***D R A F T #3 8/13/19 D R A F T #3 8/13/19***

 Date

Ms. Mary Neumayr, Chairman

Council on Environmental Quality

730 Jackson Place, N.W.

Washington, D.C. 20503

 ATTENTION: DOCKET NO. CEQ-2019-0002

Dear Ms. Neumayr:

This letter represents the collective views of \_\_\_ organizations representing more than \_\_\_\_ people. Our members urge the Council on Environmental Quality (CEQ) to act responsibly and wisely in its interpretation of the National Environmental Policy Act (NEPA) so that future generations may live on this planet in “productive and enjoyable harmony” with the environment as envisioned by Congress when it passed NEPA.[[1]](#footnote-1)

1. **INTRODUCTION**

CEQ’s draft “NEPA Guidance on Consideration of Greenhouse Gas Emissions,” published in the *Federal Register* on June 26, 2019, fails to meet the challenges that our nation and the world face in regards to the climate crisis and associated environmental effects of Greenhouse Gas (GHG) emissions.[[2]](#footnote-2) It does not acknowledge that climate change is relevant to virtually all federal decisions, whether or not those decisions cause greenhouse gas emissions, because of the hotter and drier conditions, rising sea levels, ocean acidification, declining mountain snowpack, disappearing Arctic sea ice, and an unraveling of ecological systems. It fails to inform agencies of the latest scientific analyses regarding climate change and relevant judicial decisions. It fails to offer practical guidance about methodology, scope of analysis, and upstream and downstream effects. It fails to identify the clear requirement to consider alternatives that would lessen climate change and GHG emissions impacts and to identify and analyze reasonable mitigation measures. It omits any discussion of agency consideration of resilience and adaptation measures that might be integrated into an agency’s proposal or considered through alternatives analysis. It fails to address particular issues associated with land and resource management actions, such as how to approach the analysis of biogenic sources of carbon. It omits any discussion of the need for special attention to the impacts of climate change and GHG emissions, including health impacts, on vulnerable populations. It fails to do more than allude to the possibility of programmatic analyses and tiering. It fails to address the issue of incomplete and unavailable information. It even fails to offer much information about the NEPA process itself. Devoid of substance, the draft guidance fails to even acknowledge or use the phrase “climate change” entirely.

Below we present our specific concerns and recommendations for improving the guidance in its final form. We urge CEQ to consider each of these issues carefully in light of, in NEPA’s words, your responsibility as “trustee of the environment for succeeding generations.”[[3]](#footnote-3)

1. **THE DRAFT GUIDANCE FUNDAMENTALLY FAILS TO RECOGNIZE THE PURPOSE OF NEPA AND THE GRAVITY OF THE CLIMATE CRISIS**

Contrary to the tone and content of the draft guidance, NEPA is not just a procedural statute and climate change is not just another environmental impact. The NEPA process has a specific purpose, which is to ensure not only that government agencies make informed decisions, but also that “federal agencies act according to the letter and spirit of the Act.”[[4]](#footnote-4) CEQ must remember that the purposes of the Act include promoting “efforts which will prevent or eliminate damage to the environment and biosphere” and that “protect, restore, and enhance the environment.”[[5]](#footnote-5) It is equally important to reflect on this country’s national environmental policies, set forth in NEPA. Those policies include fulfilling the responsibilities of each generation as trustee of the environment for succeeding generations.[[6]](#footnote-6) Without robust consideration of climate change and GHG emissions in federal decisions, the government abdicates its statutory responsibility to use all practicable means and measures to act as a trustee for future generations.

NEPA itself mandates that “the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this Act,”[[7]](#footnote-7) and NEPA’s implementing rules further provide that NEPA is intended “to foster excellent action” and to “take actions that protect, restore, and enhance the environment.”[[8]](#footnote-8) Sadly, the draft guidance, which characterizes NEPA as only a procedural statute and seeks to assure agencies that they need not give greater consideration to climate effects than any other potential types of effects, undermines the intent of the law. Federal courts’ focus on enforcement of NEPA’s procedural requirements does not prevent this administration from robust utilization of NEPA’s authorities to identify opportunities to mitigate current climate trends and environmental impacts from GHG emissions.

 NEPA’s mandate and mission are especially critical in the context of the climate crisis. Hardly a new phenomenon, global warming as a possible result of GHG emissions was predicted in 1896 by Svante Arrhenius, a Swedish chemist.[[9]](#footnote-9) By the 1950’s, scientists began better understanding the implications of the release of GHGs and realized that ocean absorption would not stabilize the level of rising gases[[10]](#footnote-10) and would additionally lead to highly problematic impacts on ocean ecology through consequent ocean acidification.[[11]](#footnote-11) CEQ’s first Annual Report, transmitted by President Nixon to Congress in August, 1970, contained a chapter discussing human-caused climate change. The recommendations contained in CEQ’s report encompassed not only additional research efforts, but also recommended that “[w]orldwide recognition should be given to the long-term significance of manmade atmospheric alterations.”[[12]](#footnote-12) Indeed, President Nixon’s prophetic message to Congress in 1970 stated that:

The basic causes of our environmental troubles are complex and deeply imbedded. They include: our past tendency to emphasize quantitative growth at the expense of qualitative growth; the failure of our economy to provide full accounting for the social costs of environmental pollution; the failure to take environmental factors into account as a normal and necessary part of our planning and decisionmaking; the inadequacy of our institutions for dealing with problems that cut across traditional political boundaries; our dependence on conveniences, without regard for their impact on the environment; and more fundamentally, our failure to perceive the environment as a totality and to understand and to recognize the fundamental interdependence of all its parts, including man himself.[[13]](#footnote-13)

 Many decades and hundreds of scientific reports later, there is consensus regarding the causes and effects of global climate change and GHG emissions and the urgent need to act to avert dangerous disruptions. In the latest report from the United Nation’s Intergovernmental Panel on Climate Change (IPCC)[[14]](#footnote-14), scientists from around the globe explained with “high confidence” that, among other things:

* Global warming is likely to reach 1.5°C between 2030 and 2052 if it continues at the current rate.[[15]](#footnote-15)
* Warming greater than the global annual average is being experienced in many land regions and seasons, including two to three times higher in the Arctic. Warming is generally higher over land than over the ocean.[[16]](#footnote-16)
* Impacts on natural and human systems from global warming have already been observed. Many land and ocean ecosystems and some of the services they provide have already changed due to global warming. Future climate-related risks may be long-lasting or irreversible, such as the loss of some ecosystems.[[17]](#footnote-17) High-latitude tundra and boreal forests are particularly at risk of climate change-induced degradation and loss, with woody shrubs already encroaching into the tundra.[[18]](#footnote-18)
* Any increase in global warming is projected to affect human health, with primarily negative consequences. Lower risks are projected at 1.5°C than at 2°C for heat-related morbidity and mortality . . . . Risks from some vector-borne diseases, such as malaria and dengue fever, are projected to increase with warmings from 1.5°C to 2°C, including potential shifts in their geographic range.[[19]](#footnote-19)
* Pathways limiting global warming to 1.5°C with no or limited overshoot would require rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems.[[20]](#footnote-20)
* Future climate-related risks would be reduced by the upscaling and acceleration of far-reaching, multilevel and cross-sectoral climate mitigation and by both incremental and transformational adaptation.[[21]](#footnote-21)
* Ocean acidification and ocean chemistry changes associated with GHG emissions and global temperature changes are projected to intensify at 1.5°C to 2°C warming results and have already increased the frequency of “dead zones” where oxygen is not sufficient to support oxygenic life.[[22]](#footnote-22)

 Climate change – and all of its implications for natural systems, our public lands, wildlife, livability of major urban areas and communities, human health, the economy and social systems – is the overarching environmental issue of this century. It is not just another environmental effect.

**III. THE DRAFT GUIDANCE FAILS TO OFFER CLEAR GUIDANCE REGARDING THE AGENCIES’ OBLIGATION TO QUANTIFY GHG EMISSIONS AND TO ASSESS THEIR EFFECTS ON THE HUMAN ENVIRONMENT**

1. Overview

 As the draft guidance acknowledges, the guidance does not and cannot change the nature or scope of legal requirements associated with NEPA and climate change effects. What the guidance does not but should do is offer appropriate, useful guidance to the agencies on how to go about complying with those requirements. It fails to discuss either the significance of climate change and associated environmental impacts as identified by evolving science or the growing body of NEPA caselaw on the issue. It offers almost none of the guidance and assistance that CEQ’s earlier guidance[[23]](#footnote-23) provided.

 Indeed, the removal of the term climate change from the title sets the tone for the remainder of the guidance: a very cursory approach seemingly intended to allow agencies to shirk their responsibilities and affording largely unbridled deference to the agencies’ judgment. The draft text provides minimum direction and maximum flexibility to agencies. For example, the statements that agencies should “assess effects when a sufficiently close casual relationship exists between the proposed action and the effect,” that agencies should attempt quantification of projected direct and indirect GHG emissions when the potential amount of the projected emission is “substantial enough to warrant quantification,” and “when practicable to quantify them” should be starting, not ending, points of the discussion. Lacking that discussion, the guidance risks arbitrary and inconsistent approaches by agencies.

 The guidance is notable for its absence of any discussion about the very issues that agencies are clearly struggling with today. For example, the guidance fails to address the extent to which upstream and downstream GHG emissions of pipelines intended to transport various types of fuel should be analyzed under NEPA. Despite reasonably clear guidance from federal court decisions, the draft guidance leaves it up to agencies to determine when a “sufficiently close causal relationship exists between the proposed action and the effect.”[[24]](#footnote-24) But how does the agency know if such a relationship exists? The draft should note, for example, the obligation of agencies under both CEQ’s own regulations and relevant case law to make reasonable efforts to obtain quantitative information that would facilitate meaningful analysis.[[25]](#footnote-25)

 Similarly, the guidance is silent on the fact that NEPA directs agencies to “provid[e] a clear basis for choice among options by the decisionmaker and the public.”[[26]](#footnote-26) CEQ should explain that, in the context of comparing the climate impacts between action and no action alternatives, this regulation frequently requires analysis of relevant energy markets and how changes in supply can affect price and use of a commodity such as coal, oil, or gas. The guidance should also explain that agencies cannot avoid analysis of climate change impacts for a particular proposal by arguing that should the “no action” alternative be chosen, another development would be substituted to meet market demand and that development would produce an equal or similar amount of GHG emissions, thus making the net effect of the proposed action’s contribution to climate change zero.[[27]](#footnote-27) The guidance should also remind agencies that they must utilize available tools and methodologies to analyze a common set of facts regarding both the beneficial and adverse impacts of the proposed action.[[28]](#footnote-28)

1. Quantification of Emissions

The draft guidance continues to sanction the use of GHG emissions as “a proxy for assessing potential climate effects.”[[29]](#footnote-29) However, agencies have the obligation to quantify GHG emissions, if feasible, from proposed actions and compare them to local, regional, and national emissions.[[30]](#footnote-30)

The draft guidance also states that, “Agencies are not required to quantify effects where information necessary for quantification is unavailable, not of high quality, or the complexity of identifying emissions would make quantification overly speculative.”[[31]](#footnote-31) While this statement is followed by a reference to CEQ’s regulation on “Incomplete or Unavailable Information,”[[32]](#footnote-32) it fails to accurately characterize that regulation’s content. The term “overly speculative” is not found in that regulation. While there are times when a qualitative analysis and an explanation of why a quantitative analysis is not warranted is appropriate and sufficient, the other relevant requirements in that same regulation need to be highlighted in the final guidance.

The courts have warned against agencies hiding behind the rubric of uncertainty to avoid any type of analysis of climate change. For example, in Mid States Coalition for Progress v. Surface Transportation Board,[[33]](#footnote-33) the Court of Appeals for the Eighth Circuit dealt with the proposed expansion of a railroad specifically intended to transport low-sulfur coal. The Court addressed the lead agency’s reluctance to characterize climate change impacts because of uncertainty as to its extent. The Court stated that:

. . . when the DM E [the applicant] argues in its brief that "if the increased availability of coal will ‘drive' the construction of additional power plants . . . the [Board] would need to know where those plants will be built, and how much coal these new unnamed power plants would use. Because DM E has yet to finalize coal-hauling contracts with any utilities, the answers to these questions are pure speculation — hardly the reasonably foreseeable significant impacts that must be analyzed under NEPA." Even if this statement is accurate (the Sierra Club has asserted that it is not), it shows only that the *extent* of the effect is speculative. The *nature* of the effect, however, is far from speculative. As discussed above, it is reasonably foreseeable — indeed, it is almost certainly true — that the proposed project will increase the long-term demand for coal and any adverse effects that result from burning coal.

Contrary to DM E's assertion, when the *nature* of the effect is reasonably foreseeable but its *extent* is not, we think that the agency may not simply ignore the effect. The CEQ has devised a specific procedure for "evaluating reasonably foreseeable significant adverse effects on the human environment" when "there is incomplete or unavailable information."[[34]](#footnote-34)  First, "the agency shall always make clear that such information is lacking." *Id.* Then, "[i]f the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known," the agency must include in the environmental impact statement: (1) A statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.[[35]](#footnote-35)

The final document published by CEQ should provide meaningful guidance on these requirements.

1. Analysis of Environmental Impacts, Including Related Economic, Health, and Social Effects

All agencies must do far more than simply quantify GHGs. Agencies must communicate the “*actual* environmental effects resulting from … emissions” of greenhouse gasses, not just quantify them.[[36]](#footnote-36)Today, with far better analysis of climate change and the associated environmental effects from increased GHG emissions at national and regional levels, the agencies, in many situations, should be able to move from the identification of and quantification of GHG emissions to the analysis of the effect of those emissions, such as quantified environmental and economic impacts of ocean acidification on fisheries and tourism.

The administration’s own U.S. Global Change Research Program produced its Fourth National Climate Assessment in November 2018 (NCAS4). The NCAS4 is an extremely useful, comprehensive report that analyzes environmental and related social and economic effects of climate change for 10 regions of the United States.[[37]](#footnote-37) The report is specifically written to help inform decisionmakers, among others, about the effects of climate change in ways that are relevant and informative to NEPA analyses. While it is necessary and appropriate for agencies to identify gaps in current knowledge and reflect on the strength of confidence about predictive analysis, to suggest at this point that a projection of GHG emissions is the default standard for an adequate analysis of climate change and associated environmental effects is grossly inadequate.[[38]](#footnote-38)

One simple example from NCAS4 underscores the gross inadequacy of this default standard: if fishpond managers on the island of Molokai in the state of Hawaii can take it upon themselves to integrate knowledge from climate scientists with their traditional knowledge to adjust management of the ponds,[[39]](#footnote-39) then large federal agencies, such as the Bureau of Land Management and U.S. Army Corps of Engineers, can certainly do better than routinely fixating on GHG emission calculations to the exclusion of a hard look at climate change and associated environmental impacts, and they need to do so.

We want to stress that ocean acidification resulting from GHG emissions has been demonstrated through quantified studies, models, and as well as currently observable effects, to drastically impact fisheries around the world, including grave economic damage to Pacific, Atlantic, and Gulf of Mexico fisheries in the United States.[[40]](#footnote-40) Oyster farms on the west coast in Oregon have already experienced large die-offs from pH changes[[41]](#footnote-41) and scallop fisheries in the Atlantic have been projected to suffer losses from ocean acidification at various modeled levels of GHG emissions including one where emissions fall due to aggressive climate change policy.[[42]](#footnote-42) Ocean acidification is not addressed by the social cost of carbon protocol so its impacts must be addressed separately, should the final guidance include direction on use of that methodology.[[43]](#footnote-43)

 The bald statement that, “[a] ‘but for’ causal relationship is not sufficient” is not helpful in providing agencies the guidance they need on when to assess climate effects. Obviously, every proposed federal action that comes under NEPA, including, for example, an agency’s own proposed regulations or land management plan – actions that inarguably require compliance with NEPA – would not be federal actions “but for” the federal agency’s involvement. As the Court of Appeals for the Ninth Circuit stated in a case dealing with a proposed housing development in the Sonoran Desert:

Although the Corps’ permitting authority is limited to those aspects of a development that directly affect jurisdictional waters, it has responsibility under NEPA to analyze all of the environmental consequences of a project. Put another way, while it is the development’s impact on jurisdictional waters that determines the scope of the Corps’ permitting authority, it is the impact of the permit on the environment at large that determines the Corps’ NEPA responsibility. The Corps’ responsibility under NEPA to consider the environmental consequences of a permit extends even to environmental effects with no jurisdictional waters at all.[[44]](#footnote-44)

The guidance needs to be modified to not only provide for quantification of GHG emissions, but to also clearly require analysis of the consequences of climate change.

1. The Social Cost of Carbon

The guidance provides inaccurate and counterproductive direction advising agencies to omit analysis of societal impacts of a project’s GHG emissions in most circumstances. As noted above, after a federal agency discloses the amount of GHG emissions associated with a proposed project, the agency must then also assess the impact that those emissions have on the environment. The social cost of carbon protocol[[45]](#footnote-45) and social cost of methane protocols[[46]](#footnote-46) (referred to collectively here and in the guidance as “social costs” or “social cost of carbon”) are appropriate tools for federal agencies to use in project-level NEPA reviews. Developed by more than a dozen federal agencies and offices, the Interagency Working Group on the Social Cost of Greenhouse Gases’ (“IWG”) social cost of carbon protocol is an extremely conservative estimate – i.e., its models and assumptions substantially underestimate the actual costs of carbon pollution.[[47]](#footnote-47)

These protocols provide a conservative estimate of the economic damage, in dollars, caused by each incremental ton of carbon dioxide (or methane, respectively) emitted into the atmosphere, including impacts such as increased drought, wildfires, decreased agricultural productivity, and sea level rise, among others. By translating climate impacts, and tons of GHG emissions in particular, into dollars, the social cost of carbon offers federal agencies an easy to use and easy to understand tool that would allow the public and decisionmakers to better understand the climate impacts of agency decisions.

 In cases addressing the climate impacts of coal mine expansions or natural gas pipelines, where the agency’s NEPA analysis quantified GHG emissions but claimed that it was impossible to discuss the effects thereof, federal courts have not only noted the availability of the social cost of carbon methodology but have either found that plaintiff’s argument that the agency should have utilized it were “more persuasive than the arguments of Defendants”[[48]](#footnote-48) or that the agency was obligated to explain why it was not using it.[[49]](#footnote-49)

CEQ’s draft guidance offers only unavailing justifications for directing agencies not to use the social cost of carbon protocol to analyze the climate impacts of federal actions. First, CEQ notes that NEPA does not require agencies to prepare a cost-benefit analysis.[[50]](#footnote-50) This statement is true but irrelevant. NEPA does not, of course, require agencies to monetize adverse impacts in all cases,[[51]](#footnote-51) but agencies need not prepare a cost benefit analysis for the social cost of carbon to be useful to the public and decisionmakers. NEPA requires agencies to analyze the reasonably foreseeable effects of their decisions. These effects necessarily include an analysis of economic and social effects interrelated to environmental effects,[[52]](#footnote-52) and the social cost of carbon provides one method for agencies to conduct this analysis. In the absence of another available method, and the guidance offers none, the social cost of carbon remains a useful way to analyze and understand the climate and environmental impacts of agency action. Thus, an agency’s duty to use the social cost of carbon is operative even in the absence of a traditional cost-benefit analysis. The social cost of carbon is, in these instances, a way to assess, on a monetized basis, the “actual environmental effects” of a proposed action and its alternatives,[[53]](#footnote-53) and is certainly a more reasonable proxy for climate impacts then merely quantifying emissions. In this way, the social cost of carbon may be a necessary tool for an agency to fulfill NEPA’s mandates to take a hard look at impacts, use “[a]ccurate scientific analysis,”[[54]](#footnote-54) and ensure the “scientific integrity” of NEPA documents.[[55]](#footnote-55) While NEPA may not mandate any particular methodology,[[56]](#footnote-56) it does mandate that agencies use state of the art science to make sound scientific decisions in the course of taking the requisite hard look at impacts.[[57]](#footnote-57)

Second, the guidance states that the social cost of carbon was developed for regulatory actions rather than site-specific NEPA reviews.[[58]](#footnote-58) Although the draft guidance is correct that the social cost of carbon was originally developed for use in evaluating the climate impacts of federal rulemakings, nothing about the tool itself precludes its use in evaluating project-level impacts. The tool measures the economic harm caused by each additional ton of carbon dioxide emitted into the atmosphere without regard to whether those emissions result from an agency rulemaking or an agency’s approval of an individual project. The social cost of carbon protocol operates the same in either scenario: it offers decisionmakers and the public a way to understand the climate impacts of a proposed course of action and alternatives. The tool does not distinguish between those carbon dioxide emissions that result from agency rulemakings and those that result from project-level or programmatic-level decisions.

The final guidance should direct agencies to utilize the social cost of carbon methodology so that the economic effects interrelated with the environmental effects of GHG emissions are fully considered in agency NEPA analyses.

1. Cumulative Impacts

The guidance falls well short of providing adequate guidance on the necessary analysis of cumulative impacts. It is not sufficient to dismiss the need for cumulative effects analysis “because the potential effects of GHG emissions are inherently a global cumulative effect.”[[59]](#footnote-59) As CEQ itself has pointed out, dismissing effects from individual actions that may in and of themselves seem small or trivial can lead to the “tyranny of small decisions.”[[60]](#footnote-60) And, as the Ninth Circuit has explained, “[t]he impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.”[[61]](#footnote-61)

 For example, in its NEPA analyses for oil and gas leasing on federal land in three western states, the Bureau of Land Management’s (BLM) documents acknowledged that the additional oil and gas wells it was considering would contribute incrementally to total regional and global GHG emission levels. [[62]](#footnote-62) BLM declined to go further, arguing that in order to analyze or disclose cumulative climate impacts the agency would have to identify every past, present, or reasonably foreseeable project on earth to produce a separate cumulative impact analysis. The reviewing court correctly stated that NEPA does not require that feat. But as the court noted, there is often an option between global analysis and nothing, and here, the court directed BLM to quantify emissions from individual leasing decisions when added to GHG emissions from other BLM projects in the region and nation. “To the extent other BLM actions in the region – such as other lease sales – are reasonably foreseeable when an EA is issued, BLM must discuss them as well.”[[63]](#footnote-63)

The final guidance should make clear that it is not sufficient, either as a factual or legal matter, to discuss cumulative climate change exclusively in global terms. NEPA requires an agency’s analysis to include “[a]ccurate scientific analysis” and “high quality” information.[[64]](#footnote-64) Thus, while the cumulative effects of GHG emissions are certainly global, those impacts are also discrete, with local and regional impacts that likely will be of particular importance to decisionmakers and the public. For example, an analysis of a proposed action along the Atlantic coast will necessarily have to take into account sea level rise, a proposed action in the Intermountain West will necessarily have to deal with the synergistic effects resulting in declining snowpack, and a proposed development in the arid Southwest needs to consider synergistic impacts on streamflow and groundwater. Those regional impacts should be disclosed for projects in those respective regions, particularly where federal agencies acknowledge that the agency’s approval of a particular project will incrementally add to those impacts.

1. **THE DRAFT GUIDANCE FAILS TO ADEQUATELY DISCUSS THE NEED FOR ANALYSIS OF CLIMATE CHANGE IMPACTS ON THE AFFECTED ENVIRONMENT**

 Section B of the draft guidance purports to address “current and the reasonably foreseeable future state of the environment as affected by the proposed action and its reasonable alternatives.” However, the guidance provides virtually no useful direction to agencies about how to assess the state of the future environment in the context of a changing climate and GHG emissions impacts. The guidance is silent on a vitally important topic: the identification and evaluation of interactions between a changing climate and the environmental impacts from a proposed action. This is a potentially important source of cumulative impacts[[65]](#footnote-65) and should be treated as such. For instance, a road’s impact to a coastal wetland will be cumulatively larger if that wetland is also being degraded by sea level rise. Similarly, a project involving water withdrawals will have a greater effect on aquatic species if high temperatures, drought, or reduced snowpack also lead to reductions in flow. Given that these and other effects of climate change are not only “reasonably foreseeable” but indeed already impacting the United States,[[66]](#footnote-66) it is firmly within the purview of a NEPA review to consider an action in the context of the future state of the environment. Failing to do so adequately during the NEPA process misses an opportunity for decisionmakers to improve environmental outcomes and contribute to safeguarding communities and their infrastructure against the effects of extreme weather events and other climate-related impacts. The guidance should acknowledge that it is necessary for agencies to disclose the ways in which climate change impacts may interact with the effects of the proposed action and alternatives, consider the action’s environmental effects over the lifetime of those effects, and evaluate means to alter the overall environmental implications of such actions.

Without adequate direction, agencies risk failing to adequately consider climate change and other GHG emissions impacts – like sea level rise, extreme heat, ocean acidification, severe droughts and intense storms – when they examine the environmental consequences that proposed projects will have on biological resources, imperiled wildlife, vulnerable communities and other aspects of the human environment.[[67]](#footnote-67) Without such analysis, agencies risk, in the words of one court, “failure to consider an important aspect of the problem.”[[68]](#footnote-68) The document should be improved by giving agencies actual guidance on how to appropriately analyze reasonably foreseeable climate effects and consider alternatives that would make the affected communities and resources more resilient to the effects of a changing climate and environmental impacts.

 There is also a problem with the draft guidance document’s blanket statement that, “[i]n accordance with NEPA’s rule of reason and standards for obtaining information regarding reasonably foreseeable effects on the human environment, agencies need not undertake new research or analysis of potential changes to the affected environment.” Of course, it is reasonable to evaluate the need for independent research in the context of the probable severity of potential impacts. However, the obligations of the agencies to obtain information that is essential to a reasoned choice among alternatives and relevant to reasonably foreseeable significant adverse impacts[[69]](#footnote-69) cannot be categorically dismissed by invoking the rule of reason. It might be quite reasonable, for example, for an agency to undertake independent research for a programmatic EIS on energy development over the next fifty years in the United States.

1. **THE DRAFT GUIDANCE OMITS DISCUSSION OF THE NEED TO ANALYZE CLIMATE RESILIENCE AND ADAPTATION**

Some level of climate change and its impacts are here to stay—regardless of the efficacy of efforts to slow and mitigate that change. Given that reality, NEPA analyses must, in addition to seeking opportunities that mitigate greenhouse gas emissions, address adaptation and resiliency strategies and opportunities. The guidance should advise agencies to incorporate the components of any relevant agency’s adaptation and resiliency plans, policies, goals, or strategies into purpose and need statements as well as the agency’s range of alternatives and mitigation measures. Such measures might include, for example, adjusting management of forage or wildfire due to expected long-term drought in semi-arid ecosystems; planning for landscape connectivity to facilitate new and changing wildlife migration patterns and habitat needs; prohibiting vectors of impacts within an agency’s control that, combined with climate change impacts, contribute to adverse cumulative impacts; or removing, re-siting, or altering infrastructure that is prone to flooding or erosion. Consideration of mitigation opportunities for adaptation and resiliency is especially important in the land use planning context and for other broad, programmatic NEPA analyses of long duration.

1. **THE DRAFT GUIDANCE OMITS DISCUSSION OF THE CRITICAL ROLE OF THE PUBLIC IN THE NEPA PROCESS**

The sole reference to the public in the draft guidance is the statement that, “NEPA is a procedural statute that serves the twin purposes of ensuring that agencies consider the environmental consequences of their proposed actions and inform the public about their decision-making process.”[[70]](#footnote-70) Presumably, this sentence is intended to echo the Supreme Court’s statement in *Baltimore Gas & Electric Co. v. NRDC* that the second of NEPA’s “twin aims” is to ensure, “that the agency will inform the public that it has indeed considered environmental concerns in its decisionmaking.”[[71]](#footnote-71) But it is different for an agency to simply “inform the public about the [agency’s] decision process” as opposed to informing “the public that it has indeed considered environmental concerns in its decisionmaking process.” The distinction is especially glaring in the context of this draft which contains no other mention of the public at all, despite the prominence of public involvement requirements in CEQ’s own regulations[[72]](#footnote-72) and the regulation’s acknowledgement that, “Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.”[[73]](#footnote-73) Agencies should be reminded of the need to constructively engage the public at each step of the NEPA process.[[74]](#footnote-74)

1. **THE DRAFT GUIDANCE OMITS DISCUSSION OF THE NEED TO ANALYZE CLIMATE EFFECTS ON VULNERABLE POPULATIONS**

 Two days after CEQ released this draft guidance, the United Nations’ Special Rapporteur on Extreme Poverty and Human Rights issued an advanced edition of a report on “Climate Change and Poverty.”[[75]](#footnote-75) The report highlights what the draft guidance never addresses: the extreme disproportionate impacts that climate change is having and will increasingly have on those people least able to cope with it. Citing World Bank studies, the report states that, “Climate change threatens to undo the last fifty years of progress in development, global health, and poverty reduction. Middle-class families, including in developed countries, are also being rendered poor. The World Bank estimates that without immediate action, climate change could push 120 million more people into poverty by 2030 – likely an underestimate, and rising in subsequent years.”[[76]](#footnote-76) The United States is not immune from these impacts; indeed, the report points out that since 1980, there have been 241 weather and climate disasters in the United States that have resulted in over one billion dollars in damage costs attributable to each event.[[77]](#footnote-77)

Additionally, ocean acidification poses a disproportionate threat to vulnerable populations dependent upon fish, one of the cheapest and most abundant sources of protein for many coastal and small island developing nations.[[78]](#footnote-78) Residents of those countries have fewer socioeconomic resources to replace lost seafood due to changing ocean conditions from GHG emissions.[[79]](#footnote-79) Marine tourism jobs may also suffer from likely detrimental effects to coral reefs and marine life.[[80]](#footnote-80) Consequently, food insecurity and adverse tourism industry impacts could have a cascading effect on the global economy and harm developing nations too.[[81]](#footnote-81) The United States would also be impacted by these changes directly, however. Millions of American jobs and billions of dollars in revenue are at risk from projected losses in fish capture and sales due to changing ocean conditions from GHG emissions and climate change.[[82]](#footnote-82) Fisheries in the Gulf of Mexico, Pacific Coast, and the North and Southeast Atlantic are particularly threatened with an average projected 12% loss in American fishery catch potential by the middle of the century due to rising temperatures.[[83]](#footnote-83) Current science has projected that Alaska’s fisheries will be harmed by ocean acidification with disproportionate effects on individuals with relatively lower incomes and employment alternatives, as well.[[84]](#footnote-84)

Federal agencies are already obliged to consider environmental justice impacts pursuant to NEPA in accord with Executive Order 12,898[[85]](#footnote-85) and CEQ’s 1997 guidance,[[86]](#footnote-86) and must therefore address the confluence of climate change and environmental justice as well or risk arbitrary and capricious action.[[87]](#footnote-87) CEQ needs to direct agencies to take into account the impacts of climate change on particularly vulnerable populations in the United States in the course of decisionmaking. Special efforts must be made in regards to Native American populations, including the conduct of government to government consultations on how GHG emissions and climate change effects are impacting their lands and communities.

1. **THE DRAFT GUIDANCE’S SERIOUSLY INCOMPLETE DISCUSSION OF AGENCIES’ OBLIGATIONS TO ANALYZE ALTERNATIVES AND MITIGATION MEASURES UNDERMINES THE PURPOSE OF NEPA**

 Given the severity of current and projected climate change and environmental impacts, it is particularly egregious to see the meager discussion of both alternatives and mitigation in the draft guidance. As characterized in CEQ’s own regulations, alternatives are the “heart of the environmental impact statement.”[[88]](#footnote-88) The same can be said of alternatives in the context of many environmental assessments (EAs), given NEPA’s separate statutory mandate 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.” [[89]](#footnote-89) More than any other aspect of the NEPA process, it is the analysis of alternatives and the comparison of the effects of those alternatives – including the no action alternative – that lead agency officials to making better decisions. Whether an alternative other than the original proposed action is brought to the table internally,[[90]](#footnote-90) by another agency,[[91]](#footnote-91) or by citizens,[[92]](#footnote-92) the requirement to analyze reasonable alternatives to meet the purpose and need of a proposed action is the key to ensuring that the NEPA process does more than document expected impacts, but rather meets the statute’s intent of informing decisionmaking.

Federal courts have made it clear that agencies must take this responsibility seriously, both across the board and in the context of climate change. Agencies that have persisted in presenting alternatives with narrow or no difference in projected GHG emissions have been ordered to revisit their identification and analysis of alternatives. For example, the Court of Appeals for the Ninth Circuit found that the National Highway Traffic Safety Administration failed to analyze an alternative raised by an outside commentator in its EA for CAFE standards that would have decreased emissions.[[93]](#footnote-93) More recently, the Bureau of Land Management’s EISs authorizing coal, oil and gas leasing in the Powder River Basin were found to be inadequate because all of the alternatives for coal had the same acreage available for leasing.[[94]](#footnote-94) “BLM’s failure to consider any alternative that would decrease the amount of extractable coal available for leasing rendered inadequate the Buffalo EIS and Miles City EIS in violation of NEPA.”[[95]](#footnote-95)

 CEQ should make it clear that Federal agencies must account for GHG pollution and climate change in EAs, not just EISs, in particular relative to an agency’s consideration of alternatives and mitigation measures. As the Ninth Circuit has explained:

[C]onsideration of alternatives is critical to the goals of NEPA even where a proposed action does not trigger the EIS process. This is reflected in the structure of the statute: while an EIS must also include alternatives to the proposed action, 42 U.S.C. § 4332(2)(C)(iii) (1982), the consideration of alternatives requirement is contained in a separate subsection of the statute and therefore constitutes an independent requirement. See id. § 4332(2)(E). The language and effect of the two subsections also indicate that the consideration of alternatives requirement is of wider scope than the EIS requirement. The former applies whenever an action involves conflicts, while the latter does not come into play unless the action will have significant environmental effects. An EIS is required where there has been an irretrievable commitment of resources; but unresolved conflicts as to the proper use of available resources may exist well before that point. Thus the consideration of alternatives requirement is both independent of, and broader than, the EIS requirement. See *City of New York v. United States Department of Transportation*, 715 F.2d 732,742 (2d Cir. 1983), cert. denied, 465 U.S. 1055, 104 S.CT 1403, 79 L.Ed.2d 730 (1984);  Environmental Defense Fund, Inc. v. Corps of Engineers,492 F.2d 1123, 1135 (5th Cir.1974); California v. Bergland, 483 F.Supp. 465, 488 (E.D. Cal.1980), aff'd sub nom. California v. Block, 690 F.2d 753 (9th Cir.1982). In short, any proposed federal action involving unresolved conflicts as to the proper use of resources triggers NEPA's consideration of alternatives requirement, whether or not an EIS is also required.[[96]](#footnote-96)

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Another critical factor in decisionmaking under NEPA is an agency’s responsibility to identify and consider mitigation measures. The guidance devotes precisely two sentences to mitigation, one of which states that NEPA does not require agencies to adopt mitigation measures. The guidance inexplicably omits mention of agencies’ important responsibility to identify and analyze reasonable mitigation measures. To quote the U.S. Supreme Court:

The requirement that an EIS contain a detailed discussion of possible mitigation measures flows both from the language of the Act and, more expressly, from CEQ’s implementing regulations. Implicit in NEPA’s demand that an agency prepare a detailed statement on “any adverse environmental effects which cannot be avoided should the proposal be implemented [cites omitted] is an understanding that the EIS will discuss the extent to which adverse effects can be avoided. [cite omitted] More generally, omission of a reasonably complete discussion of possible mitigation measures would undermine the “action-forcing” function of NEPA. Without such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects. . . . . Recognizing the importance of such a discussion in guaranteeing that the agency has taken a ‘hard look’ at the environmental consequences of proposed federal action, CEQ regulations require that the agency discuss possible mitigation measures in defining the scope of the EIS, in discussing alternatives to the proposed action, and consequences of that action, and in explaining its ultimate decision [cites omitted].[[97]](#footnote-97)

The final guidance must remind agencies of these obligations if it is to faithfully reflect NEPA’s purpose of preventing and eliminating damage to the environment.

1. **THE DRAFT GUIDANCE SHOULD RECOGNIZE AND RETAIN DIRECTION REGARDING CEQ’S OVERSIGHT OF INDIVIDUAL AGENCY NEPA PROCEDURES**

 Both the 2016 final guidance and this draft guidance state that new NEPA implementing procedures are not required in association with climate change effects. However, the draft guidance omits the direction given in the 2016 guidance to agencies to review their NEPA procedures and propose updates necessary or appropriate to facilitate consideration of climate change along with CEQ’s responsibility to review such revisions. We urge CEQ to recommit to guiding and overseeing the necessary updates to agency NEPA procedures in light of the evolving science and law discussed in this comment.

1. **CONCLUSION**

 The draft guidance is wholly inadequate in light of the climate crisis. The guidance fails to give agencies and the public useful guidance based on current case law and science and is a major step backwards from CEQ’s 2016 guidance. To be clear, we are not suggesting that the final 2016 guidance on GHG emissions and the effects of climate change was perfect. It was, however, a good faith effort to provide reasonable direction and assistance to agencies. This draft guidance clearly signals a diminishment of the importance of climate change analysis. It should be withdrawn and rewritten.

1. 42 U.S.C. § 4321. [↑](#footnote-ref-1)
2. We remind CEQ that in NEPA, Congress directed federal agencies to “recognize the worldwide and long-range character of environmental problems and, where consistent with the foreign policy of the United States, [to] . . . maximize international cooperation in . . . . preventing a decline in the quality of the environment.” 42 U.S.C. § 4332(2)(2)(F). [↑](#footnote-ref-2)
3. 42 U.S.C. §4331(b)(1). [↑](#footnote-ref-3)
4. 40 C.F.R. § 15001(a). [↑](#footnote-ref-4)
5. 40 C.F.R. § 1500.1(c). [↑](#footnote-ref-5)
6. 42 U.S.C. § 4331 (b)(1). [↑](#footnote-ref-6)
7. 42 U.S.C § 4332(1). [↑](#footnote-ref-7)
8. 40 C.F.R. § 1500.1(c). [↑](#footnote-ref-8)
9. Ponce, Victor, The Science of Global Warming*,* 2011, available at <http://warming.sdsu.edu/>. [↑](#footnote-ref-9)
10. Spencer Weart and the American Institute of Physics, The Discovery of Global Warming: The Carbon Dioxide Effect, February, 2019, available at<https://history.aip.org/climate/co2.htm>. [↑](#footnote-ref-10)
11. What is Ocean Acidification?, NOAA PMEL Carbon Program, *available at* [https://www.pmel.noaa.gov/co2/story/What+is+Ocean+Acidification%3F](https://www.pmel.noaa.gov/co2/story/What%2Bis%2BOcean%2BAcidification%3F) (last visited Aug 5, 2019). [↑](#footnote-ref-11)
12. Environmental Quality, Council on Environmental Quality, August, 1970, p. 104, cited in Massachusetts v. EPA, 127 S.Ct. 1438, 1447, n. 8 (2007). [↑](#footnote-ref-12)
13. Id. at vii. [↑](#footnote-ref-13)
14. Global Warming of 1.5°C, an IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty, October 8, 2018, available at <https://www.ipcc.ch/sr15/download/#full> [↑](#footnote-ref-14)
15. Id. at 4. [↑](#footnote-ref-15)
16. Id. [↑](#footnote-ref-16)
17. Id. at 5. [↑](#footnote-ref-17)
18. Id. at 8. [↑](#footnote-ref-18)
19. Id. at 9. [↑](#footnote-ref-19)
20. Id. at 15. [↑](#footnote-ref-20)
21. Id. at 5. [↑](#footnote-ref-21)
22. Id. at 38. [↑](#footnote-ref-22)
23. “Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews,” 81 Fed. Reg. 51866 (August 5, 2016). [↑](#footnote-ref-23)
24. “Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions,” 84 Fed. Reg. 30097 (June 26, 2019). [↑](#footnote-ref-24)
25. 40 C.F.R. §1502.22(a); Birckhead v. FERC, No. 18-1218 (D.C. Cir. 2019) (in a situation where the agency has the authority to act on information about environmental impacts, it has the obligation to attempt to obtain information necessary for the analyses of those impacts). See also, Sierra Club v. FERC, 867 F. 3d 1357, 1374-5 (D.C. Cir. 2017) (FERC is not excused from quantifying GHG because of the impossibility of knowing precisely what the quantity will be from a particular project or because some of the emissions might be partially offset by reductions elsewhere.) [↑](#footnote-ref-25)
26. 40 C.F.R. § 1502.14. [↑](#footnote-ref-26)
27. WildEarth Guardians v. U.S. Bureau of Land Management, 870 F.3d 1222, 1236 (10th Cir. 2017); Montana Environmental Information Center v. OSMRE, 274 F.Supp.3d 1074, 1098 (D. Mont. 2017); Sierra Club v. FERC, 867 F.3d at 1375. [↑](#footnote-ref-27)
28. WildEarth Guardians v. Zinke, 368 F. Supp. 41 (D.D.C. 2019); High Country Conservation Advocates, 52 F. Supp. 3d at 1192; see Sierra Club v. Sigler, 695 F.2d 957, 975-76 (5th Cir. 1983) (“The Corps cannot tip the scales of an EIS by promoting possible benefits while ignoring their costs.”). [↑](#footnote-ref-28)
29. 84 Fed. Reg. 30097, 30098 (June 26, 2019). [↑](#footnote-ref-29)
30. WildEarth Guardians v. Zinke, Ibid at 83. [↑](#footnote-ref-30)
31. 84 Fed. Reg. 30097, 30098 (June 26, 2019). [↑](#footnote-ref-31)
32. 40 C.F.R. § 1502.22. [↑](#footnote-ref-32)
33. 345 F.3d 520 (8th Cir. 2003). [↑](#footnote-ref-33)
34. 40 C.F.R. 1502.22. [↑](#footnote-ref-34)
35. 345 F.3d at 549-50 (emphasis in original). [↑](#footnote-ref-35)
36. Sierra Club v. FERC, 867 F.3d at 1374 (“As we have noted, greenhouse-gas emissions are an indirect effect of authorizing this project, which FERC could reasonably foresee, and which the agency has legal authority to mitigate. [cite omitted] The EIS accordingly needed to include a discussion of the ‘significance’ of this indirect effect, *see 40 C.F.R. § 1502.16(b)*, as well as ‘the incremental impact of the action when added to other past, present, and reasonably future actions, *see* WildEarth Guardians, 783 F.3d at 309 (quoting *40 C.F.R. § 1508.7)*;” Center for Biological Diversity v. NHTSA, 538 F.3d. 1172, 1216 (9th Cir. 2008), (“The EA does not discuss the *actual* environmental effects resulting from those emissions or place those emissions in context of other CAFE rulemakings” (emphasis in original)). [↑](#footnote-ref-36)
37. Fourth National Climate Assessment, U.S. Global Change Research Program (2018). The report includes analysis of water, energy supply, delivery and demand, land cover and land use change, forests, ecosystems, ecosystem services and biodiversity, coastal effects, oceans and marine resources, agriculture and rural communities, the built environment, urban systems and cities, transportation, air quality, human health, tribes and indigenous peoples, sectoral interactions and climate itself in the Northeast, Southeast, U.S. Caribbean, Midwest, Northern Great Plains, Southern Great Plains, Northwest, Southwest, Alaska and Hawaii and U.S. affiliated Pacific Islands. [↑](#footnote-ref-37)
38. Another important report that considers these issues is Federal Lands Greenouse Gas Emissions and Sequestration in the United States: Estimates for 2005-14*,* U.S. Geological Survey Scientific Investigations Report 2018-5131 (2018). <https://doi.org/10.3133/sir20185131>. This report shows that emissions from fossil fuels produced on Federal lands represent, on average, 23.7 percent of national emissions for CO2, 7.3 percent for CH4, and 1.5 percent for N2O over the 10 years included in the study relative to emissions from extraction and combustion of federally produced oil, natural gas, and coal. Estimates of the amount carbon sequestered on federal lands are also provided. [↑](#footnote-ref-38)
39. NCAS4, Chapter 27, p. 22. [↑](#footnote-ref-39)
40. NOAA Fisheries, Understanding Ocean Acidification (June 28, 2017), *available at* <https://www.fisheries.noaa.gov/insight/understanding-ocean-acidification> (last visited Aug 6, 2019); Oceana, Ocean-Based Food Security Threatened in a High CO2 World (2012), *available at* <https://oceana.org/sites/default/files/reports/Ocean-Based_Food_Security_Threatened_in_a_High_CO2_World.pdf>. [↑](#footnote-ref-40)
41. Ocean Acidifications impact on oysters and other shellfish, *available at* [https://www.pmel.noaa.gov/co2/story/Ocean+Acidification's+impact+on+oysters+and+other+shellfish](https://www.pmel.noaa.gov/co2/story/Ocean%2BAcidification%27s%2Bimpact%2Bon%2Boysters%2Band%2Bother%2Bshellfish) (last visited Aug 6, 2019); Oceana, *supra* note 41. [↑](#footnote-ref-41)
42. Jennie E. Rheuban et al., Projected impacts of future climate change, ocean acidification, and management on the US Atlantic sea scallop (Placopecten magellanicus) fishery, *available at* <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0203536> (last visited Aug 2, 2019). [↑](#footnote-ref-42)
43. National Center for Environmental Economics, Welfare Impacts of Ocean Acidification: An Integrated Assessment Model of the US Mollusk Fishery (2011), *available at* <https://www.epa.gov/sites/production/files/2014-12/documents/welfare_impacts_of_ocean_acidification.pdf> and Interagency Working Group on Social Cost of Greenhouse Gases, *supra* note 40. [↑](#footnote-ref-43)
44. Save Our Sonoran, Inc. v. Flowers, 408 F.3d 1113, 1122 (9th Cir. 2004). *See* also, White Tanks Concerned Citizens, Inc. v. Strock, 564 1033 (9th Cir. 2009) (viability of proposed housing development dependent on Army Corps of Engineer permit). The Supreme Court’s decision in Department of Transportation v. Public Citizen, 541 U.S. 752 (2004) is not to the contrary; rather, the Court held that under the facts of that case, interpreted through the light of the rule of reason, the lead agency for purposes of NEPA need not consider effects which it had no ability to prevent by a government actor who was not subject to NEPA. As the Court of Appeals for the District of Columbia pointed out in Sierra Club v. FERC,the holding in that case is not applicable in all applicant situations across the board and in that particular case, the holding from Public Citizen was not applicable to the analysis that FERC needed to do regarding downstream pollutants, including GHG emissions. 867 F.3d at 1373. [↑](#footnote-ref-44)
45. Interagency Working Group on Social Cost of Greenhouse Gases, “Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis ­ Under Executive Order 12866” (August 2016), *available at* <https://19january2017snapshot.epa.gov/sites/production/files/2016-12/documents/sc_co2_tsd_august_2016.pdf>. [↑](#footnote-ref-45)
46. Interagency Working Group on Social Cost of Greenhouse Gases “Addendum to Technical Support Document on Social Cost of Carbon for Regulatory Impact Analysis under Executive Order 12866: Application of the Methodology to Estimate the Social Cost of Methane and the Social Cost of Nitrous Oxide” (August 2016), *available at* <https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/august_2016_sc_ch4_sc_n2o_addendum_final_8_26_16.pdf>. [↑](#footnote-ref-46)
47. [↑](#footnote-ref-47)
48. Montana Envt’l Info. Ctr. v. U.S. Office of Surface Mining, 274 F. Supp. 3d 1074, 1097 (D. Mont. 2017). [↑](#footnote-ref-48)
49. Sierra Club v. FERC, 867 F.3d 1357, 1374 (D.C. Cir. 2017);High Country Conservation Advocates v. United States Forest Serv., 52 F. Supp. 3d 1174, 1190-91 (D. Colo. 2014). [↑](#footnote-ref-49)
50. 84 Fed. Reg. 30097, 30098 (June 26, 2019). [↑](#footnote-ref-50)
51. 40 C.F.R. § 1502.23. [↑](#footnote-ref-51)
52. 40 C.F.R. § 1508.8(b). [↑](#footnote-ref-52)
53. Ctr. for Biological Diversity v. NHTSA, 538 F.3d. at 1216. [↑](#footnote-ref-53)
54. 40 C.F.R. § 1500.1(b). [↑](#footnote-ref-54)
55. Id. § 1502.24. SeeOr. Nat. Desert Ass’n v. Jewell, 840 F.3d 562, 570 (9th Cir. 2016) (“The defendants maintain that the BLM is owed special deference when undertaking scientific or technical analysis within its purview, which it is. *See Lands Council* , [537 F.3d at 993](https://casetext.com/case/the-lands-council-v-mcnair#p993). But deference does not excuse the BLM from ensuring the accuracy and scientific integrity of its analysis, a NEPA requirement. *See* [40 C.F.R. §§ 1500.1(b)](https://casetext.com/regulation/code-of-federal-regulations/title-40-protection-of-environment/chapter-v-council-on-environmental-quality/part-1500-purpose-policy-and-mandate/15001-purpose), 1502.24.”  [↑](#footnote-ref-55)
56. See, e.g., WildEarth Guardians v. Zinke, 368 F.Supp.3d 41, 79 (D.D.C. 2019). [↑](#footnote-ref-56)
57. Id. at n.31; 40 C.F.R. §§ 1500.1(b), 1502.22(b), 1502.24. [↑](#footnote-ref-57)
58. 84 Fed. Reg. 30097, 30099 (June 26, 2019). [↑](#footnote-ref-58)
59. 84 Fed. Reg. 30097, 30098 (June 26, 2019). [↑](#footnote-ref-59)
60. WildEarth Guardians v. Zinke 368 F. Supp. at 76, 40 C.F.R. §§ 1508.7 and 1508.25(c). [↑](#footnote-ref-60)
61. Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin., 538 F.3d 1172, 1217 (9th Cir. 2008). [↑](#footnote-ref-61)
62. WildEarth Guardians v. Zinke*,* 368 F. Supp. at 56. [↑](#footnote-ref-62)
63. Id. at 77*.* See also, “Measuring the climate impact of Trump’s careless leasing of public lands,” The Wilderness Society, July, 2019, available at <https://www.wilderness.org/sites/default/files/media/file/TWS%20Report_Measuring%20the%20climate%20impact%20of%20Trump%20reckless%20leasing_July%202019.pdf> (last checked July 28, 2019). [↑](#footnote-ref-63)
64. 40 C.F.R. § 1500.1(b). [↑](#footnote-ref-64)
65. 40 CFR § 1502.16, 1508.7, 1508.8. *See also*, CEQ Memorandum to Heads of Federal Agencies, *Guidance on the Consideration of Past Actions in Cumulative Effects Analysis*, June 24, 2005, available at https//ceq.doe.gov/nepa/regs/Guidance\_on\_CE.pdf. [↑](#footnote-ref-65)
66. Documented extensively in: USGCRP, 2018: Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II [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, 1515 pp. doi: 10.7930/NCA4.2018 [↑](#footnote-ref-66)
67. Examples of agencies’ efforts to date at incorporating climate change effects into NEPA analysis are documented in: <https://www.defenders.org/sites/default/files/publications/reasonably-foreseeable-futures-climate-change-adaptation-and-the-national-environmental-policy-act.pdf> and <https://oceanacidification.noaa.gov/sites/oap-redesign/OAP%20FFO%20Applicant%20Documents/NOAA-OAR-OAP-2017-2005016%20FFO%20Report.pdf> [↑](#footnote-ref-67)
68. Aqualliance v. U.S. Bureau of Reclamation, 287 F. Supp. 969, 1032 (E.D. Cal. 2018). [↑](#footnote-ref-68)
69. 40 C.F.R. § 1502.22(a). [↑](#footnote-ref-69)
70. Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions”, 84 Fed. Reg. 30097 (June 26, 2019). [↑](#footnote-ref-70)
71. 462 U.S. 87, 97 (1983) citing Weinberger v. Catholic Action of Hawaii, 454 U.S. 139, 143 (1981). [↑](#footnote-ref-71)
72. *See, e.g*, 40 C.F.R. §§ 1501.7(a), 15103.(4), 1506.6. [↑](#footnote-ref-72)
73. 40 C.F.R. §1500.1(b) (emphasis added). [↑](#footnote-ref-73)
74. *See* Robertson v. Methow Valley Citizens Council*,* 490 U.S. 332, 350 (1989) (noting an EIS “serves a larger informational role. It gives the public the assurance that the agency "has indeed considered environmental concerns in its decisionmaking process," and, perhaps more significantly, provides a springboard for public comment.”) (quoting *Baltimore Gas & Electric Co.*). [↑](#footnote-ref-74)
75. Available at <https://srpovertyorg.files.wordpress.com/2019/06/unsr-poverty-climate-change-a_hrc_41_39.pdf> (25 June 2019). [↑](#footnote-ref-75)
76. Id. at 5. [↑](#footnote-ref-76)
77. Id. at 12. [↑](#footnote-ref-77)
78. NOAA Fisheries, Understanding Ocean Acidification (June 28, 2017), *available at* <https://www.fisheries.noaa.gov/insight/understanding-ocean-acidification> (last visited Aug 5, 2019);Oceana, *supra* note 41. [↑](#footnote-ref-78)
79. Id. [↑](#footnote-ref-79)
80. Id. [↑](#footnote-ref-80)
81. Id. [↑](#footnote-ref-81)
82. Id. [↑](#footnote-ref-82)
83. Id. [↑](#footnote-ref-83)
84. J. T. Mathis et al., Ocean acidification risk assessment for Alaska's fishery sector Progress in Oceanography (2014), *available at* <https://www.sciencedirect.com/science/article/pii/S0079661114001141?via=ihub> (last visited Aug 2, 2019). [↑](#footnote-ref-84)
85. 59 Fed. Reg. 7,629 (Feb. 11, 1994). [↑](#footnote-ref-85)
86. CEQ, *Environmental Justice, Guidance Under the National Environmental Policy Act* 9 (1997), *available at* <https://ceq.doe.gov/guidance/guidance.html>

(instructing agencies to “consider whether there may be disproportionately high and adverse human health or environmental effects” on Native Americans and to “recognize the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the proposed agency action”). [↑](#footnote-ref-86)
87. SeeStanding Rock Sioux Tribe v. U.S. Army Corps of Eng’rs, 255 F. Supp. 3d 101, 140 (D.D.C. 2017) (holding agency’s “bare-bones” environmental justice analysis concluding that Tribe would not be disproportionately harmed violated NEPA’s hard look requirement); see also Sierra Club v. FERC, 867 F.3d 1357, 1369 (D.C. Cir. 2017) (upholding EIS that fully discussed disproportionate impacts on environmental-justice communities while recognizing plaintiffs “[p]erhaps … would have a strong claim if the agency had refused entirely to discuss the demographics of the populations that will feel the pipelines’ effects”). [↑](#footnote-ref-87)
88. 42 U.S.C. § 4332(2)(C)(iii), 40 C.F.R. § 1502.14 [↑](#footnote-ref-88)
89. 42 U.S.C. § 4332(2)(E), 40 C.F.R. § 1508.9(b); See City of New York v. United States Department of Transportation, 715 F.2d 732, 742 (2d Cir.1983), cert. denied, 465 U.S. 1055, 104 S.Ct. 1403, 79 L.Ed.2d 730 (1984) [↑](#footnote-ref-89)
90. *See, e.g.,* Testimony of Energy Secretary Admiral James Watkins, “Looking back on it, thank God for NEPA because there were so many pressures to make a selection for a technology that it might have been forced upon us and that would have been wrong for the country.” Hearings on National Defense Authorization Act for Fiscal Year 1993 - H.R. 5006, and Oversight of Previously Authorized Programs before the House Committee on Armed Services, 102nd Cong. 912 (1992). [↑](#footnote-ref-90)
91. *See, e.g.,* discussion of how NEPA process was responsible for development of mitigation measures that proved valuable in a major fire in the vicinity of the Department of Energy’s Los Alamos National Laboratory; <https://www.energy.gov/nepa/articles/los-alamos-site-wide-eis-analyzed-wildfire-impacts-prompted-mitigation-actions> [↑](#footnote-ref-91)
92. Colorado Environmental Coalition v. Salazar, 875 F. Supp. 2d 1233 (2012). [↑](#footnote-ref-92)
93. Center for Biological Diversity v. NHTSA, 538 F.3d. at 1217-1219. [↑](#footnote-ref-93)
94. Western Organization of Resource Councils v. U.S. Bureau of Land Management, 2018 U.S. Dist. LEXIS 49635, 2018 WL 1475470 (D. Mont. Mar., 26-18). [↑](#footnote-ref-94)
95. Id. at 9. [↑](#footnote-ref-95)
96. Bob Marshall Alliance v. Hodel, 852 F.2d 1223, 1228-29 (9th Cir. 1988). Similarly, the Tenth Circuit has stated that, “An agency's obligation to consider reasonable alternatives is “operative even if the agency finds no significant environmental impact.” Highway J Citizens Group v. Mineta,349 F.3d 938, 960 (7th Cir.2003)*(internal quotation marks omitted);*seeDavis v. Mineta,*302 F.3d* [1104,] 1120 [(10th Cir. 2002)] (“A properly-drafted EA must include a discussion of appropriate alternatives.” (citing 40 C.F.R. § 1508.9(b)). [↑](#footnote-ref-96)
97. Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 372 (1989). [↑](#footnote-ref-97)