

STATE OF MINNESOTA
STATE OF OREGON
SAN CARLOS APACHE TRIBE
CENTER FOR BIOLOGICAL DIVERSITY
350.ORG

October 30, 2023

VIA CERTIFIED AND ELECTRONIC MAIL

Administrator Michael S. Regan
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Mail Code 1101A
Washington, DC 20460
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Re: Notice of Intent to Sue Pursuant to the Clean Air Act, 42 U.S.C. §§ 7401 et seq., for Unreasonable Delay in Responding to the December 2, 2009 Petition Requesting the Environmental Protection Agency Establish National Pollution Limits for Greenhouse Gases

Dear Administrator Regan:

This letter constitutes notice, pursuant to Section 304 of the Clean Air Act, 42 U.S.C. § 7604, that the Center for Biological Diversity, 350.org, the State of Minnesota, the State of Oregon, and the San Carlos Apache Tribe (“Tribe”) intend to file a citizen suit against you, in your official capacity, and against the Environmental Protection Agency (EPA). We intend to bring suit 180 days from the date of this letter, or thereafter, for EPA’s unreasonable delay in responding to the December 2, 2009 “Petition to Establish National Pollution Limits for Greenhouse Gases Pursuant to the Clean Air Act,” requesting that EPA regulate long-lived greenhouse gases pursuant to Sections 108-110 of the Clean Air Act (“2009 Petition,” enclosed as Attachment A).

It is imperative that the EPA take stronger, faster action to address the climate emergency. The National Ambient Air Quality Standards (“NAAQS”) program is the Clean Air Act’s most far-reaching and significant tool for doing so. Because it provides a national framework for addressing the most pervasive forms of air pollution emitted from “numerous or diverse” sources,¹ and because it requires science-based standards to protect the public health and welfare,² the NAAQS program is a centrally important program for EPA’s regulation of greenhouse gases.

At the time the petition was filed, EPA had already concluded that “[t]he evidence points ineluctably to the conclusion that climate change is upon us as a result of greenhouse gas

¹ 42 U.S.C. § 7408(a)(1)(B).

² 42 U.S.C. § 7408(a)(2).

emissions, that climate changes are already occurring that harm our health and welfare, and that the effects will only worsen over time in the absence of regulatory action.”³ In the nearly fourteen years since the petition has been pending before EPA, the climate crisis has become far more dire, devastating lives, livelihoods, and ecosystems. In releasing the summary of the latest report by the Intergovernmental Panel on Climate Change (IPCC), the U.N. Secretary General warned, “[t]oday’s IPCC report is a how-to guide to defuse the climate time-bomb. It is a survival guide for humanity. As it shows, the 1.5-degree limit is achievable. But it will take a quantum leap in climate action.”⁴

Just a few days ago, scientists published a 2023 state of the climate report that described the climate-related records and disasters we have experienced over the past year and noted the “minimal progress by humanity in combatting climate change.”⁵ As the authors began their report:

Life on planet Earth is under siege. We are now in an uncharted territory. For several decades, scientists have consistently warned of a future marked by extreme climatic conditions because of escalating global temperatures caused by ongoing human activities that release harmful greenhouse gasses into the atmosphere. Unfortunately, time is up. We are seeing the manifestation of those predictions as an alarming and unprecedented succession of climate records are broken, causing profoundly distressing scenes of suffering to unfold. We are entering an unfamiliar domain regarding our climate crisis, a situation no one has ever witnessed firsthand in the history of humanity.⁶

Based on these circumstances, and as detailed more fully below, EPA’s delay in responding to the 2009 Petition is unreasonable and unlawful.

I. EPA’s Unreasonable Delay.

This matter concerns EPA’s failure to respond to the 2009 petition submitted by the Center for Biological Diversity and 350.org requesting the agency establish national pollution limits for five greenhouses gases (GHGs) and two categories of GHGs pursuant to the Clean Air Act (CAA). The suit will seek injunctive and declaratory relief, the cost of litigation, and other relief.

A. Legal Background.

The CAA has provided clear and indispensable benefits to this country for more than five decades. Study after study has shown that the substantial improvements in air quality achieved

³ U.S. Env’tl. Prot. Agency, Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 18,886, 19,904 (Apr. 24, 2009).

⁴ United Nations, Secretary-General Calls on States to Tackle Climate Change ‘Time Bomb’ through New Solidarity Pact, Acceleration Agenda, at Launch of Intergovernmental Panel Report (March 20, 2023), <https://press.un.org/en/2023/sgsm21730.doc.htm>.

⁵ William J. Ripple et al., *The 2023 State of the Climate Report: Entering Uncharted Territory*, Bioscience (2023), <https://doi.org/10.1093/biosci/biad080>.

⁶ *Id.*

through the Act have not only resulted in enormous public health, ecological, and other benefits, but have also been accomplished so efficiently that the economic value of the benefits exceed by many times the costs of the pollution reduction measures.⁷

The CAA consists of six titles which provide comprehensive, and in many cases overlapping and complimentary, provisions to control pollution from most major sources in the United States. The NAAQS program described in sections 108-110 (42 U.S.C. §§ 7408-7410), addresses criteria air pollutants, national air pollution limits, and state implementation planning and is in many ways the heart of the modern law. Indeed, the Supreme Court has described the NAAQS provisions as the “engine that drives” the statute.⁸

Section 108 (42 U.S.C. § 7408) requires EPA to list air pollutants emitted by numerous or diverse sources that cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Within 12 months of adding a criteria pollutant to the list, EPA must develop air quality criteria reflecting the latest scientific information and set a national pollution limit as necessary to protect the public health and welfare, pursuant to Section 108(a)(2) and Section 109 (42 U.S.C. § 7409).⁹ Section 110 governs the specific requirements that states must submit to EPA as part of their State Implementation Plan (SIP) to attain and maintain the standards.

The NAAQS program is EPA’s most far-reaching and important tool for regulating air pollution. It provides a national framework for addressing the most pervasive forms of air pollution emitted from “numerous or diverse” sources. The NAAQS program also activates the widest possible approach to tackling greenhouse gas emissions, and offers states maximum flexibility to choose those measures, across multiple sectors, which will allow each state to achieve its emission reduction requirements. The devolution of the details of emissions reduction plans to states allows them to build upon existing programs, taking advantage of expertise and familiarity with the current regulatory structure, while encouraging innovation and allowing flexibility and localized solutions.

B. The Petition submitted by the Center for Biological Diversity and 350.org.

On December 2, 2009, the Center for Biological Diversity and 350.org petitioned the EPA, requesting that the agency establish national pollution limits for greenhouse gases. The Center’s Climate Law Institute and 350.org are both dedicated to protecting the planet and its diverse life and ecosystems from climate change, pursuing solutions in line with what science and justice demand.¹⁰ The 2009 Petition requested that EPA establish a pollution limit for seven groups of greenhouse gases, namely carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); sulfur hexafluoride (SF₆); and nitrogen

⁷ U.S. Env’tl. Prot. Agency, *The Clean Air Act and the Economy*, <https://www.epa.gov/clean-air-act-overview/clean-air-act-and-economy>. See also, U.S. Env’tl. Prot. Agency, *Benefits and Costs of the Clean Air Act*, <https://www.epa.gov/clean-air-act-overview/benefits-and-costs-clean-air-act>.

⁸ *Whitman v. Am. Trucking Ass’n*, 531 U.S. 457, 468 (2001).

⁹ The criteria pollutants listed to date are particle pollution (PM), ground-level ozone (O₃), carbon monoxide (CO), sulfur oxides (SO_x), nitrogen oxides (NO_x), and lead. U.S. Env’tl. Prot. Agency, *Criteria Air Pollutants*, <https://www.epa.gov/criteria-air-pollutants>.

¹⁰ The interests of the Center and 350.org are further described in the 2009 Petition.

trifluoride (NF₃),¹¹ pursuant to the Clean Air Act. Specifically, pursuant to the Administrative Procedure Act, 5 U.S.C. § 553(e), and the Clean Air Act, 42 U.S.C. §§ 7401 et seq., petitioners requested that EPA complete the following actions:

- (1) Pursuant to the Clean Air Act section 108(a)(1) (42 U.S.C. § 7408(a)(a)): promptly revise the list of pollutants which may reasonably be anticipated to endanger public health or welfare to include greenhouse gases;
- (2) Pursuant to the Clean Air Act section 109(a) (42 U.S.C. § 7408(a)(2)): expeditiously (but in no event later than 12 months from the revision of section 108(a)(1) list) issue air quality criteria for greenhouse gases;
- (3) Pursuant to Clean Air Act section 109(a) (42 U.S.C. § 7409(a)): publish, simultaneously with the air quality criteria, proposed national primary and secondary pollution caps (National Ambient Air Quality Standards, or NAAQS) for the greenhouse gases in order to protect the public health and welfare, and finalize the pollution caps no later than 90 days from the initial publication;
- (4) Pursuant to the Clean Air Act sections 108 & 108(f) (42 U.S.C. §§ 7408 & 7408(f)): expeditiously make available information on processes, procedures, and methods to reduce or control pollutants of the greenhouse gases in transportation, from other mobile sources, and to protect the health of sensitive individuals and groups pursuant to section 108(f), and carry out all of the other related actions specified in section 108;
- (5) Pursuant to the Clean Air Act section 110 (42 U.S.C. S 7408(b)(1)): simultaneously with the issuance of the air quality criteria above, issue information on air pollution control techniques for the greenhouse gases;
- (6) Pursuant to Clean Air Act section 110 (42 U.S.C. § 7410): expeditiously facilitate and aid the states in the state implementation plan process.

The Petition was premised on the already severe impacts of global warming as atmospheric carbon dioxide levels approached 390 parts per million.¹² Indeed, in April 2009, EPA had already concluded that “[t]he evidence points ineluctably to the conclusion that climate change is upon us as a result of greenhouse gas emissions, that climate changes are already occurring that harm our health and welfare, and that the effects will only worsen over time in the absence of regulatory action.”¹³

On January 19, 2021, the last day of the outgoing Trump administration, then-EPA Administrator Andrew Wheeler sent a letter to the Center and 350.org, as well as two other environmental and public policy groups that had petitioned EPA to take other actions under the Clean Air Act to address greenhouse gas emissions. The single letter denied all three petitions, including the petition to regulate greenhouse gases as criteria pollutants (Attachment B).

Shortly after, on March 5, 2021, Acting Administrator Jane Nishida sent a letter (Attachment C) withdrawing EPA’s denial of the petition acknowledging that the agency did not “fully and fairly assess the issues raised by the petition.” She indicated in the letter that EPA

¹¹ 2009 Petition at iii.

¹² 2009 Petition at i.

¹³ Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 18,886, 19,904 (Apr. 24, 2009).

intended to further consider these issues before responding. On April 14, 2021, the Center replied, laying out the increasingly dire state of the climate crisis as well as a description as to how EPA could promulgate a greenhouse gas NAAQS (“2021 Supplemental Letter,” Attachment D). Nevertheless, EPA has taken no further action on the petition, which has now been pending nearly 14 years.

In July 2022, seven state attorneys general, including the attorneys general of Minnesota and Oregon, wrote to the EPA recommending adoption of a NAAQS for greenhouse gases.¹⁴ The Attorneys General noted, among other things, that the Supreme Court’s reasoning in *West Virginia v. EPA*, limiting the use of Section 111(d)(2) of the Clean Air Act to address greenhouse gas emissions from power plants, would not apply to the adoption of NAAQS. The Supreme Court called Section 111(d) an “ancillary” and “gap-filler” provision of the Act,¹⁵ through which Congress could not have intended to bestow broad powers on the EPA. By contrast, the Supreme Court has described the NAAQS provisions as the “engine that drives” the Act,¹⁶ and the legislative history of the NAAQS provisions demonstrates that “Congress intended NAAQS to have ‘vast economic and political significance,’¹⁷ including generation-shifting, facility closures, and more.”¹⁸ The attorneys general quoted the Senate Committee report on the legislation that created NAAQS:

The protection of public health—as required by the national ambient air quality standards and as mandated by provision for elimination of emissions of supremely hazardous pollution agents—will require major action throughout the Nation. Many facilities will require major investments in new technology and new processes. Some facilities will need altered operating procedures or a change of fuels. Some facilities may be closed.¹⁹

Although we appreciate this Administration’s attention to the climate crisis, and its ongoing efforts to address power plant emissions, under current policies the nation will not reach President Biden’s goal of net-zero emissions by 2050. Over 40 percent of GHG emissions come from sources that, for the most part, the Federal government has no current plan to regulate, or has not yet proposed rules for: industrial sources (23% of emissions as of 2021), residential and commercial buildings (13%), and agriculture (10%).²⁰

The Inflation Reduction Act (“IRA”) will not have a dramatic impact on those categories, either. The Rhodium Group, in its analysis of the impact of the IRA, wrote that “[w]ithout the

¹⁴ Letter from the Hon. Ellen Rosenblum, Attorney General of Oregon, et al., to Michael Regan, Administrator, EPA, July 28, 2022 (hereinafter “Attys Gen. Letter”), https://www.ag.state.mn.us/Office/Communications/2022/docs/NAAQS_Multistate_Letter.pdf.

¹⁵ *West Virginia v. EPA*, 142 S. Ct. 2587 (2022) at 2601 (“gap-filler”), 2602 (“ancillary”) and 2629 (“ancillary” and “gap filler”) (U.S. June 30, 2022).

¹⁶ *Whitman v. American Trucking*, 531 U.S. 457, 468 (2001).

¹⁷ *West Virginia v. EPA*, 142 S. Ct. at 2605 (quoting an EPA quotation of *Utility Air Regulatory Group v. EPA*, 573 U.S. 302, 324 (2014)).

¹⁸ Attys Gen. Letter, *supra*, at 12.

¹⁹ National Air Quality Standards Act of 1970, Report of the Committee on Public Works, United States Senate, Together with Individual Views to Accompany S. 4358, S. Rep. No. 91-1196, at 2 (1970) (emphasis added).

²⁰ U.S. EPA, *Sources of Greenhouse Gas Emissions* (last updated April 28, 2023), <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>.

IRA, industrial emissions decrease by 14% and 8% in our low and central emissions scenario and increase by 1% in our high scenario relative to 2005 levels. . . . With the IRA, industrial emissions decrease by 3%, 11%, and 16% in 2030 relative to 2005 in the high, central, and low emissions cases, respectively” – only a two to four percent difference.²¹ With respect to carbon removal, agriculture, and buildings, the Rhodium Group report states: “Though we project some emissions abatement in the carbon removal and buildings sectors relative to current policy due to the IRA, in general, these impacts are small compared to the scale of decarbonization needed in these sectors, and continued work on all fronts will be necessary to drive down these emissions.”²²

Sector-by-sector regulations, like the Administration’s proposals for action in the transportation and power sectors, at this point will not achieve the goal that President Biden has set, and which is necessary to hold warming below 1.5 degrees Celsius. The EPA has used NAAQS successfully to fight broadscale pollutants like ozone, lead, and particulate matter, and it should do so now to address the pollution that causes climate change.

C. EPA’s delay is plainly unreasonable given the urgency of the threat posed by GHG pollution to human health and environment.

EPA must use all the regulatory tools at its disposal to address the severe impacts that GHG pollution has on human health and the environment. Climate change has already resulted in rising sea level, increased devastating weather events such as hurricanes and floods, drastic temperature increases leading to heat related death, degradation of water, land, agriculture and biodiversity, increased droughts, crop failures, spread of disease, and countless other harms.²³ Since 2009, when the petition was submitted to EPA, these harms have only worsened. For example, the years 2015-2022 were the eight warmest on record.²⁴ July 2023 was the warmest month on record for the entire world, while sea ice hit the lowest levels on record.²⁵ Global temperatures of the last decade are likely the hottest it has been on Earth in 125,000 years.²⁶ And recent Atlantic hurricane seasons have been record-breaking.²⁷

EPA has the authority to act. On April 2, 2007, in *Massachusetts v. EPA*, 549 U.S. 497 (2007), the Supreme Court found that greenhouse gases are air pollutants covered by the Clean Air Act. As a result of that decision, the Administrator was required to determine whether emissions of greenhouse gases from new motor vehicles cause or contribute to air pollution that

²¹ John Larsen et al., *A Turning Point for US Climate Progress: Assessing the Climate and Clean Energy Provisions in the Inflation Reduction Act* (Rhodium Group, Aug. 12, 2022), <https://rhg.com/research/climate-clean-energy-inflation-reduction-act/>.

²² *Id.*

²³ See 2009 Petition at 12-14; 2021 Supplemental Letter at 3-12.

²⁴ World Meteorological Org., *State of the Global Climate 2022* (2023), https://library.wmo.int/doc_num.php?explnum_id=11593 at 3.

²⁵ World Meteorological Org., *July 2023 Confirmed as Hottest Month on Record* (Aug. 14, 2023), <https://public.wmo.int/en/media/news/july-2023-confirmed-hottest-month-record>.

²⁶ *Id.* at SPM-9.

²⁷ National Oceanic & Atmospheric Admin., *Record-breaking Atlantic Hurricane Season Draws to an End*, <https://www.noaa.gov/media-release/record-breaking-atlantic-hurricane-season-draws-to-end>. See also Jason Samenow et al., *How Tropical Storms and Hurricanes Have Hit U.S. Shores With Unparalleled Frequency*, Wash. Post (Sept. 29, 2021), <https://www.washingtonpost.com/weather/2021/09/29/record-us-hurricane-landfalls-climate/>.

may reasonably be anticipated to endanger public health or welfare. In December 2009, EPA found that the then-current and projected concentrations of GHG pollution endanger the public health and welfare of current and future generations, based on robust scientific evidence of the harms from climate change.²⁸ EPA issued an endangerment finding for six GHGs: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).²⁹

One study by 16 prominent scientists reviewed the scientific evidence that has emerged since 2009 and concluded that this evidence “lends increased support” for EPA’s endangerment finding.³⁰ The study examined the topics covered by the endangerment finding and concluded that “[f]or each of the areas addressed in the [endangerment finding], the amount, diversity, and sophistication of the evidence has increased dramatically, clearly strengthening the case for endangerment.” The study also found that the risks of some impacts are even more severe or widespread than anticipated in 2009.

GHG’s should be regulated under the NAAQS program. That GHGs pose serious public health and environmental harms is indisputable. Moreover, GHGs plainly result from numerous and diverse mobile and stationary sources. As EPA has recognized, GHGs are emitted from millions of sources throughout the nation and across all sectors of the economy, including: all fossil-fuel mobile sources; home and commercial heating and cooking with oil, natural gas and coal; land use changes; industrial processes such as cement and ammonia manufacturing; and industrial energy generation units.³¹ Thus, the listing criteria of Section 108(a)(1)(A) and (B) are indubitably met.

Because greenhouse gases meet the listing provisions under Section 108(a)(1) (42 U.S.C. § 7408(a)), EPA must designate greenhouse gases as criteria air pollutants. When the provisions of subpart (A) and (B) have been met, listing the pollutant, and proceeding with the additional requirements of sections 108-110 are mandatory, and EPA lacks discretion to decline to regulate. Once EPA has listed the greenhouse gases as criteria air pollutants, the EPA must “publish, simultaneously with the issuance of such criteria and information, proposed national primary and secondary ambient air quality standards for any such pollutant” (NAAQS) in order to protect the public health and welfare.³² These standards must be science-based and thus, should be consistent with the goal of limiting global warming to 1.5°C as called for in the Paris Agreement to avoid catastrophic climate disruption and disaster. Following this action, state implementation plans must be created and adopted to reduce pollution by GHGs.

²⁸ U.S. Evtl. Prot. Agency, Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act; Final Rule, 74 Fed. Reg. 66,496 (Dec. 15, 2009).

²⁹ In 2016, EPA issued a separate finding regarding greenhouse gas emissions from aircraft. *See* EPA, Final Rule for Finding That Greenhouse Gas Emissions from Aircraft Cause or Contribute to Air Pollution That May Reasonably Be Anticipated to Endanger Public Health and Welfare, 81 Fed. Reg. 54,422 (Aug. 15, 2016).

³⁰ Philip B. Duffy et al., *Strengthened Scientific Support for the Endangerment Finding for Atmospheric Greenhouse Gases*, 363 Science 6427 (2019), <https://www.science.org/doi/10.1126/science.aat5982> at 1.

³¹ U.S. Evtl. Prot. Agency, Regulating Greenhouse Gas Emissions Under the Clean Air Act, 73 Fed. Reg. 44,304, 44,401, 44,403, 44,429-437, 44,453-454, 44,462, 44,468 (July 30, 2008); *see also* U.S. Evtl. Prot. Agency, Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 18886, 18907 (April 24, 2009).

³² Clean Air Act § 109(a)(2), 42 U.S.C. § 7409(a)(2) (2008).

EPA’s unreasonable delay in designating greenhouse gases as criteria pollutants and taking the necessary regulatory steps that flow from that designation is causing significant public harms, and directly impacting the members of the Center and 350.org, citizens of Minnesota, Oregon, and the San Carlos Apache Tribe. Atmospheric CO₂ as measured at Mauna Loa Observatory reached 424 ppm this summer and climbing. There is no time to waste. As the UN Secretary General stated, we need “climate action on all fronts – everything, everywhere, all at once.”³³ Continued delay will only increase the ongoing harm to the undersigned groups and the public’s health and welfare.

D. EPA’s failure to comprehensively address GHG pollution harms the people of Minnesota and threatens sovereign state interests.

In Minnesota, climate change already affects industries, infrastructure, human health, and the ecosystem services relied upon for potable water, clean air, and agriculture. Unprecedented weather events have caused flooding and extreme rains threatening more than 155,000 residential properties, 29,000 miles of roads, 13,000 commercial buildings, and 515 critical infrastructure facilities.³⁴ Higher intensity rainfall results in floodwater contamination of groundwater and the release of minimally treated or untreated wastewater risking exposure to illness-causing pathogens.³⁵ Air pollution related to greenhouse gas emissions annually cost us more than \$800 million in increased health care costs.³⁶ Insurance premiums have soared by nearly 400% in the last two decades as destructive weather events become more common.³⁷

Warmer winters will shorten the season for recreational activities like ice fishing, snowmobiling, skiing, and snowboarding, which could harm the local economies that depend on them. Small lakes are freezing later and thawing earlier, which shortens the season for ice fishing and ice skating. Since the early 1970s, winter ice coverage in the Great Lakes has decreased by 63 percent.³⁸ Other major sectors will suffer as well, including agriculture which generates \$106 billion annually for Minnesota.³⁹ While the precise economic impacts are unclear, the trajectory is dire: “Intense rain events can increase soil erosion. . . . Warming temperatures encourage invasive species, plant diseases and pests. . . . Wetter springs and increases in heavy rain events [prevent] spring planting. . . . And extreme weather events like large hail, pounding rains, high winds, and prolonged droughts can devastate a crop season.” As one example, “drought was the

³³ United Nations, *Secretary-General Calls on States to Tackle Climate Change ‘Time Bomb’ through New Solidarity Pact, Acceleration Agenda, at Launch of Intergovernmental Panel Report* (March 20, 2023), <https://press.un.org/en/2023/sgsm21730.doc.htm>.

³⁴ Minnesota Pollution Control Agency (MPCA), *Climate Change Impacts on Infrastructure*, <https://www.pca.state.mn.us/air-water-land-climate/climate-impacts-on-infrastructure> (accessed Sept. 2, 2023).

³⁵ Minnesota Dep’t of Health, *Minnesota Climate and Health Profile Report 2015* at 67 (Feb. 2015), <https://www.health.state.mn.us/communities/environment/climate/docs/mnprofile2015.pdf>.

³⁶ Minnesota Env’t Quality Bd., *Climate Solutions and Economic Opportunities* (April 9, 2020), <https://www.eqb.state.mn.us/content/climate-change>.

³⁷ Caroline Cummings, *More Extreme Weather Driving Increased Homeowner Insurance Premiums*, CBS News (Feb. 8, 2023), <https://www.cbsnews.com/minnesota/news/more-extreme-weather-driving-increased-homeowners-insurance-premiums-industry-official-tells-minn-house-panel/>.

³⁸ U.S. Env’tl. Prot. Agency, *What Climate Change Means for Minnesota* (Aug. 2016), <https://www.epa.gov/arc-x/minnesota-assesses-climate-risk-public-health>.

³⁹ Minnesota Dep’t of Emp. & Econ. Dev., Food & Agric., <https://mn.gov/deed/joinusmn/key-industries/food-agriculture/>.

cause of a decline in Minnesota's 2013 soybean harvest, at a loss of 175 million dollars, due to the resulting crop damage."⁴⁰ As climate change worsens, these harms will only be exacerbated.

The consequences illustrated above offer just a glimpse into the myriad of economic, environmental, and human health consequences suffered by Minnesota from climate change-producing GHGs.

E. EPA's failure to comprehensively address GHG pollution threatens the San Carlos Apache Tribe and Indian Reservation.

The Tribe is a federally recognized Indian tribe, organized pursuant to the provisions of Section 16 of the Indian Reorganization Act of June 18, 1934,⁴¹ with a total population of over 17,000 members. Spanning an area of 1.8 million acres, the San Carlos Apache Reservation ("Reservation"), located in southeastern Arizona, is home to about 13,000 residents. Because of the ongoing threats that GHGs and other pollutants pose to tribal lands and people, the Tribe joins this notice letter in support of the conservation groups' request and urges EPA to set a NAAQS for GHGs.

Over the past few decades, the San Carlos Apache Reservation has seen significant impacts from climate change, including warmer temperatures, more severe and longer lasting droughts, and an increase in fires of more than 100 acres. Fires - even very large fires - are part of the natural ecosystem of this region, but the nature and behavior of these fires has changed significantly over this time span. While federal forest management practices are partly to blame, rising temperatures and drought conditions, exacerbated by climate change, are increasingly playing a role in managing and protecting tribal lands and resources.

Drought relief efforts by the San Carlos Apache Recreation and Wildlife Department in the summer are now regular practice. Springs dry every year and wildlife water catchments become ineffective with little rainfall. The Tribe has also observed a decline in habitat conditions and an increase in bald eagle nest failures due to increased drought conditions. A recent study of the ponderosa pine forests, pinyon-juniper woodlands and grasslands on the Reservation, found that these vegetation types react negatively to drought conditions.⁴²

Arizona is the fourth driest state in the United States, with average yearly precipitation of 11.24 inches. Over the past 20 years, 78% of the state experienced abnormally dry conditions. Recent studies of agricultural productivity in tribal communities in Arizona, including the San Carlos Apache, demonstrate the significant threat that droughts pose to tribal economies.⁴³ As climate change intensifies, these trends will only escalate.

Climate change is an existential threat to tribal lands and people, and for this reason, the

⁴⁰ Minnesota Dep't of Health, *Minnesota Climate and Health Profile Report 2015*, *supra* n. 34 at 75.

⁴¹ 48 Stat. 984.

⁴² Roy Petrakis et al., *Vegetative Response to Water Availability on the San Carlos Apache Reservation* (2016), <https://doi.org/10.1016/j.foreco.2016.07.012>.

⁴³ Utah State University, *Drought Extension, Impacts of Drought on Tribal Economies in Arizona*, <https://extension.usu.edu/drought/research/impacts-of-drought-on-tribal-economies-in-arizona>.

San Carlos Apache joins the Center and 350.org in asking EPA to respond to the petition and develop a NAAQS for GHGs.

F. EPA’s failure to comprehensively address GHG pollution harms the people of Oregon and threatens sovereign state interests.

Oregonians have already experienced the impact of climate change in a wide variety of ways: choking wildfire smoke, deadly heat, flooding, landslides, disruption of transportation systems, drought, damaged fisheries, burnt forests, and the cost to taxpayers of responding to many of these impacts, to name a few. As climate change progresses, all of these impacts are expected to intensify.

Wildfire smoke: The Oregon Health Authority (OHA) has noted that already, “[f]ire seasons in Oregon are roughly 100 days longer than they were in the 1970s. Longer seasons mean more smoke in Oregon communities. . . . Wildfires create significant amounts of particulate matter in the air, which increases the risk of respiratory and cardiovascular diseases.”⁴⁴ OHA adds that as a consequence of climate change, “[m]ore frequent wildfires are expected to increase respiratory illnesses, heart disease and other poor health outcomes in the decades to come,” and “[i]ncreases in average and extreme temperatures are projected to increase the number of heat-related hospitalizations and deaths.”⁴⁵

Extreme heat: The Sixth Oregon Climate Assessment (“Sixth Assessment”) discussed the June 2021 “heat dome” event in which the temperature in Portland rose to 116 degrees, and “caused an estimated 116 deaths across the state, mostly inside homes without air conditioning.”⁴⁶ The Sixth Assessment noted that “*Thompson et al. (2022) estimated that a heat wave of similar magnitude will recur about once in six years by the end of the twenty-first century if concentrations of greenhouse gases do not decrease.*”⁴⁷

Impact on forest industries: The Sixth Assessment notes that “[a] warmer and drier climate is projected to induce a gradual shift by private landowners in Oregon away from Douglas-fir, the state’s currently most valuable tree species, toward hardwood species. . . . An economic model estimated that climate change will induce a loss of private timberland value of 39 percent by the year 2050 in western Oregon and Washington.”⁴⁸

⁴⁴ *Id.* at 32.

⁴⁵ Oregon Health Authority, *Climate and Health in Oregon: 2020 Report* (“OHA 2020 Report”) at 3.

⁴⁶ Oregon Climate Change Research Institute, *Sixth Oregon Climate Assessment*, at 40.

⁴⁷ *Id.* at 49 (emphasis added).

⁴⁸ *Id.* at 147, citing Restaino, C.M., D.L. Peterson, and J. Littell, *Increased water deficit decreases Douglas fir growth throughout western US forests*, Proceedings of the National Academy of Sciences, 113:9557–9562 (2016); Weiskittel, A.R., N.L. Crookston, and G.E. Rehfeldt. 2012. *Projected future suitable habitat and productivity of Douglas-fir in western North America*, Schweizerische Zeitschrift für Forstwesen 163:70–78 (2012); Hashida, Y., and D.J. Lewis, *The intersection between climate adaptation, mitigation, and natural resources: an empirical analysis of forest management*, Journal of the Association of Environmental and Resource Economists 6:893–926 (2019); Hashida, Y., and D.J. Lewis, *Estimating welfare impacts of climate change using discrete-choice models of land management: an application to western U.S. forestry*. Resource and Energy Economics 68:101295 (2022)

Impact on fisheries: The Sixth Assessment notes that “Dungeness crab and Pacific oysters are valuable commodities that are also susceptible to ocean acidification, which has potential to result in loss of fisheries productivity and reduced economic opportunity.”⁴⁹

Transportation impacts: The Oregon Department of Transportation’s Climate Adaptation and Resilience Roadmap (2022) (“Roadmap”) describes the transportation impact of three primary climate stressors:

- **Increased Frequency / Magnitude of Inland Flooding:** Transportation impacts include: damage and road closures resulting from concentrated runoff and scour, flooding, landslides and rock-fall.
- **Higher Sea Levels/coastal storms:** Transportation impacts include: damage and road closures from increased wave heights, flooding, storm surge, and coastal erosion.
- **Extreme Heat:** Transportation impacts include: damage and road closures due to heat and wildfires. Health and safety concerns for personnel.⁵⁰

Direct costs to the State of Oregon: The impacts of climate change have already had, and will continue to have, a significant impact on the state budget. To give a few examples:

- **Wildfires:** To give just one example, the estimated cost to the state of completed and projected cleanup efforts in the wake of the September 2020 fires, including removal of ash, debris, hazardous materials, and trees that threatened to impede the roadway, is \$75.63 million from the State Highway Fund and \$75.75 million from the State General Fund⁵¹. These direct costs to the State will not be reimbursed by the Federal Emergency Management Agency.
- **Transportation:** The ODOT Roadmap notes that “[c]urrent cost data show a snapshot of significant spikes related to natural hazard response over the last decade (2009-2021), with a total price tag of \$168.3 million.”⁵² It notes that “[n]ine years (2013-2021) of wildfire related emergency maintenance costs totaled \$58.6 million,”⁵³ and the cost of repairing landslides and sinkholes have “total[ed] about \$62 million over 13 years (2009-2021).”
- **Health care:** The health impacts of climate change, such as the impacts of wildfire smoke, naturally drive up overall health care costs – and the State Of Oregon itself pays a significant portion of such costs. The Oregon Health Authority, relying primarily on the Oregon All Payer Claims Database, estimates that at least 13%⁵⁴ of all Oregon health care costs are borne by the state.

II. Notice of Intent to Sue

After 180 days have passed from the date of this letter, the Center for Biological

⁴⁹ *Id.* at 148.

⁵⁰ *Id.* at 6.

⁵¹ F. Reading, Oregon Debris Management Task Force, Oregon Department of Transportation, personal communication, 16 December 2021.

⁵² Roadmap at 24.

⁵³ *Id.* at 20.

⁵⁴ James Oliver, Oregon Health Authority, Office of Health Analytics, personal communication August 8, 2023.

Diversity, 350.org, State of Minnesota, State of Oregon and the San Carlos Apache Tribe intend to file suit against you and EPA in federal court pursuant to 42 U.S.C. § 7604 for EPA's unreasonable delay in responding to the Petition to Establish National Pollution Limits for Greenhouse Gases Pursuant to the Clean Air Act, as described above. However, we would prefer to resolve this matter without the need for litigation. If EPA would like to avoid litigation over this matter, please contact us within 60 days to discuss how the agency intends to come into compliance with its statutory obligations.

A. Noticing Party

As required by 40 C.F.R. § 54.3, the parties giving notice are:

The Center for Biological Diversity
1411 K Street NW, Suite 1300
Washington, D.C. 20005

350.org
PO Box 843004
Boston, MA 02284-3004

State of Minnesota
Office of the Minnesota Attorney General, Keith Ellison
445 Minnesota Street, Suite 900
St. Paul, MN 55101

The San Carlos Apache Tribe
Department of Justice
Post Office Box 40
San Carlos, Arizona 85550

State of Oregon
Office of the Oregon Attorney General, Ellen Rosenblum
1162 Court Street NE
Salem, OR 97301-4096

B. Legal Representation

The Center for Biological Diversity, 350.org, San Carlos Apache Tribe, State of Oregon, and the State of Minnesota are represented in this matter by undersigned counsel. Please direct all communications regarding this matter to Maya Golden-Krasner, Alex Ritchie, Steve Novick, and Joseph Heegaard. We look forward to hearing from you.

Sincerely,



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William Snape
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