

January 15, 2016

Filed Electronically

Colorado Roadless Rule
USDA Forest Service
Attn: Daniel J. Jiron, Regional Forester
740 Simms Street
Golden, CO 80401

Re: Comments on the Supplemental Draft Environmental Impact Statement for the Proposed Exception to the Colorado Roadless Rule

Dear Mr. Jiron,

The Sabin Center for Climate Change Law at Columbia Law School submits these comments on the Supplemental Draft Environmental Impact Statement (“SDEIS”) for the North Fork Coal Mining Area exception to the Colorado Roadless Rule.

We commend the U.S. Forest Service (USFS) for conducting a much more detailed cost-benefit analysis of the effects of increased coal mining under the proposed action, pursuant to the District Court of Colorado’s ruling in *High Country Conservation Advocates v. USFS* (2014).¹ However, we are concerned about: (i) the accuracy of the agency’s economic analysis, and (ii) the inconsistency between the proposed action and federal policies aimed at reducing greenhouse gas (GHG) emissions, increasing renewable energy production, enhancing carbon sequestration, and preserving national forests to meet the needs of present and future generations.

I. The SDEIS Underestimates the Costs of GHG Emissions from Increased Coal Development under the Proposed Rulemaking

It is critically important that USFS conduct an accurate and unbiased assessment of environmental and other costs associated with the expansion of coal mining on federal lands before approving the proposed action. Although NEPA does not require a cost-benefit analysis for all proposed actions, when an agency does conduct such analysis it cannot be misleading—if an agency discloses the economic benefits of a proposed action, then it must also disclose the reasonably foreseeable costs.²

¹ *High Country Conservation Advocates v. United States Forest Serv.*, 52 F. Supp. 3d 1174 (D. Colo. 2014).

² *Id.* at 1182, 1191.

Earthjustice, the Institute for Policy Integrity, and other stakeholders have submitted comments that include a detailed assessment of USFS's economic impact analysis and how the agency has applied the social cost of carbon (SCC) to GHG emissions from coal mining, transport, and combustion.³ These groups conclude that USFS has underestimated the net costs of GHG emissions by:

- (1) Not accounting for the social cost of methane.
- (2) Under-estimating the volume of methane.
- (3) Misrepresenting the likely market response of lowering electricity costs.
- (4) Using a “lower bound” estimate of the SCC that is inconsistent with the methodology established by the Interagency Working Group on the Social Cost of Carbon.

The Sabin Center is also concerned about these aspects of the economic impact analysis, as well as USFS's calculation of economic benefits associated with increased coal consumption. Our key concerns are noted below.

NEPA requires agencies to take a “hard look” at environmental consequences in an EIS.⁴ To determine whether an agency has fulfilled this responsibility, courts will ask whether 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.”⁵ We believe that USFS has made several analytical errors and omissions that represent a failure to take a “hard look” at the environmental consequences of the proposed action.

First, USFS has arbitrarily ignored the social cost of methane in its economic analysis of GHG impacts. USFS estimates that the increase in coal mining under the proposed action would generate 1.2 – 6.3 million tons (Mt) CO₂eq of methane emissions annually, and these methane emissions are about 14 times the annual GHG footprint from U.S. Forest Service business operations.⁶ However, USFS does not assign any cost value to the methane emissions in its economic analysis. The rationale for this omission is that the SCC tool does not cover non-CO₂ emissions and predicting the social costs of these other emissions is “complex.”⁷ But there is a

³ Earthjustice et al., *Comments on the Supplemental Draft Environmental Impact Statement (“SDEIS”) for the North Fork Coal Mining Area exception to the Colorado Roadless Rule* (January 15, 2016); Institute for Policy Integrity et al., *Comments on Proposed Exception to the Colorado Roadless Rule (RIN 0596-AD26) and Supplemental Draft Environmental Impact Statement (November 2015)* (January 15, 2016).

⁴ *Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976).

⁵ *New Mexico ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 704 (10th Cir. 2009) (citing *Utah Envtl. Cong. v. Troyer*, 479 F.3d 1269, 1280 (10th Cir.2007)) (internal quotation marks omitted). See also *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983).

⁶ SDEIS at 48.

⁷ SDEIS at 86.

peer reviewed methodology that can be used to calculate the social cost of methane⁸ which is consistent with the federal government's SCC methodology and which has been used by EPA in prior rulemakings.⁹ USFS's refusal to use this readily available methodology to calculate costs related to methane emissions would reflect an inexplicable failure to consider an important aspect of the environmental consequences associated with those emissions, and would constitute a clear error of judgment.

Second, USFS's decision to use a "lower bound" estimate of the SCC is an analytical error that cannot be ascribed to a difference in view or the product of USFS expertise. The Interagency Working Group on the Social Cost of Carbon recommends that agencies use four values to estimate the SCC—three values based on the average SCC at discount rates of 2.5%, 3%, and 5%, and a fourth value based on the 95th percentile estimate for the 3% rate (the use of the 95th percentile estimate is recommended to represent the possibility of more severe impacts that may occur in the tails of the SCC distribution).¹⁰ USFS has added a fifth value that reflects a 10th percentile estimate for the 3% discount rate "to provide a lower bound for the SCC analysis."¹¹ This approach is inconsistent with the methodology recommended by the Interagency Working Group and with the practice of other federal agencies. Moreover, as noted by the Institute for Policy Integrity, there is no economic justification for using a 10th percentile estimate.¹² Reliance on this fifth value would be arbitrary and capricious.

Finally, we believe that USFS has overestimated the nationwide economic benefits associated with an increase in coal production. Specifically, USFS has erred in assuming that an increase in domestic coal production will result in a shift towards greater domestic coal use (and a corresponding decrease in natural gas and renewable energy use), which will reduce electricity costs. USFS predicts that the preferred alternative will increase the share of coal-fired electricity by 112,168 GWh, displacing 71,677 GWh from natural gas plants and 40,000 GWh from renewable energy facilities from 2016-2054.¹³ According to the agency's analysis, this shift towards more coal-fired electric generation will reduce electricity prices, resulting in \$1,284-\$2,614 million in nationwide economic benefits.

⁸ Marten et al., *Incremental CH4 and N2O Mitigation Benefits Consistent with the US Government's SC-CO2 estimates*, 15 CLIMATE POLICY 272 (2015).

⁹ See EPA, Regulatory Impact Analysis of the Proposed Emission Standards for New and Modified Sources in the Oil and Natural Gas Sector, 4-14 (2015); EPA, Regulatory Impact Analysis for the Proposed Revisions to the Emission Guidelines for Existing Sources and Supplemental Proposed New Source Performance Standards in the Municipal Solid Waste Landfills Sector, 4-10 – 4-14 (2015).

¹⁰ The Interagency Working Group recommends that agencies use four values to calculate the SCC—three values based on the average SCC at discount rates of 2.5%, 3%, and 5%, and a fourth value based on the 95th percentile estimate for the 3% rate. The use of the 95th percentile estimate is recommended to represent the possibly of more severe impacts that may occur in the tails of the SCC distribution. Interagency Working Group on the Social Cost of Carbon, Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis, 2 (2013). USFS has added a fifth value which reflects a 10th percentile estimate for the 3% rate "to provide a lower bound for the SCC analysis." SDEIS at 85. As explained in the Institute for Policy Integrity's comments, there is no economic justification for USFS's decision to add a 10th percentile estimate.

¹¹ SDEIS at 85.

¹² Institute for Policy Integrity et al., *supra* note 3.

¹³ SDEIS at 96.

But USFS does not discuss the fact that existing federal regulations—most notably, the Clean Power Plan—will require a dramatic reduction in the proportion of coal-fired generation in the nationwide electricity mix.¹⁴ In this context, an increase in coal production will more likely lead to an increase in coal exports, which will not yield the same domestic benefits in terms of reduced electricity prices. Notably, the produced coal would still be combusted resulting in GHG emissions and corresponding climate impacts (just not within U.S. borders). Thus, by failing to account for the effect of existing regulations on the domestic consumption of coal, USFS has potentially overestimated economic benefits in its cost-benefit analysis under the “national boundary” and “global boundary” scenarios. These conclusions about economic benefits run counter to the evidence before the agency.

II. The Proposed Rulemaking is Inconsistent with Federal Climate Change Policies

Even if we accept the agency’s conclusions about economic costs and benefits, it is clear that the proposed action is inconsistent with federal climate change policies.

According to the agency’s analysis, the increase in coal mining under the North Fork Coal Mining Area exception (preferred alternative) will have the following effects:

- 13.7 – 43.2 million tons (Mt) of CO₂e emissions annually from the production, transportation, and combustion of the coal,¹⁵ and 449 – 486 MtCO₂e in total GHG emissions for the duration of mining activities (assuming all coal is produced).¹⁶ As a point of reference, the annual emissions from the proposed action would be roughly equivalent to the annual GHG emissions from 2.9-9.1 million passenger vehicles or energy use in 1.2-3.9 million homes.¹⁷
- \$489 – \$13,751 million in gross global costs, and as much as \$12,468 million in net global costs.
- \$443 – \$3,163 million in gross domestic costs, and as much as \$1,879 million in net domestic costs.
- Displacement of approximately 40,000 GWh of electricity from renewable energy and 71,677 GWh from natural gas plants between 2016 and 2054.

USFS does not reach any conclusions about the significance of these impacts. But it is clear from the numbers that the mining, transportation, and combustion of coal mined as a result of the

¹⁴ EPA predicts that coal-fired generation will decline 12-15% by 2025 and 22-23% by 2030 (as compared with a baseline scenario) due to the rule. EPA, *Regulatory Impact Analysis for the Clean Power Plan Final Rule*, 3-26 (2015). But the Clean Power Plan (CPP) is only briefly mentioned on pages 10 and B-12 of the SDEIS, and there is no indication that it was accounted for in the analysis of economic benefits.

¹⁵ SDEIS at 37.

¹⁶ SDEIS at 20, 39. The range of aggregate emissions is narrower than the range of annual emissions because the mines would operate for a longer time under lower production scenarios.

¹⁷ SDEIS at 43.

proposed action will result in a substantial increase in GHG emissions, causing major economic harm in the U.S. and abroad. According to USFS, it will also displace generation from natural gas and renewable energy sources. As a result of these impacts, approving this action would be incompatible with the following federal policies and commitments:

- International Commitments:** The U.S. is a party to the United Nations Framework Convention on Climate Change (UNFCCC) and has agreed to reduce its GHG emissions under the 2015 Paris Agreement. In the negotiations leading up to the finalization of the Paris Agreement, the U.S. announced that it intended to reduce economy-wide GHG emissions by 26-28% below 2005 levels by 2025.¹⁸ This will require a reduction of approximately 1,234 – 1,381 MtCO₂e in 2025 (as compared with 2013 emissions).¹⁹ Even with the Clean Power Plan and other existing regulations, the U.S. is not yet on track to achieve these reductions—additional measures will be needed to meet the 2025 target.²⁰

In this context, federal agencies should avoid undertaking new actions that will substantially increase GHG emissions. Although emissions from the proposed rulemaking would only constitute a small proportion of the needed reductions (roughly 1%), they nonetheless represent a sizeable impediment to achieving the target. This is because nationwide measures that could be used to “fill the gap” also represent relatively small proportions of the needed reductions. For example, the World Resources Institute estimates that nationwide energy efficiency improvements and fuel switching in the industrial sector could contribute around 3% of the target.²¹

- President’s Climate Action Plan:** The President’s plan for addressing climate change includes the following goals: (1) cutting GHG emissions from power plants and coal mines, (2) adopting actions to promote fuel switching from oil and coal to natural gas or renewables, (3) leading international efforts to address global climate change. According to USFS’s analysis, the proposed exception will increase GHG emissions from power plants and coal mines and displace natural gas and renewables with more coal. As noted above, the proposed exception is also incompatible with our nation’s international climate commitments. For these reasons, the proposed action is incompatible with the Climate Action Plan goals.

¹⁸ U.S. Intended Nationally Determined Contribution (2015), *available at* <http://www4.unfccc.int/submissions/indc/Submission%20Pages/submissions.aspx>.

¹⁹ These figures are based on the EPA GHG inventory estimates for 2005 GHG emissions and 2013 emissions (which were used as a baseline for current emissions, since these are the most recent estimates). EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2013*.

²⁰ C2ES, *Achieving the United States’ Intended Nationally Determined Contribution* (June 2015), *available at* <http://www.c2es.org/docUploads/achieving-us-indc.pdf>.

²¹ Karl Hausker, *Delivering on the U.S. Climate Commitment: A 10-Point Plan Toward a Low-Carbon Future* (World Resources Institute, May 2015), *available at* <http://www.wri.org/blog/2015/05/10-steps-achieve-us-emissions-reduction-target>.

- **Clean Power Plan:** EPA recently adopted the Clean Power Plan to reduce CO₂ emissions from the power sector 32% below 2005 levels by 2030. States are responsible for developing and implementing plans to achieve the emissions reduction targets set forth in the plan. To achieve these reductions, it will be necessary to replace a large amount of existing coal-fired electric capacity with natural gas and renewables. Thus, if USFS is correct that the coal mined as a result of the proposed exception will displace natural gas and renewables, the proposal is inconsistent with the objectives of the Clean Power Plan. The export of the mined coal would also be inconsistent with the objectives of the Clean Power Plan and other federal policies discussed in this section, because the coal would ultimately be consumed and burned elsewhere, resulting in the same amount of GHGs released into the atmosphere.
- **Executive Order 13693:** The U.S. has pledged to reduce emissions from federal government operations 40% below 2005 levels by 2025 and otherwise improve the sustainability and environmental performance of federal agency operations.²² The executive order also calls upon agencies to reduce indirect GHG emissions associated with federal activities, such as supply chain emissions from procured products. Although the order does not explicitly discuss fossil fuel development, it is clear that the authorization of coal mining on federal lands is inconsistent with the ultimate objective of the order—to reduce GHG emissions from all aspects of federal operations and decision-making.
- **USDA Strategic Plan, 2014-2018:** In this plan, USDA states that it intends to “[l]ead efforts to mitigate and adapt to climate change, drought, and extreme weather in agriculture and forestry.”²³ To achieve this goal, USDA will undertake efforts to reduce GHG emissions and sequester carbon dioxide, and to “ensure our national forests... are conserved, restored, and made more resilient to climate change.”²⁴ The use of national forest land for coal development is inconsistent with all of these strategic goals, since it will contribute to an increase in GHG emissions, a decrease in carbon sequestration capacity (due to the removal of vegetation for mining infrastructure), and the degradation of local forest resources.
- **USFS National Roadmap for Responding to Climate Change, July 2010:** The USFS Roadmap states that the mission of USFS is to “sustain the health, diversity, and productivity of the Nation’s forests and grasslands to meet the needs of present and future generations.”²⁵ The roadmap recognizes that GHG mitigation and the conservation of national forests are important components of the agency’s response to climate change.²⁶

²² Executive Order 13693, Planning for Federal Sustainability in the Next Decade (March 19, 2015).

²³ USDA Strategic Plan, FY 2014-2018, at 15.

²⁴ *Id.* at 35.

²⁵ USFS, National Roadmap for Responding to Climate Change (July 2010) at 2.

²⁶ *Id.*

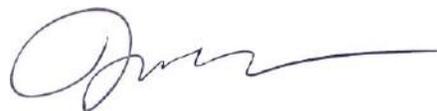
To this end, the roadmap states that USFS will “work with partners to sustain or increase carbon sequestration in forest and grassland ecosystems and to generate forest products that reduce and replace fossil fuel use.”²⁷ For the reasons discussed above, the use of national forest lands for coal production is not consistent with these goals.

In light of the inconsistencies between the proposed rulemaking and these federal policies, we urge USFS to adopt the “no action” alternative, which would not permit an exception to the Colorado Roadless Rule for the North Fork Coal Mining Area.

The SDEIS must also disclose these inconsistencies, as well as any inconsistencies with regional, state or local policies, in accordance with the regulations implementing NEPA²⁸ and the Council on Environmental Quality (CEQ)’s revised draft guidance on the consideration of climate change in NEPA reviews.²⁹

Thank you for the opportunity to submit comments on the SDEIS for the North Fork Coal Mining exception. I have included several attachments with excerpts from the documents cited in this letter to ensure that USFS can readily access those materials. Please feel free to contact me with any questions.

Sincerely,



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²⁷ *Id.* at 21.

²⁸ See 40 C.F.R. § 1502.16(c) (requiring disclosure of “[p]ossible conflicts between the proposed action and the objectives of federal, regional, state, and local... land use plans, policies, and controls”); 40 C.F.R. § 1506.2(d) (where there is an inconsistency with state or local plans or laws, the statement “should describe the extent to which the agency would reconcile its proposed action with the plan or law”).

²⁹ CEQ, *Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews*, 79 Fed. Reg. 77,802, 77,826 (Dec. 24, 2014) (instructing agencies to provide a frame of reference for decision-makers by disclosing the extent to which GHG emissions are consistent with the goals of Federal, state, tribal and local climate change policies).