus route currently serves the HMF site; whether many current employees will find the HMF a more convenient work location is unknown); (2)(a) loss of job opportunities for inner-city residents who cannot afford or otherwise manage, to commute by car or bus to the HMF site, or (b) their moving to the suburbs, either possibly leading "ultimately (to) both economic and physical deterioration in the (downtown Rochester) community,"; and (3) partial or complete abandonment of the downtown MPO which could, one may suppose, contribute to an atmosphere of urban decay and blight, making environmental repair of the surrounding area difficult if not infeasible. ⁶¹

- In 1977, the U.S. Court of Appeals for the Eighth Circuit again ruled that "if an impact significantly affects the environment, it should be considered in the EIS whether the impact is a primary or secondary one." 62
- In 1978, the U.S. Court of Appeals for the Eighth Circuit once again ruled that "under NEPA, indirect, as well as direct, costs and consequences of the proposed action must be considered."

Courts have made clear that the obligation to analyze reasonably foreseeable indirect effects was not changed by the Supreme Court's holding in *Department of Transportation v. Public Citizen*⁶⁴—a case that was very narrowly focused and found, based on the specific facts in the case, that the agency did not have discretion to act because of the Presidential and Congressional mandate the agency was operating under. For example, in *Florida Wildlife v. U.S. Army Corps of Engineers*, ⁶⁵ the court found the Corps' reliance on *Public Citizen* to be misplaced when the Corps had jurisdiction over a development and the record showed that the proposed development was explicitly anticipated to serve as a "catalyst for growth." ⁶⁶ Similarly, the U.S. Court of Appeals for the District of Columbia held that FERC should have

⁶¹ City of Rochester v. U.S. Postal Serv., 541 F.2d 967, 973–74 (2d Cir. 1976) (internal citations omitted).

⁶² Environmental Defense Fund, Inc. v. Hoffman 566 F.2d 1060, 1067 (8th Cir 1977).

⁶³ Jackson County, Mo. v. Jones, 571 F.2d 1004, 1013 (8th Cir 1978) (*Jackson City* was decided on February 7, 1978; the regulations were issued on November 22, 1978 (43 Fed. Reg. 55990)).

⁶⁴ 541 U.S. 752 (2004). It should be noted that the decision in that case also referenced with approval the lead agency's assessment of cumulative effects. *Id.* at 769-770.

^{65 401} F. Supp. 1d 1298 (S.D. Fla. 2005).

⁶⁶ Id. at 46. See also, Barnes v. U.S. Department of Transportation, 655 F.3d 1124 (9th Cir. 2011) (finding that the indirect effects of permitting an additional runway at an airport 12 miles west of the City of Portland were so obvious that the FAA had a responsibility to analyze them even absent a comment specifically identifying concerns regarding "growth inducing effects".)

considered potential downstream greenhouse gas emissions from power plants burning natural gas supplied by the proposed pipeline when conducting its NEPA analysis.⁶⁷

b. Assessing Indirect Effects Is Essential for Understanding the Impacts of an Action

Indirect effects can be—and in many cases will be—among the most significant impacts of a particular action. As a result, an assessment of indirect effects is essential to a legally valid NEPA review.

The significance of indirect impacts has long been recognized by CEQ, and the NPRM provides no rationale for why CEQ has now changed this position. For example, in 1973, CEQ explained that:

"Secondary or indirect, as well as primary or direct, consequences for the environment should be included in the analysis. Many major Federal actions, in particular those that involve the construction or licensing of infrastructure investments (e.g., highways, airports, sewer systems, water resource projects, etc.), stimulate or induce secondary effects in the form of associated investments and changed patterns of social and economic activities. Such secondary effects, through their impacts on existing community facilities and activities, through inducing new facilities and activities, or through changes in natural conditions, may often be even more substantial than the primary effects of the original action itself." 68

In 1975, CEQ wrote that:

"While the analysis of secondary effects is often more difficult than defining the first-order physical effects, it is also **indispensable**. If impact statements are to be useful, they must address the major environmental problems likely to be created by a project. Statements that do not address themselves to these major problems are increasingly likely to be viewed as inadequate." ⁶⁹

(1) Peer Reviewed Science Demonstrates the Significance of Indirect Effects

Extensive peer reviewed science clearly demonstrates the significance of indirect effects on the environment and public health and safety. For example:

 A 2019 study in *Ecological Applications* examined the indirect effects of human disturbance on mule deer and found that those effects resulted in the deer avoiding—and thus losing—an area of foraging habitat that was 4.6 times greater than the habitat lost to the direct impacts of those activities:

⁶⁷ Sierra Club v. Federal Energy Regulatory Comm'n., 867 F.3d 1357, 1374 (D.C. 2017) ("We conclude that the EIS for the Southeast Market Pipelines Project should have either given a quantitative estimate of the downstream greenhouse emissions that will result from burning the natural gas that the pipelines will transport or explained more specifically why it could not have done so.") *See also*, Wilderness Workshop v. U.S. Bureau of Land Management, 342 F. Supp. 3d 1145 (D. Colo. 2018) ("BLM failed, in part, to take a hard look at the severity and impacts of GHG pollution. Namely, it failed to take a hard look at the reasonably foreseeable indirect impacts of oil and gas.")

⁶⁸ Council on Environmental Quality, Preparation of Environmental Impact Statements, Guidelines, 38 *Fed. Reg.* 20550, 20553 (August 1, 1973) (emphasis added).

⁶⁹ Fifth Annual Report of the Council on Environmental Quality, 410-11 (December 1974) (emphasis added).

"Consequently, avoidance of human disturbance prompted loss of otherwise available forage, resulting in indirect habitat loss that was 4.6-times greater than direct habitat loss from roads, well pads, and other infrastructure. The multiplicative effects of indirect habitat loss, as mediated by behavior, impaired use of the foodscape by reducing the amount of available forage for mule deer, a consequence of which may be winter ranges that support fewer animals than they did before development."

"Strong behavioral responses to human disturbance may introduce additional constraints to the acquisition of food and exacerbate limitations to the foodscape. Furthermore, behavioral avoidance of human disturbance can force animals to use less suitable foraging habitat or crowd animals into preferred habitat, thus altering patterns of density dependence throughout the foodscape (Gill et al. 2001). Importantly, human disturbance that prompts avoidance of forage that would otherwise be available may result in indirect habitat loss that far exceeds direct habitat loss (Sawyer et al. 2006, 2009, Polfus et al. 2011, Northrup et al. 2015). Consequently, in systems that are food limited or geographically constrained, indirect habitat loss can reduce nutritional carrying capacity and prompt population declines (McCullough 1979, Hobbs and Swift 1985)."⁷⁰

 A 2019 study in Hydrology Research evaluates the significant indirect impacts from engineered changes to river systems and concludes that "greater attention must be paid to the indirect consequences of various river regulation measures":

"Based on our study, the increasing extremes in stages and decreasing water slope, together with the morphological alteration of the channel (incision, disappearance of point bars, increasing mass movements), could be related to the engineering works of the previous decades; therefore, in the future, greater attention must be paid to the indirect consequences of various river regulation measures, and engineers should revise their existing practices for flood protection and channel and floodplain management. For example, instead of building new revetments, the channel should be artificially widened, and the flood conveyance of the floodplains should be improved."

This study also describes the extensive and highly significant indirect impacts that result from various types of human modifications to river systems, including the impacts of stream channel cut-offs:

"The primary effects of cut-offs on stream channels are increased channel slope and stream power, which lead to increased erosion in the new straightened artificial channel and enhance bedload transport (Biedenharn et al. 2000). Immediately after cut-off, the channel development accelerates, the channel parameters change (Smith & Winkley 1996; Rinaldi & Simon 1998; Wyzga 2001), and in extreme cases, even channel metamorphosis can occur (McEwen 1989). The most common response to cut-offs is channel narrowing (Rinaldi &

⁷⁰ Dwinnell, S. P. H., et al., Where to forage when afraid: Does perceived risk impair use of the foodscape? ECOLOGICAL APPLICATIONS 29(7):e01972. 10.1002/eap.1972 (2019). A copy of this study is provided at Attachment 1 to these comments.

Simon 1998; Surian 1999; Surian & Rinaldi 2003), and by increasing the local sediment discharge, narrowing can accelerate the overbank aggradation close to the channel banks (Hesselink et al. 2003), which in turn increases flood levels by reducing the floodplain cross-sectional area available to store and convey flood water (Lóczy et al.2009; Kiss et al. 2011)."⁷¹

 A 2016 editorial in Landscape Ecology highlights the significant indirect effects of habitat loss and that "newer research suggests that indirect and interaction effects may be the dominant driver of the ecological changes often attributed to habitat loss alone" 72:

"While habitat fragmentation ultimately derives from habitat loss, three broadly defined mechanisms mediate the ecological consequences of fragmentation. First, there are those attributable directly to the loss of habitat area. Second, there are those attributable directly to changes in the spatial configuration of the landscape, such as isolation. Finally, there are those attributable to indirect or interaction effects of habitat loss and changes in spatial configuration (Didham et al. 2012⁷³), and to the interaction of fragments with the matrix (e.g., spillover effects). A review of the literature found that when one ignores indirect and interaction effects, the impacts of habitat loss are far greater than changing habitat configuration (Fahrig 2003⁷⁴); however, newer research suggests that indirect and interaction effects may be the dominant driver of the ecological changes often attributed to habitat loss alone (Didham et al. 2012)."

"Area and isolation effects encompass a variety of ecological processes that can complicate our understanding of fragmentation. For example, reductions in patch size and increases in edge affected area can influence local ecosystem processes indirectly through microclimatic effects." 75

 A 2016 study in Environmental Science & Policy highlights the significant indirect impact of levee construction on creating higher flood levels and increasing the long-term potential for flood damages (residual risk) in areas "protected" by those levees:

"Flood protection from levees is a mixed blessing, excluding water from the floodplain but creating higher flood levels ("surcharges") and promoting "residual risk" of flood damages. This study completed 2D hydrodynamic modeling and flood-damage analyses for the 459km2 Sny Island levee system on the Upper Mississippi River. These levees

⁷¹ Tímea Kiss, Fiala K., et al., *Long-term hydrological changes after various river regulation measures: are we responsible for flow extremes?*, HYDROLOGY RESEARCH 50.2, 418-430 (2019). A copy of this study is provided at Attachment 2 to these comments.

⁷² Maxwell C. Wilson, Chen X-Y., Corlett R., et al., *Habitat fragmentation and biodiversity conservation: key findings and future challenges*, LANDSCAPE ECOL 31:219–227 (2016) (DOI 10.1007/s10980-015-0312-3) (emphasis added). A copy of this study is provided at Attachment 3 to these comments.

⁷³ Didham RK, Kapos V, Ewers RM (2012) *Rethinking the conceptual foundations of habitat fragmentation research.*OIKOS 121:161–170. A copy of this study is provided at Attachment 4 to these comments.

⁷⁴ Fahrig L., *Effects of habitat fragmentation on biodiversity*. ANN REV ECOL SYST 34:487–515 (2003). A copy of this study is provided at Attachment 5 to these comments.
⁷⁵ *Id*.

provide large economic benefits, at least \$51.1 million per year in prevented damages, the large majority provided to the agricultural sector and a small subset of low elevation properties. However these benefits simultaneously translate into a large residual risk of flood damage should levees fail or be overtopped; this risk is not recognized either locally in the study area nor in national policy. In addition, the studied levees caused surcharges averaging 1.2–1.5m and locally as high as 2.4 m, consistent with other sites and studies. The combined hydraulic and economic modeling here documented that levee-related surcharge + the residual risk of levee overtopping or failure can lead to negative benefits, meaning added long-term flood risk. Up to 31% of residential structures in the study area, 8% of agricultural structures, and 22% of commercial structures received negative benefits, totaling \$562,500 per year. Although counterintuitive, structures at the margin of a leveed floodplain can incur negative benefits due to greater flood levels resulting from levees purportedly built to protect them."

 A 2012 study in Hydrologic Processes demonstrates the significant indirect and cumulative effects of levee construction on increasing flooding upstream:

"[A]t all sites upstream of levees or within leveed reaches, stages increased for above bankfull conditions. These increases were abrupt, statistically significant, and generally large in magnitude – ranging up to 2.3m (Wabash River at Mt. Carmel, IL). Stage increases began when discharge increased above bankfull flow and generally increased in magnitude with discharge until the associated levee(s) were overtopped. . . . Upstream of levees and levee-related floodplain constriction, backwater effects reduce flow velocities relative to pre-levee conditions and, thus, increase stages for a given discharge."

 A 2008 study in Animal Conservation uses long-term data to quantify "the relative importance of the direct versus indirect effects of area contraction on rates of avian species loss and local extinction" from land-bridge islands in Venezuela, where habitat fragmentation had caused "dramatic changes in the abundance of many important faunal groups." This study:

"[C]onclude[s] that the direct link between habitat area and the rate at which avian species are being lost is largely overshadowed by the indirect effects of area reduction as mediated through changes in the abundance of nest predators and especially herbivores." ⁷⁹

⁷⁶ Nicholas Pinter, Huthoff F., et al, *Modeling residual flood risk behind levees, Upper Mississippi River, USA*, ENVIRONMENTAL SCIENCE & POLICY 58: 131-140 (2016). A copy of this study is provided at Attachment 6 to these comments.

⁷⁷ Reuben A. Heine and Nicholas Pinter, *Levee effects upon flood levels: an empirical assessment*, HYDROL. PROCESS. 26, 3225–3240 (2012) (DOI: 10.1002/hyp.8261). A copy of this study is provided at Attachment 7 to these comments.

⁷⁸ K. J. Feeley 1 & J. W. Terborgh, *Direct versus indirect effects of habitat reduction on the loss of avian species from tropical forest fragments*, ANIMAL CONSERVATION 11: 353–360 (2008) (DOI:10.1111/j.1469-1795.2008.00182.x). A copy of this study is provided at Attachment 8 to these comments.

⁷⁹ Id.

The study also highlights the critical importance of understanding whether impacts are direct or indirect in identifying effective conservation strategies:

"Understanding the relative importance of direct and indirect effects of area contraction on bird communities will have important implications. Indirect effects of altered trophic interactions differ from direct effects of area per se in that the former are often non-continuous, depending on the presence/absence of key species such as predators and/or mesopredators and the release into hyperabundance of others, such as generalist herbivores. As such, if the impacts of habitat loss on bird persistence are primarily indirect, as our results suggest, conservation strategies will have to be modified accordingly. For example, in order to mediate the impacts of human activities on faunal communities it will be necessary not only to maximize the areas of preserved habitats, but also to minimize the associated distortions in trophic interactions. While this will pose a daunting challenge given the high sensitivity of many ecologically important species (such as large predators) and the synergy between fragmentation and other anthropogenic disturbances (Terborgh, 1974; Laurance, 2001; Peres, 2001; Wright & Duber, 2001) headway may be made through increased protection against poaching or by increasing connectivity between fragments (Dobson et al., 1999)."80

(2) Major Federal Actions Demonstrate the Significance of Indirect Effects

The longstanding recognition of the potential significance of indirect impacts is clearly borne out on the ground. As the following examples make clear, indirect impacts can fundamentally alter entire ecosystems and it is essential that NEPA reviews fully assess these impacts as the law requires.

(a) Upper Mississippi River Navigation System

Construction and operation and management of the Upper Mississippi River-Illinois Waterway navigation system has caused highly significant indirect and cumulative impacts. This system, which is operated by the U.S. Army Corps of Engineers (Corps), consists of 1,200 miles of 9-foot navigation channel, 37 lock and dam sites, and thousands of river training structures (wing dikes, bendway weirs, chevrons). Operating and maintaining this system involves: dredging and disposal of dredged material, water level regulation, construction of river training structures, construction of revetment, and operation and maintenance of the system's locks and dams.

The indirect (and cumulative) effects of constructing and operating this system have been well documented. These effects include a complete alteration of the natural processes of the Upper Mississippi River, severe declines in the ecological health of the Mississippi and Illinois Rivers, ⁸¹ and significant increases in flood risks for many Mississippi River communities. For example:

 In 1999, the U.S. Geological Survey issued a report on the ecological status and trends of the Upper Mississippi River System, which concluded that the Corps' operations and maintenance activities were: destroying critical habitats including the rivers' backwaters, side channels and wetlands; altering water depth; destroying bathymetric diversity; causing nonnative species to

⁸⁰ ld.

⁸¹ U.S. Geological Survey, *Ecological Status and Trends of the Upper Mississippi River System 1998: A Report of the Long Term Resource Monitoring Program* (April 1999) (1999 Status and Trends Report).

proliferate; and severely impacting native species.⁸² These impacts were so severe that multiple reaches of the system were deemed to be degraded, heavily impacted, or moderately degraded for six separate criteria of ecosystem health.⁸³ The report highlighted that no segment of the Upper Mississippi River system was unchanged from historic conditions or deemed to require no management action to maintain, restore or improve conditions. Equally important, no segment of the system was improving in quality.⁸⁴

- In 2000, the U.S. Fish and Wildlife Service issued a Final Biological Opinion which concludes that
 the "continued operation and maintenance of the 9-foot Navigation project will jeopardize the
 continued existence" of the Higgins eye pearly mussel and the pallid sturgeon." 85
- In 2008, the U.S. Geological Survey issued a second status and trends report which found that the Corps' O&M activities were continuing to cause and/or significantly contribute to significant harm, including: high sedimentation rates in some backwaters and side channels; an altered hydrologic regime; loss of connection between the river and its floodplain; proliferation of invasive species including common carp, Asian carp, and zebra mussels; high levels of nutrients and suspended sediments; and degradation of floodplain forests. ⁸⁶ The report also recognized "a substantial loss of habitat diversity" in the system over the past 50 years due in large part to excessive sedimentation and erosion. ⁸⁸
- Extensive peer reviewed science shows that construction and operation of a portion of the Upper Mississippi River navigation system, often referred to as the Middle Mississippi River, combined with construction of levees have significantly increased flood risks for many Mississippi River communities.

For example, a 2016 study in the *Journal of Earth Science* concludes that the Middle Mississippi River has been so constricted by river training structures and levees that it is now exhibiting "the flashy response" to flooding "typical of a much smaller river":⁸⁹

"Ehlmann and Criss (2006) proved that the lower Missouri and middle Mississippi Rivers are becoming more chaotic and unpredictable in their time of flooding, height of

⁸² Id.

⁸³ "Degraded" is the lowest possible grade issued by the report and is defined as a condition where the factors associated with the criteria "are now below ecologically acceptable levels" and where "[m]ultiple management actions are required to raise these conditions to acceptable levels." 1999 Status and *Trends Report* at 16-2.

⁸⁴ 1999 Status and *Trends Report* at 16-1 to 16.-2.

⁸⁵ U.S. Fish and Wildlife Service, Biological Opinion for the Operation and Maintenance of the 9-Foot Navigation Channel on the Upper Mississippi River System (2000) at 1.

⁸⁶ Johnson, B. L., and K. H. Hagerty, editors. 2008. U.S. Geological Survey, *Status and Trends of Selected Resources of the Upper Mississippi River System,* December 2008, Technical Report LTRMP 2008-T002. 102 pp + Appendixes A–B (Upper Midwest Environmental Sciences Center, La Crosse, Wisconsin) (2008 Status and Trends Report).

⁸⁷ *Id.* at 6.

⁸⁸ *Id.* at 6 ("In all reaches, sedimentation has filled-in many backwaters, channels, and deep holes. In the lower reaches, sediments have completely filled the area between many wing dikes producing a narrower channel and new terrestrial habitat. Erosion has eliminated many islands, especially in impounded zones.").

⁸⁹ Robert E. Criss, Mingming Luo, *River Management and Flooding: The Lesson of December 2015–January 2016, Central USA*, JOURNAL OF EARTH SCIENCE, Vol. 27, No. 1, p. 117–122 (February 2016) ISSN 1674-487X (DOI: 10.1007/s12583-016-0639-y). A copy of this study is provided at Attachment 9 to these comments.

flooding, and magnitude of their daily changes in stage. This chaotic behavior is primarily the result of extreme channelization of the river, and its isolation from its floodplain by levees (e.g., Criss and Shock, 2001; GAO, 1995; Belt, 1975). The channels of the lower Missouri and middle Mississippi Rivers are only half as wide as they were historically, along a combined reach exceeding 1 500 km, as clearly shown by comparison of modern and historical maps (e.g., Funk and Robinson, 1974).

The aftermath of storm Goliath [which led to the December 2015 floods] provides another example in an accelerating succession of record floods, whose tragic effects have been greatly magnified by man. The heavy rainfall was probably related to El Nino, and possibly intensified by global warming. . . . The Mississippi River flood at St. Louis was the third highest ever, yet it occurred at the wrong time of year, and its brief, 11-day duration was truly anomalous. Basically, this great but highly channelized and leveed river exhibited the flashy response of a small river, and indeed resembled the response of Meramec River, whose watershed is smaller by 160×. Yet, only a few percent of the watershed above St. Louis received truly heavy rainfall during this event; the river rose sharply because the water simply had nowhere else to go.

Further downstream, new record stages on the middle Mississippi River were set. Those record stages would have been even higher, probably by as much as 0.25 m, had levees not failed and been overtopped. The sudden drop of the water level near the flood crest at Thebes clearly demonstrates how levees magnify floodwater levels. In this vein, it is very significant that the water levels on the lower Meramec River were highest, relative to prior floods, proximal to a new levee and other recent developments." 90

Detailed studies of the impacts of river training structures (which are used to reduce navigation dredging costs) demonstrate that those structures have significantly increased flood levels by up to 15 feet in some locations and 8 feet and more in broad stretches of the Mississippi River where these structures are prevalent. ⁹¹ The impacts of these structures are both indirect—they increase flooding up to 20 river miles upstream, and cumulative—the more structures placed in the river, the higher the flood height increases:

"[O]ur analyses demonstrate that wing dikes constructed downstream of a location were associated with increases in flood height ('stage'), consistent with backwater effects upstream of these structures. Backwater effects are the rise in surface elevation of flowing water upstream from, and as a result of, an obstruction to water flow. These backwater effects were clearly distinguishable from the effects of upstream dikes, which triggered simultaneous incision and conveyance loss at sites downstream. **On the**

⁹⁰ Id

⁹¹ Pinter, N., A.A. Jemberie, J.W.F. Remo, R.A. Heine, and B.A. Ickes, 2010. *Empirical modeling of hydrologic response to river engineering, Mississippi and Lower Missouri Rivers*. RIVER RESEARCH AND APPLICATIONS, 26: 546-571; Remo, J.W.F., N. Pinter, and R.A. Heine, 2009. *The use of retro- and scenario- modeling to assess effects of 100+ years river engineering and land cover change on Middle and Lower Mississippi River flood stages*. JOURNAL OF HYDROLOGY, 376: 403-416. Copies of these studies are provided at Attachments 10 and 11, respectively, to these comments.

Upper Mississippi River, for example, stages increased more than four inches for each 3,281 feet of wing dike built within 20 RM (river miles) downstream. These values represent parameter estimates and associated uncertainties for relationships significant at the 95 percent confidence level in each reach-scale model. The 95-percent level indicates at least a 95% level of certainty in correlation or other statistical benchmark presented, and is considered by scientists to represent a statistically verified standard. Our study demonstrated that the presence of river training structures can cause large increases in flood stage. For example, at Dubuque, lowa, roughly 8.7 linear miles of downstream wing dikes were constructed between 1892 and 1928, and were associated with a nearly five-foot increase in stage. In the area affected by the 2008 Upper Mississippi flood, more than six feet of the flood crest is linked to navigational and flood-control engineering."92

(b) Apalachicola-Chattahoochee-Flint River System

The indirect (and cumulative) impacts of construction and operation of the Apalachicola-Chattahoochee-Flint River System (ACF) have caused devastating impacts to the ecological health of Florida's Apalachicola River and Apalachicola Bay. Sufficient and properly timed freshwater flows are critical for maintaining the health of this vital ecosystem and the hundreds of species of fish and wildlife that rely on this system. Sufficient freshwater flows are also essential for maintaining the salinity regimes needed to sustain an economically viable oyster harvest from the Apalachicola Bay, and for sustaining many other commercially viable fisheries.

The U.S. Army Corps of Engineers' operation of the ACF reservoirs in Georgia and Alabama has starved the Apalachicola River and its floodplain of the freshwater flows they need to thrive. The U.S. Geological Survey (USGS) has concluded that:

"Water-level declines in the [Apalachicola] river have substantially changed long-term hydrologic conditions in more than 200 miles of off-channel floodplain sloughs, streams, and lakes and in most of the 82,200 acres of floodplain forests in the nontidal reach of the Apalachicola River."93

The effects have been significant. For example, the USGS has determined that lack of overflow into the Apalachicola River floodplain have caused major changes to the "composition of floodplain forests along the Apalachicola River" over the last 30 to 40 years. The USGS found that the present-day forest composition along the river has shifted toward drier conditions compared to data collected in the 1970s. These drier conditions have resulted in the loss of 4.3 million trees in the Apalachicola River floodplain:

"The density of trees in swamps significantly decreased by 37 percent from 1976 to 2004. Of the estimated 4.3 million (17 percent) fewer trees that existed in the nontidal floodplain in 2004

⁹² Reply Declaration of Nicholas Pinter, Ph.D. in Support of Plaintiffs' Motion for Preliminary Injunction, NWF et al v. Corps of Engineers, Case No. 14-00590-DRH-DGW, (S.D. ILL), 2014; Declaration of Nicholas Pinter, Ph.D. in Support of Plaintiffs' Motion for Preliminary Injunction, Case No. 14-00590-DRH-DGW, (S.D. ILL), 2014. Copies of these affidavits are provided at Attachments 12 and 13, respectively, to these comments

⁹³ Helen M. Light et. al., U.S. Geological Survey, U.S. Dep't. of the Interior. *Water-Level Decline in the Apalachicola River, Florida, from 1954 to 2004, and Effects on Floodplain Habitats* 1 (2006), http://pubs.usgs.gov/sir/2006/5173/pdf/sir2006-5173.pdf.

than in 1976, 3.3 million trees belonged to four swamp species: popash, Ogeechee tupelo, water tupelo, and bald cypress. Water tupelo, the most important tree in the nontidal floodplain in terms of basal area and density, has declined in number of trees by nearly 20 percent since 1976. Ogeechee tupelo, the species valuable to the tupelo honey industry, has declined in number of trees by at least 44 percent."94

These losses in turn have cascading impacts on the fish and wildlife species that rely on the floodplain, and on nutrient cycling and food webs throughout the entire Apalachicola ecosystem. These and many other significant indirect impacts are discussed in an *Amicus Curiae* brief filed in the Supreme Court case of original jurisdiction, *State of Florida v. State of Georgia*, which is provided at Attachment 14 to these comments.⁹⁵

(c) Yazoo Backwater Pumping Plant Project

In 2007, the U.S. Army Corps of Engineers (Corps) recommended construction of the Yazoo Backwater Pumping Plant, a federal water resources project that the Corps acknowledged would have highly significant indirect impacts. Operation of the project's 14,000 cfs pumping plant would drain and damage at least 67,000 acres of ecologically significant wetlands. ⁹⁶ The direct impacts of project construction would have been the loss of 38 acres of mature bottom-land hardwood wetlands. ⁹⁷

The unacceptable indirect impacts identified in the Final Supplemental EIS led EPA to use its Clean Water Act 404(c) authority to stop this project:

"EPA has determined that the discharge of dredged or fill material in connection with the construction of FSEIS Plans 3 through 7, and Modified Plan 6, together with the anticipated **indirect impacts** associated with the subsequent operation of the pumping station would have an unacceptable adverse effect on fishery areas and wildlife." ⁹⁸

These impacts include "a dramatic alteration of the hydrologic regime in the Yazoo Backwater Area, thereby significantly degrading the critical ecological functions provided by at least 28,400 to 67,000 acres of wetlands." ⁹⁹

A copy of this Final Determination is provided at Attachment 15 to these comments.

99 Id. at 4.

Darst, M.R., Light, H.M., 2008, Drier Forest Composition Associated with Hydrologic Change in the Apalachicola River Floodplain, Florida: U.S. Geological Survey Scientific Investigations Report 2008-5062, 81 p., plus 12 apps.
 Amicus Curiae Brief of National Audubon Society, Defenders of Wildlife, Florida Wildlife Federation, and

Amicus Curide Brief of National Audubon Society, Defenders of Wildlife, Florida Wildlife Federation, and Apalachicola Riverkeeper, *State of Florida v. State of Georgia*, Supreme Court Case No. 142, Original (Before the Special Master) (October 21, 2016). A copy of this brief is provided at Attachment 14 of these comments.

⁹⁶ Outside experts determined that the Yazoo Backwater Pumping Plant project would drain and damage 200,000 acres of ecologically significant wetlands.

⁹⁷ U.S. Army Corps of Engineers, Final Supplement No. 1 To The 1982 Yazoo Area Pump Project Final Environmental Impact Statement (October 2007) at SEIS-4 ("Approximately 38 acres of mature bottom-land hardwood wetlands would be impacted at the pump station site.").

⁹⁸ Final Determination Of The U.S. Environmental Protection Agency's Assistant Administrator For Water Pursuant To Section 404(C) Of The Clean Water Act Concerning The Proposed Yazoo Backwater Area Pumps Project, Issaquena County, Mississippi at 5 (August 31, 2008) (emphasis added) (available at https://www.epa.gov/sites/production/files/2015-05/documents/yazoo-final-determination-signed-8-31-08.pdf).

"The construction and operation of the proposed pumps would dramatically alter the timing, and reduce the spatial extent, depth, frequency, and duration of time that wetlands within the project area are inundated by the 2- through 100-year flood events. For example, according to the FSEIS for the Yazoo Backwater Area Project, the proposed project would reduce the spatial extent of the 100-year flood event by approximately 25 percent, or 158,000 acres (i.e., a 4 to 4.5 foot reduction in flood stage). 100

These changes would in turn produce a host of cascading impacts to fish and wildlife, including to vast numbers of migratory birds:

"The loss of the productive shallowly flooded wetlands, especially in the spring months when the proposed pumps will typically be in operation, will impact migratory birds such as shorebirds and waterfowl as they stopover and forage in preparation for their seasonal migration. Fewer shallowly flooded wetlands will reduce foraging habitat, which will equate to reduced nutritional uptake and could result in higher mortality or reduced reproductive fitness as the birds travel the great distances between their southern wintering areas and their breeding areas in the northern U.S., Canada, and the Arctic. Breeding for many species could be adversely affected during the spring-time nesting season because foraging areas would be reduced. As a result of the reduction in flooding, adult birds will have to travel longer distances to find food, which equates to longer times away from the nest or foraging for food and may ultimately lead to higher nest mortality and lower recruitment (Appendix 4)." ¹⁰¹

2. The NPRM Eliminates Review of Cumulative Effects

The NPRM attempts to eliminate consideration of cumulative effects from all levels of NEPA analysis by deleting all references to cumulative effects and by adding an explicit statement to the regulations that, "Analysis of cumulative effects is not required." These blatantly illegal and arbitrary changes, like the entire proposed rule, must be withdrawn.

a. NEPA Requires the Evaluation and Consideration of Cumulative Effects

The courts have long recognized that cumulative effects *must* be considered under NEPA, including cases decided before promulgation of the 1978 NEPA regulations. For example:

In 1972, the U.S. Court of Appeals for the Second Circuit found that when making a
determination regarding whether or not an action is subject to NEPA, agencies should consider,
among other things: "the absolute quantitative adverse environmental effects of the action
itself, including the cumulative harm that results from its contribution to existing adverse
conditions or uses in the affected area." The Court went on to highlight that:

"it must be recognized that even a slight increase in adverse conditions that form an existing environmental milieu may sometimes threaten harm that is significant. One more factory polluting air and water in an area zoned for industrial use may represent

¹⁰⁰ *Id*. at 1-3.

¹⁰¹ Id. at 57.

¹⁰² Proposed § 1508.1(g)(2), 85 Fed. Reg. at 1729.

¹⁰³ Hanly v. Kleindienst, 471 F.2d 823, 830-31 (2d Cir. 1972) (emphasis added).

the straw that breaks the back of the environmental camel. Hence the absolute, as well as comparative, effects of a major federal action must be considered." ¹⁰⁴

 In 1975, the U.S. Court of Appeals for the Second Circuit found that NEPA requires the consideration of cumulative effects:¹⁰⁵

"The Navy's failure to consider [a number of enumerated projects] and possibly other proposed dredging projects in the New London area is an example of the isolated decisionmaking sought to be eliminated by NEPA. The cumulative environmental impact of disposal of all of this dredged spoil at or near the New London site would clearly be greater than the impacts of the projects individually and the risk of serious environmental consequences (such as the movement of the spoil toward shore) may be correspondingly greater. If the total amount and type of spoil to be disposed of in this area in the foreseeable future is studied objectively by the Navy and the Corps, they may well conclude that some other method of disposal, such as a containment island large enough to contain the spoil dredged from all of these and similar projects, should be urged upon Congress as the only effective way of dealing with the problem." 106

In reaching this decision, the Court took great pains to stress the importance of evaluating cumulative impacts:

"A government agency cannot be expected to wait until a perfect solution of environmental consequences of proposed action is devised before preparing and circulating an EIS. On the other hand, an agency may not go to the opposite extreme of treating a project as an isolated 'single-shot' venture in the face of persuasive evidence that it is but one of several substantially similar operations, each of which will have the same polluting effect in the same area. To ignore the prospective cumulative harm under such circumstances could be to risk ecological disaster.

As was recognized by Congress at the time of passage of NEPA, a good deal of our present air and water pollution has resulted from the accumulation of small amounts of pollutants added to the air and water by a great number of individual, unrelated sources.

'Important decisions concerning the use and the shape of man's future environment continue to be made in small but steady increments which perpetuate rather than avoid the recognized mistakes of previous decades.'

S.Rep.No.91-296, 91 Cong., 1st Sess. 5 (1969). NEPA was, in large measure, an attempt by Congress to instill in the environmental decisionmaking process a more comprehensive approach so that long term and cumulative effects of small and

¹⁰⁴ Id. at 831.

¹⁰⁵ Natural Resources Defense Council v. Callaway, 524 F.2d 79, 89 (2d Cir. 1975) (holding that the Navy must consider the cumulative effects of disposing polluted dredged spoil at the New London dumping site in Long Island Sound).

¹⁰⁶ Id.

unrelated decisions could be recognized, evaluated and either avoided, mitigated, or accepted as the price to be paid for the major federal action under consideration." ¹⁰⁷

The Court also found that CEQ prepared its guidelines requiring review of cumulative impacts "[i]n recognition of Congress' purpose" in enacting NEPA. 108

- In 1975, the U.S. Court of Appeals for the Seventh Circuit stated that "NEPA is clearly intended to focus concern on the 'big picture' relative to environmental problems. It recognizes that each 'limited' federal project is part of a large mosaic of thousands of similar projects and that cumulative effects can and must be considered on an ongoing basis." 109
- In 1976, the U.S. Supreme Court acknowledged the importance of cumulative effects. While ruling that in the particular situation at issue an EIS was not required, the Court concluded that:

"when several proposals for coal-related actions that will have cumulative or synergistic environmental impact upon a region are pending concurrently before an agency, their environmental consequences must be considered together. Only through comprehensive consideration of pending proposals can the agency evaluate different courses of action. . . . Cumulative environmental impacts are, indeed, what require a comprehensive impact statement." 110

NEPA's legislative history is also replete with references to the complexity of environmental impacts, the consequences of "letting them accumulate in slow attrition of the environment" and the "ultimate consequences of quiet, creeping environmental decline." All of these references point to the vital need to analyze impacts that go beyond the immediate, direct effects of an action.

As a result, CEQ has properly directed agencies to analyze and consider cumulative impacts since 1971 when it released its First Annual Report. That report explained that NEPA's statutory language requires the agencies to consider cumulative and long-term effects both in determining whether NEPA applied to a particular action and in evaluating impacts in the required detailed statement (now known as the EIS). ¹¹² In 1973, CEQ repeated these statements and admonished agencies that:

"In considering what constitutes major action significantly affecting the environment, agencies should bear in mind that the effect of many Federal decisions about a project or complex of projects can be individually limited but cumulative considerable. This can occur when one or

¹⁰⁷ Id. at 88 (emphasis added).

¹⁰⁸ Id. at 88.

¹⁰⁹ Swain v. Brinegar, 517 F.2d 766 (7th Cir. 1975) (recognizing that an EIS should consider comprehensive, cumulative impacts, but resolving the case on the grounds that the federal agency had impermissibly delegated the EIS to Illinois state authorities.)

¹¹⁰ Kleppe v. Sierra Club, 427 U.S. 390, 410, 413 (1976).

¹¹¹ 115 Cong. Rec. 29070 (October 8, 1969); see also, report accompanying S. 1075, National Environmental Policy Act of 1969, Senate Committee on Interior and Insular Affairs, July 9, 1969,

¹¹² Council on Environmental Quality: Statements on Proposed Federal Actions Affecting the Environment; Interim Guidelines, April 30, 1970, Sections 5(b) and 7(a) (filed with Fed. Reg. May 11, 1970), available in *Environmental* Quality, The First Annual Report of the Council on Environmental Quality, Transmitted to Congress, August, 1970, p. 288 available at https://www.slideshare.net/whitehouse/august-1970-environmental-quality-the-first-annual-report-of.

more agencies over a period of years put into a project individually minor but collectively major resources, when one decision involving a limited amount of money is a precedent for action in much larger cases or represents a decision in principle about a future major course of action, or when several Government agencies individually make decisions about partial aspects of a major decision. In all such cases, an environmental statement should be prepared if it reasonable to anticipate a cumulatively significant impact on the environment from Federal action."¹¹³

For 50 years, CEQ had consistently interpreted NEPA to require analysis and consideration of cumulative effects, making its dramatic about-face in the NPRM particularly inexplicable.

CEQs current attempt to eliminate consideration of cumulative effects is also incredibly dangerous. The cumulative impacts of major federal actions can, and all too often do, lead to ecosystem-wide degradation and unacceptable dangers to communities—including significantly increasing flood risks. The NPRM nevertheless directs federal agencies to simply ignore these impacts when making decisions on whether or how to proceed with a major federal action. *See* Section C.1 of these comments for documented examples of these types of impacts.

b. Assessing Cumulative Effects is Essential for Understanding Impacts

By eliminating review of cumulative impacts, the NPRM is seeking to direct agencies to ignore: (1) the implications of a project on increasing or speeding up climate change; and (2) the effects of rising sea levels, stronger storms, and other climate change impacts on the effectiveness and resilience of a proposed project. Seeking to eliminate these analyses at the very time that the nation is faced with the existential threat of climate change is unconscionable.

Attempting to ignore the implications of climate change will lead to flood and storm damage reduction projects that will not provide the level of protection needed to keep people safe. It will also lead to major infrastructure projects that will fail because they were not designed to withstand the higher seas and more frequent and intense floods and storms. The cumulative impacts of climate change must be carefully considered to ensure effective planning and the health and safety of our communities.

The Fourth National Climate Change Assessment highlights many threats that climate change poses for the nation's infrastructure:

"Our Nation's aging and deteriorating infrastructure is further stressed by increases in heavy
precipitation events, coastal flooding, heat, wildfires, and other extreme events, as well as
changes to average precipitation and temperature. Without adaptation, climate change will
continue to degrade infrastructure performance over the rest of the century, with the
potential for cascading impacts that threaten our economy, national security, essential
services, and health and well-being.¹¹⁴

¹¹³ Council on Environmental Quality, Guidelines, Preparation of Environmental Impact Statements, 38 *Fed. Reg.* 20550, 20551 (August 1, 1973).

¹¹⁴ USGCRP, 2018: Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II: Report-in-Brief at 17 [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 186 pp. doi: 10.7930/NCA4.2018.RiB (available at https://nca2018.globalchange.gov/downloads/NCA4 Report-in-Brief.pdf).

- "High temperature extremes, heavy precipitation events, high tide flooding events along the U.S. coastline, ocean acidification and warming, and forest fires in the western United States and Alaska are all projected to continue to increase, while land and sea ice cover, snowpack, and surface soil moisture are expected to continue to decline in the coming decades. These and other changes are expected to increasingly impact water resources, air quality, human health, agriculture, natural ecosystems, energy and transportation infrastructure, and many other natural and human systems that support communities across the country. The severity of these projected impacts, and the risks they present to society, is greater under futures with higher greenhouse gas emissions, especially if limited or no adaptation occurs."115
- Existing water, transportation, and energy infrastructure already face challenges from heavy rainfall, inland and coastal flooding, landslides, drought, wildfire, heat waves, and other weather and climate events (Figures 1.5–1.9). Many extreme weather and climate-related events are expected to become more frequent and more intense in a warmer world, creating greater risks of infrastructure disruption and failure that can cascade across economic sectors. For example, more frequent and severe heat waves and other extreme events in many parts of the United States are expected to increase stresses on the energy system, amplifying the risk of more frequent and longer-lasting power outages and fuel shortages that could affect other critical sectors and systems, such as access to medical care. Current infrastructure is typically designed for historical climate conditions and development patterns—for instance, coastal land use—generally do not account for a changing climate, resulting in increasing vulnerability to future risks from weather extremes and climate change. Infrastructure age and deterioration make failure or interrupted service from extreme weather even more likely. Climate change is expected to increase the costs of maintaining, repairing, and replacing infrastructure, with differences across regions.

Seeking to ignore the implications of climate change will lead to the approval of projects that could drive many species of fish, mammals, birds, waterfowl, amphibians, reptiles, and pollinators to extinction. The following are just a few of the many significant implications of climate change for fish and wildlife:

 Climate change may well cause fundamental alterations of ecosystem form and function with highly significant cascading impacts for wildlife and people. A 2020 study in *Nature Climate* Change highlighted the likely potential for climate-change to fundamentally alter the structure and function of the highly productive northern Bering and Chukchi marine shelf ecosystem:

"The highly productive northern Bering and Chukchi marine shelf ecosystem has long been dominated by strong seasonality in sea-ice and water temperatures. Extremely warm conditions from 2017 into 2019—including loss of ice cover across portions of the region in all three winters—were a marked change even from other recent warm years. Biological indicators suggest that this change of state could alter ecosystem structure and function. Here, we report observations of key physical drivers, biological responses and consequences for humans, including subsistence hunting, commercial fishing and industrial shipping. We consider whether observed state changes are indicative of future norms, whether an ecosystem transformation is already underway and, if so,

¹¹⁵ Id. at 34.

¹¹⁶ Id. at 37-38 (internal chapter references omitted).

whether shifts are synchronously functional and system wide or reveal a slower cascade of changes from the physical environment through the food web to human society. Understanding of this observed process of ecosystem reorganization may shed light on transformations occurring elsewhere." ¹¹⁷

 Migratory species are particularly vulnerable to the impacts of climate change, as recognized by the United Nations Environment Program and the Convention on the Conservation of Migratory Species of Wild Animals:

"As a group, migratory wildlife appears to be particularly vulnerable to the impacts of Climate Change because it uses multiple habitats and sites and use a wide range of resources at different points of their migratory cycle. They are also subject to a wide range of physical conditions and often rely on predictable weather patterns, such as winds and ocean currents, which might change under the influence of Climate Change. Finally, they face a wide range of biological influences, such as predators, competitors and diseases that could be affected by Climate Change. While some of this is also true for more sedentary species, migrants have the potential to be affected by Climate Change not only on their breeding and non-breeding grounds but also while on migration."

"Apart from such direct impacts, factors that affect the migratory journey itself may affect other parts of a species' life cycle. Changes in the timing of migration may affect breeding or hibernation, for example if a species has to take longer than normal on migration, due to changes in conditions *en route*, then it may arrive late, obtain poorer quality breeding resources (such as territory) and be less productive as a result. If migration consumes more resources than normal, then individuals may have fewer resources to put into breeding"

* * *

"Key factors that are likely to affect all species, regardless of migratory tendency, are changes in prey distributions and changes or loss of habitat. Changes in prey may occur in terms of their distributions or in timing. The latter may occur though differential changes in developmental rates and can lead to a mismatch in timing between predators and prey ("phenological disjunction"). Changes in habitat quality (leading ultimately to habitat loss) may be important for migratory species that need a coherent network of sites to facilitate their migratory journeys. Habitat quality is especially important on staging or stopover sites, as individuals need to consume large amounts of resource rapidly to

¹¹⁷ Huntington, H.P., et al, Evidence suggests potential transformation of the Pacific Arctic ecosystem is underway. NATURE CLIMATE CHANGE (2020) (https://doi.org/10.1038/s41558-020-0695-2). A copy of this study is provided at Attachment 16 to these comments.

continue their onward journey. Such high quality sites may [be] crucial to allow migrants to cross large ecological barriers, such as oceans or deserts." 118

- Climate change is causing dramatic shifts in the ranges of marine species. For example, a 2011 study published in *Science*, concludes that average geographical range shifts for marine communities due to climate change over the past 50 years are from 1.4 to 28 km per decade— or 0.9 to 17.4 miles per decade. Shifts in seasonal timing for marine species are advancing an average of 4.3 days per decade in the oceans. This study also concludes that range shifts in the ocean are from 1.5 to 5 times faster than range shifts on land, likely due to the more homogeneous nature of surface water temperature changes in the ocean than on land, and shifts in the timing of spring temperatures were 30 to 40% faster in the ocean than on land (from 1960–2009). A 2010 study published in *Global Ecology and Biogeography* concludes that range shifts occurred much faster in marine systems than terrestrial systems, and noted that most of the species documented as shifting their range were coastal species. A 2009 study published in *Fish and Fisheries*, projected a climate-change induced range shift for marine fish and invertebrates of 45–59 km per decade.—or 28 to 37 miles per decade.
- Climate change is facilitating the spread of invasive species. A 2002 study published in the
 Proceedings of the National Academy of Sciences that looked at invasive marine species
 concludes that "the greatest effects of climate change on biotic communities may be" to
 "facilitate a shift of dominance by nonnative species, accelerating the homogenization of the
 global biota." This report also concludes that the greatest effects of climate change on biotic
 communities may be due to changing maximum and minimum temperatures rather than annual
 means.

By attempting to allow all federal agencies to ignore cumulative effects, significant environmental impacts that occur downstream, downwind or otherwise outside the action area of an agency's proposed action will almost certainly never be evaluated. The implications of climate change will almost

125 Id.

¹¹⁸ UNEP/CMS Secretariat, Bonn, Germany, Migratory Species and Climate Change: Impacts of a Changing Environment on Wild Animals (2006) at 40-41 (available at

http://www.cms.int/publications/pdf/CMS_CimateChange.pdf).

¹¹⁹ Michael T. Burrows, Schoeman D.S., Buckley L.B., et al, The Pace of Shifting Climate in Marine and Terrestrial Ecosystems. Science, Vol 334: 652-55 (Nov. 4, 2011). ¹²⁰ *Id*.

¹²¹ Id.

¹²² Cascade J. B. Sorte, S.L. Williams and J.T Carlton, Marine range shifts and species introductions: comparative spread rates and community impacts, Global Ecology and Biogeography (2010) 19, 303–316. The study defines range shifts "as any changes in the distributions of native species that are not directly human mediated." The study also concludes that "[r]ange shifts of native species and introductions of non-native species are analogous in that both are fundamentally biological invasions, involving the movement of individuals from a donor community into a recipient community."

¹²³ William W.L. Cheung, V.W.Y. Lam, J.L. Sarmiento, K. Kearney, R. Watson and D. Pauly, Projecting global marine biodiversity impacts under climate change scenarios, Fish and Fisheries, 10, 235–251 (2009).

¹²⁴ John J. Stachowicz, Terwins J.R., Whitlatch R.B., Osman R.W., Linking climate change and biological invasions: Ocean warming facilitates nonindigenous species invasions, Proceedings of the National Academy of Sciences (PNAS) Vol. 99, No 24: 15497–15500 (November 26, 2002) available at www.pnas.org.cgi.doi.10.1073 pnas.242437499.

certainly never be evaluated. As importantly, these critically important implications will play no role in decisions regarding the development and approval of major federal projects, programs, and permitting decisions. These proposed changes are not only illegal—they intentionally seek to shield from decision-makers and the public the effects of major federal actions on some of the pressing environmental issues we are facing, such as climate change. This is the opposite of what NEPA was passed to do.

1. The NPRM Undermines the Scientific Integrity of NEPA Reviews

In addition to the intense restrictions on evaluating indirect and cumulative effects, the NPRM proposes additional changes that will undermine the integrity of the science used in the analyses that are carried out. In some cases, these changes will lead to impact assessments that are biased, fail to look at key issues, or are fundamentally incorrect. These provisions, like the entire proposed rule, must be withdrawn.

NEPA has an explicit focus on informed decision making that utilizes "a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and decisionmaking which may have an impact on man's environment." 126 Judicial decisions reflect the importance of obtaining information, including undertaking new scientific research, before making a decision on whether or how to proceed. "NEPA requires each agency to undertake research needed adequately to expose environmental harms." 127

The NPRM ignores these mandates by amending the regulations to explicitly state that agencies "are not required to undertake new scientific and technical research to inform their analyses." For many types of projects—including water resources projects like dams, levees, floodgates, and reservoirs—it simply is not possible to understand the environmental and public safety effects of a specific project without undertaking new, project-specific modeling and assessments. For example:

• Failing to undertake new research can have disastrous consequences. Prior to construction of the Mississippi River Gulf Outlet (MRGO) in Louisiana (before NEPA was enacted), the Fish and Wildlife Service raised serious concerns and strongly recommended that the Corps of Engineers conduct additional environmental and hydrologic modeling to better understand the likely impacts of the project. However, those studies were not done and the request for hydrologic modeling was essentially rejected out of hand. Since its construction, the MRGO has destroyed more than 27,000 acres of coastal wetlands and damaged more than 600,000 acres of coastal ecosystems surrounding the Greater New Orleans area. During Hurricane Katrina, the MRGO funneled Katrina's storm surge into New Orleans, resulting in devastating flooding in St. Bernard Parish and the lower Ninth Ward. Had the Corps conducted the requested scientific and technical research, the agency may have been able to avert a massive ecological and human disaster.

^{126 42} U.S.C. §4332(2)(A).

¹²⁷ Save Our Ecosystems v. Clark, 747 F.2d 1240, 1248 (9th Cir. 1984).

¹²⁸ Proposed § 1502.24, 85 Fed. Reg. at 1721.

¹²⁹ Team Louisiana, The Failure of the New Orleans Levee System During Hurricane Katrina, A Report prepared for Secretary Johnny Bradberry Louisiana Department of Transportation and Development, Baton Rouge, Louisiana State Project No. 704-92-0022, 20 (December 18, 2006), Chapter 7 at 231-234. The Executive Summary and Chapter 7 of this report are provided at Attachment 17 to these comments.

¹³⁰ Id.

Undertaking new scientific and technical research, on the other hand, produces better
decisions. For example, new scientific and technical analyses led to development of an
ecologically sound, community-supported plan to restore Bolinas Lagoon, an ecological treasure
located in northern California. Bolinas Lagoon is a designated Wetland of International
Importance under the Ramsar Convention, is among the most pristine tidal lagoons in California,
provides critical feeding grounds and stopover habitat for tens of thousands of migratory birds
each year, and supports at least 77 birds, fish, mammals, invertebrates, amphibians, reptiles,
and plant species that are listed as threatened, endangered, or of special concern.¹³¹

The Corps of Engineers had originally proposed a "restoration" plan for Bolinas Lagoon that involved dredging almost 40 percent of the Lagoon to restore it to its "historic" depth at a cost of \$133 million. According to the Corps, dredging was necessary because Bolinas Lagoon was filling in due to excessive human-caused sediment loading from the surrounding watershed and would eventually become upland, and because the mouth of the Lagoon would begin closing intermittently within the next 50 years. 133

After the public raised serious concerns with the environmental impacts of this massive dredging plan, outside experts developed new scientific and technical information for the project which showed that these underlying assumptions were fundamentally incorrect. The Lagoon was not at risk of filling in and becoming upland; the surrounding watershed was not contributing to sedimentation in the Lagoon (the bulk of the sediments originated from the near-shore ocean environment and from the bluffs just outside the Lagoon); and the Lagoon did not have a static "historic" depth, but instead had a depth that varied naturally over time, primarily due to repeated earthquakes causing the bottom of the Lagoon to drop (the Lagoon sits directly atop the San Andreas Fault). 134

As a result of this new information, the Corps of Engineers' proposed plan was abandoned, saving the ecology of the Lagoon and saving taxpayers \$133 million. The non-federal sponsor then worked with scientists, local stakeholders, environmental groups, and state and federal agency representatives to develop a series of community-supported recommendations for the restoration and management of Bolinas Lagoon that were finalized in 2008. That plan continues to be implemented today.

The NPRM further undermines the scientific integrity and accuracy of NEPA reviews by creating a wholly arbitrary "standard" for determining when an agency may be excused from obtaining complete

¹³¹ U.S. Army Corps of Engineers, Draft Environmental Impact Statement: Bolinas Lagoon Ecosystem Restoration Project Feasibility Study at 3-19, 3-29 to 3-30 (June 2002) (available at https://www.marincountyparks.org/~/media/files/departments/pk/projects/open-space/bolinas-lagoon/draft-bolinas-lagoon-ecosystem-restoration-feasibility-study-and-draft-eir-eis.pdf).

¹³² Id. at 2-4, 2-16.

¹³³ Id. at 1-4.

¹³⁴ See the Peer Review Comments on the U.S. Army Corps of Engineers, Draft Environmental Impact Statement: Bolinas Lagoon Ecosystem Restoration Project Feasibility Study (June 2002) provided at Attachment 18 to these comments

¹³⁵ Bolinas Lagoon Ecosystem Restoration Project: Recommendations and Restoration Management. A Working Group of the Sanctuary Advisory Council Gulf of the Farallones National Marine Sanctuary (August 2008). A copy of this report is provided at Attachment 19 to these comments.

information relevant to reasonably foreseeable significant adverse impacts. Under the current regulations, agencies must obtain such information if the cost of doing so is "not exorbitant." Under the NRPM agencies must obtain such information only if the costs of doing so are not "unreasonable." 136

This proposed change replaces a clear and objective standard with a vague and non-objective standard, allowing agencies to make arbitrary decisions when deciding whether or not to obtain new information. The term "unreasonable" is variously defined as "not fair; expecting too much" 137; "not based on or using good judgement; not fair" 138; or "exceeding the bounds of reason or moderation." 139 This means that an agency could opt out of obtaining critically important information simply by claiming that doing so would cost too much, that obtaining the information is expecting too much of the agency, or that it isn't fair to make the agency obtain the information. The current standard provides significantly more guidance, has worked well for decades, and should be retained.

D. The NPRM Improperly Limits the Review of Alternatives

The NPRM proposes multiple changes that limit the review of alternatives. These changes would dramatically and illegally undermine the evaluation of less environmentally harmful approaches to a proposed action, which is the "linchpin of the entire impact statement.¹⁴⁰ These changes, like the entire proposed rule, must be withdrawn.

The NPRM's illegal limitations on the evaluation of alternatives—combined with the proposed dramatic limitations on impact assessments—strike at the very heart of NEPA's goals and mandates. Collectively, these changes appear designed for one purpose only: to dramatically facilitate whatever action an applicant or federal agency wants to carry out, regardless of the level of environmental harm or the existence of less damaging approaches to achieving the same purpose.

This interpretation is further supported by CEQ's request for comments on the possibility of "establishing a presumptive maximum number of alternatives for evaluation of a proposed action, or categories of proposed actions." The National Wildlife Federation strongly objects to any "presumptive maximum number of alternatives." Such an approach is entirely arbitrary and rife for abuse. It would allow an agency to forgo analysis of highly reasonable alternatives simply because the agency had already reviewed the arbitrarily-established maximum number of alternatives. It would allow an agency to first quickly review and eliminate a host of less promising alternatives to reach the "presumptive maximum" in order to avoid having to look carefully at a particular alternative. Such an approach cannot be reconciled with the plain language of NEPA or longstanding case law.

¹³⁶ Proposed § 1502.22, 85 Fed. Reg. at 1721.

¹³⁷ Oxford Learners Dictionaries at

https://www.oxfordlearnersdictionaries.com/us/definition/english/unreasonable?q=unreasonable.

¹³⁸ Cambridge Dictionary at https://dictionary.cambridge.org/us/dictionary/english/unreasonable.

¹³⁹ "Unreasonable." *Merriam-Webster.com Dictionary*, Merriam-Webster, https://www.merriam-webster.com/dictionary/unreasonable. Accessed 9 Mar. 2020.

¹⁴⁰ Monroe County Conservation Council, Inc. v. Volpe, 472 F.2d 693, 697-98 (2d Cir. 1972).

¹⁴¹ 85 Fed. Reg. at 1702.

1. The NPRM Eliminates Rigorously and Objective Evaluation of All Reasonable Alternatives

The NPRM eliminates the requirements to "rigorously explore and objectively evaluate all reasonable alternatives" and instead directs a much less extensive review, requiring only that agencies "evaluate reasonable alternatives to the proposed action." This change would encourage agencies to significantly reduce the rigor of their alternatives analyses, and result in agencies failing to consider many cost-saving, highly reasonable alternatives with fewer adverse environmental impacts. This change, like the entire proposed rule, must be withdrawn.

NEPA unequivocally requires a highly rigorous and thorough evaluation of reasonable alternatives that would cause less harm to the environment. The directive to consider alternatives appears **twice** in the statute, ¹⁴³ and those directives must be carried out "to the fullest extent possible." ¹⁴⁴ NEPA drives this home through its mandates to prepare a "detailed statement", and to "study, develop, and describe appropriate alternatives." ¹⁴⁵ As the U.S. Court of Appeals for the Second Circuit concluded in 1972, "[t]he requirement for a thorough study and a detailed description of alternatives, which was given further Congressional emphasis in § 4332(2)(D), is the linchpin of the entire impact statement."

As highlighted throughout these comments, many cases have stressed NEPA's directive that agencies must implement the Act "to the fullest extent possible" and that this sets a high standard for the agencies. ¹⁴⁷ The courts have also confirmed that NEPA requires a robust analysis of alternatives, including cases decided prior to issuance of the existing regulations. ¹⁴⁸

For example, in 1974, the U.S. Court of Appeals for the Fifth Circuit ruled that NEPA requires a "thorough consideration of all appropriate methods of accomplishing the aim of the action" and an "intense consideration of other more ecologically sound courses of action": 149

"[NEPA § 4322(D)] was intended to emphasize an important part of NEPA's theme that all change was not progress and to insist that no major federal project should be undertaken without intense consideration of other more ecologically sound courses of action, including

¹⁴² Proposed § 1502.14, 85 Fed. Reg. at 1721.

¹⁴³ 42 U.S.C. § 4332(C)(iii) (the required detailed statement must include "alternatives to the proposed action"), and 42 U.S.C. § 4332(D)(agencies must "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.").

¹⁴⁴ 42 U.S.C. § 4332.

¹⁴⁵ 42 U.S.C. § 4332(D).

¹⁴⁶ Monroe County Conservation Council, Inc. v. Volpe, 472 F.2d 693, 697-98 (2d Cir. 1972).

¹⁴⁷ E.g., Calvert Cliffs' Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n, 449 F.2d 1109, 1114 (D.C. Cir. 1971).

¹⁴⁸ As CEQ is aware, the existing regulations to not establish an unworkable process. Courts have made clear that the rule of reason applies to the alternatives analysis such that agencies need not review alternatives that are speculative or remote, or whose impacts cannot be reasonably ascertained. *E.g.*, Life of the Land v. Brinegar, 485 F.2d 460, 472 (9th Cir 1973) ("there is no need for an environmental impact statement to consider alternatives whose effect cannot be reasonably ascertained and whose implementation is deemed remote and speculative."); Carolina Environmental Study Group v. United States, 510 F.2d 796, 800–01 (D.C. Cir. 1975) (quoting NRDC v. Morton) ("the requirement is not to explore every extreme possibility which might be conjectured. Rather, we view NEPA's requirement as one of considering alternatives as they exist and are likely to exist.")

¹⁴⁹ Environmental Defense Fund, Inc. v. Corps of Engineers of U.S. Army, 492 F.2d 1123, 1135 (5th Cir. 1974)

¹⁴⁹ Environmental Defense Fund, Inc. v. Corps of Engineers of U.S. Army, 492 F.2d 1123, 1135 (5th Cir. 1974) (emphasis added).

shelving the entire project, or of accomplishing the same result by entirely different means. In *Natural Resources Defense Council, Inc. v. Morton, supra*, the District of Columbia Circuit recognized that this section did not intend to limit an agency to consideration of only those alternatives that it could adopt or put into effect. We agree. The imperative directive is a thorough consideration of all appropriate methods of accomplishing the aim of the action, including those without the area of the agency's expertise and regulatory control as well as those within it." ¹⁵⁰

The Court also stressed the importance of the NEPA alternatives analysis by highlighting that "NEPA expressly refers to agency consideration of alternatives to the proposed action, not once, but twice," and that the analysis of alternatives is a key component of the detailed statement that "has aptly been described as the 'full disclosure requirement' of NEPA." In short, NEPA requires "a searching inquiry into alternatives" and such an inquire demands rigor and objectivity.

Many early cases also the highlighted importance of assessing all reasonable alternatives. In 1976, the U.S. Court of Appeals for the District of Columbia ruled that "NEPA is premised on the assumption that all reasonable alternatives will be explored by the agency." ¹⁵⁴ In 1975, the U.S. Court of Appeals for the Second Circuit ruled that an EIS may not disregard an alternative merely because it does not offer a complete solution to the problem. To the contrary, the EIS "must... consider such alternatives to the proposed action as may partially or completely meet the proposal's goal and it must evaluate their comparative merits." ¹⁵⁵ In 1975, the U.S. Court of Appeals for the Ninth Circuit ruled that the "existence of an unexamined but viable alternative to the adopted plan... could render the environmental impact statement inadequate. ¹⁵⁶ In 1972, the U.S. Court of Appeals for the District of Columbia ruled that an alternative cannot be disregarded simply because it would require additional Congressional authorization. ¹⁵⁷

¹⁵⁰ Id. at 1135 (42 U.S.C. § 4322(D) directs agencies to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.")

¹⁵¹ *Id.* at 1134.

¹⁵² *Id*. at 1132.

¹⁵³ Simmons v. U.S. Army Corps of Engineers, 120 F.3d 664, 666 (7th Cir. 1997) (officials must justify their plans to the public after a full airing of alternatives).

¹⁵⁴ Concerned About Trident v. Rumsfeld, 555 F.2d 817, 825 (D.C. Cir 1976) (emphasis added); see also Homeowners Emergency Life Protection Committee v. Lynn, 541 F.2d 814, ("As a result, to prevent completion of the project with federal funds without considering all reasonable alternatives, the Court has stayed the expenditure of such funds on the project pending a determination of the adequacy of the EIS.") (emphasis added); South Terminal Corp. v. EPA, 504 F.2d 646, 659 (1st Cir. 1974) ("The instant notice left no doubt that EPA would consider all reasonable alternatives for cutting down vehicle use."); lowa Citizens for Environmental Quality, Inc. v. Volpe, 487 F.2d 849, 853 (8th Cir. 1973) ("The question to be asked is whether all reasonable alternatives to the project have been considered, even if some were only briefly alluded to or mentioned.").

¹⁵⁵ Nat. Res. Def. Council, Inc. v. Callaway, 524 F.2d 79, 93 (2d Cir. 1975).

¹⁵⁶ Brooks v. Coleman, 518 F.2d 17, 18 (9th Cir. 1975).

¹⁵⁷ Natural Resources Defense Council v. Morton, 458 F.2d 827, 834-36 (D.C. Cir. 1972) (alternative sources of energy had to be discussed, despite federal legislation indicating an urgent need for offshore leasing and mandating import quotas; Department of Interior had to consider reasonable alternatives to offshore oil lease which would reduce or eliminate the need for offshore exploration, such as increased nuclear energy development and changing natural gas pricing, even though that would require Congressional action).

The NPRM's proposal to rewrite the regulations to state that agencies need only "evaluate reasonable alternatives to the proposed action" is in direct conflict with this longstanding case law. This proposed change also replaces a clear and objective standard with a completely undefined standard, allowing agencies to make entirely arbitrary decisions when looking at alternatives. If an agency need not review "all" reasonable alternatives, how does it determine which to review and which not review? If an agency need not "rigorously explore and objectively evaluate" alternatives, what level of review must it undertake? Can it simply eliminate an alternative from analysis because it does not wish to undertake the effort? These impermissible proposed changes suggest that it may.

2. The NPRM Eliminates Consideration of Alternatives Outside an Agency's Jurisdiction

The NPRM further limits the review of alternatives by deleting the requirement to analyze alternatives outside the agency's jurisdiction. CEQ acknowledges that this change "would preclude alternatives outside the agency's jurisdiction" because, according to the NPRM "they would not be technically feasible due to the agency's lack of statutory authority to implement that alternative." This proposed change is in direct conflict with longstanding case law, and like the entire proposed rule, must be withdrawn.

CEQ promulgated its existing regulations requiring an EIS to "[i]nclude reasonable alternatives not within the jurisdiction of the lead agency" because it was "declaratory of existing law." Before the current regulations were issued in 1978, a number of Courts had ruled that NEPA requires agencies to consider reasonable alternatives beyond their own jurisdiction. For example, in 1972, the U.S. Court of Appeals for the District of Columbia ruled that an alternative cannot be disregarded simply because it would require additional Congressional authorization. In 1974, the U.S. Court of Appeals for the Fifth Circuit ruled that the "agency must consider appropriate alternatives which may be outside its jurisdiction or control, and not limit its attention to just those it can provide."

¹⁵⁸ Proposed § 1502.14, 85 Fed. Reg. at 1720.

^{159 85} Fed. Reg. at 1702.

¹⁶⁰ 40 C.F.R. § 1502.14(c)

¹⁶¹ 43 Fed. Reg. 55,978, 55,984 (November 29, 1978).

¹⁶² See Natural Resources Defense Council, Inc. v. Morton, 458 F.2d 827, 834 (D.C. Cir. 1972) ("While we agree...that the alternatives required for discussion are those reasonably available, we do not agree that this requires a limitation to measures the agency or official can adopt.") See also Sierra Club v. Lynn, 502 F.2d 43, 62 (5th Cir. 1974) (an agency must consider appropriate alternatives which may be outside its jurisdiction or control, and not limit its attention to just those it can provide); and see Envtl. Def. Fund, Inc. v. Corps of Engineers of U.S. Army, 492 F.2d 1123, 1135 (5th Cir. 1974) (The imperative directive is a thorough consideration of all appropriate methods of accomplishing the aim of the action, including those without the area of the agency's expertise and regulatory control as well as those within it).

¹⁶³ Natural Resources Defense Council v. Morton, 458 F.2d 827, 834-36 (D.C. Cir. 1972) (alternative sources of energy had to be discussed, despite federal legislation indicating an urgent need for offshore leasing and mandating import quotas; Department of Interior had to consider reasonable alternatives to offshore oil lease which would reduce or eliminate the need for offshore exploration, such as increased nuclear energy development and changing natural gas pricing, even though that would require Congressional action.

¹⁶⁴ Sierra Club v. Lynn, 502 F.2d 43 (5th Cir. 1974).

3. The NPRM Rewrites "Purpose and Need" to Limit the Analysis of Alternatives

The NRPM will further limit the analysis of alternatives by improperly restricting the focus of the purpose and need statement. This change, like the entire proposed rule, must be withdrawn.

The NPRM proposes to rewrite the definition of purpose and need to focus on the specific goals of the applicant and diminish the assessment of alternatives. The definition would be changed to direct an agency to base the purpose and need "on the goals of the applicant and the agency's authority." The NPRM would also change the context of the "purpose and need" statement from meaningfully assessing all reasonable alternatives to supporting the approval of a specific proposed action that was chosen before the required NEPA review. 165 Neither change is acceptable.

Establishing an appropriate purpose and need statement is crucially important, because this statement "delimit[s] the universe of the action's reasonable alternatives." This is because "[o]nly alternatives that accomplish the purposes of the proposed action are considered reasonable, and only reasonable alternatives require detailed study. . . ." 167

As the Courts have long acknowledged:

"One obvious way for an agency to slip past the strictures of NEPA is to contrive a purpose so slender as to define competing "reasonable alternatives" out of consideration (and even out of existence).... If the agency constricts the definition of the project's purpose and thereby excludes what truly are reasonable alternatives, the EIS cannot fulfill its role. Nor can the agency satisfy the Act. 42 U.S.C. § 4332(2)(E)." ¹⁶⁸

Accordingly, the Courts have made it clear that an agency may not define a project so narrowly that it "forecloses a reasonable consideration of alternatives" or makes the final EIS "a foreordained

¹⁶⁵ 85 Fed. Reg. at 1720 (proposed changes to § 1502.13).

¹⁶⁶ Citizens Against Burlington v. Busey, 938 F.2d 190, 195 (D.C. Cir. 1991). See also Wyoming v. U.S. Dep't of Agric., 661 F.3d 1209, 1244 (10th Cir. 2011) ("how the agency defines the purpose of the proposed action sets the contours for its exploration of available alternatives."); Sierra Club v. U.S. Dep't of Transp., 310 F.Supp.2d 1168, 1192 (D. Nev. 2004) (citing City of Carmel-By-The-Sea v. U.S. Dep't of Transp., 123 F.3d 1142, 1155 (9th Cir. 1997)). ¹⁶⁷ Webster v. U.S. Department of Agriculture, 685 F.3d 411, 422 (4th Cir. 2012); Methow Valley Citizens Council v. Regional Forester, 833 F.2d 810, 815-16 (9th Cir. 1987).

¹⁶⁸ Simmons v. United States Army Corps of Eng'rs, 120 F.3d 664, 666 (7th Cir. 1997). See also City of Bridgeton v. FAA, 212 F.3d 448, 458 (8th Cir. 2000); City of Carmel-by-the-Sea v. United States Dep't of Transp., 123 F.3d 1142, 1155 (9th Cir. 1997) ("an agency cannot define its objectives in unreasonably narrow terms"); Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 195-96 (D.C. Cir. 1991), cert. denied, 502 U.S. 994 (1991) ("an agency may not define the objectives of its action in terms so unreasonably narrow that only one alternative from among the environmentally benign ones in the agency's power would accomplish the goals of the agency's action"); City of New York v. United States Dep't of Transp., 715 F.2d 732, 743 (2d Cir. 1983), cert. denied, 456 U.S. 1005 (1984) ("an agency will not be permitted to narrow the objective of its action artificially and thereby circumvent the requirement that relevant alternatives be considered"); Methow Valley Citizens Council v. Regional Forester, 833 F.2d 810, 815-16 (9th Cir. 1987) (impact statements must consider all reasonable alternatives that accomplish project purpose, but need not consider alternatives not reasonably related to purpose).

¹⁶⁹ Fuel Safe Washington v. Fed. Energy Regulatory Comm'n, 389 F.3d 1313, 1324 (10th Cir. 2004) (quoting Davis v. Mineta, 302 F.3d 1104, 1119 (10th Cir. 2002); Citizens' Comm. To Save Our Canyons v. U.S. Forest Serv., 297 F.3d 1012, 1030 (10th Cir. 2002); Friends of Southeast's Future v. Morrison, 153 F.3d 1059, 1066 (9th Cir. 1998) ("An agency may not define the objectives of its action in terms so unreasonably narrow that only one alternative from

formality."¹⁷⁰ Courts have also made clear that it is the agency, not the applicant that "bears the responsibility for defining at the outset the objectives of an action."¹⁷¹

The U.S. Court of Appeals for the Seventh Circuit explained the problems associated with focusing solely on an applicant's precise goals and preferred alternative—problems that would that would be vastly amplified by the changes proposed in the NPRM:

"This is a losing position in the Seventh Circuit.... The general goal of Marion's application is to supply water to Marion and the Water District—not to build (or find) a single reservoir to supply that water.... An agency cannot restrict its analysis to those 'alternative means by which a particular applicant can reach his goals.' This is precisely what the Corps did in this case. The Corps has 'the duty under NEPA to exercise a degree of skepticism in dealing with self-serving statements from a prime beneficiary of the project.' And that is exactly what the Corps has not shown in its wholesale acceptance of Marion's definition of purpose." 172

The U.S. Court of Appeals for the Ninth Circuit acknowledged that the Bureau of Land Management (BLM) had to consider the goals of a private applicant, but it pointed out that doing so "is a far cry from mandating that those private interests define the scope of the proposed project." The Court held that the purpose and need statement unlawfully narrowed BLM's examination of other alternatives to meet the applicant's objectives and thus eliminated from analysis reasonable alternatives that would have been responsive to BLM's own purpose and need. "The BLM adopted Kaiser's interests as its own to craft a purpose and need statement so narrowly drawn as to foreordain approval of the land exchange." 174

The NPRM's proposed changes to "purpose and need" allow—and indeed, attempt to direct—the agencies to so narrowly define purpose and need as to mirror the precise project proposed by the applicant (or proposed by an agency on behalf of a non-federal sponsor), and preemptively eliminate alternatives that are not the proposed action. This is in direct conflict with NEPA and well-settled case law that makes clear that "an agency may not define the objectives of its action in terms so unreasonably narrow that only one alternative from among the environmentally benign ones in the agency's power would accomplish the goals of the agency's action, and the EIS would become a foreordained formality." 1775

among the environmentally benign ones in the agency's power would accomplish the goals of the agency's action".); Simmons v. United States Army Corps of Eng'rs, 120 F.3d 664, 666 (7th Cir. 1997); City of New York v. United States Dep't of Transp., 715 F.2d 732, 743 (2d Cir. 1983), cert. denied, 456 U.S. 1005 (1984) (holding that "an agency may not narrow the objective of its action artificially and thereby circumvent the requirement that relevant alternatives be considered); Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 196 (D.C. Cir. 1991), cert. denied 502 U.S. 994 (1991).

¹⁷⁰ City of Bridgeton v. FAA, 212 F.3d 448, 458 (8th Cir. 2000) (quoting Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 196 (D.C. Cir. 1991), *cert. denied* 502 U.S. 994 (1991) (citing Simmons v. U.S. Army Corps of Eng'rs, 120 F.3d 664, 666 (7th Cir. 1997)).

¹⁷¹ See City of Angoon v. Hodel, 803 F.2d 1016, 1021 (9th Cir. 1986)

¹⁷² Simmons v. U.S. Army Corps of Engineers, 120 F.3d 664, 669 (7th Cir. 1997) (internal citations omitted).

¹⁷³ National Parks & Conservation Association v. Bureau of Land Management, 606 F.3d 1058. 1072 (9th Cir. 2010).

¹⁷⁴ Id. See also, Backcountry Against Dumps v. Chu, 215 F. Supp. 3d 966 (S.D. Cal. 2015) (Dept. of Energy unlawfully constrained purpose and need for permit for proposed transmission line to need outlined in permit application and discounted alternative of distributed generation.)

¹⁷⁵ Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 196 (D.C. Cir. 1991).

E. The NPRM Creates Improper Barriers to Public Engagement and Input, and Encourages Agencies to Ignore Public Input

The NPRM proposes extensive changes to the regulations that are designed to make it much harder for the public to meaningfully participate in the NEPA process, and much easier for agencies to ignore public comments. These changes, like the entire proposed rule, must be withdrawn.

Public involvement is a critical component of NEPA.¹⁷⁶ However, CEQ's proposed regulations attempt to limit meaningful public involvement at every turn, while making it easier for private applicants to pave their own way towards easy approval of potentially impactful projects without proper public oversight. This is counter to NEPA's purpose for informed decision-making.

Overall, the proposed regulations are designed to keep the public in the dark, and to make it hard for potentially under resourced members of the public to meaningfully participate in the NEPA process. Indeed, references to the public are notably scrubbed from the proposed regulations. For instance, the current mandate to "[e]ncourage and facilitate public involvement in decisions which affect the quality of the human environment" has been removed.

Foremost, the proposed rule attempts to shortchange what is considered under NEPA, and the time and length of that consideration. For example:

- The public would have no opportunity at to review and provide input on the many actions that the NPRM attempts to exclude from NEPA coverage altogether. As discussed above, this includes the proposed narrowing of the scope of federal actions considered to be "major federal actions" to eliminate review of so-called "minor" projects that may have a significant effect on the environment.
- The public would have no, or extremely limited, opportunity to provide input on any projects
 deemed to covered by the NPRM's massive expansion of the use of "functional equivalents."
 This particularly hurts members of the public with fewer resources who may be unaware of
 instances where a separate permitting or other federal process will be deemed to be
 appropriate for use in place of NEPA review, allowing a project to barrel ahead with little or no
 meaningful chance for public input.
- The public would have no, or extremely limited, opportunity to provide input on any projects covered by the NPRM's significant expansion of categorical exclusions. For instance, the proposed regulations would allow agencies to create a process to apply categorical exclusions established by other agencies, ¹⁷⁸ but there are no parameters around what this process is to

¹⁷⁶ Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989) ("The statutory requirement that a federal agency contemplating a major action prepare such an environmental impact statement serves NEPA's "action-forcing" purpose in two important respects. . . . It ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision." (emphasis added)).

¹⁷⁷ 40 CFR 1500.1(b).

¹⁷⁸ Proposed § 1507.3 (e)(5), 85 Fed. Reg. at 1727-28.

entail or the level of public involvement needed in that process—if any. Once a project falls under a categorical exclusion, the opportunity for public input is gone.

- The public's opportunity to provide input is significantly hampered by the NPRM's extensive narrowing of the effects and alternatives analyses. These restrictions will result EISs or EAs that will be much less detailed and that will discuss many fewer impacts and alternatives. As a result, the public will be far less informed about a project and less able to provide meaningful comment, especially members of the general public who may lack technical expertise or the time and resources to do independent analysis on their own.
- The public's ability to meaningfully participate will also be hampered by the NPRM's arbitrary and unrealistic time and page length limits (e.g., proposed § 1501.5(e) limits EAs to 75 pages; proposed § 1502.7 limits EISs to 150 pages or complex EIS's to 300 unless a political level exception is made; proposed § 1501.10 establishes time limits of one year for preparation of an EA, or two years for an EIS). The arbitrary page limits constrain the amount of information available to the public. But perhaps even more harmfully, the arbitrarily short time limits provide very limit room for public comment, especially for more complex projects. Commenters without extensive resources will not have time to separately analyze, consider, and meaningfully comment on projects that are rushed through with short comment windows and inflexible time periods. In many cases, the public simply will not be able to consider and weigh in on projects with potentially severe impacts on the environment.
- The 30-day time limit to public comment for EISs simply does not provide adequate time, even for many well-resourced members of the public, much less those less well-resourced, to meaningfully evaluate a complex project.¹⁷⁹
- Adding to this, the NPRM creates the possibility that agencies will circulate inadequate or incomplete draft EIS's for public comment, which will would make it more difficult, or even impossible, for the public to meaningfully evaluate a federal action—especially under the tight time limits established by the NPRM. The NPRM states that a draft EIS need only meet the requirements of NEPA "to the fullest extent practicable." Existing regulations, directly echoing the statute, require that a draft EIS comply with NEPA "to the fullest extent possible." By changing this requirement to the less stringent "fullest extent practicable," the NPRM will expand agency discretion to distribute an inadequate or incomplete draft EIS.
- The NPRM's increased reliance on electronic participation (e.g., proposed § 1503.1(c) for agency comment; proposed § 1506.6(c) allowing public hearings and public meetings to be held electronically) could have disproportionately negative impacts on communities without access to the internet, and on disadvantaged members of the public who may lack ready access to electronic communication or media.

With the backdrop of a rushed process and less information being considered, the proposed regulations add provisions that place new burdens on members of the public seeking to provide comments by increasing the need for those comments to be both highly specific and technical. This creates a

¹⁷⁹ Proposed § 1503.1(b), 85 Fed. Reg. at 1722.

¹⁸⁰ Proposed § 1502.9(b) (emphasis added), 85 Fed. Reg. at 1718.

^{181 40} CFR 1502.9(a).

particularly heavy burden on under-resourced members of the public. These changes would also make it easier for agencies to brush aside public comments on the flawed grounds that those comments were not "specific enough." For example:

- Proposed Section 1503.3 ("Specificity of Comments") improperly demands a high degree of detail in public comments, including a requirement that the public show "why the issue raised is significant to the consideration of potential environmental impacts and alternatives to the proposed action, as well as economic and employment impacts, and other impacts affecting the quality of the human environment," and that comments should "include or describe the data sources and methodologies supporting the proposed changes." 182 Additionally, the proposed regulations state that commenters "should identify any additional alternatives, information, or analyses not included in the draft environmental impact statement, and shall be as specific as possible." 183 It is not the public's duty to provide detailed technical comments, analyze the impacts of a project, suggest reasonable alternatives, analyze employment and economic considerations, and come up with methodologies for doing so. This is clearly the responsibility of the agencies. Placing these burdens on the public violates both the plain language and clear intent of NEPA.
- Proposed Section 1503.4 ("Response to Comments") seeks to limit both agency consideration of, and agency response to, public comments. This section states that the agency need only consider "substantive" comments, but does not define what this means. This appears to be designed to let the agency ignore comments that it deems to be not substantive, which would be a dramatic rollback from the current regulations, which state that agencies "shall assess and consider comments." 184 This, paired with the level of technical expertise outlined in proposed Section 1503.3, seems to imply that comments that do not lay out detailed analyses and methodologies may be dismissed entirely. Proposed Section 1503.4 also says that the agency only "may" respond to comments, a dramatic rollback from the current regulations which state that the agency "shall" respond to comments. This means that the public may be left totally in the dark as to whether comments were considered at all, or why comments were dismissed. CEQ further seeks to limit its obligation to explain why comments do not warrant further agency responses by proposing to strike the requirement that an agency cite "sources, authorities, or reasons which support the agency's position [that a comment doesn't warrant further response] and, if appropriate, indicate those circumstances which would trigger agency reappraisal or further response." 185

Thus, the proposed regulations would dramatically increase the amount of technical knowledge required by members of the public to ensure that the comments will be considered. Many members of the public who have vital information to share, but lack resources or technical expertise, are at risk of having their comments totally dismissed. At the same time, the proposed rule would decrease the amount of technical and other information that well-resourced, expert agencies must provide to explain why they are not considering or dismissing comments.

¹⁸² Proposed § 1503.3(a), 85 Fed. Reg. at 1722.

¹⁸³ Proposed § 1503.3(b), 85 Fed. Reg. at 1722.

¹⁸⁴ 40 CFR 1503.4.

¹⁸⁵ 40 CFR 1503.4(5).

This turns NEPA on its head. It is also contrary to case law. Courts have found that the public only needs to "provid[e] sufficient notice to the [Agency] to afford it the opportunity to rectify the violations that the plaintiffs have alleged." More than this "might unduly burden those who pursue administrative appeals unrepresented by counsel, who may frame their claims in non-legal terms rather than precise legal formulations." The proposed regulations would create hurdles to public comment that impermissibly limit public participation, and must be withdrawn.

The proposed regulations go even further in stifling public input and engagement in the NEPA process by stating that comments will deemed to be "exhausted and forfeited" if they are not "raised within 30 days of the publication of the notice of availability of the final environmental impact statement" 188 and by attempting to allow agencies to create a "conclusive presumption that the agency has considered the information" provide in public and agency comments. 189 These provisions attempt to place additional burdens on the public, including requiring the public to re-raise objections if their comments on the draft EIS were ignored or not fully addressed. Proposed § 1502.18 190 also seeks to allow federal agencies to deem that they have in fact considered all information and comments provided to the public simply by certifying that they did so. In addition to CEQ's lack of authority to create such a presumption, the extensive body of case law highlighting the failure of agencies to comply with NEPA makes it clear that such an approach would be absurd on its face.

F. The NPRM Eliminates Vital Conflict-of-Interest Safeguards

In addition to curtailing the ability of the public to be involved, the proposed rules give unprecedented and impermissible license for applicants to prepare their own NEPA documents while removing common sense safeguards that protect against obvious conflicts of interests. ¹⁹¹ In addition to making NEPA a self-serving exercise controlled by the project proponent, this contravenes the long-standing principle that the "primary and nondelegable responsibility" for considering environmental values "lies with the agency." ¹⁹²

Currently, NEPA regulations contemplate a robust role for the applicant, including involving the applicant in assessments prepared by the agency, ¹⁹³ assisting the applicant in supplying information needed to conduct any NEPA analysis, ¹⁹⁴ and clarifying that there is no "prohibit[ion on] any agency from requesting any person to submit information to it or to prohibit any person from submitting information to any agency." ¹⁹⁵ Yet, the regulations very sensibly require that any contractor preparing an EIS "be chosen solely by the lead agency, or by the lead agency in cooperation with cooperating agencies, or where appropriate by a cooperating agency to avoid any conflict of interest." ¹⁹⁶ Similarly, to further ensure there is no conflict of interest, the current regulations require that, "Contractors shall

¹⁸⁶ Native Ecosystem Council v. Dombeck, 304 F.3d 886, 899 (9th Cir. 2002).

¹⁸⁷ Id.

¹⁸⁸ Proposed § 1503.3, 85 Fed. Reg. at 1722 (also referring to Proposed § 1500.3, 85 Fed. Reg. at 1713)

¹⁸⁹ Proposed § 1502.18, 85 Fed. Reg. at 1720.

¹⁹⁰ ld.

¹⁹¹ 85 Fed. Reg. at 1725 (proposed §1506.5).

¹⁹² Greene County Planning Board v. FPC, 455 F.2d 412, 420 (2d Cir. 1972), cert. denied, 409 U.S. 849 (1972).

¹⁹³ 40 C.F.R. § 1501.4(b).

¹⁹⁴ 40 C.F.R. § 1506.5(a).

¹⁹⁵ 40 C.F.R. § 1506.5(c).

¹⁹⁶ 40 C.F.R. § 1506.5(c).

execute a disclosure statement prepared by the lead agency, or where appropriate the cooperating agency, specifying that they have no financial or other interest in the outcome of the project." ¹⁹⁷

The current regulations closely adhere to case law which makes clear that the agency must ensure that it "independently evaluate[s] the information" submitted by the applicant and "shall be responsible for its accuracy." As well as the fact that NEPA must serve the public interest, not private interests. Courts have held that NEPA "demand[s] exploration of alternatives free of contractual arrangements. The public interest in the environment cannot be limited by private agreements." And that NEPA requires agencies to evaluate "alternative means to accomplish the general goal of an action," not the "means by which a particular applicant can reach his goals."

The proposed regulations blow apart the balance struck in the current regulations between allowing applicants a role in providing timely and meaningful information to the agency and protecting against self-dealing. Instead, CEQ seeks to open the door to do-it-yourself NEPA review and wipe away meaningful safeguards protecting the public from conflicts-of-interest. For instance:

- CEQ proposes to explicitly permit applicants to prepare their own NEPA documents, including both EAs and EISs.²⁰¹ This do-it-yourself approach is not currently allowed.
- CEQ proposes to remove the requirement that agencies, rather than the applicant, choose a
 contractor to prepare an environmental impact statement. Contractors chosen by applicants
 have an evident interest in producing a result that will please the applicant which has hired
 them. Allowing these relationships creates unavoidable conflicts of interests.
- CEQ proposed to remove safeguards that the lead or cooperating industry seek a disclosure statement from contractors that they do not have a conflict-of-interest in the project. Removing this not only makes such a conflicts more likely, but keeps the public in the dark regarding what potential conflicts a preparer might have.

While CEQ does propose language that the agency must "independently evaluate [NEPA documents prepared by an applicant or contractor] prior to its approval, and take responsibility for its scope and contents," 202 this language rings hollow. Agencies are often understaffed and under-resourced, making it particularly difficult to fully assess information prepared without transparency and without meaningful public input under the unrealistic time frames imposed by the NPRM. Agencies very likely will not have the time, resources, or public oversight necessary to ensure that documents prepared by obviously self-interested parties are objective, thorough, adequately consider impacts and alternates, and provide the

¹⁹⁷ 40 C.F.R. § 1506.5(c).

¹⁹⁸ City of Roseville v. Norton, 219 F. Supp. 2d 130, 165-66 (D.D.C. 2002) (citation omitted); *see also* Utahns for Better Transp. v. U.S. Dept. of Transp., 305 F.3d 1152, 1165 (10th Cir. 2002) (Department of Transportation violated NEPA because the administrative record contained no evidence that the agency verified the project applicant's cost estimates regarding the feasibility of a potentially viable alternative); Southern Utah Wilderness Alliance v. Norton ("SUWA"), 237 F. Supp.2d 48, 53-4 (D.D.C. 2002) (court remanded a BLM decision approving an applicant-prepared environmental assessment for a seismic exploration project where the record failed to demonstrate that the agency had conducted an independent analysis of alternatives to the proposed action. The court found that "BLM neither conducted nor commissioned an independent analysis of alternatives" and therefore violated NEPA).

¹⁹⁹ Simmons v. United States Army Corps of Engineers, 120 F.3d 664, 669-70 (7th Cir. 1997).

²⁰⁰ Van Abbema v. Fornell, 807 F.2d 633, 638 (7th Cir. 1986).

²⁰¹ 85 Fed. Reg. at 1725 (proposed § 1506.5 (b) & (c)).

²⁰² 85 Fed. Reg. at 1725 (proposed § 1506.5 (c)(2)).

meaningful analysis needed for informed decision-making. The fact of the matter is that in many cases, these do-it-yourself analyses with inherent conflicts-of-interest will receive quick sign off from many agencies without much scrutiny or oversight.

The ongoing study of the Pearl River Basin, Mississippi Federal Flood Risk Management Project (the Pearl River Project), which is being prepared by the project's non-federal sponsor, provides a stark example of some of the many problems that can arise when a project proponent develops its own NEPA documents.

Notably, as highlighted the U.S. Fish and Wildlife Service, the non-federal sponsor has recommended construction of the most damaging alternative identified in its draft EIS. ²⁰³ That alternative would construct a new low-head dam on the Pearl River and dredge 25 million cubic yards of sediment—enough to fill 7,500 Olympic size swimming pools—to transform a 10 mile stretch of riverine ecosystem into a 1,900-acre impoundment. The dredged sediment will then be used to raise and build a number of large levees and bury floodplain habitat to create new land for development purposes. More than 2,500 acres of wildlife habitat, including at least 1,500 acres of vital bottomland hardwood wetlands, would be destroyed and 1,900 acres of diverse in-stream riverine habitat and ecologically vital small streams will be turned into an impoundment. Hundreds of species of fish and wildlife will be adversely affected. At least 8 toxic sites would be dug up in and near the project footprint, including 2 Superfund sites, 3 Hazardous-Waste sites, and 3 other highly contaminated sites. The Mississippi Department of Transportation has determined that the project proponent's selected alternative would cause the "catastrophic failure" of 9 bridges. ²⁰⁴

The process used to develop this draft EIS has also been rife with problems. The public has been denied timely access to basic planning information; the public comment period was barely publicized and was run haphazardly at best; the mandatory Independent External Peer Review (required because this project is supposed to be subject to the legal requirements applicable to federal water resources projects planned by the U.S. Army Corps of Engineers) has not been released; the Environmental Protection Agency never commented on the draft EIS because the draft was never noticed in the Federal Register; and the public, federal agencies, and the non-federal sponsor itself are completely unclear on the parameters and requirements of the planning process being used.²⁰⁵

The NPRM provisions allowing applicants to write their own NEPA reviews and eliminating other vital conflict-of-interest safeguards, like the entire NPRM, should be withdrawn.

²⁰³ U.S. Fish and Wildlife Service, Fish and Wildlife Coordination Act Report for the Pearl River Basin, Mississippi Federal Flood Risk Management Project Hinds and Rankin Counties, MS (January 2020). This report is provided at Attachment 20 to these comments.

²⁰⁴ Letter from the Mississippi Department of Transportation to the Rankin-Hinds Pearl River Flood Control & Drainage Control District (September 5, 2018); September 6, 2018 Comments of the National Wildlife Federation on the Integrated Draft Feasibility Study & Environmental Impact Statement Pearl River Basin, Mississippi Federal Flood Risk Management Project Hinds & Rankin Counties, MS; September 5, 2018 Comment Letter from 56 groups on the Pearl River Project. These letters are provided at Attachments 21, 22, and 23, respectively, to these comments.

²⁰⁵ See July 3, 2018 Letter from 25 Organizations to Col. Derosier, Commander Vicksburg District, U.S. Army Corps of Engineers. A copy of this letter is provided at Attachment 24 to these comments.

Conclusion

The National Wildlife Federation urges CEQ to withdraw the NPRM and retain the existing the existing CEQ regulations that properly implement NEPA. As detailed in these comments, the changes proposed in the NPRM are illegal and strike at the very heart of NEPA's goals and mandates. In the short term, they will create confusion and extensive litigation. In the long-term they will result in federal actions that cause significant harm to people, wildlife, and the environment.

Sincerely,

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