

September 15, 2017

Elisabeth A. Shumaker
Clerk of Court

PUBLISH

UNITED STATES COURT OF APPEALS
TENTH CIRCUIT

WILDEARTH GUARDIANS; SIERRA
CLUB,

Petitioners - Appellants,

v.

No. 15-8109

UNITED STATES BUREAU OF
LAND MANAGEMENT,

Respondent - Appellee,

and

WYOMING MINING ASSOCIATION;
BTU WESTERN RESOURCES, INC.;
STATE OF WYOMING; NATIONAL
MINING ASSOCIATION,

Respondents - Intervenors -
Appellees.

THE INSTITUTE FOR POLICY
INTEGRITY AT NEW YORK
UNIVERSITY SCHOOL OF LAW,

Amicus Curiae.

APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF WYOMING
(D.C. No. 2:13-CV-00042-ABJ)

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Michael T. Gray, Attorney (Philip C. Lowe, of Counsel, United States Department of the Interior, Rocky Mountain Regional Solicitor's Office; John C. Cruden, Assistant Attorney General; John S. Most and Andrew C. Mergen, Attorneys, with him on the brief), Appellate Section, Environment and Natural Resources Division, United States Department of Justice, Jacksonville, Florida, for Respondent-Appellee, United States Bureau of Land Management.

Erik E. Petersen (Michael J. McGrady, with him on the brief), Wyoming Office of the Attorney General, Cheyenne, Wyoming, for Respondents-Intervenors-Appellee State of Wyoming.

Jayni Foley Hein and Jason A. Schwartz, Institute for Policy Integrity, New York, NY, filed an amicus curiae brief on behalf of the Institute of Policy Integrity at New York University School of Law in support of Petitioners-Appellants.

Before **BRISCOE**, **McKAY**, and **BALDOCK**, Circuit Judges.

BRISCOE, Circuit Judge.

Appellants WildEarth Guardians and Sierra Club (Plaintiffs) challenge the Bureau of Land Management's (BLM) decision to approve four coal leases in Wyoming's Powder River Basin. Plaintiffs brought an Administrative Procedure Act (APA) claim arguing that the BLM failed to comply with the National

Environmental Policy Act (NEPA) when it concluded that issuing the leases would not result in higher national carbon dioxide emissions than would declining to issue them. The district court upheld the leases. We reverse and remand with instructions to the BLM to revise its Environmental Impact Statements (EISs) and Records of Decision (RODs). We do not, however, vacate the resulting leases.

I.

A. Statutory and Regulatory Background

The NEPA, 42 U.S.C. §§ 4321–4370h, and its implementing regulations promulgated by the Council on Environmental Quality (CEQ), 40 C.F.R. §§ 1500.1–1518.4, are “our national charter for protection of the environment.” 40 C.F.R. § 1500.1(a). Section 102 of NEPA, in relevant part, requires federal agencies to

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, [and]
- (iii) *alternatives to the proposed action.*

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348–39 (1989)

(emphasis added) (quoting 42 U.S.C. § 4332(C)). In these EISs, agencies must analyze direct effects, reasonably foreseeable indirect effects, and effects that are

cumulative over time or aggregated with other forces outside the agency's proposed action. 40 C.F.R. § 1508.7, 1508.8.

The alternatives analysis “is the heart of the environmental impact statement.” § 1502.14. Agencies “should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public,” including a “no action” alternative. *Id.* Agencies must “rigorously explore and objectively evaluate” these alternatives “so that reviewers may evaluate their comparative merits.” *Id.* “Without substantive, comparative environmental impact information regarding other possible courses of action, the ability of an EIS to inform agency deliberation and facilitate public involvement would be greatly degraded.” *New Mexico ex rel. Richardson v. BLM*, 565 F.3d 683, 708 (10th Cir. 2009). Courts often characterize NEPA’s procedural requirement as obliging agencies to take a “hard look” at the environmental consequences and alternatives. *Methow Valley*, 490 U.S. at 350; *Richardson*, 565 F.3d at 704; *Biodiversity Conservation All. v. U.S. Forest Serv.*, 765 F.3d 1264, 1267 (10th Cir. 2014). NEPA does not provide a private right of action, so we review this claim under the APA. 5 U.S.C. §§ 701–706.

B. Factual and Procedural Background

The Powder River Basin (PRB) region is the largest single contributor to United States’ domestic coal production. In 2008, PRB coal represented 55.5% of

the United States's surface-mined coal, and 38.5% of the country's total coal production. App. at 983, 988. The BLM controls much of the region and is often in the business of approving mining infrastructure and issuing mining leases under the Federal Land Policy and Management Act (FLPMA), 43 U.S.C. §§ 1701–1787, the Mineral Leasing Act, 30 U.S.C. §§ 181–287, and BLM's own regulations and plans. See 43 C.F.R. §§ 1601.0–1610.8, 43 C.F.R. §§ 3400.0-3–3487.1.

At issue in this case are four coal tracts¹ that extend the life of two existing surface mines near Wright, Wyoming: the Black Thunder mine and the North Antelope Rochelle mine. The four “Wright Area Leases” at issue here are North Hilight, South Hilight, North Porcupine, and South Porcupine. The tracts are also near, and partially within, the Thunder Basin National Grassland, a national forest.

Alone, the two existing mines account for approximately 19.7% of the United States's annual domestic coal production. App. at 637, 987.² The North

¹ BLM's environmental analysis included two additional tracts, West Hilight and West Jacobs Ranch, which are not at issue in this litigation.

² According to BLM, the new leases will maintain the same production at these mines as in the past: 135 million tons per year at Black Thunder and 95 million tons per year at North Antelope Rochelle, for a total of 230 million tons per year. And according to the Energy Information Administration's (EIA) 2008 Energy Outlook Report, relied on heavily by all parties, the United States produced 1.16 billion tons of coal in 2006, and was predicted to produce roughly the same in 2010. Using simple division, one can arrive at the percentage. Plaintiffs cite to a declaration from a resource economist for the percentage, but

and South Hilight leases will extend the life of the Black Thunder mine by approximately four years; the North and South Porcupine leases will extend the life of the North Antelope Rochelle mine by approximately nine years. Without these leases, the existing mines would cease operations after the currently leased reserves are depleted. The North Hilight lease was never sold, although the BLM did prepare a ROD for it. Mining has already commenced under three of the four leases, as counsel stated at oral argument. In total, the tracts at issue contain approximately two billion tons of recoverable coal.

Pursuant to NEPA, BLM prepared a Draft Environmental Impact Statement (DEIS) for the leases. 74 Fed. Reg. 32,642-01 (July 8, 2009). In the DEIS, BLM compared its preferred action (denominated Alternative 2 in the DEIS) to a no action alternative in which none of the coal leases would be issued, as it was required to do under CEQ regulations. 40 C.F.R. § 1502.14. Regarding carbon dioxide emissions and impacts on climate change, BLM concluded that there was no appreciable difference between the United States's total carbon dioxide emissions under its preferred alternative and the no action alternative. BLM concluded that, even if it did not approve the proposed leases, the same amount of coal would be sourced from elsewhere, and thus there was no difference between the proposed action and the no action alternative in this respect.

doing so is unnecessary and inadmissible as extra-record evidence. See App. at 267–68.

BLM then received comments on the DEIS, including from Plaintiffs. WildEarth Guardians commented that BLM's conclusion on carbon dioxide emissions under the no action alternative was "at best a gross oversimplification, and at worst entirely impossible." App. at 725. They argued that if the tracts were not leased, "it will be very difficult for domestic coal mines," or international coal mines, to replace that quantity of coal at the same price, making "other sources of electricity," with lower carbon dioxide emissions rates, "more competitive with coal." Id. at 725–26. WildEarth Guardians concluded that the authorization of the leases would have a significant effect on national carbon dioxide emissions as compared to the no action alternative, and that BLM therefore failed to adequately compare the alternatives. WildEarth Guardians did not provide BLM with any factual support for its argument against BLM's replacement theory, nor did they suggest that BLM use the economic modeling tools employed by other federal agencies under similar circumstances.

In its responses to comments, BLM stood by its conclusion regarding the comparative demand for coal and resulting carbon dioxide emissions. It acknowledged that cost is one factor which "determine[s] the potential for switching to non-carbon based electric generation," and that "if the demand for coal decreases nationwide, then coal production and coal mining would decrease." Id. at 48. But it did not acknowledge that denying the Wright Area Leases would have any effect on the price for coal or thereby demand for it. Instead, the BLM

concluded that because Energy Information Administration (EIA) projections indicated that population and energy demand would rise, and that coal would remain the largest fuel in the energy mix, demand for coal would remain static even in the face of the potential reduction in supply. The BLM stated that “[l]imiting one or even several points of fuel supply will not affect coal use because of the diverse group of national and international suppliers.” Id. at 41.

The BLM published its Final Environmental Impact Statement (FEIS) for the Wright Area Leases in July, 2010. The FEIS acknowledges some basic presumptions that no one in this litigation contests: the quantity of coal proposed in these leases would result in approximately 382 million tons of annual carbon dioxide emissions from electricity generation, id. at 987, which is the equivalent of roughly 6% of the United States’s total emissions in 2008, see id. at 984, anthropogenic carbon dioxide emissions contribute to climate change, id. at 977–80, climate change presents a litany of environmental harms disbursed throughout the globe, id. at 980–82, and if the nation’s energy mix shifts towards non-coal energy sources, less carbon dioxide would be emitted. Id. at 997–98.

However, the BLM’s contested conclusion regarding comparative carbon dioxide emissions from the no action alternative remained in the FEIS:

It is not likely that selection of the No Action alternative[] would result in a decrease of U.S. CO2 emissions attributable to coal mining and coal-burning power plants in the longer term, because there are multiple other sources of coal that, while not having the cost, environmental, or safety advantages, could supply the demand

for coal beyond the time that the Black Thunder . . . and North Antelope Rochelle mines complete recovery of the coal in their existing leases.

Id. at 988. For purposes of this conclusion, the BLM “assum[ed] that all forms of electric generation would grow at a proportional rate to meet forecast electric demand” in 2010, 2015, and 2020. Id. at 984. The FEIS relies on various governmental reports, including the EIA’s Annual Energy Outlook reports from 2008, 2009, and 2010. Under these projections, coal’s share of the energy mix continues to represent the largest portion of the United States’s energy mix. The BLM predicted that overall demand for coal in the United States was predicted to grow during the life of the Wright Area Leases.

The BLM then concluded that, because overall demand for coal was predicted to increase, the effect on the supply of coal of the no action alternative would have no consequential impact on that demand. This long logical leap presumes that either the reduced supply will have no impact on price, or that any increase in price will not make other forms of energy more attractive and decrease coal’s share of the energy mix, even slightly.

The BLM acknowledged that many forces might impact future demand for coal, but it continued to disagree that a lack of supply leading to an increase in price could be one of those forces. Additionally, BLM also repeatedly noted that PRB coal enjoys several cost advantages over coal from other regions, but again,

disavows the possibility that the no action alternative, in which half of current PRB production would stop, would impact the price of coal or the demand for it.

Following the FEIS, BLM issued a ROD for each of the four tracts, deciding to offer them for lease. Each ROD is practically identical in its discussion of the climate change implications of the no action alternative. BLM addressed this issue as follows:

Denying this proposed coal leasing is not likely to affect current or future domestic coal consumption used for electric generation.

Based on the[] studies [BLM consulted], even with a considerably more optimistic projection for renewable sources, coal use continues to be projected as the largest portion of the domestic electric fuel mix. As described in the Final EIS, the key determinant of energy consumption is population. As human population and activities have increased over time, coal and other carbon-based fuels have been utilized to provide for these additional energy demands.

Further, BLM disagrees with the comment that denying the proposed Federal coal leasing application would consequentially reduce the overall rate of national coal consumption by electric generators. Numerous mines located outside of the PRB extract and produce coal in the United States [and] many mines outside of the PRB have the capacity to replace the coal production generated by the Black Thunder Mine [and the North Antelope Rochelle mine].

The inability of the Black Thunder Mine, or any other existing PRB producer, to offer reserves in the coal market would not cause electric generators to stop burning coal. Utility companies will likely operate existing coal-burning facilities until either cost or regulatory requirements render them ineffective or they are replaced

by other reliable large scale capacity electric generation technologies capable of consistently supporting the bulk electrical demands.

Id. at 1057–58.

Finally, and somewhat contradictory to its assertions regarding replacement coal not having an effect on the market, BLM noted that:

PRB coal has competed for an increasing share of coal sales in the market primarily because it [ha]s lower cost, [is] environmentally compliant, and [its] successful post-mining reclamation has been thoroughly demonstrated. For these reasons, over the past several decades, PRB coal has been replacing other domestic coals in the open market, and would be expected to compete similarly in the future When current reserves are depleted at these mines, their production would likely be replaced by other domestic and, potentially, international coal producers with coal that is more costly, less environmentally compliant, and has greater residual environmental impact.

Id. at 1059.

Since BLM’s decision, North and South Porcupine and South Hilight have already been leased. As mentioned, North Highlight has not yet been sold. The South Hilight tract went to Ark Land Company; the Porcupine tracts are leased to BTU Western Resources, Inc.

In 2012, Plaintiffs challenged the four RODs and the FEIS in federal district court in three consolidated cases. The State of Wyoming intervened, as did a group of mining interests (BTU Western Resources, Inc., the National Mining Association, and the Wyoming Mining Association, collectively, Mining Appellees). The New York University School of Law’s Institute for Policy

Integrity (the Institute) filed a motion for leave to file an amicus brief in support of the Plaintiffs’ position, which we now grant. The Plaintiffs objected to BLM’s no action alternative analysis before the district court, among various other issues, but the district court did not specifically address it. In the end, the district court upheld the BLM’s actions as reasonable, and Plaintiffs timely appealed this narrow issue.

II.

The Mining Appellees challenge the Plaintiffs’ Article III standing. See U.S. Const. Art. 3 § 2 (limiting the jurisdiction of federal courts to “cases” and “controversies”). The remaining Appellees (BLM and the State of Wyoming) do not.

The Plaintiffs must show that their individual members have standing; that is, that they (1) have suffered or will imminently suffer a concrete and particularized injury that is (2) fairly traceable to the challenged agency action, and (3) likely to be redressed by a favorable decision. Lujan v. Defenders of Wildlife, 504 U.S. 555, 560–61 (1992). Next, the Plaintiffs must demonstrate that the “interests at stake are germane to the organization’s purpose” and that “neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.” Friends of the Earth, Inc. v. Laidlaw Env’tl. Servs., Inc., 528 U.S. 167, 181 (2000); Hunt v. Wash. State Apple Adver. Comm’n, 432 U.S. 333, 343 (1977). Article III standing must be established for

each form of relief sought, Summers v. Earth Island Inst., 555 U.S. 488, 493 (2009), and assessed “at the time the suit is filed.” WildEarth Guardians v. Pub. Serv. Co. of Colorado, 690 F.3d 1174, 1185 (10th Cir. 2012) (relying on Laidlaw, 528 U.S. at 189); see also Clapper v. Amnesty Int’l USA, 133 S. Ct. 1138, 1157 (2013) (“[W]e assess standing as of the time a suit is filed.”).

The Plaintiffs have standing; they have proved every element. The environmental impacts of the Wright Area Leases are germane to the purposes of both the Sierra Club and the WildEarth Guardians. As for injury in fact, Plaintiffs presented declarations from individual members establishing harms to their personal aesthetic and recreational interests in the Thunder Basin National Grasslands, which would be adversely affected by the mining leases. The Supreme Court has repeatedly acknowledged this type of injury as sufficient. Laidlaw, 528 U.S. at 183. In a NEPA challenge, “[t]o establish causation, a plaintiff need only show its increased risk is fairly traceable to the agency’s failure to comply with [NEPA]” and the agency’s resulting “uninformed decisionmaking.” Committee to Save the Rio Hondo v. Lucero, 102 F.3d 445, 451-52 (10th Cir. 1996). Here, the Plaintiffs pointed out that the increased risk of environmental harm is directly tied to BLM’s inadequate alternatives comparison. “[T]he normal standards for redressability are [also] relaxed” in the NEPA context. Id. at 452 (quoting Defenders of Wildlife, 504 U.S. at 572 n.7). “[A] plaintiff need not establish that the ultimate agency decision would change upon

[NEPA] compliance” but “rather . . . that its injury would be redressed by . . . requiring the [agency] to comply with [NEPA]’s procedures.” Id. Here, Plaintiffs argued that their injuries are redressable through the relief they seek: vacatur of the BLM’s FEIS, RODs, and the resulting leases. Sierra Club v. U.S. Dep’t of Energy, 287 F.3d 1256, 1265–66 (10th Cir. 2002) (“The alleged injury is the potential environmental impact of an uninformed decision to” move forward with a particular project. “This injury is redressable by a court order requiring the [agency] to undertake an NEPA . . . analysis in order to better inform itself of the consequences of its decision.”).

Mining Appellees argue that Plaintiffs lack standing to litigate this appeal for two alternative reasons: (1) the Plaintiffs never had standing to challenge BLM’s climate change analysis because their alleged injuries are not caused by climate change, or (2) the Plaintiffs had a form of derivative standing in the district court because they also challenged localized environmental impacts, but lost their standing on appeal by abandoning that challenge. Neither of these arguments is persuasive.

First, it is not the case that Plaintiffs’ injury must be tied to the particular deficiency alleged in the FEIS, i.e., that Plaintiffs must allege a climate-change related injury in order to have standing to challenge BLM’s analysis of climate change impacts. If anything, Supreme Court precedent indicates that we should focus on the *form of relief*, rather than the *arguments* upon which that relief might

be based. See Duke Power Co. v. Carolina Env'tl. Study Grp., Inc., 438 U.S. 59, 72–79 (1978). In Duke Power, the Court summarized the defendants' argument, and “declined to accept” it: “Since the environmental and health injuries claimed by appellees [resulting from the construction of a new nuclear power plant in their area] are not directly related to the constitutional attack on the Price-Anderson Act [authorizing construction], such injuries, the argument continues, cannot supply a predicate for standing.” Id. at 78. The Court was unconvinced because “but-for” the challenged statute, plaintiffs' injuries would not occur. Id. “Where a party champions his own rights, and where the injury alleged is a concrete and particularized one which will be prevented or redressed by the relief requested, the basic practical and prudential concerns underlying the standing doctrine are generally satisfied when the constitutional requisites are met.” Id. at 80–81.

Our own precedents indicate that the legal theory and the standing injury need not be linked as long as redressability is met. See Rio Hondo, 105 F.3d at 452; S. Utah Wilderness All. v. Office of Surface Mining Reclamation & Enf't, 620 F.3d 1227, 1233–34 (10th Cir. 2010) (concluding that aesthetic and recreational environmental injuries conferred standing to challenge agency decision on whether the mining company's time window to commence mining had expired).

We have not specifically addressed whether local, non-climate injuries may support standing for a challenge to NEPA climate change analysis, but the

District of Columbia Circuit has.³ In WildEarth Guardians v. Jewell, 738 F.3d 298 (D.C. Cir. 2013), the court concluded that WildEarth Guardians had standing to challenge inadequate NEPA analysis of climate change impacts “based on their members’ aesthetic and recreational injuries caused by local pollution,” and did not require climate-based injury because “[v]acatur of the BLM order would redress the Appellants’ members’ injuries.” Jewell, 738 F. 3d at 306. Relying on Duke Power, the District of Columbia Circuit rejected the argument that “the specific type of pollution causing the Appellants’ aesthetic injury be the same type that was inadequately considered.” Id. at 307. Such a requirement would, in that court’s words, “slice[] the salami too thin.” Id.

Alternatively, Mining Appellees argue that, even if Plaintiffs had standing to challenge the climate change analysis in the district court, they lost that standing on appeal. Mining Aplee. Br. at 9–10. We disagree. We have explained

³ Several district courts have also addressed the issue, but are not unanimous. WildEarth Guardians v. Bureau of Land Mgmt., 8 F. Supp. 3d 17, 29–30 (D.D.C. 2014), appeal dismissed, No. 14-5137, 2014 WL 3014914 (D.C. Cir. June 20, 2014) (finding Article III standing in identical situation); High Country Conservation Advocates v. U.S. Forest Serv., 52 F. Supp. 3d 1174, 1186 (D. Colo. 2014) (same); WildEarth Guardians v. U.S. Forest Serv., 828 F. Supp. 2d 1223, 1235 (D. Colo. 2011) (same); Amigos Bravos v. U.S. Bureau of Land Mgmt., 816 F. Supp. 2d 1118, 1127–36 (D.N.M. 2011) (under different facts, finding no injury or causation where injury alleged was change to New Mexico climate resulting from the oil and gas lease and there was a lack of support showing impacts to local geographic area); Kunaknana v. U.S. Army Corps of Engineers, 23 F. Supp. 3d 1063, 1081–83 (D. Alaska 2014) (affidavits did not support group’s members’ actual or imminent use of the area subject to proposed agency action, and rejecting the “contiguous ecosystem” argument).

that “[t]he plaintiff bears the burden to establish standing at the time the suit is filed, and if the defendant’s offending conduct has ceased by that time, we dismiss for lack of redressability. But if the offending conduct ceases after the suit is filed, the defendant must establish mootness by showing that its offending conduct ‘could not reasonably be expected to recur.’” WildEarth Guardians, 690 F.3d at 1185–86 (quoting Laidlaw, 528 U.S. at 189). Here, Mining Appellees point to no facts that suggest the Plaintiffs did not have standing to sue when they filed their complaint, as previously noted. Neither do the Mining Appellees argue that the facts undergirding the Plaintiffs’ standing argument have changed, causing the case to moot since the Plaintiffs filed the Complaint. We therefore conclude that the Plaintiffs have standing to bring this lawsuit.

III.

Turning to the merits, the central issue in this case is whether the BLM’s assumption that there was no real world difference between issuing the Wright area leases and declining to issue them because third party sources of coal would perfectly substitute for any volume lost on the open market should the BLM decline to issue the leases was arbitrary and capricious. We hold that it was.

A. Standard of Review

We apply the same standard of review as the district court in this administrative challenge: the familiar “arbitrary and capricious” standard. Richardson, 565 F.3d at 704-05; 5 U.S.C. § 706(2)(A) (“The reviewing court shall

. . . hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.”). An agency’s decision is arbitrary and capricious if the agency (1) “entirely failed to consider an important aspect of the problem,” (2) “offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise,” (3) “failed to base its decision on consideration of the relevant factors,” or (4) made “a clear error of judgment.” Richardson, 565 F.3d at 704 (quoting Utah Env’tl. Cong. v. Troyer, 479 F.3d 1269, 1280 (10th Cir. 2007)). “[T]he arbitrary and capricious standard focuses on the rationality of an agency’s decision making process rather than on the rationality of the actual decision” Colo. Wild v. United States Forest Serv., 435 F.3d 1204, 1213 (10th Cir. 2006). “This standard of review is ‘very deferential’ to the agency’s determination, and a presumption of validity attaches to the agency action such that the burden of proof rests with the party challenging it.” Kobach v. United States Election Assistance Comm’n, 772 F.3d 1183, 1197 (10th Cir. 2014).

In the NEPA context, an agency’s EIS is arbitrary and capricious if it fails to take a “hard look” at the environmental effects of the alternatives before it. See All Indian Pueblo Council v. United States, 975 F.2d 1437, 1445 (10th Cir. 1992). We have characterized our review of whether agencies took the requisite “hard look” as a “rule of reason standard (essentially an abuse of discretion

standard).” Utahns for Better Transp. v. U.S. Dep’t of Transp., 305 F.3d 1152, 1163 (10th Cir. 2002), as modified on reh’g on other grounds, 319 F.3d 1207 (10th Cir. 2003); Richardson, 565 F.3d at 708-09. This means that “[a] court reviewing the adequacy of an EIS merely examines ‘whether there is a reasonable, good faith, objective presentation of’ the topics NEPA requires an EIS to cover.” Holy Cross Wilderness Fund v. Madigan, 960 F.2d 1515, 1522 (10th Cir. 1992) (quoting Johnston v. Davis, 698 F.2d 1088, 1091 (10th Cir. 1983)). We have also stated that the reasons for rejecting an alternative must be “plausible.” All Indian Pueblo Council, 975 F.2d at 1446. The agency may choose the more environmentally harmful alternative provided its reasons for doing so are disclosed and rational. See Forest Guardians v. United States Forest Serv., 495 F.3d 1162, 1173 (10th Cir. 2007) (The agency “acknowledged that the project would cause a number of significant environmental problems -- including dust, noise, and diesel fumes -- but, as noted by USFS, it opted to pursue the project anyway based on other considerations. Idiosyncratically, NEPA does not require more.”).

B. NEPA Analysis

The Plaintiffs argue the BLM’s substitution assumption rendered its comparison of the preferred alternative (issuing the leases) and the no action alternative arbitrary and capricious for two reasons: the assumption itself was arbitrary and capricious because it lacks support in the administrative record and

ignores basic supply and demand principles; and it ignored readily available tools to measure the market impact of such a large contraction in the nation's coal supply, which amounts to a failure to acquire the information "essential to a reasoned choice among alternatives." Aplt. Br. at 32 (quoting 40 C.F.R. § 1502.22(a)). Plaintiffs argue that the FEIS and RODs therefore do not comply with NEPA and CEQ regulations and should be vacated. We address these arguments in turn.

1. The Perfect Substitution Assumption

The Plaintiffs' first argument is persuasive. They assert that the BLM's assumption of "replacement" lacks any support in the administrative record. As a factual matter, we agree. The BLM did not point to any information (other than its own unsupported statements) indicating that the national coal deficit of 230 million tons per year incurred under the no action alternative could be easily filled from elsewhere, or at a comparable price. It did not refer to the nation's stores of coal or the rates at which those stores may be extracted. Nor did the BLM analyze the specific difference in price between PRB coal and other sources; such a price difference would effect substitutability.

Wyoming argues on appeal, and vigorously asserted at oral argument, that the record supports a conclusion that failing to issue the leases would not impact the nation's coal supply and thus would not impact the national price of coal because the replacement coal would come from within the PRB, and enjoy the

same cost advantages over other regions. But BLM never indicated on the record that coal from within the PRB would replace that extracted under these leases (possibly to avoid any perception of agency capture); to the contrary, its statements indicate only that replacement coal would come from outside the region.

We also agree with the Plaintiffs that the BLM's assumption was contradicted by one of the principal resources on which it relies. The BLM did not acknowledge portions of EIA's 2008 Energy Outlook which contradict its conclusion, and thus these portions of the report are not in the FEIS or RODs. However, BLM relied on other excerpts of this report, and it seems only appropriate to look to other portions of that same source for a more complete picture of the EIA's forecasts and expertise on the coal markets.

Principally, Plaintiffs point to a portion of the 2008 Energy Outlook which explains that an increase in coal prices would affect national demand for coal because it would compete less effectively against other sources of energy. Although, as BLM points out, the report generally predicts an increase in coal production, "different assumptions about economic growth (which mainly affect overall electricity demand) and about the costs of producing fossil fuels (which primarily determine the mix of supply sources for generation and petroleum products) lead to different results." App. at 580. The 2008 Energy Outlook states:

Alternative assumptions for coal mining and transportation costs affect delivered coal prices and demand. Two alternative coal cost cases developed for [this report] examine the impacts on U.S. coal markets of alternative assumptions about mining productivity, labor costs, and mine equipment costs on the production side, and about railroad productivity and rail equipment costs on the transportation side. In the high coal cost case, the average delivered coal price in 2006 dollars is \$2.76 per million Btu in 2030—52 percent higher than in the reference case (Figure 96). As a result, U.S. coal consumption is 4.8 quadrillion Btu (16 percent) lower than in the reference case in 2030, reflecting both a switch from coal to natural gas, nuclear, and renewables in the electricity sector and reduced CTL [coal-to-liquids] production. In the low coal cost case, the average delivered price in 2030 is \$1.29 per million Btu—29 percent lower than in the reference case—and total coal consumption is 2.1 quadrillion Btu (7 percent) higher than in the reference case. *Id.* at 581; *see also id.* at 678 (Table D12 of EIA 2008 Energy Outlook, showing a projected difference of 26% in coal use from the “low cost” case in 2030 to the “high cost” case).

Thus, the report supports what one might intuitively assume: when coal carries a higher price, for whatever reason that may be, the nation burns less coal in favor of other sources. A force that drives up the cost of coal could thus drive down coal consumption.

Seemingly counter to its entire argument, BLM admits that the 2008 Energy Outlook “undoubtedly predicts that coal demand may decline in response to increased coal price, and BLM has never suggested otherwise.” BLM Br. at 32. But, BLM argues, overall increased demand for electricity will override the effect of increased coal prices. But there is no evidence in the record that BLM considered the potential impact of increased price on demand but rather BLM merely concluded it would have no impact. The record contains only BLM’s conclusions that the effect on demand would be “inconsequential,” with no

reference to how, or if, it decided which demand-driving factors would prevail or why.

That this perfect substitution assumption lacks support in the record is enough for us to conclude that the analysis which rests on this assumption is arbitrary and capricious. True, “the mere presence of contradictory evidence does not invalidate the Agencies’ actions or decisions.” Wyo. Farm Bureau Fed’n v. Babbitt, 199 F.3d 1224, 1241 (10th Cir. 2000). If the agency is faced with conflicting evidence or interpretations, “[w]e cannot displace the agencies’ choice between two conflicting views, even if we would have made a different choice had the matter been before us de novo.” Custer Cty. Action Ass’n v. Garvey, 256 F.3d 1024, 1036 (10th Cir. 2001); see also Holy Cross Wilderness Fund v. Madigan, 960 F.2d 1515, 1527 (10th Cir. 1992) (quoting Friends of the Earth v. Hall, 693 F. Supp. 904, 922 (W.D. Wash. 1988) (“A federal court is not in the business of resolving scientific disagreements between plaintiffs’ experts and the [agency’s] experts.”)).

But this assumption nevertheless falls below the required level of data necessary to reasonably bolster the Bureau’s choice of alternatives. A number of our cases discuss the quality of evidentiary support sufficient to avoid our concluding that a challenged NEPA analysis is arbitrary and capricious. The evidence must be sufficient in volume and quality to “sharply defin[e] the issues and provid[e] a clear basis for choice among options.” Citizens’ Comm. to Save

Our Canyons v. Krueger, 513 F.3d 1169, 1179 (10th Cir. 2008) (quoting 40 C.F.R. § 1502.14); see also All Indian Pueblo Council, 975 F.2d at 1444 (“Concerning the requisite level of detail necessary, what is required is information sufficient to permit a reasoned choice of alternatives as far as environmental aspects are concerned.” (quotation omitted)). Here, the blanket assertion that coal would be substituted from other sources, unsupported by hard data, does not provide “information sufficient to permit a reasoned choice” between the preferred alternative and no action alternative. It provided no information.

Even if we could conclude that the agency had enough data before it to choose between the preferred and no action alternatives, we would still conclude this perfect substitution assumption arbitrary and capricious because the assumption itself is irrational (i.e., contrary to basic supply and demand principles). “We apply a rule of reason standard (essentially an abuse of discretion standard) in deciding whether claimed deficiencies in a FEIS are merely flyspecks, or are significant enough to defeat the goals of informed decisionmaking and informed public comment.” Utahns, 305 F.3d at 1163.

We have not previously addressed when the assumptions an agency makes in its EIS render its analysis unreasonable in violation of the “rule of reason.” However, the Supreme Court’s non-NEPA APA cases are helpful. We look to these cases because the APA sets the minimum procedural requirements all

agencies must satisfy when taking formal action. See Vt. Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 525 (1978).

In Baltimore Gas & Electric Co. v. NRDC, 462 U.S. 87 (1983), the Supreme Court upheld the Nuclear Regulatory Commission's conclusion that permanent nuclear waste storage would not have a significant environmental impact, which was based on the Commission's assumption that the waste repositories would perform perfectly. Id. at 89. The Court upheld the agency's decision based on the zero release assumption after considering three factors: (1) it had a limited purpose in the overall environmental analysis, i.e., it was not the key to deciding between two alternatives; (2) overall, the agency's estimation of the environmental effects was overstated, so this single assumption did not determine the overall direction the NEPA analysis took; and (3) courts are most deferential to agency decisions based not just on "simple findings of fact," but in the agency's "special expertise, at the frontiers of science." Id. at 102-04.

Here, the BLM's substitution assumption appears to be quite different from the Commission's zero release assumption under the three factor analysis in Baltimore Gas. First, the BLM's perfect substitution assumption was key to the ultimate decision to open bidding on the leases. In each of the four RODs, the "Reasons for Decision" section first discusses the leases' effect on coal combustion in the nation overall, then lists the other facts that influenced its decision in bullet points. In each ROD, the discussion opens with the assertion

that: “Denying this proposed coal leasing is not likely to affect current or future domestic coal consumption used for electric generation.” E.g., App. at 1057-58. Prioritizing the carbon emissions and global warming analysis in the RODs suggests that this question was critical to the decision to open the leases for bidding. Prioritizing the perfect substitution assumption within that analysis suggests it was critical to deciding between two alternatives: whether or not to issue the leases. The perfect substitution assumption was more than a “mere flyspeck” in the BLM’s NEPA analysis. Richardson, 565 F.3d at 704.

Second, the BLM’s carbon emissions analysis seems to be liberal (i.e., underestimates the effect on climate change). The RODs assume that coal will continue to be a much used source of fuel for electricity and that coal use will increase with population size. We do not owe the BLM any greater deference on the question at issue here because it does not involve “the frontiers of science.” The BLM acknowledged that climate change is a scientifically verified reality. Climate science may be better in 2017 than in 2010 when the FEIS became available, but it is not a scientific frontier as defined by the Supreme Court in Baltimore Gas, i.e., as barely emergent knowledge and technology. Balt. Gas, 462 U.S. at 92. Moreover, the climate modeling technology exists: the NEMS program is available for the BLM to use.

Plaintiffs also cite authority questioning other agency assumptions similar analytically to the perfect substitution assumption. The primarily disputed

case—Mid States Coalition for Progress v. Surface Transp. Bd., 345 F.3d 520 (8th Cir. 2003)—is not on point. In that case, the Eighth Circuit rejected an agency’s argument that it did not need to consider the effect on air quality of building a national coal railway because the exact impact was speculative. Id. at 548-50. The agency’s FEIS had concluded that any emissions the rail project caused would comply with any statutory caps and thus have only a known effect on air quality, an assumption that ignored how emissions not subject to statutory caps would affect air quality. Id. at 550.

Mid States is distinguishable from the present case. The agency there had “completely ignored the effects of increased coal consumption” and “made no attempt” to meet the CEQ regulation requirements. Id. at 550. Here, the BLM has not completely ignored the effects of increased coal consumption, but rather it has analyzed them irrationally.

This deficiency is more than a mere flyspeck. Richardson, 565 F.3d at 704. The BLM’s perfect substitution assumption was key to the ultimate decision to open bidding on the leases. In each of the four RODs, the “Reasons for Decision” section first discusses the leases’ effect on coal combustion in the nation overall, then lists the other facts that influenced its decision in bullet points. In each ROD, the discussion opens with the assertion that: “Denying this proposed coal leasing is not likely to affect current or future domestic coal consumption used for electric generation.” E.g., App. at 1057-58. Prioritizing the carbon emissions and

global warming analysis in the RODs suggests that this question was critical to the decision to open the leases for bidding. Prioritizing the perfect substitution assumption within that analysis suggests it was critical to deciding between two alternatives: whether or not to issue the leases.

Moreover, failing to adequately distinguish between these alternatives defeated NEPA's purpose. We have explained that if the EIS is so deficient as to "defeat NEPA's goals of informed decisionmaking and informed public comment," then it is arbitrary and capricious. See Richardson, 565 F.3d at 704. In order for the agency's conclusions to be upheld, "an agency must 'examine[] the relevant data and articulate[] a rational connection between the facts found and the decision made.'" Id. at 713 (quoting Citizens' Comm. to Save Our Canyons, 513 F.3d at 1176) (alterations in original). NEPA has two purposes: prevent uninformed agency decisions and provide adequate disclosure to allow public participation in those decisions. See Methow Valley, 490 U.S. at 349; Colo. Env'tl. Coal. v. Dombeck, 185 F.3d 1162, 1172 (10th Cir. 1999); see also Marsh v. Or. Nat. Res. Council, 490 U.S. 360, 371 (1989) (referring to "the Act's manifest concern with preventing uninformed action"). Failing to disclose the data critical to the key distinction between two alternatives led to what appears, on the record, to be an uninformed agency decision and did not adequately disclose the BLM's rationale to the public.

Therefore, we hold that it was an abuse of discretion to rely on an economic assumption, which contradicted basic economic principles, as the basis for distinguishing between the no action alternative and the preferred alternative.

2. Modeling Tools

The Plaintiffs argue that because the BLM assumed perfect substitution, it failed to take additional efforts to determine climate impact, a failure that “prevented the agency from ‘providing a clear basis for choice among options by the decisionmaker and the public.’” Aplt. Br. at 33 (quoting 40 C.F.R. §1502.14). It points to an available computer modeling system, National Energy Modeling System (NEMS), the BLM might have used. Contrary to BLM’s and Wyoming’s characterizations, Plaintiffs do not argue that the failure to use these models, in and of itself, was arbitrary and capricious or invalidates the FEIS or the RODs. Nor could Plaintiffs make such an argument here, since they did not argue for the necessity of modeling in their comments on the DEIS. See Gilmore v. Weatherford, 694 F.3d 1160, 1169 (10th Cir. 2012).

Plaintiffs’ modeling argument is not persuasive. “NEPA does not require agencies to adopt any particular internal decisionmaking structure.” Balt. Gas, 462 U.S. at 100; see also Utahns, 305 F.3d at 1166. Choosing not to adopt a modeling technique does not render the BLM’s EIS arbitrary and capricious; its irrational and unsupported substitution assumption does. We therefore decline to find that the EIS and RODs arbitrary and capricious for this reason.

C. Deference

Despite these deficiencies, BLM argues that it is entitled to deference in its area of expertise. BLM is correct that agencies receive deference on factual determinations made within their special area of expertise. FERC v. Elec. Power Supply Ass'n, __U.S.__, 136 S. Ct. 760, 782 (2016). Here, BLM argues that comparing the demand for coal under its proposed alternative and the no action alternative is within its area of expertise because 43 C.F.R. 3425.4(a)(1) requires it to hold a public hearing “on the environmental assessment or environmental impact statement, the proposed sale and the fair market value and maximum economic recovery on the proposed lease tract” before it issues mineral leases. It is debatable whether BLM’s conclusion on the economic implications of the no action alternative falls squarely within BLM’s expertise, especially since it needed to cite EIA and DOE for its minimal economic analysis, rather than relying on internal expertise. Cf. Balt. Gas, 462 U.S. at 99–104 (deferring to the Nuclear Regulatory Commission on impacts of nuclear waste storage, “at the frontiers of science”); Marsh, 490 U.S. at 376–83 (deferring to Corps of Engineers and Oregon Department of Fish & Wildlife internal expert opinions on turbidity and temperature impacts of a forestry project). In any case, there is nothing for the court to defer to here. BLM did not provide any reasoning or analysis for its conclusion that the no action alternative would bear no consequential difference to the proposed leases, other than noting that overall coal

demand was projected to increase under the EIA's baseline assumptions. BLM's reliance on expertise deference doctrine is therefore unhelpful.

We therefore decline to extend the additional layer of deference the BLM requests.

D. Harmless Error

The BLM argues that if it erred, any error was harmless. See 5 U.S.C. § 706 (“due account shall be taken of the rule of prejudicial error”); Richardson, 565 F.3d at 708 (“The harmless error rule applies to judicial review of administrative proceedings, and errors in such administrative proceedings will not require reversal unless Plaintiffs can show they were prejudiced.” (quoting Bar MK Ranches v. Yuetter, 994 F.2d 735, 740 (10th Cir.1993))). The BLM argues that even if it had discovered a significant difference in carbon dioxide emissions between the two alternatives, it would have proceeded with the leases nonetheless.

The BLM has forfeited any harmless error claim by failing to argue it before the district court. See Richison v. Ernest Grp., Inc., 634 F.3d 1123, 1128 (10th Cir. 2011). We therefore decline to address it.

E. Relief

Plaintiffs have requested that we:

(1) declare that BLM violated NEPA in issuing the Wright Area Final EIS and Records of Decision for the North Hilight, South Hilight, North Porcupine, and South Porcupine leases; and (2) vacate each

BLM's authorization, sale, and issuance of the North Hilight, South Hilight, North Porcupine, and South Porcupine leases, including the Wright Area Final EIS and individual Records of Decision challenged here.

Aplt. Br. at 39.⁴ They requested the same relief from the district court. To the contrary, BLM argues that the appropriate form of relief would be to “reverse and remand to the district court with instructions to remand to BLM, and not grant injunctive relief or vacatur.” BLM Br. at 40 n.6.

Under the APA, courts “shall” “hold unlawful and set aside agency action” that is found to be arbitrary or capricious. 5 U.S.C. § 706(2)(A). Vacatur of agency action is a common, and often appropriate form of injunctive relief granted by district courts. It is, however, a different question whether we may grant vacatur of BLM's decision, or if we must remand to the district court with instructions to do so.

⁴In April, 2016, while appeal before this court was pending, BTU Western's parent company, Peabody Energy Corporation, filed for chapter 11 bankruptcy. Stipulation and Consent Order Concerning Pending Litigation, at 1. BTU Western had successfully bid on and been issued the leases to North Porcupine and South Porcupine, and these properties are included in the schedule of assets in the bankruptcy proceeding. Schedule G, Voluntary Petition for Bankruptcy, at 1. Bankruptcy stays can limit litigation concerning the property. See, e.g., Bd. of Governors of the Fed. Reserve Sys. v. MCorp Fin., 502 U.S. 32, 38 (1991); see also 11 U.S.C. § 362(a)(1). Concerned about the future of their case, Plaintiffs entered a Stipulation, which the bankruptcy court approved, withdrawing their request for vacatur of the leases. Stipulation and Consent Order Concerning Pending Litigation, at 3-4. As of April 3, 2017, BTU Western was dismissed from the bankruptcy proceedings. The Plaintiffs reinstated their request for vacatur.

In the past, we have done all of the following when placed in a similar posture: (1) reversed and remanded without instructions, (2) reversed and remanded with instructions to vacate, and (3) vacated agency decisions. See Richardson, 565 F.3d at 721 (requiring BLM to conduct an EIS, rather than issuing a FONSI, but merely reversing and remanding to the district court without vacating the FONSI); Utah Envtl. Cong. v. Bosworth, 439 F.3d 1184, 1195 (10th Cir. 2006) (where agency violated requirements of the Endangered Species Act, “revers[ing] the district court’s order affirming authorization of the Project and remand[ing] to the district court with instructions to vacate the Forest Service’s approval of the Project”); Utah Envtl. Cong. v. Richmond, 483 F.3d 1127, 1140 (10th Cir. 2007) (in a challenge under the National Forest Management Act [NFMA], also under arbitrary-and-capricious review, reversing the district court’s “reject[ion]” of the plaintiff’s challenge, and “remand[ing] to the district court so it may remand to the Forest Service for further administrative action consistent with this opinion”); Ecology Ctr., Inc. v. U.S. Forest Serv., 451 F.3d 1183, 1195 (10th Cir. 2006) (in another NFMA challenge, reversing the district court’s dismissal and remanding to the district court with instructions “to enter an order vacating the Forest Service’s approval of the” project); New Mexico Cattle Growers Ass’n v. U.S. Fish & Wildlife Serv., 248 F.3d 1277, 1285-86 (10th Cir. 2001) (“set[ting] aside” Fish & Wildlife’s critical habitat designation under the

Endangered Species Act, “instruct[ing]” the Service to issue a new designation, and reversing and remanding to the district court).

We decline to vacate the leases. First, because Plaintiffs challenge a fairly narrow issue, the district court may vacate the entire FEIS and RODs, or it might fashion some narrower form of injunctive relief based on equitable arguments the parties have failed to make here. Second, the question remains what will happen to the leases which have already been issued and whether mining the lease tracts should be enjoined—a question that the parties have not touched on in their arguments before us. Third, the Appellees stated at oral argument that the three leases that were issued are currently being mined.

IV.

We hold that the BLM’s EIS and RODs were arbitrary and capricious and thus REVERSE the district court. We REMAND with instructions to enter an order requiring the BLM to revise its EIS and RODs. We do not, however, vacate the resulting leases.

BALDOCK, J., concurring.

The Administrative Procedure Act provides that courts shall “hold unlawful and set aside agency action, findings, and conclusions [that are] . . . arbitrary [and] capricious.” 5 U.S.C. § 706(2)(A). We have held that an agency engages in “arbitrary” and “capricious” action when, *inter alia*, it “offer[s] an explanation for [such action] that runs counter to the evidence before the agency.” *New Mexico ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 704 (10th Cir. 2009) (internal citation omitted). The question before us is whether the Bureau of Land Management (BLM) engaged in arbitrary and capricious action when it issued the Wright Area leases on the assumption that there would be no “consequential[.]” reduction in coal use, and thus environmental impact, if it were to decline to issue such leases. The relevant environmental impact for purposes of this appeal is climate change, and the BLM has conceded that carbon dioxide emissions from coal use cause climate change. *See App.* at 978, 987.

The Court’s opinion ably sets forth why, in light of the BLM’s concession that coal use causes climate change, the BLM’s assumption that declining to issue the Wright Area leases would not result in less climate impact renders the decision to issue the leases arbitrary and capricious: (1) declining to issue the Wright Area leases would have the effect of removing some twenty percent of the nation’s present annual coal supply from the market; (2) replacement coal would be more costly; (3) as the cost of coal goes up, “basic supply and demand principles” predict that demand for coal goes down; and (4)

lessened demand for coal results in less use of coal, which results in less impact on the climate. To assume that declining to issue the Wright Area leases would not have a “consequential[]” impact on coal use, and thus the climate, the Court concludes, runs counter to basic supply and demand principles. Consistent with this conclusion, the Court characterizes the BLM’s analytical flaw as an “economic” one in its opinion. *See* Court’s Op. at 28.

Because the question before us is an economic one, and because in resolving that question we dispose of this appeal, I see no need to comment on matters of climate science, as the Court does when it attempts to distinguish this appeal from *Baltimore Gas & Elec. Co. v. Nat. Res. Def. Council, Inc.*, 462 U.S. 87 (1983). In *Baltimore Gas*, the Supreme Court held the Nuclear Regulatory Commission’s assumption that permanent storage of nuclear waste would not result in environmental harm was not arbitrary and capricious in part because the assumption dealt with an “area of special expertise, at the frontiers of science” and thus merited deference from the Court. *Id.* at 103-06. The obvious distinction between this appeal and *Baltimore Gas* is this appeal does not turn on scientific expertise; it turns, instead and in this Court’s words, on “basic economic principles.” *See* Court’s Op. at 29. Perplexingly, the Court does not cite this distinction in addressing *Baltimore Gas*. The Court attempts, instead, to distinguish this appeal from *Baltimore Gas* by positing that unlike assumptions about nuclear waste storage, assumptions about climate change “do[] not involve ‘the frontiers of science’” because “[c]limate science . . . is not a scientific frontier.”

The assertion that climate science is settled science is, in my view, both unnecessary to this appeal and questionable as a factual matter. Such an assertion is not necessary to this appeal because there is no disputed issue of climate science before us and thus no question of climate science we must decide whether to defer to the BLM on.¹ As set forth above, we can distinguish *Baltimore Gas* on other grounds. The assertion is questionable as a factual matter because it is contrary to evidence in the record. Section 4.2.14.1 of the Final Environmental Impact Statement (FEIS) states that “the science [of climate change] is not settled and there is strong debate among the scientific community that natural variability is the overwhelming factor influencing climate rather than the accumulation of anthropogenic GHG emissions in the atmosphere.” App. at 977. The FEIS also states that “[t]here has been, and continues to be, considerable scientific investigation and discussion as to the causes of the recent historic rise in global mean temperatures, and whether the warming trend will continue,” and “[g]lobal climate models are at this time imperfect and . . . should not be used as a basis for public policy.” *Id.* at 978, 982. The Court neither addresses these statements nor cites any authority seconding its assertion that climate science is settled science. Contrary to this Court’s

¹ Even if a question of climate science was before us, I am not inclined to agree with the Court’s view that we ought not defer to agencies on such a question. “Federal judges lack the scientific, economic, and technological resources an agency can utilize in coping with issues” involving climate change and regulation of greenhouse gas emissions. *Am. Elec. Power Co. v. Connecticut*, 564 U.S. 410, 428 (2011). “Judges may not commission scientific studies or convene groups of experts for advice” *Id.* We are, instead, “confined by a record comprising the evidence the parties present.” *Id.* In view of our limitations, it seems to me that matters of climate science and its attendant policy implications are precisely the type of questions we should defer to agencies on under the present state of the law.

assertion, the Supreme Court has recognized that opposing views exist on climate science. *See Am. Elec. Power Co. v. Connecticut*, 564 U.S. 410, 417 n.2 (2011).

In commenting on the merits of climate science, I fear the Court suggests we have adjudicated the BLM's concession about climate change as a dispositive matter, when the validity of such concession was never before us on this appeal. The oft-cited axiom that we decide only the matters before us counsels us to be more prudent with our choice of commentary. *See, e.g., Johnson v. United States*, 559 U.S. 133, 144 (2010) ("The issue is not before us, so we do not decide it."). Accordingly, I concur with the Court's analysis of the BLM's economic assumption and disposition of this appeal on that basis, without joining its conclusion about climate science.