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U.S. Department of Energy

RE: Notice of Availability: A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate, DOE-HQ-2025-0207; NMERT Project No. NMERT-4935

To Whom it May Concern:

The New Mexico Department of Game and Fish (Department) has the following comments regarding the U.S. Department of Energy's (DOE's) report entitled "A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate" (Report). Comments are prefaced with the comment type and page number(s), as requested in DOE (2025).

1) Technical, reference, pages vi-vii, Table of Contents, "Part III: Impacts on Ecosystems and Society". The Report, while it includes a "Part" that contains "Ecosystems" in its title, does not substantively discuss the impacts of greenhouse gas emissions and associated climate change on wildlife and their key habitats. This is evidenced by the following: 1) there are no sections in the Table of Contents under the relevant "Part III" that reference ecosystems, habitats, natural resources, or any other terms that pertain to the natural environment; the focus of "Part III" appears to be on agriculture, social costs, impacts on human mortality, and emission policies; 2) the word "wildlife" does not appear in the Report and there is only one reference to "animals" (page 4) and "biodiversity" (page 69) and two in-text reference to fish (page 8), both focused on ocean-dwelling fish. The scientific literature very clearly indicates the threat to biodiversity as a whole (e.g., Pereira et al. 2024) and to different taxonomic groups (e.g., birds, Chen and Khanna 2024; fishes, Moyle et al. 2013; insects, Forister et al. 2021; mammals, Kays et al. 2024; reptiles and amphibians, Sinervo et al. 2010, Sinervo et al. 2024) from climate change and associated warming, drying conditions. It also clearly indicates the impacts of climate change on key habitats for wildlife (e.g., forests, Davis et al. 2019, Triepke et al. 2019; riparian ecosystems, Perry et al. 2012; and rivers, NMBGMR 2022). The

Department requests discussion of these impacts on wildlife and their habitats in Part III of the Report.

2) Technical, reference, pages 68-69, “Droughts” section: Drought conditions, and associated stress on important wildlife habitats such as forests, are projected to worsen within the southwestern U.S. and semi-arid western U.S. over the next few decades, and New Mexico is projected to become increasingly arid and experience more severe droughts (Gutzler and Robbins 2011, Williams et al. 2013, NMBGMR 2022). These drying trends will have significant impacts on water availability, including instream flows; wildfire occurrence (see further comments below); and the regeneration, growth, and survival of natural vegetation (NMBGMR 2022). The Department requests recognition of the documented and projected impacts of drought on the southwestern U.S., including New Mexico, in the Report.
3) Technical, reference, pages 69-71, “Wildfires” section: Wildfires have become increasingly large (i.e., burn area has increased), more severe (i.e., area burned at high severity has increased), more frequent, and last longer in the western U.S. than they did historically; these changes are associated with warmer temperatures, earlier spring snowmelt, and drought (Westerling et al. 2006, Westerling 2016, Parks and Abatzoglou 2020). The Department requests inclusion of information on these trends in the Report as they have, and will continue, to impact important wildlife habitats (e.g., driving forest conversion to other vegetation types; Parks and Abatzoglou 2020) and human communities (e.g., loss of homes in fires, Westerling et al. 2006) in the western U.S., including New Mexico.

Thank you for the opportunity to review and comment on DOE’s Report and your consideration of these comments.

Sincerely,

Michael B. Sloane

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Michael B. Sloane
Director

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