JULIA A. OLSON (CA Bar 192642) 1 julia@ourchildrenstrust.org 2 ANDREA K. RODGERS (pro hac vice) andrea@ourchildrenstrust.org 3 CATHERINE SMITH, Of Counsel (pro hac vice) 4 csmith@law.du.edu 5 **OUR CHILDREN'S TRUST** 1216 Lincoln St. 6 Eugene, OR 97401 7 Tel: (415) 786-4825 8 Attorneys for Plaintiffs 9 (Additional Counsel Listed on Next Page) 10 11 UNITED STATES DISTRICT COURT 12 CENTRAL DISTRICT OF CALIFORNIA 13 14 **GENESIS B.**, a minor, by and through Case No.: 2:23-CV-10345-MWF-15 her Guardian G.P.; MAYA W., a AGR minor, by and through her Guardian 16 R.W.; MARYAM A., a minor, by and FIRST AMENDED COMPLAINT 17 through her Guardian M.T.; ZUBAYR FOR DECLARATORY AND 18 M., a minor, by and through his INJUNCTIVE RELIEF Guardian S.W.; MUAAWIYAH M., a 19 minor, by and through his Guardian **Constitutional Rights**; S.W.; DANI R., a minor, by and **Declaratory Judgment Action** 20 (28 U.S.C. §§ 1331, 2201, 2202) through her Guardian A.P.; MAYA R., 21 a minor, by and through their Guardian M.R.; MARYAM D., a minor, by and 22 through her Guardian S.A.; NOAH C., 23 a minor, by and through their Guardian 24 N.M.; IONE W., a minor, by and through her Guardian C.W.; AVROH 25 S., a minor, by and through his 26 Guardian P.S.; ARIELA L., a minor, by and through her Guardian E.L.; 27

FIRST AMENDED COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

**HUCK A.**, a minor, by and through his 1 Guardian R.A.; **NEELA R.**, a minor, 2 by and through their Guardian S.R.; EMMA W., a minor, by and through 3 her Guardian S.W.; ARISHKA J., a 4 minor, by and through her Guardian A.J.; LALI H., a minor, by and 5 through her Guardian R.H.; DEAN S., 6 a minor, by and through his Guardian R.K.; 7 8 Plaintiffs, 9 VS. 10 The UNITED STATES 11 **ENVIRONMENTAL** 12 PROTECTION AGENCY; The **UNITED STATES of AMERICA**; 13 MICHAEL S. REGAN, in his official 14 capacity as Administrator of the Environmental Protection Agency; 15 OFFICE OF MANAGEMENT AND 16 **BUDGET; SHALANDA D. YOUNG,** in her official capacity as Director of 17 the Office of Management and Budget. 18 **Defendants.** 19 20 21 22 23 24 25 26 27 28

FIRST AMENDED COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

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	FIRST AMENDED COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

## **INTRODUCTION AND NATURE OF THE ACTION**

- 1. This is a Fifth Amendment action to declare and enjoin as unconstitutional the policies and practices of the United States Environmental Protection Agency ("EPA") and the Office of Management and Budget ("OMB") that unconstitutionally discriminate against Children by valuing their lives less than adults. Defendants have created and implement the Federal discounting policies stated in Circular No. A-4¹ and Guidelines for Preparing Economic Analyses² (the "Discounting Policies"). These Discounting Policies and Defendants' practice of carrying them out afflict EPA's regulatory programs that control the climate pollution that is allowed to enter the Nation's air space with unequal treatment of Children. The ubiquitous and unequal treatment of Children through Defendants' ongoing Discounting Policies and practices challenged here will continue allowing levels of climate pollution that substantially threaten Plaintiffs' very lives and their prospects for a livable future, on top of their preexisting injuries from Defendants' past policies and practices.
- 2. The Discounting Policies and practices are an economic calculation Defendants make to decide on their regulatory programs by determining how valuable they are. Defendants' Discounting Policies and practices are explicitly discriminatory toward Children because they build into Defendants' decision-making processes a requirement that Defendants value the present more than the future when evaluating the social or health impacts of regulatory programs regarding how much climate pollution to allow. Defendants are violating the Constitution because by design, the Discounting Policies put a thumb on the scale against

<sup>&</sup>lt;sup>1</sup> https://www.whitehouse.gov/wp-content/uploads/2023/11/CircularA-4.pdf (last accessed May 18, 2024).

https://www.epa.gov/environmental-economics/guidelines-preparing-economicanalyses-2016 (last accessed May 18, 2024).

reducing climate pollution for Children, thereby favoring other groups who benefit economically in the short term from maintaining climate pollution activities.

- 3. Children in the United States are already growing up with polluted air and a government-imposed and -sanctioned climate crisis. If the Discounting Policies and practices are allowed to continue, *more climate pollution will be emitted, and Children's current injuries will worsen and become substantially irreparable.*
- 4. The climate system that is vital to ordered liberty and has fostered and supported all human life for thousands of years no longer exists because it has been destabilized by pollution from burning fossil fuels. The ongoing climate crisis, and how much worse it is allowed to become, is the single greatest driver of the health and opportunity of every child born today. This crisis is driven by unjust economic analysis, systematic mismanagement of regulatory authority, and abuses of power. This climate crisis is not just a political issue; it is a constitutional one.
- 5. As members of the class<sup>3</sup> of "Children," Plaintiffs come to this Court as the most vulnerable, unrepresented, powerless people in the Nation. Children in the western United States regularly breathe into their lungs air polluted by toxic smoke from climate-fueled wildfires and fossil fuel operations. Alternately, Children must stay inside their homes to avoid the heat and air quality dangers posed by the climate crisis and must evacuate the safety of their homes due to encroaching climate-driven fires or floods. Children have lost homes from climate-driven fires. Children have lost weeks of education from climate change-related school closures and unsafe air quality conditions. Children cannot swim in water bodies laden with toxic algae spawned by too-warm water and must ration tap water because of

<sup>&</sup>lt;sup>3</sup> This case is not a putative class action. In jurisprudence under the Equal Protection Clause, the term "class" is a term of art for a group that is being treated differently. *See Grutter v. Bollinger*, 539 U. S. 306, 326 (2003).

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unprecedented climate droughts. Children are losing the ability to practice their Indigenous, religious, spiritual, and cultural traditions and their individual dignity. Children face shortened lifespans due to harms to their health and an accumulation of otherwise avoidable adverse childhood events, such as loss of dignity, with lifelong consequences. Plaintiffs, as individual Children, have experienced each of these harms. Each of these injuries is not static, and will certainly worsen, with some becoming irreparable in Plaintiffs' lifetimes, if Defendants' Discounting Policies and practices challenged here are allowed to continue.

- 6. Fossil fuel pollution and human-induced climate change specially harm Children and are burdening them with a lifetime of hardship. Children are harmed by the effects of the climate crisis in ways that are different from and worse than fully developed adults because Children's bodies and minds are still growing, they are still dependent on adults, they have different needs and behaviors from adults, and because they will live longer throughout this century and into the next one. Each additional ton of climate pollution and increment of heating poses increased hardship and risk for Children, including Plaintiffs.
- 7. Plaintiffs seek redress in this Court because, as members of a protected and disenfranchised class, they are politically and economically powerless in our constitutional democracy and cannot effectively participate in and influence the policy decisions that have caused and continue to affirmatively worsen the climate crisis, discriminate against them, and will irreversibly harm them for the remainder of their lives on Earth. Plaintiffs have no vote—the most important right of citizenship that helps preserve all other rights. By the time they can vote, Plaintiffs will have experienced 18 years of discrimination and climate injuries that they carry for the rest of their lives.
- 8. At no time in our Nation's history has Congress delegated authority to any governmental agency to value Children less than adults and to allow levels of

pollution that are harmful to Children. Yet that is what Defendants have done through their Discounting Policies and practices, and that is what Defendants will continue to do without relief from the Court.

- 9. Defendants contend these Plaintiffs have no right to be heard. Defendants claim that OMB and EPA have the exclusive and unreviewable power to harm these Children, discriminate against them, and continue taking away the fundamental right these Plaintiffs have to a stable climate system required to sustain their lives. Defendants assert these Plaintiffs have no standing to sue and this Court has no jurisdiction because this Court must leave untouched the Discounting Policies and practices, because each separate permit and rule to allow climate pollution must be challenged singularly by these Plaintiffs, because of alleged effects on the whole economy, or because the problem is allegedly "too big." Defendants are wrong. The greater the constitutional grievance of these disenfranchised young Plaintiffs and their class, the greater the responsibility of the judiciary to act as a check on Defendants' infringement of Plaintiffs' constitutional rights. That the Discounting Policies and practices challenged here are ubiquitous makes Plaintiffs' grievance all the greater.
- 10. Plaintiffs' government has made these types of arguments before—against Black children, against Mexican-American children, against Indigenous children, against children of unmarried parents, against children born to undocumented immigrants, against children of Japanese descent, and more—each time in an effort to protect powerful status quo interests and deny disenfranchised Americans their equal rights. Courts have prohibited this type of discriminatory government conduct as violative of the very foundation of our democracy.
- 11. Plaintiffs are Children living in California. They bring this declaratory judgment action under the Fifth Amendment Equal Protection and Due Process Clause, and the Declaratory Judgment Act. Plaintiffs seek, in the first instance, a

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- declaratory judgment that, as Children, they are entitled to a heightened level of judicial review over government conduct that burdens them with lifetimes of hardship, that they are members of a constitutionally protected class, and that Defendants have violated their constitutional rights under the Fifth Amendment Equal Protection Clause, as incorporated by the Fourteenth Amendment, by discriminating against them as Children and with respect to rights that are fundamental, including rights to life, personal security and happiness, dignity and worth as an individual, and in so doing Defendants have also acted outside the scope of their delegated authority.
- 12. Plaintiffs seek a declaration that the Discounting Policies and practices described herein are unconstitutional. Plaintiffs also seek an injunction preventing EPA from systematically practicing the Discounting Policies in its regulatory programs affecting climate pollution. Plaintiffs seek a declaration that the Discounting Policies and practices have resulted in discrimination with respect to fundamental rights and an injunction against Defendants' continued use of the Discounting Policies and practices that have been found to result in discrimination with respect to fundamental rights.
- 13. Plaintiffs seek further relief as deemed necessary and proper to enforce a declaratory judgment after the facts are found and the legal conclusions of this Court are rendered on a full evidentiary record.
- 14. Given the dire emergency of the climate crisis, which Defendants' Discounting Policies and practices worsen, Plaintiffs also respectfully plea that they be granted a swift hearing, including trial, to resolve material issues of disputed facts, on their claims and of their evidence. Fed. R. Civ. P. 57 ("The court may order a speedy hearing of a declaratory-judgment action.").
- 15. As the Chief Justice of the U.S. Supreme Court stated: "There is no better gift a society can give children than the opportunity to grow up safe and free—

the chance to pursue whatever dreams they may have. Our Constitution guarantees that freedom."<sup>4</sup> Through their Discounting Policies and practices Defendants have acted, by design, to discriminate against Children and to diminish their opportunity to grow up safe and free, much less pursue their dreams. Plaintiffs, as part of the protected class of Children, seek equitable remedies to right the injustice of these ongoing constitutional wrongs.

## **JURISDICTION AND VENUE**

- 16. This action is brought pursuant to the United States Constitution. It is authorized by Article III, Section 2, which extends the federal judicial power to all cases arising in equity under the Constitution. The Fifth Amendment is self-executing.
- 17. This action arises under the laws of the United States, involves a federal question, and this Court has jurisdiction pursuant to 28 U.S.C. § 1331.
- 18. "In a case of actual controversy within its jurisdiction, [] any court of the United States, upon the filing of an appropriate pleading, may declare the rights and other legal relations of any interested party seeking such declaration, whether or not further relief is or could be sought. Any such declaration shall have the force and effect of a final judgment or decree and shall be reviewable as such." 28 U.S.C. § 2201.
- 19. "Further necessary or proper relief based on a declaratory judgment or decree may be granted, after reasonable notice and hearing, against any adverse party whose rights have been determined by such judgment." 28 U.S.C. § 2202.
- 20. A case and actual controversy exists between Plaintiffs and Defendants because in exercising sovereign and delegated statutory authority over the quality of

<sup>&</sup>lt;sup>4</sup> Celebrating the Constitution: Chief Justice John G. Roberts tells Scholastic News why kids should care about the U.S. Constitution, Scholastic News, Sept. 11, 2006, at 4, 5.

the Nation's air and the pollution that enters it, Defendants have adopted and carried out the Discounting Policies and practices that are ongoing and worsening climate destabilization, endangering and discriminating against Plaintiffs, and caused them injuries to rights protected by the Fifth Amendment.

- 21. The actual controversy lies in: (1) whether Defendants' Discounting Policies and practices burden Children with a lifetime of hardship in violation of the Equal Protection Clause; (2) whether Children are a protected class under the Equal Protection Clause; (3) whether Defendants' Discounting Policies and practices are discriminating against Plaintiffs, as part of the protected class of Children, in violation of the Equal Protection Clause; (4) whether the injurious climate pollution sanctioned and systematically allowed by Defendants' Discounting Policies and practices discriminate against Children with respect to rights that are fundamental; and (5) whether EPA has exceeded its statutorily delegated authority in violation of the Constitution. The resolution of these actual controversies involves questions of scientific evidence and a factual record and cannot be decided merely as a matter of law.
- 22. At minimum, declaratory relief will redress the actual controversy by: clarifying Plaintiffs' equal protection rights as Children; resolving whether the Discounting Policies and practices are unconstitutional; resolving whether the Discounting Policies and practices have resulted and will continue to result in discrimination with respect to fundamental rights; and provide constitutional direction to Defendants in how they may carry out their benefit-cost analyses and other authorities in a manner that applies the law equally and fairly to Children. EPA would henceforth be constitutionally constrained from using the challenged Discounting Policies and practices in its systematic management of the air and climate pollution.
  - 23. Defendants admit they will comply with any Declaratory Judgment of

this Court, which means Plaintiffs will have immediate relief from the ongoing discrimination that is occurring if Declaratory Judgment is entered in their favor.

- 24. Enjoining Defendants' Discounting Policies and practices in EPA's regulatory programs will provide immediate relief to Plaintiffs from the ongoing discrimination they suffer. If EPA is enjoined from using its discriminatory and ubiquitous Discounting Policies and practices, it would alter its conduct by systematically controlling and managing climate pollution through its regulatory programs in a manner that would result in fewer tons of CO<sub>2</sub> allowed to be emitted into the air because there would no longer be an economic thumb on the scale of policies that allow more climate pollution. EPA has exclusive delegated authority and numerous methods to regulate and control climate pollution free from the discriminatory approach challenged herein.
- 25. An injunction preventing EPA from practicing discriminatory Discounting Policies would also remedy Children's disparate treatment under law by preventing more economically-biased regulatory programs that allow unsafe levels of climate pollution.
- 26. The Court has equitable authority to fashion further meaningful relief as the evidentiary record warrants.
- 27. If Defendants can continue to exercise their sovereign and statutorily delegated authority unchecked by the U.S. Constitution, with the errant belief that discriminating against Children to allow climate pollution that further destroys the air and climate system and Children's livable future is permissible under the U.S. Constitution, Plaintiffs will face an insurmountable burden in securing their rights compared to adults. Many Children will succumb to physical or mental illness caused by Defendants' allowance of climate pollution that discriminates against Children. Some will die from extreme climate events or lack of access to basic life necessities well before their given life expectancy. The gains in life expectancy over

the last century are now reversing for Children born today. Ending the Discounting Policies and practices will aid in protecting Plaintiffs' rights from complete extinguishment, and at least partially alleviate Plaintiffs' constitutional injuries.

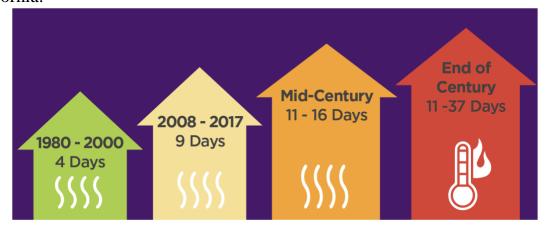
- 28. Once Plaintiffs and Children reach the age of suffrage and are enfranchised, their vote on the matter of their lives and health will be ineffectual at altering the consequences of 18 years of being treated as worth less than adults and the resulting cumulative climate pollution and early exposures to climate harms, as well as the policies established during their formative years that will abide for years to come. Children are increasingly losing an open livable future, one where liberty and life are increasingly constrained, and additional property destroyed, by an increasingly and dangerously destabilized climate system. A timely declaration in their favor regarding the unconstitutionality of Defendants' Discounting Policies and practices will provide redress and reduce the risk of the ongoing and certainly impending future harm to their rights.
- 29. Plaintiffs have no adequate remedy at law to redress the harms herein, which, if left unresolved, will be irreversible and life-threatening.
- 30. Venue lies in this judicial district by virtue of 28 U.S.C. § 1391(e). Plaintiffs reside in this judicial district, and the harms giving rise to the claims herein arise, in part, in this judicial district. Plaintiffs Genesis, Maya W., Maryam A., Zubayr, Muaawiyah, and Dani reside in the Western Division of this judicial district.

## **PLAINTIFFS**

31. Plaintiff **Genesis B.** is a 17-year-old lifelong resident of Long Beach, California. Rising temperatures due to climate change are threatening Genesis's safety and decreasing her ability to learn. Genesis's home, designed for moderate temperatures that were previously typical of coastal cities in Southern California, has no air conditioning. Installing air conditioning is cost prohibitive for Genesis's

family. As extreme heat days become more common in Long Beach, Genesis is unable to cool off in her home during the day. On many days, Genesis must wait until the evening to do schoolwork when temperatures cool down enough for her to be able to focus. On July 29, 2023, Genesis experienced symptoms of heat exhaustion, including a headache and bodily weakness after spending time outdoors on a hot day, and had to cancel her appearance to receive an award for her activism from a local youth group.

32. Extreme heat days (measuring 95°F and above) in Long Beach, California.



- 33. Without air conditioning, Genesis must keep the windows in her house open in the summer, which can be unsafe and exposes her to more pollen, worsening her allergies and resulting in frequent runny nose, cough, and congestion. Ash from wildfires that are exacerbated by climate change and increasingly close to Genesis's home also blows in through her windows causing headaches, fatigue, and worsening of her allergy symptoms. Genesis wears masks to go outside in particularly bad smoke seasons, including the past two years.
- 34. Genesis feels a deep connection to the earth, tied closely to her Afro-Latina and Indigenous roots. She has made substantial efforts to lessen her contribution to climate change by adopting a vegan lifestyle at the age of six and educating the public about greenhouse gas emissions. Genesis experiences climate

anxiety and instead of thinking about college, she constantly worries about the climate crisis and how it will affect her future and the future of her four younger siblings. One way Genesis deals with her anxiety is by being in nature, though this becomes more difficult as climate change worsens. The heat and smoke prevent her from even taking walks near her home. In August 2023, after Tropical Storm Hilary, Genesis was unable to take a family trip to the Colorado River, because the route, the I-5 freeway, flooded.

- 35. Plaintiff **Maya W.** is a 17-year-old resident of Los Angeles, California. Maya was diagnosed with bronchospasms due to her asthma and must regularly use a steroid inhaler to participate in physical activities essential for her health, like soccer. Increasing interaction with wildfire smoke, driven by climate change, causes Maya to have chest pains related to her asthma and severe headaches. Maya plays soccer and would like to compete at a competitive level but is unable to do so due to her asthma. Wildfire smoke has caused practices to be cancelled in the past, which also prevents Maya from performing at her highest level. When Maya participated in PE classes, wildfire smoke forced the students to exercise inside, but on several occasions, ash lined the floor of the gym. Wildfires have also increasingly threatened Maya's grandparents' property in Burbank, a home she visits on nearly a weekly basis. While her grandparents' home has thus far been spared from fire, Maya was shocked to see her grandparents' lush backyard turned to ash by wildfires.
- 36. Maya's participation in soccer is also affected by rising temperatures caused by climate change which causes her fatigue, headaches, and more loss of breath when she exercises. Maya plays soccer on turf fields that intensify the heat and cause her feet to feel like they are burning. At times, air conditioning has broken down at Maya's school making it difficult to focus due to the heat. Her school has lost power on especially hot days, which caused school cancellations.

- 37. Maya started experiencing anxiety in 2020. This anxiety is worsened as she learns about climate change and experiences its effects. Maya's anxiety around climate change rises to the level of panic attacks, which she manages by engaging in therapy and climate action. Maya feels compelled to adjust her lifestyle and activities, like eating a vegan diet, choosing not to get her driver's license, purchasing reused items, reducing her consumption, and declining trips involving airplanes, to reduce her carbon footprint. Even with these outlets and lifestyle choices, Maya's anxiety persists as she thinks about her government making climate change worse. She feels like she has been robbed of the bright future adults promised her as she was growing up.
- 38. Plaintiff **Maryam A.** is a 13-year-old resident of Santa Monica, California. Increasing wildfires and wildfire smoke harm Maryam's physical health and her family's safety. When Maryam is exposed to wildfires and wildfire smoke, she has difficulty breathing and her nose hurts around her sinuses. When air quality is poor due to wildfires, Maryam is unable to do activities she enjoys like biking, hiking, and enjoying time in nature. In 2019, Maryam's grandparents came to stay in Maryam's home because their house in Malibu was unlivable from being filled with ash from frequent wildfires. When they returned two months later, her grandparents' property had been partially burned and the house had to be remediated to rid it of ash and smoke.
- 39. Maryam has also been impacted by the increasingly hot temperatures which cause Maryam headaches, while the dry air worsens her eczema flare-ups. The heat forces Maryam to limit her outdoor activities, including biking to school. Maryam practices Islam, and because her age, she is considering what practices of the faith she will adopt in the future. The heat makes it difficult for Maryam to fast for Ramadan and has affected her decision on whether to fast. As she looks to the future, Maryam believes that wearing a hijab would be very difficult in the heat. She

also is concerned about her ability to participate in the Hajj, the pilgrimage to Mecca that is done on foot, with increasing temperatures. Maryam tries to change her daily activities to reduce water use, given the historical drought in California.

- 40. Until Maryam's family recently had their roof repaired in Summer 2023, it would leak due to increasing extreme precipitation. In August 2023, Maryam had to cancel her thirteenth birthday with friends due to Tropical Storm Hilary. Even with the repaired roof, Maryam's home still experienced some leaks from the storm.
- 41. Maryam enjoys going to Santa Monica Beach over the summer where oil spills often run onto the beach. The oil has ruined her shoes when she takes long walks along the beach. Maryam is concerned about how her future will be affected by climate change and how much she will be able to go outside due to poor air quality. She worries that the state of the planet will affect her ability to live her life and explore opportunities when she becomes a young adult, including going to college, traveling and hiking, choosing her career, and all of the small and big choices adults get to make, like starting a family and having future children. Maryam believes that her generation, and all generations after, are owed a future.
- 42. Plaintiffs **Zubayr M.** and **Muaawiyah M.** are brothers, 11- and 16-years-old respectively. They are residents of Los Angeles, California and live near several oil and gas wells, including 3½ miles from a fracked well. Zubayr and Muaawiyah regularly face climate pollution from fossil fuel infrastructure as they recreate. They enjoy visiting Kenneth Hahn Park, approximately five miles from their home, once or twice a month and which is located next to an oil field. In April 2021, their ability to visit the park was disrupted by an oil leak which threatened health of residents by releasing contaminants in the air and water.
- 43. Zubayr and Muaawiyah experienced increased rainfall in their area due to climate change. In August 2023, winds from Tropical Storm Hilary blew off a

- 44. Zubayr and Muaawiyah regularly experience smog, driven by fossil fuel emissions and wildfire smoke. Muaawiyah checks the air quality several times a week and has observed below average air quality on his weather app about half the time. When Zubayr and Muaawiyah visit downtown on smoggy days they have trouble breathing, coughing, and at times, eye irritation.
- 45. Zubayr and Muaawiyah have also experienced an increase of mosquitos in their area. They frequently receive mosquito bites and through the fall of 2023, they could see mosquitos on the inside walkway of their apartment building. In 2022, Zubayr developed a staph infection from a mosquito bite and had to receive medical treatment.
- 46. Zubayr feels angry and sad when he thinks about how fossil fuels will increase in the future and make his future worse. Muaawiyah can feel despair for days at a time if he thinks too deeply about the climate crisis.
- 47. Plaintiff **Dani R.** is a 17-year-old resident of Santa Clarita, California. Dani faces increasing extreme weather events due to climate change. Dani lives in a canyon where heavy rains in 2022 caused mudslides that caused severe damage to the foundation of her home and holes in the ceiling. The repairs on the home took a long time and cost her family \$100,000 as it was not covered by homeowner's insurance.
- 48. Dani has experienced extreme heat and wildfire, which are increasing in frequency and severity with climate change. Wildfire smoke and poor air quality caused severe allergies for Dani in 2021, where she was unable to attend school because of migraines, shakes, and congestion—missing about 15 days of school. Dani worked with a physician to get these allergies under control, which required taking Benadryl. Dani loses power several times a year at her home due to climate related events. In 2019, the Tick fire came very close to her house. Dani's family

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- has housed displaced friends who have been evacuated or lost their homes to wildfires.
- 49. Dani's school and community have issues with contaminated water. In the past, particularly in time of drought driven by climate change, Dani's family has struggled to find packaged water on the shelf.
- 50. Dani is an active member in her community, and frequently volunteers in climate action, works with women and children in need, and in the past, assisted in Covid relief. She has observed inequity and social issues in her community exacerbated by climate change. Dani had hoped to become a nurse practitioner in the future, but her concerns about climate change have made her shift her plans to focus on targeting climate change through non-profit work.
- Plaintiff Maya R. is a 10-year-old resident of Fullerton, California. 51. Maya's first encounter with the threat of wildfire and smoke was when they were a baby and their parents were making plans to evacuate from their home in La Habra when it was difficult to know where to safely go. In their young life, Maya has experienced the physical discomfort of smoke from wildfires, which has harmed their ability to safely engage in outdoor activities they enjoy, like biking. Maya has been forced to stay inside at school due to ash falling and unhealthy air quality. Maya has observed burned landscapes while traveling for family vacations such as to Yosemite. Wildfire smoke and orange skies make Maya feel scared. Maya has experienced extremely high temperature days, requiring them to stay indoors at school when it is too hot for recess or lunch. Orange County experienced one of its hottest days ever in September 2022, reaching 111°F in Fullerton, where average high temperatures normally range near 85°F.
- 52. Maya also experiences anxiety about the impacts of drought on the Colorado River and their water supply in Southern California. Maya feels a strong connection to animals and experiences anxiety about climate change's harm to

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animals and their habitat, especially birds and canines. Maya uses art to help with the anxiety they feel around climate change, and they attend events and marches whenever they can to try to have their voice heard.

- 53. Plaintiff **Maryam D.** is a 15-year-old resident of Garden Grove, California. The effects of climate change are already impacting Maryam's religious practices. As a Muslim, Maryam feels a deep connection to Islam's call to care for both the environment and animals. She practices veganism as part of her devotion and is discouraged by governments' neglect of the earth. The increasing heat in Southern California due to climate change burdens Maryam when the month-long fast during Ramadan falls during periods of heat as it has for the last several years. The heat makes it very difficult to abstain from both food and water from dawn to dusk, which is an important part of her religious practice. Maryam also wears a hijab and conforms with other religious attire including long sleeves and long pants, which increasing temperatures make more difficult and lead to physical discomfort.
- 54. Maryam faced a tropical storm warning for the first time in August 2023 when Tropical Storm Hilary, caused in part by climate change, hit Southern California. Her home was under threat of evacuation causing stress to her and her family. Along with worsening storms, wildfire and wildfire smoke have harmed Maryam's quality of life. Maryam considers her academics, and her love of mathematics, to be one of the most important aspects of her life and, in middle school, Maryam's school closed down for multiple days each year due to the threat of wildfire and wildfire smoke, interfering with her learning. Even when fires are not close to Maryam's home, she has had ash fall on her property from fires several miles away. Maryam worries for her younger brother with asthma, which is worsened by wildfire smoke, and requires their family to run air purifiers.
- 55. Wildfires, smoke, and heat have also interfered with Maryam's enjoyment of family gatherings. In 2020, Maryam visited her family in Northern

California for about a week and was exposed to extremely smoky air and poor air quality in addition to heat, which forced her to stay indoors. In recent years, two campsites that Maryam and her family regularly visited were burned down in wildfires. One campsite was a camp Maryam's mother used to also stay at as a child, a now-broken tradition she had passed down to Maryam and her siblings.

- 56. Maryam worries about how climate change will affect her and her loved ones in the future. She worries about immediate climate related threats to her family and friends, like those living in Pakistan who have been harmed by extreme flooding. She also worries about the long-term future and sustainability of life in California and other parts of the world. As a result of her climate anxiety, she spends her free time outside of school volunteering for youth-led climate organizations, which has left no time for a childhood of play and social time with friends.
- Noah loves Sebastopol and even though they have visited other places in California and the country, Sebastopol is their favorite place and is where Noah feels a sense of connection and belonging. Noah remembers having a great childhood until they were 8-years-old, in third grade, when the 2017 Tubbs Fire started. That was the first time Noah was evacuated from their home for wildfire. Noah lost 19 days of school and ultimately had to leave the state to find safe air quality for their brother with asthma. The Tubbs Fire destroyed homes of Noah's friends and threatened their school and entire community. Noah's home was layered with smoke and ash. Noah remembers being very scared. Both Noah and their younger brother share the month of October for their birthdays. The Tubbs Fire occurred a couple of days after Noah's brother's birthday and shortly before Noah's birthday, ruining an otherwise celebratory time. While nothing had ever happened like that to Noah before, and they thought it was a one-time catastrophe, the Tubbs Fire was just the beginning.

- 58. Again, in 2018, the Camp Fire caused five more days of school closures for Noah, and their family planned for potential evacuation. In 2019, during the Kincaid Fire, Noah had to evacuate their home once again, leaving their dogs at a neighborhood boarding, causing Noah to fear for their home and pets. Noah packed stuffed animals to take with them, knowing they might lose all of their possessions and their home. The evacuation disrupted Noah's Halloween, and they were forced to celebrate the holiday away from home and their community. Noah's school was shut down for several weeks, and they had anxiety that their school might burn down. In 2020, Noah's home was threatened again by an even closer fire, the Walbridge Fire. Noah evacuated to San Francisco and missed the first day of sixth grade at a new school. After the 2020 fire, Noah's family relocated from their farm into town for fear of future wildfires, but they are not free from danger.
- 59. Noah has spent significant portions of their childhood running from fires, spending holidays in rental houses not being able to enjoy their October birthday or Halloween, from feeling constantly afraid about fire and their house burning down. Noah has witnessed their friends struggle with the impact of losing homes. Noah has also spent many days wearing masks to help protect against the inhalation of pollutants like PM<sub>2.5</sub>, and their family has had to purchase multiple air purifiers for every room in their home to try to keep their indoor air quality safe.
- 60. After the Tubbs Fire, in fourth grade, Noah began to struggle in school and with anxiety and depression for which they have sought medical treatment. Noah uses therapy, meditation, art, and sacred time in nature to help manage their climate anxiety and depression, but the ongoing harms of climate change in Noah's life make it extremely challenging. Climate change has fundamentally changed Noah's childhood.

that neuro-divergence with a helpful medication. However, that medication makes it

more difficult for Noah to regulate their temperature and causes sensitivity to heat.

Noah also has sensory conditions and hyperhidrosis, which can lead to dehydration,

which is exacerbated by hot conditions. With increasing temperatures and heat

waves, Noah experiences severe physical and psychological harm that has led to

hospitalization, which comes with great academic, social, and financial costs. Being

stuck inside due to heat or smoke worsens Noah's mental state because walks outside

in fresh air are an important part of their self-care.

In recent years, Noah has been diagnosed with ADHD and manages

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- 62. After experiencing growing trouble with breathing after years of smoke exposure, in eighth grade Noah was diagnosed with asthma, for which they use an albuterol inhaler. Noah's asthma makes it difficult for them to participate in PE class and other activities like hiking at Noah's favorite summer camp. Noah never had respiratory issues before the fires started.
- 63. Every year of Noah's childhood they attend a month-long camp in the redwoods near the ocean. That ritual and place is important to Noah and their family. Now, due to Noah's asthma and heat sensitivities, Noah is afraid to participate in the camp activities, like hiking, because of the struggle to breathe when Noah's lungs flare up. Noah used to attend camp later in the summer, but they only register to go at the beginning of summer now because of fire danger and heat. Recent fires have come very close to burning down the camp and have burned the corridor and blackened the formerly green trees Noah witnesses traveling to the camp.
- 64. Climate change has also increased flooding in Noah's area. In 2019, Sebastopol experienced a severe flood, closing some of Noah's favorite places in the town square. In January 2023, Noah's home was flooded after record-breaking rainfall. The ground floor of Noah's home sustained water damage that was not covered by Noah's family's homeowner's insurance.

- 65. Noah loves the coastal environment and tidepools of California and wants to study marine biology one day, but knows that some marine species are dying out or moving to different locations due to the increase in ocean temperatures. This additional loss exacerbates Noah's climate anxiety.
- 66. Noah's life has been frequently disrupted by the increasing wildfires, heatwaves, and flooding due to climate change. However, the physical climate harms and disruptions cause an even greater psychological harm from the fear and anxiety Noah experiences thinking about their safety and the future as climate change worsens and governments maintain the status quo. Noah has met with members of Congress to ask them to support H. RES. 259 aimed at promoting youth mental health and well-being in a changing climate, including funding school districts to help children cope with climate-related disasters. Noah felt frustrated that many politicians did not listen to them. To date, only 29 members of Congress have supported H. RES. 259.
- 67. Plaintiff **Ione W.** is a 12-year-old resident of Sebastopol, California. Wildfire seasons worsened by climate change are already harming Ione's home, family, community, and way of life. In 2017, when Ione was 5 years old, she was forced to evacuate her home in the middle of the night due to the Tubbs Fire, California's most destructive wildfire at that time. Ione's family had about 15 minutes notice before evacuating, and their home was completely destroyed in the fire, losing all possessions except those in their car, and the charred swing set in their yard—the only thing remaining of the property they still own. Ione's family was fortunate to escape across the bridge that burned down behind them. Ione missed approximately one week of school and was displaced for six months. During that time, Ione had to move three times before settling into her current home, each move adding additional stress to her as a young child.
  - 68. Since the Tubbs Fire, Ione feels extreme anxiety around fires. During

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the growing wildfire seasons, she checks the color of the sky before going to bed to confirm there is no fire in the area. At age 7, Ione photographed the sunset each night on her iPod to compare against prior sunsets, looking for hints of wildfire orange, to feel calm enough to go to sleep. Ione has also worked with a therapist to develop coping skills to address her fire anxiety. Despite these measures, Ione does not feel safe, even in her own home, from September through the first heavy rain, due to the increasing presence of wildfires in her area due to climate change. The smell of smoke heightens her anxiety and causes extreme headaches that sometimes make it difficult to participate in school, harming Ione's health, education, and security. Ione's family has considered rebuilding on their property but is unable to do so due to the inability to insure the property as homeowner insurance companies flee California. Since 2017, Ione has evacuated her home two additional times due to the Kincade (2019) and Walbridge (2020) fires. During the 2018 Paradise fire, Ione evacuated home to escape prolonged smoke exposure. Ione's family ultimately moved to a more coastal and less forested area that should have less wildfire risk, but there is nowhere to live in their community to escape the growing wildfire season from climate change.

- 69. Ione has researched climate change since third grade and believes that climate change is something that needs to be talked about and stopped. She wants to share her story of loss and fear through these claims to prevent additional harm to herself and other children by the choices her government makes.
- 70. Plaintiff **Avroh S.** is a 14-year-old lifelong resident of Palo Alto, California. Avroh first had to wear a mask as a fourth grader in 2018 when the air was filled with ash and smoke from the deadliest and most destructive wildfire season in California history. Avroh was exposed to wildfire smoke that caused headaches, coughing, and discomfort, leading to the cancellation of school. In 2020 when he was in sixth grade, Avroh began regularly checking his outdoor air quality

after repeatedly waking up to a sky that had turned an apocalyptic orange from yet another series of devastating wildfires. The poor air quality has made it unsafe for Avroh to go outside for months at a time, eliminating his recreational activities important for his health and wellbeing like soccer games, practices, simple daily walks, or hanging outdoors with friends. Avroh's family has canceled family vacations in other parts of California due to extreme heat and smoke from wildfires that cover large parts of the state. Avroh now suffers from more frequent nosebleeds that occur during periods of poor air quality and excessive heat, and has had to have a blood vessel in his nose cauterized during wildfire season. During the 2023 fire and smoke season, Avroh experienced more respiratory symptoms such as congestion, coughing, and a sore throat, which made it hard to concentrate in school. Avroh worries for his safety as each year fires burn closer to his community.

- 71. Avroh has also been exposed to increasingly severe storms that have closed his school, interrupted his education, and prevented participation in activities. For example, at the start of 2023, Avroh's school was canceled for at least five days from an extreme storm event. Extreme precipitation flooded school grounds making it unsafe to access the buildings for several days. High winds from another storm in the winter of 2023 downed power lines on campus, forcing all school children to be sent home while the power lines were fixed and the power restored. Even when school was in session, parts of Avroh's school have been blocked off as unsafe because of the risk that trees weakened by storms may fall. Avroh is scared that another severe storm could send a tree crashing into his classroom in the future.
- 72. Avroh feels a deep, spiritual connection to nature and grieves the sudden loss of wildlife and ecosystems that he is witnessing in Northern California due to climate change. When Avroh was 9 years old, he started a Nature Club, to do his part to clean up the environment. Avroh has known since he was 10 years old that leading climate scientists have warned we have a limited window of opportunity

to avert climate disaster, and while he does what he can in his own school and home to care for himself and nature, he feels anxiety wondering whether those in power will continue to perpetuate the harm to him and future generations.

- 73. Plaintiff **Ariela L.** is a 17-year-old resident of San Leandro, California and the first generation of her family to be born in the United States. Ariela feels a deep connection to her community in San Leandro as well as her extended family and community in Oaxaca, Mexico, who she visits regularly.
- 74. During the August 2020 Lightning wildfires that ignited across Northern California, Ariela opened her front doors to orange skies with air thick and heavy with smoke, causing throat aches and watering eyes an experience that now happens every year with the increasing wildfire season made worse by climate change. As part of a low-income immigrant community in San Leandro, Ariela, as well as other students in her community, is forced to suffer climate hazards compounded by social and economic burdens. For example, Ariela has had to go to school during periods of hazardous air quality from wildfires while wealthier area schools have closed. Ariela's classrooms filled with smoke, disrupting her learning, and causing Ariela and her classmates sore throats and other physical effects. Likewise, Ariela's mom has had to continue working during hazardous smoke waves because taking time off work as a preschool teacher would cause the family financial hardship.
- 75. Ariela has also endured heat waves, with no air conditioning at her home and in many areas of her school. Frequently, on the hottest days, the air quality is also poor from smoke and it is not safe to cool down her home with open windows at night.
- 76. Ariela has a large extended family in Oaxaca where she spends time. During her childhood, while in Oaxaca in her family's pueblo, Ariela experienced intense storms whose flood waters demolished homes and crops central to her

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family's economic wellbeing and cultural traditions. Ariela experiences anxiety over the impact of extreme weather, like storms and hurricanes, as well as heat, on maize and other crops in Oaxaca because these crops sustain her family, community, and cultural traditions. Shortly after her family lost homes and crops in Oaxaca, Ariela returned home to the Bay Area where smoke engulfed her community. Ariela recalls waking up at dawn to take the bus with her mom to school, breathing in toxic smoke and understanding it was not safe for her or her mom and feeling trapped in the lack of safety for herself and her family.

- 77. Ariela has been a community organizer with Sunrise Movement since age 14, fighting to stop the climate crisis. She has trained students from across the country for a national campaign and has gone to D.C., participating in a demonstration in an effort to be heard by the people in power. She would like to spend time doing other activities or enjoy her hobbies, but Ariela worries about her future, her community, her life, and future generations and knows that we are running out of time, so she has foregone parts of her childhood in order to protect a livable future.
- 78. Plaintiff **Huck A.** is a 13-year-old lifelong resident of Truckee, California. Huck enjoys many outdoor activities including mountain biking, cross-country running, baseball, river inner-tubing, skiing, and other winter activities, which are an important part of his childhood and development. As climate change worsens, Huck's ability to engage in these activities is being harmed.
- 79. Worsening wildfires and air quality due to climate change, are commonplace in Huck's life, a symbolic beginning of the summer. Though Huck would enjoy running or biking throughout the summer and fall, the pervasive smoke during wildfire season often forces him to stay indoors. In 2021, Huck's school was closed for one week due to the Caldor fire that caused evacuation warnings for the Tahoe Truckee Unified School District. That same fire affected Huck's family's

ability to safely move his ailing grandparents into their home. In 2022, hazardous smoke from the Mosquito fire, which Huck avoided only by being out of town, impacted Huck's grandma and family members who were stuck in the smoke. When Huck attends school during wildfire season, he wears N95 masks during the day at high air quality indexes. If the air quality index exceeds 150, Huck's cross-country, biking, and baseball practices and events are canceled, which occurs regularly. Though Huck is preparing for high school and would like to compete competitively in these sports, smoke days cause him to miss training and competition days and interfere with his performance.

80. The Tahoe Truckee Unified School District closes schools for smoke days when AQI exceeds 400, causing Huck to miss school, and has instituted other restrictions on student activities to reduce smoke inhalation. The School District instituted this new smoke protocol in 2021 in response to the increasing number and severity of wildfires from climate change.

81.

TTUSD Guidelines for Outdoor Activity Based On Air Quality Level

Use your best judgment; the AQI reports do not always reflect what we see on the ground.

AQI Value (Air Quality Index)	Level 1: 0-50 Good	Level 2: 51-100 Moderate	Level 3: 101-150 Unhealthy for Sensitive Individuals	Level 4: 151-200 Unhealthy	Level 5: 201-300 Very Unhealthy	Level 6: 301-399 Hazardous	Level 7: 400+ Hazardous
Windows/Doors	OK to Open	OK to Open	Keep Closed	Keep Closed	Keep Closed	Keep Closed	Keep Closed
Lunch/Breaks Outdoors	No Restrictions	No Restrictions	No Restrictions  Ensure sensitive individuals are medically managing their condition.*	15-30 minutes max with no physical activity	No Outdoor Activity	No Outdoor Activity	No Outdoor Activity
Recess (15 Minutes)	No Restrictions	Ensure sensitive individuals are medically managing their condition. *	Sensitive individuals should exercise or play indoors.  Encouraged to move indoors if AQI exceeds 100, if possible.	Indoors Only	No Outdoor Activity	No Outdoor Activity	No Outdoor Activity
P.E. (1 hour)	No Restrictions	Ensure sensitive individuals are medically managing their condition. *	Sensitive individuals should exercise or play indoors.  Encouraged to move indoors if AQI exceeds 100, if possible.	Indoors Only	No Outdoor Activity	No Outdoor Activity	No Outdoor Activity
Athletic Practices & Training and Athletic Competitions (2-4 Hours)	No Restrictions	Ensure sensitive individuals are medically managing their condition. *	Athletic Practice p Limit to 30 minutes per hour of practice time with increased rest breaks and substitutions Encouraged to move indoors if AQI exceeds 100, if possible.  Athletic Competitions Increase rest breaks and substitutions per CIF guidelines for extreme heat.** Ensure sensitive individuals are medically managing their condition.*	CT Athletic Practice Indoors Outdoor Athletic Competitions Cancelled or relocated	Athletic Practice Indoors (monitor indoor air quality to ensure it does not exceed 150)  Outdoor Athletic Competitions Cancelled or relocated	Athletic Practice Cancelled (Site Administrators have discretion to hold practice if schools remain open. Students will be monitored for health impacts) All Athletic Competitions Cancelled or relocated	Athletic Practice Cancelled All Athletic Competitions Cancelled or relocated
School Status	Open	Open	Open	Open	Open	Potential Smoke Day based on air quality outside and inside of buildings and location of school.	Smoke Day Schools Closed

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- 83. Huck has been susceptible to heat exhaustion as temperatures increase due to climate change. While attending cross-country meets, Huck has had to run in the heat, causing his lungs to burn, intense sweating, and headaches. On a few occasions, Huck has been biking in his full protective mountain biking gear in high temperatures when he got a severe headache and started vomiting and spent the rest of the day trying to cool down. Huck enjoys inner tubing down the Truckee River and has noticed the water getting warmer in the summer. Some summers, the river levels are too low to float due to drought.
- 84. Extreme weather events, increasing with climate change, have also affected Huck's favorite time of year, winter, and winter sports. Huck loves snow and anxiously awaits the first snowflakes. Some winters, Huck has had difficulty skiing because there were patches of dirt everywhere and little snowpack. On the other side of extreme conditions, Huck has missed school for winter weather events made more extreme by climate change. Record-setting snow in 2016-17 and 2022-23 caused several weeks of school day cancellations. In 2023, the record-setting amount of snow caused concern over school building stability, canceling school for additional days. Huck was not able to ski during this time because the snow blocked roads to the ski resorts, which also had closures. Huck is worried that as climate change worsens, he will not be able to sled or ski because the snow will disappear with rising temperatures and the altered precipitation patterns will forever change winter in the Sierra Nevada. The number of days when air temperatures averaged below-freezing has declined by almost 30 days since 1911. Not only is the snow getting heavier and concrete-like, but there are increasingly fewer days when it is

even cold enough to snow. Huck lives at just below 6,000 feet in elevation. The number of average days below freezing at Huck's home are continuing to decline.

- 85. Plaintiff **Neela R.** is an 8-year-old resident of Petaluma, California. Neela experiences smoky seasons every year from increasing wildfires due to climate change and cannot remember a year without smoke. The smoke causes Neela headaches so severe that their parents have had to pick them up early from school on many occasions. Neela also experiences stomachaches during smoke seasons. The smoke has caused Neela to miss school, camps, recess, and multiple planned family vacations in California. When Neela was very young, their family faced evacuation threats due to wildfires. Their family continues to prepare for wildfire threats, including plans to ensure the safety of Neela's aging grandparents who also live in California and have faced similar threats from smoke and fire evacuations.
- 86. Neela has an autoimmune disease. There is increasing evidence of a relationship between exposure to  $PM_{10}$  and the risk of developing autoimmune diseases.
- 87. Neela endures increasingly extreme temperatures during the summer due to climate change. Neela feels discomfort as they participate in outdoor activities including soccer, which they sometimes must play on artificial turf that further increases the heat. Drought has, at times, dried up the creek near a friend's house where Neela likes to play. Extreme precipitation from climate change has threatened to flood Neela's home. In 2021, Neela and their parents had to dump buckets of water from immediately outside their home to prevent its flooding.
- 88. Neela has a deep love for animals and nature. Neela worries that as climate change worsens it will affect their family's ability to garden the fruit and vegetables they love to eat, the safety of their pets, and local flora and fauna.
- 89. Plaintiff **Emma W.** is a 16-year-old resident of La Jolla, California. Emma is a citizen of Switzerland, and a permanent resident of the United States

since she was 2 years old, with plans to naturalize into a United States citizen when she turns 18. Emma's parents are also permanent residents and as non-citizens do not vote in U.S. elections.

- 90. Emma was diagnosed in summer 2023 with exercise-induced asthma. She uses an inhaler before physical activity, including field hockey. Increasing heat due to climate change worsens Emma's asthma. Emma also experiences heat sensitivity and has nausea and exhaustion in high temperatures, which are increasing. She has had to sit out field games and practices because of heat, preventing her from competing at the high level at which she would like. Emma visits her extended family every summer in Switzerland. During these visits, Emma has lived through European heat waves and temperatures in excess of 100°F.
- 91. Emma's quality of life improves when she interacts with nature and she worries about losing access to forests, which are her favorite place to be, and underwater habitats where she scuba dives, because of climate change. Emma has a generalized anxiety disorder which is triggered by extreme climate events and politicians not acting to stop climate change. This anxiety is often immobilizing and affects her ability to function at school and in her social life. While being involved in climate activism herself is a way she tries to manage her anxiety, Emma still worries about her future and the lives of vulnerable people. While she dreams of pursuing a career as a history teacher, she believes the only path she can morally take is to work against the climate crisis; because without a stable climate system, she does not have the opportunity to choose a different future. As a minor and a child of non-citizen residents, Emma feels the profound weight of not being able to vote and have decades of decisions made about her future and the climate crisis without having a voice.
- 92. Emma has also noticed a large increase in mosquitos in her area and is highly susceptible to mosquito bites and allergic inflammation. Emma's open skin

from scratching the bites will make her more susceptible to infection and disease.

- 93. Plaintiff **Arishka J.** is a 15-year-old resident of Redwood City, California. Arishka lives close to the bay coastal line and worries about sea level rise driven by climate change, which could affect infrastructure near her home by 2030 under current government projections. According to the *Sea Level Rise Vulnerability Assessment* conducted in 2018 by San Mateo County, her neighborhood of Redwood Shores is likely to be flooded completely if a 100-year flood with 3.3 feet of sea level rise occurs. Arishka enjoys recreating at the beach and has noticed rising tides and erosion that have prevented her from accessing beaches that are important to her. Arishka's life is connected to the sea and coastlines, and her opportunities about where she lives and how she spends her time will be increasingly affected by rising sea levels if climate pollution continues.
- 94. Extreme weather is already harming Arishka today. In late December 2022, after record-breaking rainfall, Arishka's kitchen was flooded from water flooding in from their saturated backyard and coming up through the floorboards. Because of the extreme flooding happening in other areas as well as the time of year, most contractors were unavailable to help. Arishka's family tried to reach out to contractors for over a week, but ended up having to spend hundreds of dollars and over 20 hours to repair the damage and prevent further flooding on their own.
- 95. Arishka is regularly impacted by increasing wildfire and wildfire smoke. On smoky days, Arishka has trouble breathing and gets headaches. From 4th to 7th grade, her classes and sports practices were cancelled for more than a week due to wildfires or poor air quality. Safety drills at her high school, including evacuation drills for wildfires, have even been canceled due to poor air quality. On the poor air quality days, the students are forced to stay inside at school. Students had to shelter in place for two days in September 2023 alone. Arishka has had to change her plans and alter activities due to wildfire smoke, including canceling a

planned beach clean-up with friends. Arishka is aware of the harm wildfire smoke can have on her health and brain chemistry and worries about how her exposure to wildfire smoke, which has become the norm each year in the Bay Area, is affecting her.

- 96. Arishka also worries how climate change will affect her future and is concerned that the world will not be safe for future generations. She also worries about the future of her communities including vulnerable communities near her in California, as well as her extended family in India, who she fears may be affected by extreme weather conditions.
- 97. Plaintiff **Lali H.** is a 12-year-old resident of Berkeley, California. For half of Lali's life, since she was six, Lali has lived with smoke season from the increasing wildfires due to climate change. Lali remembers a Tuesday in second grade when she woke up and her bedroom was red from the light outside, which was created by wildfire and smoke. Lali's mom had her wear long-sleeved clothes to protect her from the ash as they went to school where she was not allowed outside for recess, and afterward they went straight home and stayed indoors. Years before the Covid pandemic began, Lali's family was already wearing masks during periods of poor air quality from smoke. Even inside Lali's home, she cannot escape the smoke because their home is older and drafty and the back door does not close all of the way. During smoke season, Lali can smell the smoke inside her home. Smoke irritates Lali's eyes and makes her teary. She also feels physically weaker when she breathes in the smoky air.
- 98. Lali has missed school because of wildfire smoke. She attended an elementary school that was also drafty and allowed smoke inside the classrooms. The school was not able to install air filtration and parents would bring in portable air filters, but still the children were in poor air quality. There were days during Lali's elementary school when teachers would teach wearing full gas masks.

- 99. Often during smoke season, Lali has not been allowed outside at recess, and she would have PE at her desk in the classroom. Lali is an active child and has a harder time paying attention in class without breaks for physical activity. Both smoke and heat make it harder for Lali to pay attention in school and do her homework.
- 100. Lali's family has canceled trips to visit family in India due to extreme flooding events, which were caused by climate change. They have also canceled summer vacations due to fire. The redwood trees of California are really important to Lali and she values their fire resistance and hopes they will withstand climate change. Her extended family loves to ski together in the winter for vacation, which can only happen in years when there is enough snow to go. Lali has believed adults need to stop hurting the environment since she saw a sign in second grade that said, "There is no Planet B."
- 101. Plaintiff **Dean S.** is an 11-year-old resident of Lee Vining, California. Dean is a member of the Mono Lake Kutzadika'a Tribe, the southernmost band of the Northern Paiute. Dean has lived his whole life on the lands and waters of his ancestors from time immemorial. It is part of Dean's and his family's tradition to gather native food from the land, like the deer, fish, buck berries, and pine nuts. Climate change is changing the availability of these foods and harming Dean's traditional and nourishing practices. Dean has been fishing since the age of three, learned how to gut a fish when he was 7, and to say the prayers when he takes a life. In recent years, Dean has noticed a lot of dead fish and not as many native fish to catch. In 2023, Dean and his dad did not find any deer during their hunting season. There has also been a decline in buck berries over the last few seasons. The pinyon pine nuts have not been predictable and lately have been rotten. Dean and his family notice these changes from what used to be.
  - 102. Dean's Tribe is named after Mono Lake and the lake is a huge part of

them. Kutzadika'a means "we ate the brine flies." When the lake is hurting, Dean and his family are hurting. Mono Lake is like medicine for Dean and his family, to heal his mosquito bites or other ailments. It is important to Dean to swim in the lake, to sing to her, and to find healing in her waters. When Mono Lake water levels are low, it becomes almost dangerous to swim there because of the higher concentration of minerals, which can cause burning. Dean knows it is important to protect nature and help Mother Earth heal, which will also heal people.

- 103. In the winter of 2023, Dean lived through an extreme snowpack that trapped wild horses who died, but other years there is now very low snowpack and not enough water for the horses. Too much snow is too much water, and too hot is too little water, both of which affect the way things grow. During the hotter drier summers, some of the lakes Dean likes to swim in, like Saddlebag Lake, are contaminated with toxic algae and unsafe to be in. Dean can feel and see these changes worsening during his 11 years. Because Dean is in nature all the time, walking barefoot in the summer, tasting the snow, harvesting food from the land and waters, he notices the changes. The snow or rain used to be more predictable and now with climate change it is hard to know what will happen.
- 104. One of Dean's favorite activities is playing football and he hopes to play college football one day, but his football practices have been canceled for heat and games ended early. Dean gets headaches from the heat. Dean has also had school canceled for several days due to smoke from increasing wildfires. The red skies and thick smoke that comes inside Dean's house have increased with the increase in fires in Dean's area. Dean wants to help Mother Earth heal so that his brothers, sisters, and friends can have a healthy safe future.
- 105. Each Plaintiffs' existing injuries to their individual physical and mental health, homes, education, spiritual practices, dignity, and other individual rights resulted from Defendants' ubiquitous practice of discounting the value of Children's

lives and future, and the economic value of controlling past climate pollution to protect their lives today. That discrimination has already occurred by Defendants' design. Plaintiffs' injuries described above are the natural and intended consequence of discounting the value of Children's lives and a livable future.

106. Defendants' systematic control and management of climate pollution, through their Discounting Policies and practices, contributed to Plaintiffs' past injuries including damage and loss of homes for Plaintiffs Ione, Dani, Muaawiyah, Zubayr, and Arishka; development of asthma for Emma, Noah, and Maya W.; health impacts from heat and smoke to Genesis, Maya W, Maryam A, Dani, Noah, Avroh, Ariela, Huck, Neela, Emma, Lali, and Dean; and educational, learning, and recreational disruptions to all Plaintiffs.

which continue to discount Children's value, and the value of controlling pollution today and going forward—will result in more climate pollution that exacerbates Plaintiffs' injuries and deprives them of an equally-valued future in government decision-making than would otherwise occur if Defendants did not use positive discount rates to artificially undervalue the future benefits of reducing climate pollution now. Plaintiffs Maryam A., Maryam D., and Dean will experience increasing disruptions to religious and cultural practices; Plaintiffs Noah, Genesis, Avroh, Dani, Emma, Huck, Neela, and Maya W. will experience more frequent adverse episodes of their existing health conditions, including asthma attacks for Emma, Noah, and Maya W; Plaintiffs Genesis, Maya W., Maryam A. Maya R., Maryam D., Noah, Ariela, Huck, Neela, Emma, and Dean will face increasing exposure to unhealthy heat that causes physical reactions and interrupts daily activities; and nearly all Plaintiffs will experience worsening anxiety.

108. All Plaintiffs face the continuing and underlying injury from Defendants' Discounting Policies and practices of being denied equal treatment

under law and their basic dignity of being valued equally to other groups of people. This explicit devaluing leads to the extreme hazards and barriers to Children's health, natural development, and opportunity for a livable future. Defendants' discriminatory control of climate pollution and their Discounting Policies and practices continue to place the present interests of adults above Children in a grave threat to Children's health and well-being and an open livable future.

- 109. Plaintiffs are increasingly denied the privilege of equal treatment in having clean air and a stable climate because of Defendants' Discounting Policies EPA practices. Plaintiffs' lives depend on clean air. The air Plaintiffs breathe circulates through their bloodstream and fills their lungs so there is no clear line separating where the air ends and where they begin. The air Plaintiffs breathe will continue to become less healthy if Defendants continue their discriminatory Discounting Policies and practices.
- 110. Plaintiffs cannot escape the ubiquitous discriminatory Discounting Policies EPA practices throughout its regulatory programs that value Children and their futures as worth less than adults today. Plaintiffs cannot escape climate pollution or climate destabilization they have been born into. They are confined by the climate system as now degraded by Defendants, with no other solution but to come to the court to seek to stop the discriminatory Discounting Policies and practices by which Defendants intentionally allow each additional ton of climate pollution to enter the air, thereby worsening Plaintiffs' existing injuries.
- 111. Plaintiffs have volunteered, spoken to elected officials, peacefully protested, marched and taken many individual actions to try to stop the climate crisis from worsening. Their efforts, alongside many other Children's efforts, have not stopped the discriminatory conduct of their government. They are politically powerless to effectively and permanently alter the Discounting Policies and practices they challenge here because they cannot vote and do not have economic power to

lobby and compete with the fossil fuel industry. Children and these Plaintiffs are consistently ignored, overlooked, tokenized, and undervalued even when they try to affect political processes without the franchise.

112. Plaintiffs' impending and accumulating injuries of more explicit discrimination and more climate pollution being allowed would be avoided by Defendants eliminating their Discounting Policies and practices, thereby allowing Defendants to limit climate pollution to levels that are constitutionally compliant. Every ton of climate pollution emitted adds more heat-trapping molecules to the air. Inversely, every ton of climate pollution not emitted reduces the amount of heat that can be trapped by those molecules. In the context of climate crisis, incremental changes offer meaningful relief in mitigating and avoiding additive physical harms to Plaintiffs, additive economic harms to Plaintiffs, and avoiding irreversible climate tipping points that would leave Plaintiffs no recourse to restore Earth's energy balance.

# **DEFENDANTS**

- 113. Defendant **United States Environmental Protection Agency** ("EPA") is the federal agency with delegated authority from Congress since 1970 to prevent, control, and protect the Nation's air from pollution. Some of EPA's delegated authorities, most relevant to the allegations herein, come from the Clean Air Act.
- 114. The stated mission of EPA is "to protect human health and the environment" including "clean air, land and water . . . based on the best available scientific information."
- 115. According to EPA, "Congress designed the Clean Air Act to protect public health and welfare from different types of air pollution caused by a diverse array of pollution sources." The primary goals of the Clean Air Act are pollution prevention and the protection of human health and welfare. 42 U.S.C. § 7401(c).

116. Congress has delegated EPA statutory authority to systematically

a. All stationary sources of pollution, including factories, chemical and

fertilizer plants, petroleum refineries, power plants, cement plants, glass plants, and other industrial facilities;b. All mobile sources of pollution, including all motor vehicles, engines,

control pollution through its regulatory programs over the following:

- b. All mobile sources of pollution, including all motor vehicles, engines, and equipment including small gasoline-powered engines like generators, mowers, chainsaws, and leaf-blowers;
- c. Fuels;
- d. Locomotives;
- e. Ocean-going vessels and large ships with marine diesel engines, including ferry boats, and marine recreational equipment; and
- f. Aircraft.
- 117. Through its regulatory programs, EPA sets the national floor for air quality protection. States and Tribes may limit air pollution more stringently than EPA, but they may not allow more air pollution than does EPA. EPA oversees the conduct of states in controlling pollution emanating from within their borders and is authorized to take legal action should states not comply with federal law.
- 118. Acting as the sovereign's agent, and under its delegated authorities since 1970, EPA has exercised control over the Nation's air, and air pollution over international waters. In exercising this control, EPA uses Discounting Policies and practices to make decisions about its regulatory programs.
- 119. There is no statutory language in the Clean Air Act that explicitly or implicitly gives EPA the authority to allow pollution at levels that degrade the public health and welfare and the productive capacity of the national population. There is no statutory language in the Clean Air Act that explicitly or implicitly gives EPA the

authority to allow pollution from the sources it regulates at levels that discriminate against and injure Children.

120. EPA has been delegated no authority by Congress to discount the lives

- 120. EPA has been delegated no authority by Congress to discount the lives of Children and future generations of Children when it exercises its authority to control air pollution.
- 121. Through its Discounting Policies and practices, EPA has allowed and permitted substantial amounts of climate pollution to enter the air above the Nation's sovereign territory since 1970. EPA continues through its Discounting Policies and practices to allow and systematically permit large amounts of climate pollution to enter the Nation's sovereign air space.
- 122. By and through its exercise of control over climate pollution, EPA discriminates against Children as a class by treating their lives as less valuable than adults, ubiquitously using Discounting Policies and practices that devalue the benefit to Children of controlling climate pollution, and undervaluing the hardship EPA's regulatory programs will have on Children in the coming decades.
- 123. In exercising control over the quality of the Nation's air from 1970 through the date of this action, through its Discounting Policies and practices, EPA has intentionally allowed an accumulation of climate pollution that EPA's own documents and the best available scientific information show is harmful to the health and welfare of Children today.
- 124. Without judicial intervention, EPA will continue to implement its Discounting Policies and ubiquitous practice of discounting the value of Children's lives and their future when exercising its regulatory control over the quality of the Nation's air. By diminishing the true costs to Children's health, lives, and future, EPA will continue to allow additional climate pollution, which will exacerbate Plaintiffs' already-existing injuries, and further impair their lives and future.

- 125. By discounting the economic costs to Children's lives to allow the pollution of the air, the destabilization of Earth's energy balance, and thus the climate crisis, EPA has acted in excess of its congressionally-delegated authority.
- 126. Defendant **the United States of America** ("United States") is sovereign over our Nation's air space and atmosphere. In its sovereign capacity, the United States controls the climate pollution that enters the Nation's air or emanates from the United States to the air above international waters. As sovereign, the United States has caused constitutionally significant amounts of climate pollution to enter the air, and levels of CO<sub>2</sub> to accumulate in the atmosphere, which have already destabilized Earth's energy balance and climate system and are causing the planet to heat. The United States Congress and President delegated authority to Defendant Environmental Protection Agency to protect and enhance the quality of the Nation's air resources to promote the public health and welfare.
- 127. Defendant **Michael Regan** is the Administrator of EPA and, in his official capacity, is responsible for all policies and practices of EPA, including its Discounting Policies and practices that lead to the ongoing allowance of climate pollution that will worsen Plaintiffs' existing injuries.
- of the United States government that is responsible for setting, implementing, and enforcing executive branch policies, including coordination and review of all significant federal regulations, issuance of executive orders, and other regulatory guidance to agencies, like EPA. OMB is responsible for Circular No. A-4, which is the policy that directs Federal agencies, including EPA, in their regulatory analysis of benefits and costs and the use of discount rates.
- 129. Defendant **Shalanda D. Young** is the Director of OMB, an office within the Executive Office of the President of the United States. 31 U.S.C. §501. She is sued in her official capacity. In her official capacity, Director Young is

charged with the supervision and management of all actions of OMB, including its ongoing benefit-cost analysis ("BCA" or "CBA") and Discounting Policies and practices that EPA implements.

#### STATEMENT OF FACTS

#### **Defendants' Discriminatory Discounting Policies**

- 130. Circular No. A-4 ("Circular A-4") is the Executive Branch policy on benefit-cost analysis ("BCA" or "CBA") and discounting. Circular A-4 states: BCA "is the primary analytical tool used for regulatory analysis" and provides a systematic framework for executive agencies to identify, compare, and evaluate the likely outcomes of alternative regulatory choices. Circular A-4 and its appendix constitute OMB's discounting policies challenged here.
- 131. The Guidelines for Preparing Economic Analyses document (the "EPA Guidelines") is EPA's policy on performing BCA and other economic analyses of contemplated regulations in accordance with Circular A-4.
- 132. EPA Guidelines Sections 6.3 and 6.4 require positive discounting regardless of the long time horizon of a policy or its effect on Children. Section 8.3.1.3 of the EPA Guidelines directs that "[b]enefits and costs that occur over time must be properly and consistently discounted if any comparisons between them are to be legitimate." "[I]t is equally important to properly discount cost estimates of different regulatory approaches to facilitate valid comparisons."
- 133. Circular A-4 and EPA Guidelines, set forth the Discounting Policies challenged here because they discriminate against Children and result in the substantial climate pollution that is injuring, and will continue to injure, the Plaintiffs.
- 134. Regulatory Impact Analyses ("RIAs"), of which BCAs are the primary analytical tool, are the "formal way" that EPA anticipates and evaluates the likely

consequences of its regulatory actions allowing climate pollution. RIAs, including the BCAs, inform EPA about the effects of its regulatory actions and influence how EPA develops regulations, chooses between regulatory alternatives, and adopts final regulations. Used early in the regulatory design phase, EPA's economic analysis directs the selection of regulatory options.

- 135. OMB's Circular A-4 directs agencies to "select those [regulatory] approaches that maximize net benefits."
- 136. The most recent Circular A-4 policy was published on November 9, 2023, superseding the prior policy issued on September 17, 2003. The 2003 Circular A-4 policy still applies for certain regulatory programs currently under consideration and the 2023 Circular A-4 policy takes full effect beginning in January 2025.
- 137. Circular A-4 requires: "All future effects, regardless of what form they take (*e.g.*, changes to consumption, health, environmental amenities, etc.), should be discounted to reflect changes in valuation of impacts across time."
- 138. In accordance with the Discounting Policies, EPA selects the regulatory approach that maximizes "net benefits."
- 139. In accordance with the Discounting Policies, EPA has discounted and is discounting "all future effects, regardless of what form they take (*e.g.*, changes to consumption, health, environmental amenities, etc.)" in order to value effects differently across time.
- 140. Discounting "reflects that people prefer consumption today to future consumption" and tells EPA "how much future benefits and costs are worth today."
- 141. Starting in 2003, the Discounting Policies required agencies, including EPA, to apply discount rates of 3% and 7% in regulatory impact analyses BCAs.
- 142. Section 6.4 of the EPA Guidelines sets a default policy that for "long time horizons" of more than 50 years, the effects of CO<sub>2</sub>-reducing regulations should be evaluated at discount rates of 2.5%, 3%, and 5%. Section 6.4 also instructs that:

"When implementing any discounting approach the following principles should be kept in mind: In all cases social benefits and costs should be discounted in the same manner, . . . The monetary benefits from the expected future impacts should be discounted at the same rate as other benefits and costs in the analysis. This includes changes in human health, environmental conditions, ecosystem services, etc." Even where Children are affected, the same policy applies.

143. EPA has been and continues evaluating the benefits of its regulatory programs compared to the costs in terms of present value, using OMB's discount rates of 3 and 7%. For regulatory programs being considered presently, EPA has used discount rates of 2.5, 3, 5, and/or 7%.

144. The new Circular A-4 Discounting Policy, which takes full effect in 2025, sets a required 2% discount rate. OMB's new Circular A-4 policy also includes a new "long-term estimate of the social rate of time preference" discount rate. For regulatory impacts through year 2079, the discount rate remains 2%. Through year 2105, it drops to 1.8%. For impacts in years 2164-2172, the discount rate applied is still over 1% as depicted in OMB's chart below.

145. OMB's new long-term estimate of the social rate of time preference:<sup>5</sup>

<b>Years</b>	<b>Discount Rate</b>
2023 - 2079	2.0%
2080 - 2094	1.9%
2095 - 2105	1.8%
2106 - 2115	1.7%
2116 - 2125	1.6%
2126 - 2134	1.5%
2135 - 2143	1.4%
2144 - 2153	1.3%
2154 - 2163	1.2%
2164 - 2172	1.1%

<sup>&</sup>lt;sup>5</sup> https://www.whitehouse.gov/wp-content/uploads/2023/11/CircularA-4Appendix.pdf (last accessed May 18, 2024).

146.

#### How Even Small Positive Discount Rates Erase Nearly All Climate-Pollution Reduction Benefits from Consideration

Year	Share of Benefits Ignored at 0% Discount Rate Discount Rate		Share of Benefits Ignored at OMB's Discount Rate	
2025	0.00	2.0%	0.02	
2030	0.00	2.0%	0.11	
2040	0.00	2.0%	0.28	
2050	0.00	2.0%	0.41	
2060	0.00	2.0%	0.52	
2070	0.00	2.0%	0.61	
2080	0.00	1.9%	0.68	
2090	0.00	1.9%	0.73	
2100	0.00	1.8%	0.78	
2110	0.00	1.7%	0.81	
2120	0.00	1.6%	0.84	
2130	0.00	1.5%	0.87	
2140	0.00	1.4%	0.88	
2150	0.00	1.3%	0.90	
2160	0.00	1.2%	0.91	
2170	0.00	1.1%	0.92	

A 0.92 share means the specified discount rate causes EPA's analysis to ignore 92% of benefits in that year.

- 147. Circular A-4 requires: "Any agency that wishes to account for risk using alternative discount rates in primary or sensitivity analyses should provide specific justification for their approach, and should confer with OMB before proceeding."
- 148. EPA conforms its Discounting Policy and practices to OMB's Circular A-4 Discounting Policy.
- 149. A 2% discount rate means that the value of reducing climate pollution today for the benefit of Children 30 years from now is only worth 55 cents on a dollar as depicted in OMB's chart below.

A 0.00 share means the discount rate is not causing EPA to ignore climate benefits.

150. I	Discount rate	over next	30 years:6
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Year	<b>Discount Factor</b>	Year	<b>Discount Factor</b>
1	0.9804	16	0.7284
2	0.9612	17	0.7142
3	0.9423	18	0.7002
4	0.9238	19	0.6864
5	0.9057	20	0.6730
6	0.8880	21	0.6598
7	0.8706	22	0.6468
8	0.8535	23	0.6342
9	0.8368	24	0.6217
10	0.8203	25	0.6095
11	0.8043	26	0.5976
12	0.7885	27	0.5859
13	0.7730	28	0.5744
14	0.7579	29	0.5631
15	0.7430	30	0.5521

151. Defendants' Discounting Policies applied to controlling climate pollution are explicitly discriminatory towards Children, including Plaintiffs, because Defendants' Discounting Policies put a thumb on the scale against reducing climate pollution tomorrow and in the years ahead. When a regulatory BCA applies *any* positive discount rate (more than zero) to a proposed regulation versus a more stringent alternative, the discount rate guarantees that the calculation will generate a result that makes the future benefits of reducing climate pollution—or the future costs of *not* reducing pollution today—appear much lower than the future costs actually are.

152. Defendants' Discounting Policies put their thumb on the scale *against* urgent and ambitious regulatory programs to reduce climate pollution, and *in favor* of taking less ambitious actions in the present. Because the U.S. continues to be one of the globe's top emitters, the Discounting Policies and EPA's continuing practice of using positive discount rates ensure that more climate pollution will be emitted causing more harm to the lives and future of Children, including Plaintiffs.

<sup>&</sup>lt;sup>6</sup> *Id*.

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153. Even small discount rates greatly affect the outcome of a BCA because discount rates compound every year. Thus, the longer the time-horizon considered in the calculation, the more EPA's choice of discount rate matters. Using a 1.4% discount rate, after 36.5 years, future people are worth just three-fifths of a person's worth today. With a 3% discount rate, a future person just 17 years from now is worth three-fifths of a person today.

154. When evaluating how much a climate-pollution-control measure taken today will benefit Children 30 years from now, a discount rate of 2% ignores (discounts) 45% of the benefit that would exist in 30 years' time—and a discount rate of 7% ignores 89% of the benefit. Thus, the higher the discount rate is, the more heavily it censors and excludes the benefits to Children, including Plaintiffs, of controlling pollution from being considered in the analysis, as depicted in the chart below.

Share of Future Benefits from Reducing Climate Pollution that are Ignored under Four Different Discount Rates (0%, 2%, 3%, and 7%)

Number of	0%	2%	3%	7%	Number of	0%	2%	3%	7%
Years in	Discount	Discount	Discount	Discount	Years in	Discount	Discount	Discount	Discount
the Future	Rate	Rate	Rate	Rate	the Future	Rate	Rate	Rate	Rate
1	0.00	0.02	0.03	0.07	16	0.00	0.28	0.39	0.69
2	0.00	0.04	0.06	0.14	17	0.00	0.29	0.40	0.71
3	0.00	0.06	0.09	0.20	18	0.00	0.30	0.42	0.73
4	0.00	0.08	0.11	0.25	19	0.00	0.32	0.44	0.75
5	0.00	0.10	0.14	0.30	20	0.00	0.33	0.46	0.77
6	0.00	0.11	0.17	0.35	21	0.00	0.35	0.47	0.78
7	0.00	0.13	0.19	0.40	22	0.00	0.36	0.49	0.80
8	0.00	0.15	0.22	0.44	23	0.00	0.37	0.50	0.81
9	0.00	0.17	0.24	0.48	24	0.00	0.38	0.52	0.82
10	0.00	0.18	0.26	0.52	25	0.00	0.40	0.53	0.84
11	0.00	0.20	0.28	0.55	26	0.00	0.41	0.55	0.85
12	0.00	0.22	0.31	0.58	27	0.00	0.42	0.56	0.86
13	0.00	0.23	0.33	0.61	28	0.00	0.43	0.57	0.87
14	0.00	0.25	0.35	0.64	29	0.00	0.44	0.59	0.88
15	0.00	0.26	0.37	0.66	30	0.00	0.45	0.60	0.89

A 0.89 share means the specified discount rate causes the EPA's analysis to ignore 89% of benefits in that year; A 0.00 share means the discount rate is not causing EPA's analysis to ignore benefits.

156. Applying a 10% discount rate to the cost of a program to save lives results in a life today having the same value as 117 lives in 50 years and 13,781 lives

in 100 years, resulting in a valuing of one life today more than thousands in the future. Looked at another way, a proposed regulation that will generate \$100 in benefits in 50 years is worth only \$61 in present value using a 1% discount rate, \$14 at 4%, \$3 at 7%, and less than \$1 at 10%.

- 157. The higher the discount rate, the lower the value for the Social Cost of Carbon, another economic valuation meant to inform Defendants of the value of reducing levels of climate pollution.
- 158. Since the effects of climate pollution are long-lasting and cumulatively worse over time, the Discounting Policies dictate that what happens in the future to Children does not matter nearly as much as the costs of controlling the future effect today, which has substantially biased Defendants' exercise of its regulatory authority against Children.
- 159. Both EPA and OMB have refused to set a policy of a discount rate of zero when analyzing benefits and costs of regulatory programs that create a lifetime of hardship for Children, such as those regarding allowing climate pollution.
- 160. In its RIAs, as a matter of policy, EPA also systematically places a lesser economic value on reducing climate pollution health risks to Children than on reducing health risks to adults.
- 161. In its RIAs, as a matter of policy, EPA also economically devalues the lives of Children by treating them as worth fewer dollars than an adult because Children are not yet wage-earners.

# **EPA's Discounting Policies in Practice**

162. The Discounting Policies in practice inform EPA of the purported net benefits and efficiency of its regulatory programs, and the BCA in the RIAs control EPA's decision in establishing alternative regulatory programs, in determining the preferred program, and in selecting the final rule. Defendant EPA has a past and

ongoing systematic practice of using the Discounting Policies to develop, analyze, and select regulatory programs that allow substantial amounts of climate pollution that is harming Children, as evidenced by numerous RIAs, including those below.

- 163. From 1980 to 1986, EPA exclusively used a 10% discount rate. It continued to use discount rates as high as 10% until 1994. For instance, in 1983, EPA's RIA for the "Alternative National Ambient Air Quality Standards for Particulate Matter" used a discount rate of 10% because of "OMB requirements."
- 164. In the 1990s, nearly all of EPA's discount rates were between 3% and 7%. From 2004 to 2010, EPA exclusively used discount rates of 3% and 7%. These discount rates were used because of the Discounting Policies.
- 165. Between 1983 and 2018, EPA issued scores of RIAs for regulatory programs over sources of pollution that contribute to climate change that used a positive discount rate because of the Discounting Policies.
- 166. In 2019, EPA's RIA for the "Proposed Reclassification of Major Sources as Area Sources under Section 112 of the Clean Air Act" used discount rates of 3% and 7% because of OMB's Circular A-4.
- 167. In 2019, EPA's RIA for the "Proposed Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review" used discount rates of 3% and 7%, "as recommended by OMB Circular A-4."
- 168. In 2019, EPA's RIA for the "Repeal of the Clean Power Plan, and the Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units" used discount rates of 3% and 7%, "as recommended by OMB Circular A-4."
- 169. In 2020, EPA's Memorandum on the "Analysis of Potential Costs and Benefits for the 'National Emission Standards for Hazardous Air Pollutants: Coaland Oil-Fired Electric Utility Steam Generating Units Subcategory of Certain Existing Electric Utility Steam Generating Units Firing Eastern Bituminous Coal

Refuse for Emissions of Acid Gas Hazardous Air Pollutants'" used discount rates of 3% and 7% "consistent with OMB guidance."

- 170. In 2020, EPA's RIA for the "Review and Reconsideration of the Oil and Natural Gas Sector Emission Standards for New, Reconstructed, and Modified Sources" used discount rates of 3% and 7%, "consistent with the guidance contained in the Office of Management and Budget (OMB) Circular A- 4."
- 171. In 2020, EPA's RIA for the "Final Reclassification of Major Sources as Area Sources under Section 112 of the Clean Air Act" used discount rates of 3% and 7% because of OMB's Circular A-4.
- 172. In 2020, EPA's RIA for the "Proposed Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP Reconsideration" used discount rates of 2.5%, 3%, and 7%, due to guidance from OMB's Circular A-4 stating that a "further sensitivity analysis using a lower but positive discount rate in addition to calculating net benefit using discount rates of 3 and 7 percent" should be used.
- 173. In 2020, EPA's RIA for the "Proposed Revised Cross-State Air Pollution Rule (CSAPR) Update for the 2008 Ozone NAAQS" used discount rates of 3% and 7% "consistent with OMB guidance."
- 174. In 2021, EPA's RIA for the "Final Revised Cross-State Air Pollution Rule (CSAPR) Update for the 2008 Ozone NAAQS" used discount rates of 3% and 7% because of OMB's Circular A-4, despite acknowledging that "a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, are also warranted when discounting intergenerational impacts."
- 175. In 2021, EPA's RIA for the "Proposed Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review" used discount rates of 3% and 7% because of OMB's Circular A-4.

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176. In 2022, EPA's RIA for the "Proposed Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Ozone National Ambient Air Quality Standard" used discount rates of 3% and 7%, "as directed by OMB's Circular A-4."

- 177. In 2022, EPA's RIA for the "Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP Amendments" used discount rates of 3% and 7%, "as directed by OMB's Circular A-4."
- 178. In 2022, EPA's RIA for the "Proposed Reconsideration of the National Ambient Air Quality Standards for Particulate Matter" used discount rates of 3% and 7%, "as directed by OMB's Circular A-4."
- 179. In 2022, EPA's RIA for the "Proposed National Emission Standards for Hazardous Air Pollutants: Gasoline Distribution Technology Review and Standards of Performance for Bulk Gasoline Terminals Review" used discount rates of 3% and 7%, "as directed by OMB's Circular A-4."
- 180. In 2022, EPA's RIA for the "Supplemental Proposal for the Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review" used discount rates of 3% and 7% because of OMB's Circular A-4.
- 181. In 2022, EPA's Technical Memorandum for the "Addendum to the Regulatory Impact Analysis: Monetizing Climate Benefits for the Proposed FIP for Addressing Regional Ozone Transport for the 2015 Ozone NAAQS" used discount rates of 3% and 7% because of OMB's Circular A-4.
- 182. In 2022, EPA's Supplementary Material for the RIA for the "Supplemental Proposed Rulemaking, 'Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review' - EPA External Review Draft of Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent

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Scientific Advances" used discount rates of 3% and 7% because of OMB's Circular A-4.

- 183. In 2022, EPA's RIA for the "Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards" used discount rates of 3% and 7% because of OMB's Circular A-4.
- 184. In March 2023, EPA's RIA for the "New Source Performance Standards for the Synthetic Organic Chemical Manufacturing Industry and National Emission Standards for Hazardous Air Pollutants for the Synthetic Organic Chemical Manufacturing Industry and Group I & II Polymers and Resins Industry" used discount rates of 3% and 7%, "as directed by OMB's Circular A-4."
- 185. In March 2023, EPA's RIA for the "Final Federal Good Neighbor Plan Addressing Regional Ozone Transport for the 2015 Ozone National Ambient Air Quality Standard" used discount rates of 3% and 7%, "as directed by OMB's Circular A-4."
- 186. In April 2023, EPA's RIA for the "Proposed National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units Review of the Residual Risk and Technology Review" used discount rates of 3% and 7%, "as directed by OMB's Circular A-4."
- 187. In July 2023, EPA's RIA for the "Proposed Revisions to the Air Emissions Reporting Requirements" used discount rates of 3% and 7% "as directed by OMB's Circular A-4."
- 188. In November 2023, EPA's RIA for the "Proposed Supplemental Federal 'Good Neighbor Plan' Requirements for the 2015 8-hour Ozone National Ambient Air Quality Standard" used discount rates of 3% and 7% because of OMB's Circular A-4.
- 189. In December 2023, EPA's RIA for the "Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing

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Sources: Oil and Natural Gas Sector Climate Review" used discount rates of 2%, 3%, and 7%, because of a recent revision to OMB's Circular A-4.

- 190. In January 2024, EPA's RIA for the "Proposed Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Large Municipal Waste Combustors" used discount rates of 3% and 7% "as directed by OMB's Circular A-4."
- 191. In January 2024, EPA's RIA for the "Final National Emission Standards for Hazardous Air Pollutants: Gasoline Distribution Technology Review and Standards of Performance for Bulk Gasoline Terminals Review" used discount rates of 3% and 7%, "as directed by the current version of OMB's Circular A-4."
- 192. In January 2024, EPA's RIA for the "Reconsideration of the National Ambient Air Quality Standards for Particulate Matter" used discount rates of 3% and 7% because of OMB's Circular A-4.
- 193. In March 2024, EPA's RIA for the "Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles" used discount rates of 2%, 3%, and 7% because of OMB's Circular A-4.
- 194. In March 2024, EPA's RIA for the "Final New Source Performance Standards for the Synthetic Organic Chemical Manufacturing Industry and National Emission Standards for Hazardous Air Pollutants for the Synthetic Organic Chemical Manufacturing Industry and Group I & II Polymers and Resins Industry" used discount rates of 2%, 3%, and 7% "as directed by OMB's Circular A-4."
- 195. In April 2024, EPA's RIA for the "New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions from Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule" used discount rates of 2%, 3%, and 7%, "as directed by OMB's Circular A-4."

- 196. In April 2024, EPA's RIA for the "Final National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units" used discount rates of 2%, 3%, and 7%, because of OMB's Circular A-4.
- 197. Because of the Discounting Policies, each of these RIAs intentionally and by design underestimated the benefits of controlling air pollution for Children and underestimated the costs to Children of not controlling air pollution, putting a discriminatory thumb on the scale of EPA's regulatory programs, leading to dangerous allowances of pollution in the past and in the years to come. As a result, EPA never proposes, analyzes, or adopts regulatory programs to control climate pollution that would treat Children equally under law.
- 198. EPA has systematically practiced the Discounting Policies in at least 40 RIAs over the last 10 years, each time significantly undervaluing the benefits to Children of controlling climate pollution in regulatory actions addressing wood stoves, cross-state air pollution, solid waste landfills, oil, coal, and natural gas, electric utilities, reclassification of major sources, and standards for vehicles, and significantly undervaluing the costs of not doing so.
- 199. Defendants' decades-long Discounting Policies and EPA's systematic practice of implementing the discriminatory Discounting Policies, have led to regulatory decisions by EPA that continue allowing high levels of climate pollution to enter the air now and in the future.
- 200. EPA will continue to use positive discount rates in RIAs that establish alternative regulatory program options under consideration, determine the preferred program, and ultimately lead to the final regulatory program that affects the quality of Children's air and climate, and therefore their lives, health, safety, and future.

# EPA Knows the Discriminatory Level of Climate Pollution It Has Allowed and Allows Today Is Dangerous to Children's Health and Welfare

201. Climate pollution includes greenhouse gases that accumulate in the air:

carbon dioxide ("CO<sub>2</sub>"), methane, nitrous oxide, and fluorinated gases. The gas in our air that is primarily responsible for destabilizing the climate system is CO<sub>2</sub>. CO<sub>2</sub> is the primary pollutant driving the climate crisis because of how much CO<sub>2</sub> is entering the air, how long it stays in the air, and because it is efficient at absorbing and emitting radiation, i.e., heat. About 80% of greenhouse gas climate pollution in the United States is CO<sub>2</sub> and a significant portion of it stays in the air for millennia.

- 202. Methane is a more powerful gas at trapping heat, but it dissipates much more quickly than CO<sub>2</sub>.
- 203. Scientists have known since the mid- to late-1800s that CO<sub>2</sub> pollution accumulating in the atmosphere, from burning fossil fuels, would heat the planet.
- 204. The United States government has known since at least the White House's 1965 Report of The Environmental Pollution Panel President's Science Advisory Committee that CO<sub>2</sub> pollution would alter Earth's energy balance, heat the planet, and thereby threaten "the health, longevity, livelihood, recreation, cleanliness and happiness of citizens who have no direct stake in their production, but cannot escape their influence."
- 205. In 1970, EPA's first Administrator, William Ruckelshaus, ordered EPA's Air Pollution Control Office to conduct national programs for the definition, prevention, and control of air pollution to achieve wholesome air and sufficiently define air quality to minimize and eliminate the harm from air pollution.
- 206. Early in its inception, recognizing that Earth's climate is changing, EPA commissioned a report published in 1974 from University of Wisconsin's Center for Climatic Research on *Changes in the Global Energy Balance*. In 1974, scientists estimated that CO<sub>2</sub> was increasing at 1 ppm annually from human-caused pollution, when CO<sub>2</sub> was 330 ppm. In this report, EPA was advised that by 2000, atmospheric CO<sub>2</sub> would rise from 320 to 379 ppm due to fossil fuel use projections and could

increase the earth's temperature by almost half a degree Celsius. Atmospheric CO<sub>2</sub> in 2000 reached about 370 ppm.

207. In 1978, EPA reaffirmed the warning of the National Academy of Sciences ("NAS") "that continued use of fossil fuels as a primary energy source for more than 20 to 30 more years could result in increased atmospheric levels of carbon dioxide. The greenhouse effect and associated global temperature increase and resulting climate changes could, according to NAS be both 'significant and damaging." Atmospheric CO<sub>2</sub> in 1978 reached about 335 ppm.

208. In 1983, EPA knew that climate pollution was continuing to accumulate in the air and would substantially raise global temperature. EPA projected a possible 2°C (3.6°F) increase by the middle of the 21st century, and a 5°C (9°F) increase by 2100. EPA said the increased heat would result in dramatic precipitation and storm patterns and rising seas. EPA projected significant effects to agriculture and every other natural and political system and institution. EPA knew that the human habitability of certain regions would be threatened.

- 209. In 1983, EPA reaffirmed a 1979 National Academy of Sciences report that warned against further delay in addressing CO<sub>2</sub> pollution. EPA summed up the CO<sub>2</sub> pollution threat: "A wait and see attitude may mean waiting until it's too late. (Charney, 1979)."
- 210. In 1983, EPA recommended that a policy of banning fossil fuels could significantly reduce temperature increases by 2100. EPA suggested banning coal and oil shale.
- 211. The summary of EPA's findings in 1983 were stated as follows: "our findings call for an expeditious response. A 2°C increase in temperature by (or perhaps well before) the middle of the next century leaves us only a few decades to plan for and cope with a change in habitability in many geographic regions. Changes by the end of the 21st century could be catastrophic taken in the context of today's

world. A soberness and sense of urgency should underlie our response to a

greenhouse warming."

212. By 1983, four decades ago, EPA knew it had only a few decades to control climate pollution to avoid catastrophic changes to the habitability of the Nation for generations of Children, including Plaintiffs today.

- 213. In the past 40 years, relying on the BCAs from its Discounting Policies and practices, EPA has continued to allow through its regulatory programs even more climate pollution to enter the Nation's air than it allowed in 1983. Atmospheric CO<sub>2</sub> in 1983 reached about 343 ppm.
- 214. In 1990, EPA published a report, *Policy Options for Stabilizing Global Climate*, that called for a 50% reduction in total U.S. CO<sub>2</sub> emissions below 1990 levels by 2025 to correct climate destabilization. Atmospheric CO<sub>2</sub> in 1990 reached about 354 ppm.
- 215. Over three decades ago, EPA said that climate pollution can be effectively reduced thereby dramatically reducing the rate and ultimate magnitude of climate change in the 21st century.
- 216. The recommendations in EPA's 1990 Report were not followed by EPA. U.S. climate pollution continued to increase thereafter under EPA's control.
- 217. In 1992, the United States ratified the United Nations Framework Convention on Climate Change ("UNFCCC") renewing its sovereign commitment to protect the climate system for present and future generations with the primary commitment to "stabiliz[e] greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." EPA remained the U.S. agency with exclusive authority to protect the air from U.S. climate pollution. Atmospheric CO<sub>2</sub> in 1992 reached about 356 ppm.
- 218. Ten years later, on December 7, 2009, then-Administrator of EPA, Lisa Jackson, issued EPA's formal Endangerment Finding for climate pollution under the

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- Clean Air Act: Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act. EPA issued its Endangerment Finding only after being sued and losing the case in the U.S. Supreme Court, in Massachusetts v. EPA, 549 U.S. 497 (2007). The Endangerment Finding had been in existence for many years prior to 2007 and was not published by EPA. Atmospheric CO<sub>2</sub> in 2009 reached about 388 ppm.
- 219. EPA's Endangerment Finding stated that current and projected atmospheric concentrations of greenhouse gases, in particular CO<sub>2</sub>, threatened the public health and welfare of current and future generations.
- 220. EPA's Endangerment Finding specifically named Children as a group of people most vulnerable to these climate-related health harms. The Administrator also specifically found that the threat to public health for current and future generations would likely mount over time as climate pollution continues to accumulate in the air, leading to worsening climate change.
- 221. EPA scientists have repeatedly recommended setting a national pollution standard for CO<sub>2</sub>. EPA has refused to set a national pollution standard for CO<sub>2</sub>. EPA is the only federal agency with Congressional authority to set a national pollution standard for CO<sub>2</sub>.
- 222. Since the 2009 Endangerment Finding, Defendants have repeatedly stated that allowing "business as usual" climate pollution will imperil future generations with dangerous risks, including to health and welfare, and that Children were the most vulnerable to those dangers.
- 223. Since the 2009 Endangerment Finding, which is older than many of the Plaintiffs, Defendants have continued their Discounting Policies and practices to intentionally allow and systematically permit "business as usual" climate pollution to enter the Nation's air. Defendants have systematically allowed ongoing climate pollution over which the U.S. Supreme Court has said EPA has exclusive control.

### EPA Knows Its Discounting Policies and Practices Discriminate Against Children by Allowing Climate Pollution at Levels That Caused and Now Worsen the Climate Crisis

- 224. EPA has known for decades that the continued emission of greenhouse gases into the atmosphere would be harmful to children, yet it continued its systematic practice of Discounting Policies that favor allowing climate pollution, and value the interests of adults over Children's health and welfare.
- 225. EPA's explicitly discriminatory Discounting Policies and practices have resulted in regulatory analyses that have contributed to EPA's ongoing allowance of unsafe levels of climate pollution for Children.
- 226. Between 1751 and 2021 the United States emitted approximately 25% of the world's cumulative CO<sub>2</sub> pollution to the air, more than any other country to date. Most of United States CO<sub>2</sub> pollution has been emitted since 1970, when EPA was created. The United States is the nation most responsible for the climate crisis and its cumulative greenhouse gas emissions far exceed those of other nations such as India and China.
- 227. EPA provides a comprehensive accounting of U.S. greenhouse gas emissions and sinks by source, economic sector, and greenhouse gas going back to 1990 in their annual report, *Inventory of U.S. Greenhouse Gas Emissions and Sinks*. Since at least 1990, EPA has been aware of the relative contributions from different sources of climate pollution, which are under its regulatory jurisdiction, in the United States.
- 228. Despite fluctuations in the past three decades, U.S. climate pollution is still close to what it was in 1990. Eighty percent of climate pollution in the U.S. is CO<sub>2</sub>, largely from the power generation and transportation sectors, sources directly under EPA's control. More than 90% of CO<sub>2</sub> pollution is from fossil fuels from sources under EPA's control.

229. With climate pollution already recognized by EPA to be at levels that threaten the public health and welfare of current and future generations, the U.S. Energy Information Administration ("EIA") forecasts that energy-related CO<sub>2</sub> pollution from sources under EPA's control will remain at 99% of 2023 levels in 2024, with total U.S. energy-related CO<sub>2</sub> emissions in 2050 projected to be only about 19% lower than the amount in 2022.

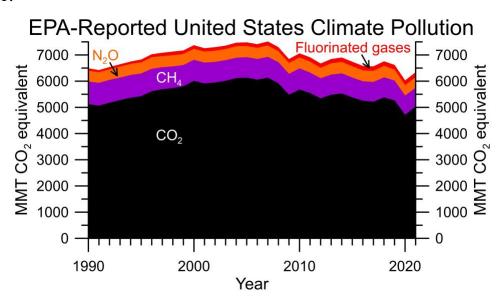
230. Between 1970 and 2021, the United States, under EPA's regulatory control and permitting of climate pollution, has been responsible for intentionally allowing approximately 422,000 million metric tons ("MMT") CO<sub>2</sub> pollution to enter the Nation's air from within its territories as depicted in the graph and chart below.

		U.S. Annual CO <sub>2</sub> Pollution Emissions (MMT)	Cumulative U.S. CO <sub>2</sub> Pollution (MMT)	U.S. Annual Greenhouse Gas Pollution Emissions (MMT CO <sub>2</sub> equivalent)
Year	<b>Historical Moments</b>	Total	Total	Total
1970	U.S. creates EPA to control air pollution	4,340	154,000	Data unavailable
1983	EPA Report: Can We Delay A Greenhouse Warming?	4,429	215,000	Data unavailable
1990	EPA Report: Policy Options for Stabilizing Global Climate	5,122	249,000	6,487
2009	EPA issues Endangerment Finding	5,483	358,000	6,841
2021	Most recent data on annual U.S. CO <sub>2</sub> pollution	5,032	422,000 (274% increase since 1970)	6,340

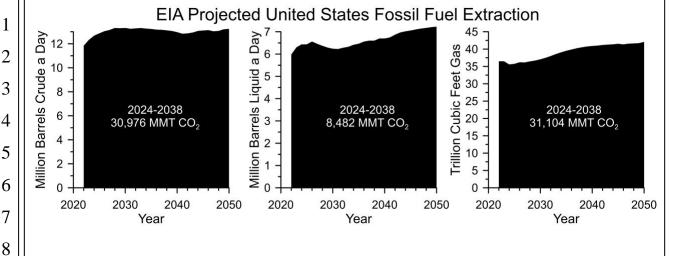
231. Most of this pollution was allowed under regulatory programs that EPA arrived at through RIAs applying a positive discount rate in accordance with its Discounting Policies. The BCAs provided justification for EPA's regulatory programs.

232. Based on its own data, EPA has continued to authorize high levels of climate pollution in the past thirty years, resulting in a sustained annual rate of climate pollution with some highs and lows that never drop below 6,350 MMT CO<sub>2</sub> equivalent a year until the 2020 pandemic that had 6,026 MMT CO<sub>2</sub> equivalent emitted and in 2021 when the country was still recovering from the pandemic and emitted 6,340 MMT CO<sub>2</sub> equivalent. The EPA regulatory programs that allowed these emissions were—and continue to be—developed through Defendants' RIAs and Discounting Policies and practices.

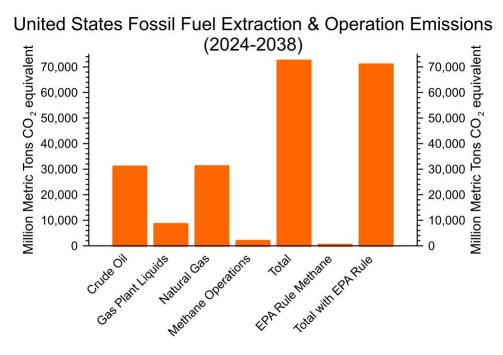
233. This graph shows EPA-reported U.S. climate pollution between 1990 and 2021.



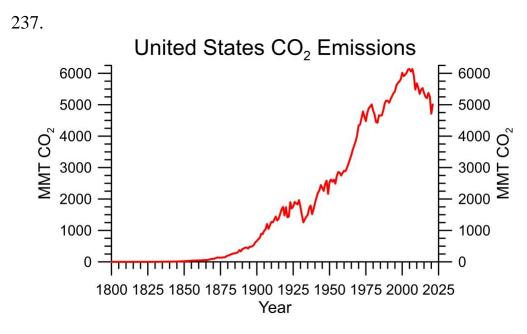
234. The graph below shows EIA's reference case for extraction through 2050 of crude oil (left) natural gas plant liquids (middle) and natural gas (right) with their cumulative combusted emissions for 2024-2038 labeled.



235. EIA's 2024-2038 extraction emissions and EPA's operational methane emissions with and without EPA's new methane rule are illustrated in this graph below.

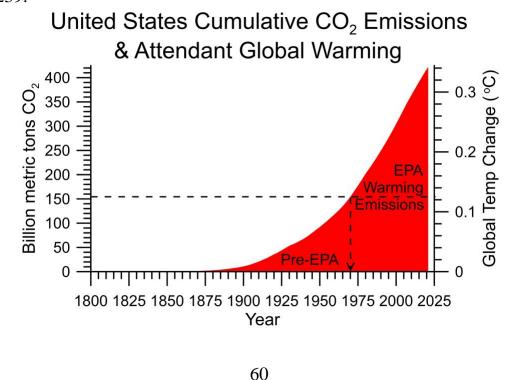


236. Since the EPA was founded in 1970, national CO<sub>2</sub> emissions increased to a peak in 2005 of 6,132 MMT CO<sub>2</sub>. Since then, emissions decreased slowly, with the largest decline during the 2020 pandemic largely due to less travel, and have rebounded again to 5,586 MMT CO<sub>2</sub> in 2021.



238. Cumulatively, under EPA's control and authority and Discounting Policies, the United States has been responsible for about 271,922 MMT of CO<sub>2</sub> from 1970 to 2021, which is 1.85 times more CO<sub>2</sub> than the U.S. emitted cumulatively in the 169 years prior to the creation of the EPA (149,985 MMT of CO<sub>2</sub> from 1800 to 1969).

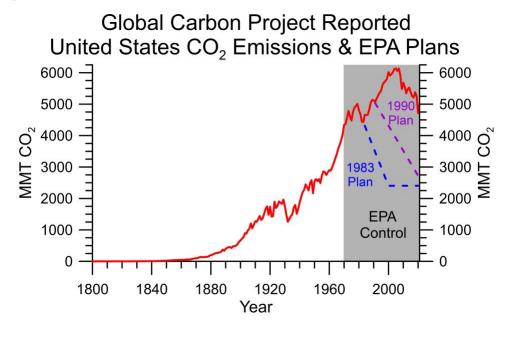
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240. International scientific consensus estimates that every 1,000,000 MMT CO<sub>2</sub> emitted causes 0.45°C (0.81°F) of global warming. Based on that calculation, the EPA has allowed about 0.22°F of global warming since 1970 from carbon dioxide emissions alone, which is about 10% of Earth's global warming to date. For comparison, U.S. total CO<sub>2</sub> emissions to date have caused 0.34°F of global warming since the 1800s.

241. Relying on Discounting Policies and practices, EIA projects climate pollution will continue at current levels in the United States in 2024. The EIA also projects continued climate pollution through 2050, with 2050 pollution being about 81% of 2022 pollution. This continued climate pollution would add another 0.18°F of global warming on top of the U.S.-CO<sub>2</sub>-caused warming of 0.22°F since 1970. EPA intentionally allows that level of climate pollution.

242. Had Defendants banned climate pollution from coal and oil shale in 1983 as was recommended in EPA's 1983 Report, *Can We Delay A Greenhouse Warming?*, CO<sub>2</sub> pollution today could have been 47.2% less since 1983. The graph below depicts this with the blue-dotted line.



- 243. Had EPA heeded its own 1990 Report, CO<sub>2</sub> pollution today could have been 30.5% less since 1990. The graph above depicts this with the purple-dotted line.
- 244. Defendants' Discounting Policies and practices systematically ignored climate science recommendations and led to regulatory programs that allowed cumulatively increasing CO<sub>2</sub> pollution.
- 245. EPA ignores its own plans from three decades ago and continues to intentionally allow levels of CO<sub>2</sub> pollution that it knows are harmful to Children's health and welfare.
- 246. Instead of pursuing their own plans and recommendations to decrease climate pollution, or responding to citizen petitions asking the agency to use its authority to limit climate pollution, and consequently reduce the harm to Children's health and welfare from climate change, Defendants' Discounting Policies and practices artificially inflate the apparent value of pollution-permissive regulations that exacerbate the climate crisis. Defendants exercise their discriminatory control and dominion over the air in a systematic manner that caused, and continues to cause, significant harm to Children, born and unborn, including these Plaintiffs.
- 247. Absent Discounting Policies and practices, there would be less climate pollution today in the United States and the Plaintiffs' injuries would be reduced.
- 248. If EPA continues its Discounting Policies and practices, hiding the actual costs of not controlling climate pollution and hiding the actual benefits to Children, there will be more climate pollution in the future and Plaintiffs' injuries will be made worse.

# Children are Uniquely Vulnerable to and Disproportionately Harmed by the Past, Present and Future Climate Pollution Allowed Through Defendants' Discounting Policies and Practices

- 249. Since the early 20th century, the United States has known that environmental degradation would burden Children and future generations. In 1908, President Theodore Roosevelt said that we should leave our natural national domain to our children, increased in value and not worn out. In 1909, setting the stage to launch an initiative to protect children, President Theodore Roosevelt said: "If we of this generation destroy the resources from which our children would otherwise derive their livelihood, we reduce the capacity of our land to support a population, and so either degrade the standard of living or deprive the coming generations of their right to life on this continent."
- 250. Every president carried forward President Theodore Roosevelt's Conference on Children and Youth and the message to specially protect Children until 1970. President Nixon was the last to host the conference.
- 251. Over 100 years after President Theodore Roosevelt implored the Nation to preserve essential resources for future generations, President Joseph Biden, in his March 2023 remarks at the White House Conservation in Action Summit, stated "[o]ur country's natural treasures define our identity as a nation. They're a birthright—they're a birthright we have to pass down to generation after generation. . . . [W]e owe to our children, our grandchildren, our great-grandchildren, and all to come what we have and what we can preserve."
- 252. In the 1980s, the United States went on to lead the international effort in drafting the United Nations Convention on the Rights of the Child and then never ratified it. The United States is the only country on the planet that has not ratified the Convention on the Rights of the Child.

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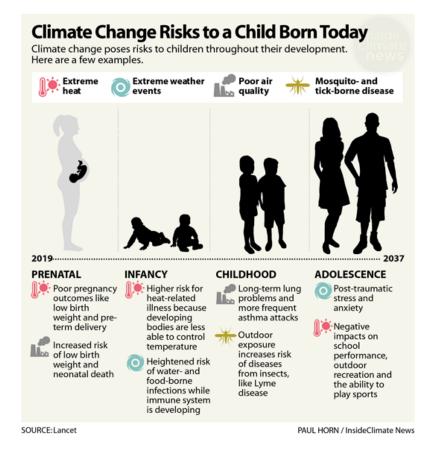
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253. For decades, EPA has recognized that Children are among the Nation's most fragile and vulnerable populations. EPA has determined:

Children can be at a greater risk to environmental hazards due to unique activity patterns, behaviors and biology. They have unique behaviors such as breast feeding, crawling and hand-to-mouth activity that may contribute to increased exposure. Children eat more food, drink more water and breathe more air in proportion to their body size as compared to adults, and the variety of the foods they consume is more limited. As children are still growing and developing, they do not respond to toxic substances in the same way as adults. For instance, their blood-brain barrier and metabolic processes are less mature. The timing of exposure to chemicals and other contaminants is critical in protecting human health. The same dose of a chemical during different periods of development can have very different consequences. Children who live in highly exposed or underserved communities may have reduced biological resilience and ability to recover from exposure to environmental hazards. With new threats and worsening conditions resulting from climate change, the EPA has a greater responsibility to provide children with heightened focus, assessment and safeguards to protect their health.

254. EPA's 2021 stated policy acknowledges that "Children's environmental health refers to the effect of environmental exposure during early life: from conception, infancy, early childhood and through adolescence until 21 years of age." EPA states that they have a "scientific understanding that children may be at greater risk to environmental contaminants than adults due to differences in behavior and biology and that the effects of early life exposures may also arise in adulthood or in later generations."

255.



- 256. Nearly two decades ago, EPA's Children's Health Protection Advisory Committee advised the EPA Administrator that climate change will disproportionately affect Children's health and that efforts to address climate change need to be substantially strengthened to protect Children.
- 257. EPA has known of the harm climate change causes Children and the increased risk of harm they face. EPA has issued reports over the last several decades and made findings about the dangers of climate change to Children especially.
- 258. Children are especially vulnerable to the dangers of climate change because they are still growing, they have unique behaviors different from adults, and they are dependent on their caregivers and their government, having no independent economic or political power.

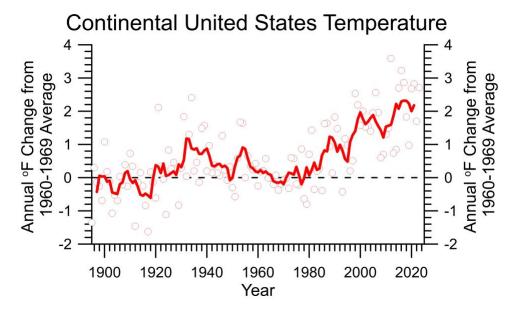
- 259. As stated in EPA's April 2023 Climate Change and Children's Health and Well-Being in the United States, "Children are uniquely vulnerable to climate change" and "[c]limate impacts experienced during childhood can have lifelong consequences." The report also highlights that overburdened children, including Black, Brown, Indigenous, and low-income children, may suffer the most severe impacts.
- 260. Climate pollution causes higher temperatures and heat waves. Children are especially endangered by heat because they need more fluid per pound of body weight than adults and are less capable of controlling their environment and fluids. Children's bodies are also not as efficient at thermoregulation, or maintaining a normal internal temperature as external temperatures change, as adults. Children, especially the very young, are more vulnerable to heat-related illnesses and death. Heat waves are worsening.
- 261. EPA knows that even small increases in extreme heat can result in increased deaths and illnesses. According to EPA, heat is the leading weather-related killer in the United States and Children are most vulnerable to heat. Black Children are at even higher risk for heat related illness and death than other Children.
- 262. Increased heat exposure is particularly devastating for Children at multiple stages of development as the brains and lungs of children are not fully developed until around age 25.
- 263. Climate-induced extreme heat causes fetal death. Extreme weather events can lead to low birthweight and preterm birth of babies. Infant mortality increases 25% on extremely hot days with the first seven days of life representing a period of critical vulnerability.
- 264. Extreme heat places young Children at higher risk of kidney and respiratory disease as well as fever and electrolyte imbalance. Heat illness is also a leading cause of death and illness in high school athletes with nearly 10,000 episodes

occurring annually. Plaintiffs Huck, Dean, and Emma have experienced physical injury from heat exposure during athletics and risk further injury as temperatures continue to rise. Plaintiff Emma's recent diagnosis of exercise-induced asthma is exacerbated by heat.

- 265. Hotter temperatures lead to more emergency department visits for Children with heat-related illnesses, bacterial enteritis, otitis media and externa, infectious and parasitic diseases, nervous system diseases, and other medical issues. Emergency department visits for Children in the West have been increasing with higher ambient temperatures. Plaintiff Noah is extremely sensitive to heat, which has caused severe discomfort and has led to hospitalization.
- 266. Heat experienced during the school year reduces learning through poor cognitive function and reduced ability to concentrate or learn. Temperature increases of 2°C and 4°C are associated with 4% and 7% reductions in academic achievement per child and projected lost future income. Plaintiffs Genesis, Maryam D., Avroh, Maya W., and Ariela have all already experienced harm to their educational experiences due to excess heat.
- 267. Increasing temperatures interfere with important religious practices like Plaintiff Maryam D.'s ability to comfortably wear her hijab or fast during Ramadan, and Plaintiff Maryam A.'s plan to do the pilgrimage to Mecca on foot, which may be physically dangerous with increasing temperatures. The sacredness of Earth, and protecting her, is central to several Plaintiffs' spiritual or religious beliefs and practices.
- 268. Today's climate-induced heat, and increasing heat, presents substantial risk to unborn and living Children.
- 269. All Plaintiffs have already altered or canceled their regular healthy activities on account of rising temperatures.

270. The temperature trend in the United States since 1970 is increasing temperatures, due to increased climate pollution. Since the late 1970s, the United States has warmed faster than the global rate and the West, along with Alaska, has seen the greatest increase in temperatures.

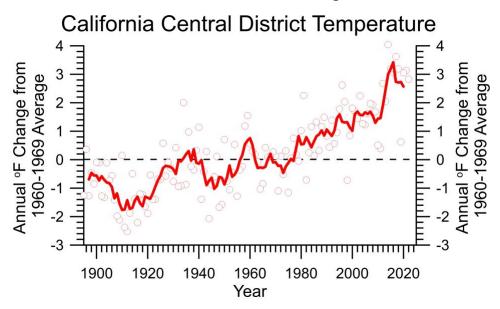
271. The graph depicts how the annual average temperatures in the contiguous 48 states have changed since 1895 relative to the 1960-1969 average based on National Oceanic and Atmospheric Administration ("NOAA") observations.



272. The last nine years have been the hottest, globally, in recorded human history. Temperatures in locales in the western United States have broken all records. 2023 was the hottest year in human history, with June 2023 the hottest June on record and July 2023 being the hottest month ever on record. Plaintiffs like Dean and Maya R. were exposed to temperatures over 100°F, which do not normally occur where they live.

273. Temperatures in the geographic area of the Central District of California have increased significantly since 1970 as depicted in the graph below.

Since 1970, the Central District has warmed at about 0.6°F per decade whereas the contiguous United States has warmed at about 0.5°F per decade.



- 274. Defendants' ongoing Discounting Policies and regulatory practices over climate pollution will lead to more climate pollution and increasing temperatures, which will exacerbate Plaintiffs' injuries.
- 275. Higher temperatures and climate changes to the water cycle will continue to lead to drier conditions, sharply increasing the risk of megadroughts lasting 10 or more years. Droughts lead to more climate-induced wildfires.
- 276. Prolonged droughts pose a special threat to Indigenous Children, like Plaintiff Dean, by degrading natural elements important to their culture and traditions, like water, food sources, and vegetation. Droughts and climate fire threats also impede important tribal and ceremonial practices. Indeed, the Mono Lake Basin, home of the Kutzadika'a Paiute people is experiencing increased warming since 2011 in conjunction with declining snow cover (about 28 fewer days of snow cover over the last two decades), which is causing the lake level to fall and the lake to shrink. Mono Lake has decreased in length by about 0.8 miles and in width by about 1.3 miles since the 1960s. The lake level protections set in 1994 pursuant to the

Public Trust Doctrine to prevent unhealthy water diversions have not protected the lake at those levels because the hydrologic conditions since 1994 have significantly changed due to the declining snowpack in the Sierra Nevada, lower direct precipitation, and more evaporation from warmer temperatures and drought from climate change. In fact, the 2000-2021 western United States drought exceeded in severity any drought in the last 1,200 years, including the period of 900 to 1350 when droughts drove Mono Lake to extreme low levels. The continued decline of Mono Lake ("lake of the fly") will cause severe and costly impacts to human health and ecosystems, including loss of ancient brine shrimp and flies that support numerous water birds and are essential to the Kutzadika'a Paiute people.

277. This decline in Mono Lake comes in conjunction with glacier decline in the adjacent Sierra Nevada. Over the 20th century, Sierra Nevada glaciers lost about 56% of their area, 90-100% of which was due to human-caused climate change since at least the 1960s. Such century scale retreat of glaciers is a consequence of human-caused climate change. These glaciers have existed for more than 3,000 years, yet are projected to disappear in the coming decades with current global warming, with the Sierra Nevada becoming like the Trinity Alps of California that gained glacier-free status in 2015. Indeed, four glaciers in the Sierra Nevada recently broke up into multiple smaller ice masses while another three glaciers are no longer considered glaciers. Loss of Sierra Nevada glaciers will fundamentally alter stream temperatures, water quality, and downstream ecosystems, with glacier-fed streams running dry in late summer and some species becoming locally extinct.

278. Climate change-fueled wildfires are destroying the landscape upon which Indigenous Children depend for game, fish, and berries. The 2020-2021 wildfire burn area in California was unprecedented in the modern record with nearly 4.7 million acres burned, which was 10 times greater than the historical average. Fires in these two years burned 3% of the cold desert ecoregion east of the Sierra

- 279. Defendants' ongoing Discounting Policies and regulatory practices over climate pollution will lead to more harm to Indigenous people's resources and cultural practices, particularly affecting Plaintiff Dean.
- 280. Wildfire danger also has an elevation dependence where the higher elevation regions of the Sierra Nevada and the high cold desert of California have had a greater increase in fire danger days and burned area relative to lower elevation regions in the state. In addition to fire, the eastern Sierra Nevada and adjacent cold desert is experiencing the greatest increase in tree mortality from climate stress and insects.
- 281. Wildfires are also impacting water resources in the Sierra Nevada. Burned regions expose snow to direct solar radiation, increasing snowpack loss from sublimation and mid-winter melt events that then reduce summer stream flow. Dark, light absorbing particles supplied by wildfires cause snow to absorb more solar radiation, reducing snow cover and causing earlier snow melting. This process also reduces soil water content and vegetation, impacting the survival of bighorn sheep. Such dark particles from wildfire induce faster melting on glaciers, speeding up their demise.
- 282. Increasing temperatures and declining rainfall has reduced the flow of water in the Colorado River, which is a key source of water in southern California, exacerbating water shortages and drought conditions. For the first time in history, the federal government is considering shutting down diversions from the Colorado

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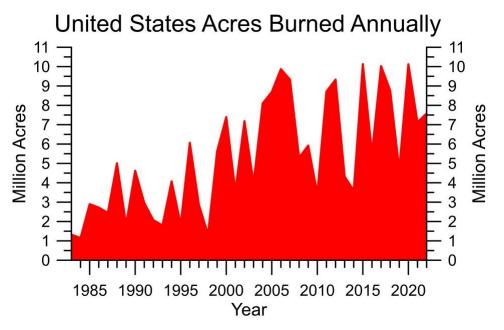
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River, which will harm California Children's access to water, like Plaintiffs Genesis, Maya W., Maya R., and Maryam A.

- 283. Even in arid regions, increased precipitation is causing flash flooding, followed by drought. The recent 22-year-long drought from 2000 to 2021 in the western United States was the driest 22-year drought in at least the last 1,200 years. Climate pollution is responsible for at least 42% of this drought. If climate pollution had not occurred, the drought during Plaintiffs' lives would either not have been as severe or as long. The climate pollution acted as an additional heating and drying force to maintain the naturally drier years over an extended period of time when the dry years would have otherwise been interrupted by wet years, ending the drought. California's 2012-2014 drought years are also unprecedented in the last 1,200 years and are caused by climate pollution.
- 284. Climate pollution causes warmer springs, longer summer dry seasons, and drier soils and vegetation which increase wildfire season length, frequency, severity, and burned area in the West. The incidence of large climate fires in the western United States has increased since the early 1980s and is continuing to increase, cause profound changes to the West, and harming each of these young Plaintiffs in particularly personal ways. Climate pollution doubled the area burned by wildfire in the western United States from 1984 to 2015. Half of the burned area would not have burned without climate pollution and climate change.
- 285. The largest number of acres burned annually from climate fires have all occurred since 2004, which coincides with the hottest years in the Nation's recorded history. EPA predicts that with more climate pollution and more frequent and longer droughts, longer climate fire seasons and larger climate fire size will continue, increasingly exposing Plaintiffs to even more severe injuries from wildfires.
- 286. This figure shows area burned in the United States between 1983 and 2022 based on National Interagency Fire Center data. In the case of California, the

increase in burn area for 1996 to 2021 relative to 1971 to 1995 is nearly all, if not entirely, due to anthropogenic climate change, with the best estimate being 172% of the burn-area increase being due to human-caused climate change.



287. The wildfire season is longer than it ever has been. In 1970, the wildfire season in the West was from June to September. Now, the climate fire season in the West begins in March and goes well into fall. In Pacific U.S. (i.e., CA, OR, WA) forests, the fire season has increased by >40% (37 more days) from 1979 to 2019, with extreme fire weather increasing by 166%, the largest increase in any region analyzed in the world.

288. In the Sierra Nevada Mountains of California, where Plaintiff Huck resides, the fire season has increased from less than 100 days per year on average (1981-1990) to close to 150 days (2011-2020). For the Central District of California, where Plaintiffs Genesis, Maya R., Maya W., Maryam D., Maryam A., Dani, Muaawiyah, and Zubayr live, since the early 1970s the interior portion of the district has experienced at least a 63 day increase in fire season length.

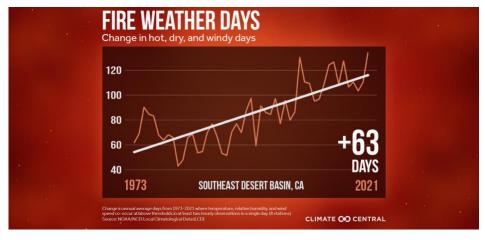
289. Sonoma County, where Plaintiff Ione lost her home and where

Plaintiffs Ione and Noah have evacuated multiple times, has experienced numerous recent destructive climate-fueled fires including, the Nuns (55,565 acres), Tubbs (36,810 acres, 5,636 structures, and 22 deaths) and Pocket (17,000 acres) fires in 2017; the Kincade Fire (77,758 acres) in 2019; and the Walbridge (55,000 acres) and Glass (67,000 acres) fires in 2020. In the case of the Tubbs Fire, human-caused climate change increased the rate that the fire rapidly spread by 23%.

290. Indeed, the increase in California's annual burn area over the last 50 years, including Sonoma County and the Tahoe Basin, is entirely attributable to human-caused climate change with a best estimate of 172% from anthropogenic greenhouse gas emissions.

291. Since 2001 there is no evidence for any other forcing for the rising burn area besides human-caused climate change. The Tubbs, Kincade, and Mosquito fires all occurred in the autumn, which is a season where human-caused climate change has increased the likelihood of extreme fire weather by 40% through drying of fuels and warmer temperatures.

292. The graph from Climate Central shows the change in the number of fire weather days from 1973 to 2021 for southeast California desert basin within the Central District of California. Over this time period, the number of hot, dry, and windy days conducive for fire increased by 63 days.



- 293. The increase in aridity between 1984 and 2017 exposed an additional 31,500 square miles of western montane forests to climate fires. The greatest rise in fire elevation due to dry air is in the Sierra Nevada, where Plaintiffs Huck and Dean are threatened with increasing fire. There is greater than 99% certainty that 65% of California's drying trend, also called vapor pressure deficit or VPD, is due to human-caused climate change. The increase in severity and frequency of fires is also a result of climate change.
- 294. EPA says the "wildfire crisis is a public health crisis, including significant impacts on air quality."
- 295. The smoke from those climate fires includes fine particulate matter. Inhaling or ingesting even small amounts of these pollutants causes many adverse health conditions. Children are susceptible to health harms from climate fires even in utero. Wildfire smoke may cause 7,700 premature births (< 37 weeks) at 2°C of global warming. At 4°C of global warming, wildfire smoke may cause 13,600 premature births, a 92% increase in premature births attributable to wildfire smoke from 1986-2005.
- 296. Children exposed to smoke and particulate matter also have higher risks of respiratory symptoms, decreased lung function, substantial eye symptoms, worsening asthma, increased sinus issues, development of chronic bronchitis, heart failure and premature death. The rate of childhood hospitalizations and emergency department visits is increasing due to climate fire smoke. Plaintiff Avroh's sinuses have been injured by repeated and prolonged exposure to smoke and heat, leading to a hospital visit and medical procedure. Plaintiffs Ariela, Arishka, Avroh, Dani, Dean, Emma, Genesis, Huck, Ione, Lali, Maryam A., Maryam D., Maya R., Maya W., Muaawiyah, Neela, Noah, and Zubayr have each experienced respiratory symptoms, sore throats, headaches, eye irritations, panic attacks, and/or other physical symptoms of smoke exposure. Plaintiffs will experience worsening

symptoms as they face increasing smoke and heat from more pollution resulting from EPA's discriminatory programs.

297. Exposure to PM<sub>2.5</sub>, a pollutant emitted from wildfires, can aggravate the occurrence and development of bronchial asthma. Since the worsening wildfire and smoke seasons in California, Maya W., Noah, and Emma have each been diagnosed with bronchial asthma or exercise-induced asthma. They will experience more asthma attacks with more heat and more smoke.

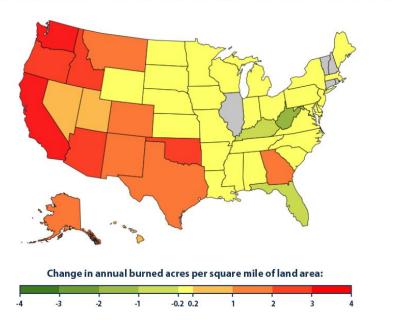
298. Even among Children who do not suffer from asthma, climate fire smoke exposures lead to decline in Children's lung functioning. California is the least healthy state in terms of air pollution in the nation. Pollution exposure to wildfire smoke in California has risen four-fold in the past decade. Current levels of air pollution in southern California have chronic, adverse effects of lung development in Children, which leads to important deficits in lung function in adulthood. Air pollution harms Children's lungs for life. Air pollution in the western United States is also shown to shorten human life through premature death and other medical harms.

299. School closures caused by wildfires have significant negative impacts on academic performance, primarily among elementary school students. Such closures are likely to become more common in California in future years. In the 2018-19 school year, wildfires impacted 1,138,463 students across 1,911 California schools. Plaintiffs Arishka, Ione, Huck, Neela, Lali, Noah, Maryam D., Dani, Dean, and Avroh have each faced school closures from wildfire smoke that interfere with their learning and educational opportunities. Plaintiffs Ariela and Huck have had to attend school during unsafe air quality conditions, making it harder to focus or requiring N-95 masks. Plaintiff Maya W. has had PE class in a gym covered in ash.

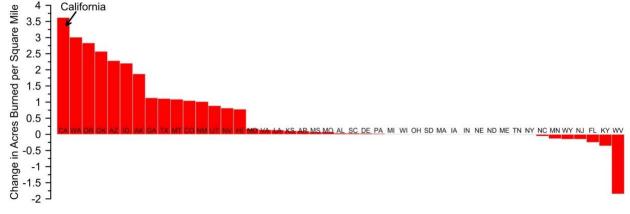
300. Climate fires and smoke in the West are worsening with greater smoke production and chronic exposures for Children. Exposure to wildfire smoke increases depression among some Children, including certain Plaintiffs.

301. The map below is from the EPA and shows the change in annual burned acreage per square mile of land from 1984-2001 average to 2002-2020 average. The bar graph below is the same data but expressed in a graphic format.

Change in Annual Burned Acreage by State Between 1984–2001 and 2002–2020



Change in State Burn Area Between 1984-2001 and 2002-2020



- 302. According to EPA, California has experienced on average 3.62 more acres burned per year per square mile of land for the period 2002-2020 relative to the period 1984-2001. This is the largest increase of anywhere in the United States.
- 303. Defendants' ongoing Discounting Policies and regulatory practices over climate pollution will lead to more fires, more smoke, and greater injuries to Plaintiffs.
- 304. Climate change also worsens other air pollution, like ozone levels. Air pollution preferentially targets Children because of their immature lungs, narrow airways, high respiratory rates, lower body weights, their outdoor activities, higher level of physical activity, and a high prevalence of asthma. Children's respiratory tracts are not fully developed, and air pollution permanently reduces lung development. Air pollution exacerbated by climate change is continuing to worsen.
- 305. In 2023, EPA said climate change will increase the annual cases of asthma in Children by 4% at 2°C of global warming and 11% at 4°C of global warming especially in the Southwest, with low-income and Black, Brown and Indigenous children being more likely than others to develop new asthma because of particulate matter exposure.
- 306. Over 8% of Children suffer from allergic rhinitis, and the ragweed pollen season in North America has grown 13-27 days longer since 1995 due to higher temperatures and greater CO<sub>2</sub> levels. Longer pollen seasons lead to more asthma episodes, doctor visits, and prescriptions for allergies for Children. Plaintiffs Genesis and Dani struggle with the combination of worsening allergies, smoke, and heat that significantly limit their activities both outdoors and indoors. Dani has resorted to medical treatment to manage her rhinitis.
- 307. This graphic depicts projected impacts per year for Children due to increasing pollen exposure at 2°C and 4°C of global warming.

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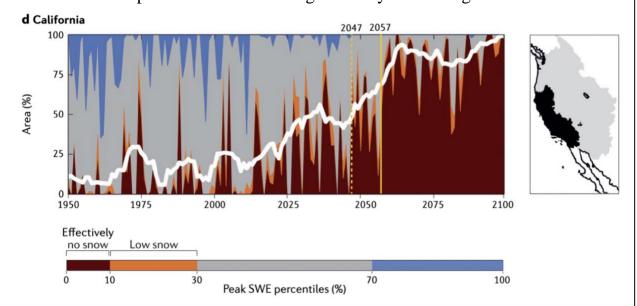
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308. Defendants' ongoing Discounting Policies and regulatory practices over climate pollution will lead to longer pollen seasons, which will exacerbate injuries to Plaintiffs.

309. The overall trend is that snowpack declines will continue. Until early 2022, of the area of California that historically has winter snowpack, 20-25% of the area experienced low-to-no snowpack since 2000. Low-to-no snowpack will increase with half of California's historically snowy regions having low-to-no snow winters for five years in a row by 2047 and 10 years in a row by 2057. Climate change causes extremes in terms of drought, but also unusually high precipitation years that cause flooding. The winter of 2023, which had historically high snowpack, is an example of the climate extremes caused by high CO<sub>2</sub> levels in a La Niña year. Plaintiff Huck experienced 30 days of school closures due to the extreme snowpack near his home, but in many winters of his childhood Huck has not been able to participate in his winter snow activities because of lack of snow. The consequence of unusually high snowpack combined with earlier warm temperatures and rain on snow causes extreme flood events that harm lower elevation areas in California. The flooding of Mono Lake affected Plaintiff Dean.

310. As illustrated in the figure below, the area of snowpack and the thickness of snowpack in California is significantly decreasing.



- 311. Under the climate conditions in which human civilization developed, a large snowpack or glacier acts as a supplemental reservoir or water tower, holding a great deal of water in the form of ice and snow through the winter and spring and releasing it in the summer when rainfall is lower or absent. The water systems of the western U.S., particularly in California and Oregon, heavily rely on this natural water storage. Yet as temperatures increase, not only will these areas lose this supplemental form of water storage, but severe flooding is also likely to increase as rainfall accelerates the melting of glaciers and snowpack.
- 312. Scientists predict a coming water supply crisis for the western United States. Indeed, all glaciers within the California Trinity Alps disappeared after the 2015 warm summer and extremely low snowpack. The glaciers on Mount Shasta are rapidly receding as are all glaciers in the western United States. The Sierra Nevada are projected to be glacier-free by 2050, where glaciers have existed for more than 3,000 years. California will soon be a glacier-free state, especially if climate pollution continues.

- 313. During droughts in the West, groundwater pumping increases and results in dramatic groundwater-level declines that lead to worsening groundwater quality. Plaintiff Noah relies on groundwater, which is diminishing.
- 314. Defendants' ongoing Discounting Policies and regulatory practices over climate pollution will lead to more extreme snow and flooding events on one end and more drought conditions on the other, each of which will exacerbate injuries to Plaintiffs.
- 315. Changes in water supply and water quality are also harming agriculture and farming in the West. Increased heat, water shortages, and associated issues such as pests, crop diseases, and weather extremes including fires, hurt crop and livestock production and quality. Climate pollution is threatening food security and will decrease crop yields, increase crop prices, decrease nationwide calorie availability, and increase malnutrition.
- 316. Defendants' ongoing Discounting Policies and regulatory practices over climate pollution will lead to more food and water insecurity, which will exacerbate injuries to Plaintiffs.
- 317. As precipitation increases, in urban areas in particular, climate-driven flooding is destroying infrastructure Children depend upon, increasing pollutant exposures, and increasing drowning dangers. The EPA has found 200,000 additional Children may need to evacuate their homes due to inland flooding at 2°C of global warming, and 550,000 at 4°C of global warming. Further, coastal flooding is expected to destroy the homes of 185,000 children at a sea level rise of 50 cm above current levels, and the homes of 1.13 million children at sea level rise of 100 cm above current levels. Coastal flooding will also raise groundwater levels. In the San Francisco Bay, 5,282 contaminated sites will be inundated by groundwater at 1 m of sea-level rise (3,964 sites at 0.5 m of sea-level rise) while 24% of California's superfund site area is at risk from sea-level driven groundwater inundation. Fifty-

- 318. The increase in temperatures along with extreme precipitation and flooding is increasing the prevalence of mosquitos and infectious diseases. Children, who spend more time outside and have more open skin wounds are more susceptible to mosquito bites and contracting water-borne diseases. Zubayr and Emma have experienced these harms and are vulnerable to more harms in the future.
- 319. Defendants' ongoing Discounting Policies and regulatory practices over climate pollution will lead to more flooding and extreme weather events, which will exacerbate injuries to Plaintiffs.
- 320. Climate pollution is causing a mental health crisis for Children. Extreme events caused by climate change are traumatic for Children and cause depression, anxiety, and post-traumatic stress. The chronic worry about climate change also harms the mental health of Children. Children experience anxiety from the betrayal of their government in causing climate crisis and not protecting the air and climate system. The toxic stress from these mental health harms can last into adulthood and diminish a child's prospects for healthy adulthood. EPA has acknowledged that climate change puts Children at particular risk for distress, anxiety, and other adversities to their mental health. Every one of these young Plaintiffs lives with some level of climate anxiety, chronic worry, post-traumatic stress, and or depression. Some have diagnoses and seek treatment from therapy where they spend time talking about climate change.
- 321. EPA and mental health experts have identified "climate anxiety" among Children as a chronic stressor that will have adverse effects on Children's lives. Experts opine that the mental health harms of climate change to Children are akin to cruel, inhuman, and degrading treatment (i.e., the equivalent of torture) because of the mental suffering Children are already experiencing at existing levels

- of climate pollution. EPA has acknowledged that Children that understand the likelihood of experiencing climate change effects throughout their lives are more predisposed to experiencing climate anxiety and feel hopelessness and trauma. Government betrayal, by continuing to allow the crisis to unfold unabated is also highly linked to the climate anxiety Children are uniquely experiencing.
- 322. EPA knows that climate change causes harm to Children's mental health. EPA's ongoing Discounting Policies and regulatory practices over climate pollution will lead to more climate anxiety among Children, which will exacerbate injuries to Plaintiffs.
- 323. Childhood is a condition of life when a person is most susceptible to psychological damage. Childhood trauma can have long-term mental health impacts because Children are more likely to maintain those traumatic memories with greater clarity. The disturbances in childhood from climate crisis can also harm brain development and permanently and adversely affect the prefrontal cortex, with lifelong adverse consequences that impact learning.
- 324. Children will also suffer disproportionate harm from the increased financial burdens climate crisis poses, including lost property values and increasing costs from catastrophic events and harm.
- 325. Black, Brown, and Indigenous Children (referred to by EPA as "BIPOC Children" and "Children of Color") are the most vulnerable because their families and communities often lack the resources for adequate shelter, air conditioning, air purifiers, and other ways of escaping from heat, climate fires, and air pollution. Black, Brown, and Indigenous Children disproportionately live proximate to fossil fuel infrastructure and the source of climate pollution, which further exacerbates their immediate exposure to dangerous air and water pollution, harming their developing bodies. Climate change also threatens the lives and health of Children by

reducing food availability and increased prices, leading to food insecurity within households with fewer resources.

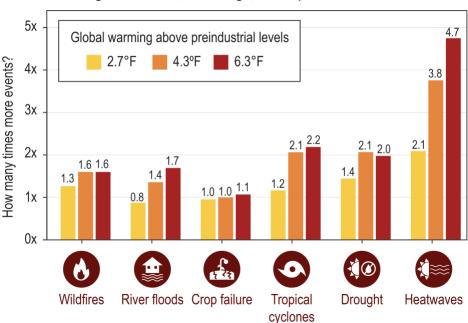
- 326. Black, Brown and Indigenous Children's injuries from climate pollution are compounded by the historic racism and discrimination experienced by their ancestors and parents as well as the ongoing systemic racism they have been born into. These Children, including many of these Plaintiffs, are the most vulnerable of the Children class.
- 327. Black and Brown Children in California are exposed to more air pollution in general than white persons. California's average disparities between racial minority populations and non-Hispanic white populations are notably larger than other states (on average, 6 times larger). In general, Black and Brown communities bear a "pollution burden" of 56% and 63% excess exposure relative to their consumption of goods and services resulting in pollution.
- 328. Black and African American Children are 34% more likely to live in areas highly impacted by climate change. And they are at higher risk of childhood asthma diagnoses compared to other Children.
- 329. Adverse childhood experiences ("ACEs") increase the likelihood of cumulative trauma that leads to mental and physical illness, as well as an increased risk of early death. The more ACEs children experience, the greater the risk of lasting effects on health (increased risk of obesity, diabetes, heart disease, depression, strokes, chronic pulmonary disease), behaviors, and life potential. Exposure to climate pollution and climate change increases the ACEs for these Plaintiffs and Children.
- 330. Experts agree that "[a] child born today will experience a world that is more than four degrees warmer than the pre-industrial average, with climate change impacting human health from infancy and adolescence to adulthood and old age. Across the world, children are among the worst affected by climate change."

331. The U.S. 2023 Fifth National Climate Assessment Summary confirms that Children born in 2020 will suffer disproportionate harm from climate pollution than an adult who was born in 1960.

332.

#### Intergenerational Inequity

A person born in 2020 will experience more climate hazards during their lifetime, on average, than a person born in 1965.

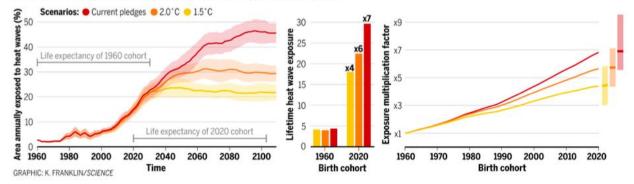


333. Experts agree with EPA and have documented the disparity in harm that Children born today will experience as compared to adults as depicted in the graphic below. Specifically, Children will experience vastly more severe weather events than living adults and prior generations.

334.

#### From a period to a cohort perspective on extreme event exposure

(Left) Global land area annually exposed to heat waves under three scenarios. Lines represent multimodel means of a heat wave metric calculated from four global climate models. Lines were smoothed by using a 10-point moving average. Uncertainty bands span 1 standard deviation across the model ensemble. (Middle) Lifetime heat wave exposure for the 1960 and 2020 birth cohorts under the three scenarios. Numbers above bars indicate exposure multiplication factors relative to the 1960 cohort. (Right) Multiplication factors for lifetime heat wave exposure across birth cohorts relative to the 1960 cohort. Uncertainty bands represent the interquartile range for the 2020 cohort exposure relative to the multi-model mean exposure of the 1960 cohort.



**EPA's Discounting Policies and Regulatory Practices Disregard the Best Science on Climate Pollution and Earth's Energy Imbalance** 

335. Based on the best scientific information,  $CO_2$  concentrations greater than 350 ppm cause an Earth Energy Imbalance ("EEI"). EEI is increasing and amounted to  $0.76 \pm 0.2$  watts per square meter (W/m²) during 2006–2020. That energy imbalance is also measured cumulatively as  $381 \pm 61$  zeta joules (ZJ, 1,021 joules) between 1971 and 2020.

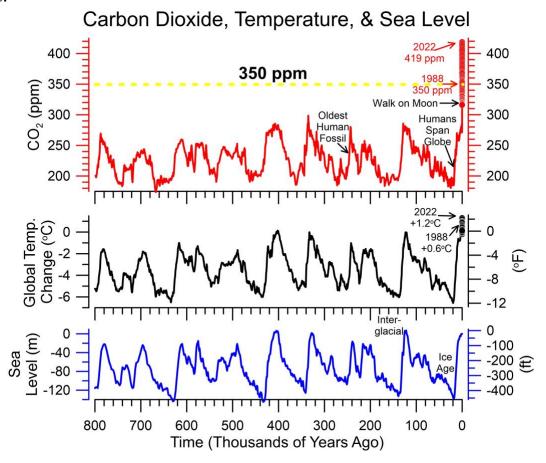
336. Between 2005 and 2019, the EEI doubled, representing an unprecedented and rapid heating of our planet. Earth Energy Imbalance is the physical fact that climate pollution is trapping more heat that Earth normally reflects back out to space and it is heating the oceans, the land surface, and the air. It is like wearing extra layers of sweaters in the summer and not being able to take them off.

337. Restoring Earth's energy balance is key to abating or alleviating the climate crisis. Scientists say that to restore energy balance, we must swiftly reduce climate pollution by eliminating fossil fuel combustion and protecting and enhancing carbon sinks to sequester already accumulated CO<sub>2</sub> in our air. Earth's energy balance will only be restored when atmospheric CO<sub>2</sub> is returned to concentrations less than

350 ppm, which will restore a stable climate system. Science-based, Children-centric reductions in climate pollution will help keep open the possibility of restoring Earth's energy balance in Plaintiffs' lifetimes. Conversely, EPA's current regulatory trajectory carried out through its Discounting Policies, will foreclose the possibility of restoring Earth's energy balance in Plaintiffs' lifetimes.

- 338. To illustrate the enormous amount of extra energy that climate pollution traps on Earth, 381 ZJ could power the City of Los Angeles for more than 4.8 million years. The oceans are absorbing most of that extra energy (heat), which is why the surface temperature of the Earth has not heated as quickly, and also why the ocean's ice sheets are melting and the coral reefs are dying.
- 339. The current annual mean concentration of atmospheric CO<sub>2</sub> is 419 ppm as of 2022, far above scientists' proposed safe planetary boundary of 350 ppm. The climate pollution concentration in our air is already dangerous for Children. It has already caused an energy imbalance and climate destabilization. More climate pollution will exacerbate the dangerous situation.
- 340. For comparison, the historical scientific record shows the last time CO<sub>2</sub> was over 400 ppm, about three million years ago, the global average sea level was at least 20 feet and up to 65 feet higher than today, with best estimate of 55 feet higher than today, and the planet was about 5°F (~2.8°C) warmer than the preindustrial era. No humans lived on Earth at those greenhouse gas concentrations, which were elevated from a time of enhanced volcanic activity on Earth, which naturally increased carbon dioxide emissions. The reason the seas have not yet risen that much today is because it takes time for the ocean's ice sheets to collapse and melt, which they are in the process of doing faster than any scientists predicted.
- 341. This graph depicts the correlation between atmospheric carbon dioxide levels, global temperature levels, and global sea level, as well as the unprecedented

rise of CO<sub>2</sub> caused by human activity in an unprecedented short time span on historic scales.



342. Importantly, even during prior natural cycles of climatic change, the increase or decrease in greenhouse gases in the air happened much more gradually over thousands to millions of years and there was no human-caused climate pollution increasing to such extremes as they are now, in such a relatively short time frame of less than 200 years, as depicted in the graph above.

343. There is an established scientific prescription to return to below 350 ppm this century that requires climate pollution reduction consistent with steadily eliminating nearly all fossil fuel burning by 2050. That prescription was developed by one of the United States' top climate scientists, and former head of NASA's Global Institute for Space Studies, with scientists around the world. Similarly, a

growing body of science confirms that atmospheric CO<sub>2</sub> concentrations below 350 ppm is also a planetary boundary for a safe climate system. The 350 ppm global prescription cannot be achieved without Defendants ceasing their allowance of nearly all U.S. climate pollution from fossil fuel burning by 2050, with steady reductions each year between now and 2050. In addition, natural carbon sinks, located in lands and waters, need to be protected so they can naturally absorb excess carbon in the air and not become sources of climate pollution themselves.

- 344. EPA finds that the current changes from accumulated climate pollution, and future projected changes, "endanger the physical survival, health, economic well-being, and quality of life of people living in the United States (U.S.), especially those in the most vulnerable communities." Defendants know that ongoing climate pollution, especially from fossil fuels, is actively causing serious and life-threatening environmental and health impacts, yet they continue their Discounting Policies and practices in allowing climate pollution and discriminating against Children.
- 345. Due to climate pollution, the surface temperature of Earth has heated by 1.1-1.2°C on average (2018-2022 or 2013-2022 average) above pre-industrial temperatures (1880-1920 average). That temperature exceeds the maximum temperatures of the Holocene era, the period of climate stability over the last 10,000 years that enabled human civilization to develop.
- 346. Politically-set temperature targets of 1.5 to 2°C, which allow the Earth to heat more than it already has, are not in conformance with the accepted best science, are life-threatening for Children, and are not based on peer-reviewed science publications or the opinions of qualified experts. There is still time for Defendants to avert these increasing temperatures.
- 347. EPA has no research, scientific evidence, or reports that say a 1.5°C increase in temperatures from the preindustrial era is safe for Children. In fact, the research, scientific evidence, and reports relied upon by EPA state that a 1.5°C

increase in temperatures from the preindustrial era is hazardous for Children and future generations.

- 348. We are already in the danger zone. Every added ton of climate pollution to the air today exacerbates the harm to Children.
- 349. Defendants know that 350 ppm CO<sub>2</sub> is the uppermost level of climate pollution that will protect human health and welfare. By design, Defendants' Discounting Policies and practices ignore this best science.
- 350. This climate pollution crisis is urgent beyond measure, in part because of feedback loops. Feedback loops work like this: More climate pollution in the air means more heat. More heat means less ice. Melting ice means less white reflectivity on Earth and more heat is absorbed by dark water. Melting ice means methane trapped in frozen permafrost can escape. Methane escaping from frozen land means even more dangerous climate pollution. More heat also means more drought and more climate fires. More climate fires mean more climate pollution. And the cycle continues. Climate pollution begets more climate pollution. Sooner than later, if more and more methane is released from frozen tundra due to feedback loops, Children will experience runaway, unstoppable climate change as has happened on other planets. Defendants' Discounting Policies and practices by design ignore these costs to Children.
- 351. If Defendants' allowance of climate pollution through the exercise of their Discounting Policies and practices continue unabated, it is significantly likely that Earth's Energy Imbalance will trigger additional amplifying feedbacks and the climate system and biological system will pass critical tipping points. Such changes would be irreversible on any time scale relevant to Children and future generations, threatening their survival and wellbeing.
- 352. With Defendants' allowance of climate pollution through the exercise of their Discounting Policies and practices, they project that by 2050, when these

Plaintiffs might be starting their own families and bringing children into the world: climate fire activity will double in the West, increasing burned areas by more than 50%; snowpack will be substantially reduced even from today's levels and snowmelt will shift about four weeks earlier, resulting in warmer and shallower rivers and streams; parasites and diseases will increase; the frequency of high ozone pollution events will increase 50%-100%; more fetuses and Children will prematurely die from climate change; and Children's health will decline further. Each of the injuries

353. Just in terms of avoiding localized air pollution harm in California, separate from climate change, if all fossil fuel pollution were phased out by 2050, about 10,200 premature deaths per year would be avoided in California alone. The cleaner air from eliminating fossil-fuel pollution will save California about \$134.1 billion per year in 2050 in avoided health costs. The national savings of eliminating fossil fuel and climate pollution are far greater. Plaintiffs, who will inherit the economic consequences of the climate crisis, will benefit from the cost savings of lowering the number of extreme climate events and fossil fuel pollution in the coming years by ending the discriminatory Discounting Policies and practices that keep high levels of climate pollution in place.

detailed above will worsen substantially as our Nation bakes.

# Defendants Have Available Non-Discriminatory Alternatives to Undertake Cost-Benefit Analysis of Regulatory Proposals Involving Climate Pollution

- 354. Economists working for and with Defendants have advised for decades that the discount rate be lowered when government makes decisions affecting climate pollution.
- 355. Experts, both inside and outside of government, have advised Defendants that the long-term catastrophic dangers posed by climate pollution warrant a much lower discount rate of zero percent or even a negative discount rate, if any.

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356. EPA's own guidance documents indicate that the discount rates could and should be lower than the Discounting Policies when evaluating programs implicating climate pollution, climate change, and Children. Yet EPA continues its Discounting Policies and practices that intentionally discriminate against Children.

357. In other contexts, EPA has considered applying a zero discount rate. For example, in 1987, EPA contemplated adopting a zero or negative discount rate when analyzing controlling pollution that caused the hole in the stratospheric ozone layer. EPA understood that a discount rate "may be positive, negative, or zero . . . . From a social perspective, the value of this . . . discount factor reflects one's resolution of some of the ethical considerations discussed above. A zero utility discount factor weighs current and future utilities equally. A positive (negative) value weights future utilities lower (higher) than current utility." The "ethical considerations" that EPA stated were relevant to choosing a discount rate were that "the parties who will bear the costs or enjoy benefits may not yet exist"; "the unregulated market will probably not result in the optimal level of saving for the future"; "[i]rreversibility of the consequences of some policies is . . . a reason for adopting a more cautious attitude toward imposing burdens on future generations"; it is only justified to "borrow[] from future generations to benefit the present" only if "[f]uture generations may be richer than existing ones"; "[t]he current generation should treat future generations as they treat themselves"; "[t]he current generation should treat future generations so as to improve their life from current conditions"; and "[t]he current generation should not discount future lives, since human life is not fungible."

358. By using a discount rate of zero or a negative discount rate, Children will be valued equally and their livable future will be treated as equally worth protecting from the catastrophic harm of more climate pollution in Defendants'

exercise of their regulatory authority. The resulting BCA would then show the clear irrationality of allowing ongoing levels of climate pollution.

- 359. Eliminating Defendants' Discounting Policies and practices and pursuing a non-discriminatory alternative will alleviate the substantial harm these discriminatory Policies cause to these Plaintiffs, Children, and society as a whole.
- 360. Defendants can conform their conduct to control climate pollution while still enabling a viable and more economical energy system in the United States. An energy system that does not result in dangerous amounts of climate pollution has been feasible since before Children were born. Defendants' policies and practices since 1970 have impeded the development of a non-fossil fuel-based energy system in part by making it cheap and permissible to pollute the air, artificially lowering the social cost of carbon, and thereby requiring Children to subsidize climate pollution.
- 361. Clean renewable energy is the most affordable and reliable form of energy today. Plans exist to transition the United States to 100% clean renewable energy in all energy sectors by 2050 at the latest. It is technically and economically feasible to eliminate nearly all fossil fuel climate pollution by 2050. All mobile and stationary sources of climate pollution over which EPA has control can be powered without fossil fuels.

#### <u>CLAIMS</u>

## COUNT I: EQUAL PROTECTION VIOLATION—CHILDREN AS SUI GENERIS

- 362. Plaintiffs hereby incorporate the above paragraphs by reference as though fully set forth herein.
- 363. Through incorporation of the Equal Protection Clause of the Fourteenth Amendment, the Fifth Amendment constitutionally guarantees that Defendants shall

not deny to Plaintiffs or Children within its jurisdiction the equal protection of the laws that has been enjoyed by similarly situated groups of people.

- 364. The Supreme Court has also long recognized Children's constitutional rights and liberties and protected Children from government action that harms them under the Equal Protection Clause by affording less deference and applying heightened scrutiny to government action that imposes lifetime hardships on children for matters beyond their control.
- 365. Equal protection claims involving Children are *sui generis*. Specifically, the Equal Protection Clause prohibits Defendants from imposing significant risks and injury to Children's well-being for matters beyond their control. Under such circumstances, courts do not apply a traditional tier of scrutiny, but rather analyze the extent to which Defendants' conduct burdens Children's ability to live and enjoy their lives by imposing on them a lifetime of hardship.
- 366. Defendants have violated the Equal Protection Clause by knowingly adopting Discounting Policies and practices that favor allowing climate pollution from sources under EPA's control (including all stationary sources of pollution, all mobile sources of pollution, fuels, locomotives, ocean-going vessels, and aircraft), which imposes significant risks and injury to Children, including each Plaintiff, in a manner that burdens them with lifetimes of hardship for matters beyond their control.
- 367. Defendants' control of the air and climate pollution, through the exercise of their Discounting Policies and practices described herein, burdens Children's lives by imposing a lifetime of harms and hardship on Children, including Plaintiffs, from birth into their adulthood. The economic method of discounting is a weapon of intergenerational oppression that harms Children.
- 368. The harms and hardships to Children's lives that are ongoing and will worsen if Defendants' Discounting Policies and practices continue, include

economic harms, displacement, psychological harms, barriers to family formation, health impacts, educational deprivation, cultural and religious deprivation, harm to dignity, and a diminished ability to seek happiness and an open future, all while being deprived of a meaningful vote and voice on the matter most important to their lives—climate crisis. Plaintiffs, as Children, will face an insurmountable burden in securing their rights.

369. Plaintiffs are entitled to a declaratory judgment, pursuant to 28 U.S.C. § 2201, and a permanent injunction because there is no plain, adequate, or speedy remedy at law to prevent Defendants from continuing to use their Discounting Policies and practices that discriminate against Children in their systematic management of the air and climate pollution because the harm Plaintiffs will suffer is irreparable. Plaintiffs are also entitled to such further relief as necessary to enforce the judgment.

# COUNT II: EQUAL PROTECTION VIOLATION—CHILDREN AS A PROTECTED CLASS

- 370. Plaintiffs hereby incorporate the above paragraphs by reference as though fully set forth herein.
- 371. Defendants' systematic control and management of the air and climate pollution through its Discounting Policies and practices violates Plaintiffs' rights secured to them by the Fifth Amendment, which incorporates the Fourteenth Amendment right of Equal Protection.
- 372. The Discounting Policies and practices act as intentional and explicit discrimination against Children because they devalue the rights and interests of Children and all future generations of Children. Children are a protected class.
- 373. Defendants' systematic control of the air and climate pollution through their Discounting Policies and practices amounts to unconstitutional differential

treatment of Children from the treatment of adults. Children already suffer disproportionate harm from Defendants' allowance of climate pollution. The unfairness of the treatment of Children and the higher burden of harm they will bear than adults results in unjustified inequality and violates any notion of fairness.

- 374. Under the adult-centric traditional equal protection tiers of scrutiny analysis, Children as a class are a prime example of a "discrete and insular" minority requiring close judicial scrutiny of invidious discrimination because Children have characteristics that are different from adults and are entitled to consideration on their own terms as growing young people. Specifically, Children:
  - a. Are in early phases of human development and physiologically and psychologically vulnerable.
  - b. Have developing lungs, brains, and immune systems that are particularly sensitive to climate harms, and exposure to these harms can subject Children to a lifetime of hardship.
  - c. Are dependent on their caregivers and are politically and economically powerless until at least age 18. It takes decades for Children born today to have enough political and economic power to become a political majority capable of protecting their air and climate system. Even upon growing to voting age, Plaintiffs and all Children, will remain politically burdened by the First Amendment political speech rights the U.S. Supreme Court has afforded corporations, which have outsize influence in campaigns, elections, and political processes. *Citizens United v. Fed. Election Comm'n*, 558 U.S. 310 (2010).
  - d. Have life expectancy many decades beyond living adults. In the case of the average age of federal policymakers today, Children will live approximately 60 years beyond the federal policymakers and bear the consequences of the decisions of those federal policymakers, especially

- as to the discriminatory systemic management and control of climate pollution by Defendants at issue in this litigation.
- e. Have faced a long history of discrimination where they have been continuously subjected to unequal treatment. Like women, Children were once considered property and many children were treated as indentured servants or were enslaved.
- 375. Being a member of the class of Children is thus more than a chronological fact. Plaintiffs, ages 8 to 17 years old, all fall within the protected class of Children.
- 376. All human beings, living adults and living Children alike are similarly situated with respect to their need for air, water, and a stable climate system for life. Our ancestors, including the Framers, also depended on air, water, and a stable climate system for life and were thus also similarly situated to living adults and children with respect to their need for air, water, and a stable climate system for life.
- 377. Through their Discounting Policies and practices in Defendants' exercise of sovereign control over the air and the life-threatening amounts of climate pollution they allow to enter the air, Defendants have denied and continue to deny Children equal protection of the laws.
- 378. Defendants intentionally discriminate against Children through Discounting Policies and practices that are designed to suppress the value of Children's lives and their future when making decisions about climate pollution. Such explicit classification of Children born and unborn generations as less valuable than living adults demonstrates a discriminatory purpose as a matter of law. Defendants' policies and practices overtly and expressly single out Children for disparate treatment from adults in their benefit-cost analyses.
- 379. Plaintiffs' physical and mental health is being harmed by Defendants' conduct. Defendants' systematic control of the air and climate pollution through

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their Discounting Policies and practices has caused and contributed to Plaintiffs' homes being threatened with heat, fires, smoke, and floods; Plaintiffs' education being regularly and increasingly disrupted; Plaintiffs not being able to go outside daily because it is not safe and curtailing of their recreational and physical activities; Plaintiffs' religious, spiritual, and cultural practices being disrupted; and Plaintiffs facing long-term water and food insecurity. Defendants' policies and practices are ongoing and will cause Plaintiffs' injuries to worsen.

- 380. Defendants have infringed Children's rights of equal protection by subjugating Children's vital interests in air quality and a stable climate system to the special financial interests of adult persons living today, and non-human persons, like fossil fuel companies, in violation of Children's equal protection of the law. Defendants' subjugation of Children's vital interests in favor of the financial interests of other adults and corporations is ongoing.
- 381. There is no justification by which Defendants can satisfy their burden under rational basis, intermediate scrutiny, or strict scrutiny at trial. The discrimination and profound harms attributable to Defendants' Discounting Policies and practices, which are already occurring and will only continue to increase absent judicial intervention, are of such magnitude as to "outrun and belie any legitimate justifications" that may possibly be claimed.
- 382. Defendants' Discounting Policies and practices in carrying out their regulatory programs are neither necessary to achieve a compelling government interest nor is it substantially related to achieving any important government interest.
- 383. Defendants' discriminatory conduct in allowing dangerous levels of climate pollution into the sovereign air space and in discounting the value of Children's lives is not rationally related to any legitimate government interest.
- 384. There is no rational basis for Defendants' Discounting Policies and practices. Because of the enormous cost of climate pollution on Children and the

Nation, there is no rational calculus that supports any decision not to immediately and swiftly control climate pollution to abate the climate crisis. Despite their lack of a rational calculus, Defendants' Discounting Policies and practices give EPA's regulatory programs—to permit climate pollution—an economic facade of rationality.

- 385. There are other non-discriminatory alternatives that if implemented can achieve any purpose Defendants could assert for their Discounting Policies and practices.
- 386. Absent declaratory relief that Defendants' Discounting Policies and practices in their systematic management of the air and climate pollution violate Children's rights of Equal Protection, Plaintiffs will continue to be harmed in worsening ways over the course of their young lives, depriving them of equal protection of the law.
- 387. Plaintiffs are entitled to a declaratory judgment, pursuant to 28 U.S.C. § 2201, and a permanent injunction because there is no plain, adequate, or speedy remedy at law to prevent Defendants from continuing to use their Discounting Policies and practices that discriminate against Children in their systematic management of the air and climate pollution because the harm Plaintiffs will suffer is irreparable. Plaintiffs are also entitled to such further relief as necessary to enforce the judgment.

# COUNT III: EQUAL PROTECTION VIOLATION: BURDEN ON FUNDAMENTAL RIGHTS - RIGHT TO LIFE, PERSONAL SECURITY, BODILY INTEGRITY, DIGNITY, FAMILY AUTONOMY, CULTURAL/SPIRITUAL TRADITIONS, AND LIFE-SUSTAINING CLIMATE SYSTEM

388. Plaintiffs hereby incorporate the above paragraphs by reference as though fully set forth herein.

389. Defendants' systematic control and management of the air and climate pollution, through their Discounting Policies and practices, discriminates against Children, including Plaintiffs, with respect to their fundamental rights to life, personal security, bodily integrity, dignity, family autonomy, the right to learn, practice, and transmit one's cultural and spiritual traditions, and a life-sustaining climate system, in violation of the Fourteenth Amendment's Equal Protection Clause, as incorporated into the Fifth Amendment.

390. The Supreme Court has long recognized unenumerated fundamental rights to personal security, bodily integrity, family autonomy, dignity, the right to free movement, and the right to transmit religion and culture to children, as fundamental rights that both adults and Children hold.

391. Plaintiffs' fundamental right to life means more than not being put to death. The fundamental right to life, as the Framers intended, includes the right of current and future generations of living persons to enjoy this terrestrial existence and pursue happiness in living. The right to life includes vitality (health) and a person's lifespan. At the time of the Nation's founding, "life" was defined as "enjoyment, or possession of terrestrial existence;" "condition; manner of living with respect to happiness;" "continuance of our present state;" and "living person." The Declaration of Independence also specified the "pursuit of happiness" as a self-evident equal right central to human existence.

392. The Nation was founded on a balanced atmosphere and a life-sustaining climate system. Children cannot exercise their equal rights to life without a stable climate system.

393. James Madison, drafter of the Fifth Amendment, said: "Animals, including man, and plants may be regarded as the most important part of the

<sup>&</sup>lt;sup>7</sup> Samuel Johnson Dictionary (1755).

their varieties and their multitudes, visible and invisible. To all of them, the atmosphere is the breath of life. Deprived of it, they all equally perish. But it answers this purpose by virtue of its appropriate constitution and character." Framer Madison explained in 1818 that the balanced composition of the atmosphere and the climate system in its natural state formed the ingredients, "which fits it for its destined purpose, of supporting the life and health of organized beings."

394. A stable climate system that sustains human life is fundamental to ordered liberty and every single one of Plaintiffs' fundamental rights to life, liberty, and property.

395. The beneficiaries of the U.S. Constitution included the founding generation as well as "Posterity," meaning all future generations of Americans, including Children. Our Constitution begins with intergenerational fairness and justice as a basis for forming our "more perfect Union." Our Constitution explicitly foreclosed the English rule that children, or remote generations, should be punished for the actions of their parents or ancestors, in order to preserve opportunity for liberty and happiness for each new generation. Art. III, § 3, cl. 2.

396. Governmental policies and practices that knowingly classify children as worth less than adults or fossil fuel corporations and result in a significant diminishment in a child's health, safety, and wellbeing with a lifetime of

<sup>&</sup>lt;sup>8</sup> James Madison, Address to the Agricultural Society of Albemarle (May 12, 1818).

<sup>&</sup>lt;sup>9</sup> The Fifth and Fourteenth Amendments should be interpreted through the lens of the Posterity Clause in the Preamble of the Constitution, which articulates intergenerational concern: "We the People of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves *and our Posterity*, do ordain and establish this Constitution for the United States of America."

consequences, such as a reduced lifespan and increased exposure to risk of death, burdens the right to life and infringes the Equal Protection Clause, unless it is necessary to achieve a compelling governmental interest.

- 397. Defendants' Discounting Policies and practices have already deprived Plaintiffs of essential aspects of life, including their bodily integrity and health, their opportunity to pursue happiness, and risks depriving them of their full lifespan and a livable future.
- 398. Defendants' Discounting Policies and practices have already deprived Plaintiffs of the liberty to be safely outside and safely inside, and the very sanctity of their homes.
- 399. Defendants' systematic control over and management of sources of climate pollution through their Discounting Policies and practices are actively discriminating against Plaintiffs' fundamental rights, enumerated and unenumerated. The longer the Discounting Policies and practices remain, the more Plaintiffs' rights will be diminished.
- 400. Defendants' Discounting Policies and practices have already deprived Plaintiffs of essential aspects of their fundamental rights to a life-sustaining climate system, and their continuation risks depriving Plaintiffs of the opportunity to repair the destabilized climate system that is causing irreversible harm to them and their home planet.
- 401. Any compelling government interest that could possibly be asserted for Defendants' Discounting Policies and practices that have led to EPA systemically allowing dangerous amounts of climate pollution from sources under its authority to control is wholly unnecessary. A secure, jobs-producing, thriving national energy system can be powered with non-fossil fuel energy at low costs that are more stable than the costs of a fossil fuel-based energy system. Falsely discounting the actual climate costs to Children and valuing Children less than others serves no compelling

government interest. There is no necessary and compelling government interest in allowing Defendants' Discounting Policies and practices, which endanger the Earth's life support systems and Children's right to life.

- 402. There are other less discriminatory alternatives that if implemented can achieve any purpose Defendants could assert for their Discounting Policies and practices.
- 403. Plaintiffs are entitled to a declaratory judgment, pursuant to 28 U.S.C. § 2201, and a permanent injunction because there is no plain, adequate, or speedy remedy at law to prevent Defendants from continuing to use their Discounting Policies and practices that discriminate against Children in their systematic management of the air and climate pollution because the harm Plaintiffs will suffer is irreparable. Plaintiffs are also entitled to such further relief as necessary to enforce the judgment.

### **COUNT IV: VIOLATION OF ARTICLE II TAKE CARE CLAUSE and SEPARATION OF POWER**

- 404. Plaintiffs hereby incorporate the above paragraphs by reference as though fully set forth herein.
- 405. The President has a constitutional duty to "take care that the laws be faithfully executed." U.S. Const., art. II, § 3. The Take Care Clause is violated where executive action undermines statutes enacted by Congress and signed into law.
- 406. The United States has asserted sovereignty of, and exercised dominion and control over, the air above the Nation's territory. The United States has also exercised dominion and control over the pollution that enters the Nation's air space. The Supreme Court has long affirmed that except for the immediate airshed above private property, air is in the public domain. *United States v. Causby*, 328 U.S. 256, 266 (1946).

- 407. In 1970, President Nixon proposed to Congress a consolidation of authority over pollution into one federal agency—EPA. Nixon's proposal found that "for pollution control purposes the environment must be perceived as a single, interrelated system" to coordinate an "attack on the pollutants which debase the air we breathe, the water we drink, and the land that grows our food," and "Because environmental protection cuts across so many jurisdictions, and because arresting environmental deterioration is of great importance to the quality of life in our country and the world, I believe that in this case a strong, independent agency is needed."
- 408. Pursuant to Article I, Congress enacted laws consolidating and delegating federal authority to EPA to manage the protection of the Nation's air and prevent pollution that endangers human health and welfare from entering or accumulating in the air. In delegating authority to EPA, Congress understood that setting national air quality standards to protect public health from hazardous pollution agents would require major action throughout the Nation.
- 409. Pursuant to Article II, OMB and EPA are agencies of the Executive branch with authority delegated from Congress. As such, they are required to take care to faithfully execute the law's explicit language and effectuate Congress' intent to protect the sovereign air from pollution that endangers human health and welfare.
- 410. The U.S. Supreme Court ruled that any "federal common-law claim for curtailment of greenhouse gas emissions . . . . would be displaced by the federal legislation authorizing EPA to regulate carbon-dioxide emissions"; "Congress designated an expert agency, here, EPA, as best suited to serve as primary regulator of greenhouse gas emissions." *American Electric Power Co. v. Connecticut*, 564 U.S. 410, 423, 428 (2011). Because other remedies at law have been curtailed, EPA's faithful execution of the law is vital.
- 411. EPA must conduct its programs to protect the quality of the air and water for the benefit of human health and welfare, including for present and future

generations, pursuant to the authorities under which EPA operates. EPA can only exercise its authority within the power granted to it by the Clean Air Act or other statutory authority.

- 412. "Agencies have only those powers given to them by Congress," and Congress does not "typically use oblique or elliptical language to empower an agency to make a 'radical or fundamental change' to a statutory scheme." *West Virginia v. EPA*, 142 S. Ct. 2587, 2609 (2022). "The agency . . . must point to 'clear congressional authorization' for the power it claims." *Id*.
- 413. Congress did not delegate to EPA authority or power to discount the lives of Children, or to execute the law in a manner that would degrade the Nation's air, harm Children's health, endanger Children's welfare, or treat Children or future generations of Children differently from adults. Congress could not have intended to delegate such sweeping authority as EPA has assumed to allow for the significant degradation of air quality and thus, the endangerment of the Nation's climate system, and harm to Children's lives. By exercising control of the air and systemically managing climate pollution through Defendants' Discounting Policies and practices in a manner that endangers human health and welfare, EPA has acted far in excess of the legal authority granted it by Congress.
- 414. Defendants' Discounting Policies make a "radical or fundamental change" to the statutory scheme, for which Defendants have no congressional authorization for this discriminatory power they claim.
- 415. Even if Congress wanted to bestow authority to EPA to allow life-threatening levels of climate pollution and harm Children, including Plaintiffs, Congress has not delegated and cannot delegate to EPA the power to infringe any fundamental right to life or liberty or equal protection of the law. EPA must point to "clear congressional authorization" for the power it claims to adopt the Discounting Policies and practices, which allow unhealthy levels of climate pollution for

Children. Defendants' Discounting Policies and practices are highly consequential and beyond what authority Congress could reasonably be understood to have granted to EPA.

- 416. The Clean Air Act does not expressly, nor implicitly, authorize EPA to systematically allow amounts of climate pollution, through Discounting Policies and practices, that destabilize the climate system, endangering Children's health and welfare, including the health and welfare of Plaintiffs. Congress cannot delegate authority that it does not possess, including engaging in unconstitutional conduct, and has made no clear statement that it intended such delegation in the Clean Air Act or any other statute delegating authority to EPA.
- 417. Whether to discriminate against Children through Defendants' Discounting Policies and practices and damage the Nation's climate system and permit dangerous levels of CO<sub>2</sub> and other climate pollution is certainly a question with vast economic and political significance, which would have to be expressly stated in any legislation passed by Congress. Congress' constitutional mandate is to enact laws that preserve the perpetuity of the Nation based on the sovereignty of the People, including future generations of Children who will one day exercise the political franchise and their own sovereign power.
- 418. As a result of EPA's Discounting policies and practices that exceed its delegated authority, Plaintiffs are being injured with no other remedy at law.
- 419. EPA's Discounting policies and practices that exceeds its authority as delegated by Congress under Article I, and does not faithfully execute the law under Article II, thus violates the Take Care Clause.
- 420. As a result of EPA's Discounting policies and practices that exceeds its authority as delegated by Congress under Article I, and does not faithfully execute the law under Article II, Plaintiffs are entitled to declaratory relief and further relief to enforce the judgment.

- 421. Plaintiffs are irreparably harmed by Defendants' violation of the Take Care Clause insofar as Defendants' Discounting Policies and practices exceeds their authority as delegated by Congress under Article I, and does not faithfully execute the law under Article II, discriminates against Children, causes damage to the Nation's climate system and permits dangerous levels of CO<sub>2</sub> and other climate pollution, as alleged above, rather than safeguard the health and well-being of Children, including Plaintiffs.
- 422. This Court is authorized to enjoin any action by EPA that "is unauthorized by statute, exceeds the scope of constitutional authority, or is pursuant to unconstitutional enactment." *Youngstown Sheet & Tube Co. v. Sawyer*, 103 F.Supp. 569 (D.D.C. 1952), *aff'd*, 343 U.S. 579 (1952).
- 423. Plaintiffs are entitled to a declaratory judgment, pursuant to 28 U.S.C. § 2201, and a permanent injunction because there is no plain, adequate, or speedy remedy at law to prevent Defendants from continuing to use their Discounting Policies and practices that discriminate against Children in their systematic management of the air and climate pollution because the harm Plaintiffs will suffer is irreparable. Plaintiffs are also entitled to such further relief as necessary to enforce the judgment.

**PRAYER FOR RELIEF** 

WHEREFORE, Plaintiffs, and each of them, pray for relief as set forth below:

- 1. For a declaration that Defendants' Discounting Policies explicitly discriminate against Children, including these Plaintiffs, and violate the Equal Protection Clause, as incorporated into the Fifth Amendment of the U.S. Constitution through the Fourteenth Amendment, and the Due Process Clause.
- 2. For a declaration that Defendants' Discounting Policies and practices, in controlling the climate pollution that enters the Nation's air, discriminate against Children, including these Plaintiffs, and violate the Equal Protection Clause, as incorporated into the Fifth Amendment of the U.S. Constitution through the Fourteenth Amendment, and the Due Process Clause.
- 3. For a declaration that Defendants' Discounting Policies and practices in controlling the climate pollution that enters the Nation's air, discriminate against Children and Plaintiffs with respect to their fundamental rights.
- 4. For a declaration that the fundamental right to a life-sustaining climate system is encompassed within the Fifth Amendment substantive due process fundamental right to life and is also inseparable from fundamental rights to liberty and property.
- 5. For a declaration that EPA has exceeded its delegated authority by its Discounting Policies and practices that allow unsafe levels of climate pollution that endanger Children, including Plaintiffs, to enter and accumulate in the Nation's air, in violation of the Take Care Clause.
- 6. For a permanent injunction preventing EPA from using the Discriminatory Policies and practices in its regulatory programs.

- 7. For a permanent injunction preventing EPA from using a discount rate higher than zero in its Regulatory Impact Analyses and benefit-cost analyses to quantify the future social, economic, health, or environmental benefits of reducing climate pollution, or the future social, economic, health, or environmental costs of emitting climate pollution.
- 8. For a permanent injunction requiring Defendants to conduct their Regulatory Impact Analyses, benefit-cost analyses, and regulatory programs in a manner that does not discriminate against Children.
- 9. Pursuant to 28 U.S.C. § 2202 and this Court's Article III authority, grant such other and further relief as the Court deems just and proper to redress the constitutional violations so declared and adjudged.
- 10. Award Plaintiffs their costs and reasonable attorneys' fees in this action.

Respectfully submitted this 20th day of May, 2024,

#### s/ Julia A. Olson

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	FIRST AMENDED COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF	