

Written Testimony before the U.S. House of Representatives,
House Committee on Foreign Affairs and House Select Committee on the Climate Crisis
Hearing Entitled
“Voices Leading the Next Generation on the Global Climate Crisis”
Vic Barrett, Fellow, Alliance for Climate Education and
Youth Plaintiff, *Juliana v. United States*
September 18, 2019

Chairman Keating, Ranking Member Kinzinger, Chairwoman Castor, Ranking Member Graves, Members of the House Committee on Foreign Affairs Subcommittee on Europe, Eurasia, Energy, and the Environment, and the House Select Committee on the Climate Crisis - thank you for inviting me to provide testimony. My name is Vic Barrett, I am 20-years-old and one of the 21 youth plaintiffs in the *Juliana v. United States* constitutional lawsuit, suing the executive branch of the federal government for knowingly causing climate change.

I am a first-generation Garifuna-American. My people are an afro-indigenous community originally from the island of St. Vincent in the Caribbean. In the 18th and 19th centuries, we were pushed from our homeland on St. Vincent by British colonial power, settling on the eastern coast of Central America in Honduras and Belize. Despite overwhelming adversity, we organized our community and emancipated ourselves to protect our future as a people.

However, the struggle continues for me and my people. As temperatures increase, sea levels rise, storms become more intense and frequent, and the coral reefs and fisheries upon which we depend disappear, our future is uncertain. Once again, we are being pushed from the lands we call home. The ocean-front land that my family has inhabited for generations and that I am supposed to inherit, will be underwater if the U.S. federal government continues to promote a fossil fuel-based energy system.

It is not just me and my people in Honduras being harmed by climate change. Frontline communities around the country and around the world are already feeling the effects of the climate crisis - from the dispossession of land to the grave public health threats that are disproportionately affecting myself and other young people.

These frontline communities are made up of people who look like me: young, black and brown, LGBTQ, indigenous... identities which place them at a significantly higher risk to experience the impacts of climate change than the general populace due to their marginalized status in our society.

I myself have felt the consequences of climate change directly. Growing up in New York, I was impacted by the climate change-fueled Hurricane Sandy, which left my family and my school without power for days. I still experience grave anxiety about experiencing another climate-driven disaster like Superstorm Sandy, and the harm that these storms will have on myself and my family.

As someone who already struggles with anxiety and depression from my understanding of climate change and what I experience, watching our government knowingly perpetuate the climate crisis is often overwhelming. I wrestle with this anxiety every day, from the moment that I wake up in the morning to the moment I fall asleep at night: If we keep going on with business as usual, both Honduras and New York, the places where my family and I are from, will forever be lost to the sea. That is one of my greatest fears: that climate change is going to take these places away from us.

My co-plaintiffs also experience both the mental and physical health impacts of climate change. For example, my co-plaintiff Jayden became very ill when her home in Rayne, Louisiana was flooded and she was exposed to mold and water contaminated with raw sewage and toxic chemicals. My co-plaintiffs with asthma and allergies have suffered from the prolonged wildfire and allergy seasons in the West, limiting their ability to participate in certain activities or even go outside. Many of them, like me, are also struggling with psychological harms from climate change.

The medical community now recognizes climate change as a grave public health threat. One of our experts, the esteemed Dr. Jerome A. Paulson, describes climate change as a public health emergency, which is disproportionately impacting children and youth in a myriad of ways. He goes on to list specific health risks exacerbated by climate change, including but not limited to: heat stress, extreme weather events, wildfires, decreased air quality, and infectious disease; all of which pose a disproportionate threat to children and youth.

Another one of our experts, Dr. Lise Van Susteren, a psychiatrist known nationally for her work on climate change, explains that *quote* “with continued government actions that exacerbate the climate crisis, the Plaintiffs, and those they represent, will suffer catastrophic emotional injuries.” She goes on to state that the federal government’s *quote* “sanctioning of climate change as lawful in federal law and policy makes the psychological injuries suffered by individuals, including the Plaintiffs, particularly harmful and insidious.” She warns that without immediate action by the federal government to address climate change the mental health impacts will worsen and be life-long.

The ways in which climate change disproportionately impacts youth was also detailed in an amicus brief filed by the Harvard Law School Environmental Law and Policy Clinic in support of my case with the Court of Appeals. Fourteen of the nation’s top medical organizations signed onto the brief, including the American Heart Association, the American Lung Association, and the American Academy of Pediatrics, along with over 70 preeminent experts in pediatrics, psychiatry, and public health.

Just as my federal government sanctioned discrimination in schools and housing until the middle of the last century, a policy that harmed children, my federal government has also orchestrated and sanctioned a system of fossil fuel energy that is harming children in another way, irreversibly threatening our health, our personal security, our homes and our communities by creating a dangerous climate system.

Like youth who have come before us in the civil rights movement and other social justice movements, it is often the youth that must shine a light on systems of injustice.

So.... In 2015, 21 young people, myself included, filed a lawsuit against the United States and agencies of the executive branch, to safeguard our constitutional right to life, liberty and property, including our rights to personal security, bodily integrity and a stable climate system that sustains our lives and liberties.

Because climate change is a systemic issue, it will require systemic change and all three branches of government to fix it. The burdens of the system's problems cannot be placed on the shoulders of an individual, especially not a young person like myself and my co-plaintiffs. To combat the system-wide government actions that have led to the climate crisis, we need system-wide reform at a governmental level to address this emergency before it's too late.



The Juliana Plaintiffs

Our case, Juliana v. United States

I, along with 20 other youth plaintiffs, Dr. James Hansen as guardian for future generations, and a youth-led organization called Earth Guardians, filed the landmark *Juliana v. United States* lawsuit in August 2015. Since the time our case was filed, when President Obama was in the White House, the federal defendants¹ have done everything in their power to stop *Juliana* from going to trial. They have made unprecedented and drastic efforts to have it thrown out before we get our day in court. Nonetheless, we have won every step of the way. In November 2016, we received a historic opinion from U.S. District Court Judge Ann Aiken, who aptly began her decision by referring to *Juliana* as “no ordinary lawsuit.”²

Judge Aiken’s opinion stated that:

Exercising my ‘reasoned judgment,’ . . . I have no doubt that the right to a climate system capable of sustaining human life is fundamental to a free and ordered society. Just as marriage is the ‘foundation of the family,’ a stable climate system is quite literally the foundation ‘of society, without which there would be neither civilization nor progress.’³

As part of her decision, the district court properly found the right “to a climate system capable of sustaining human life” is both fundamental to ordered liberty and deeply rooted in our Nation’s history and traditions. The district court also found we should have an opportunity to present evidence to show that my federal government has knowingly violated this fundamental right.⁴ In response, the Executive Branch defendants say that: “Plaintiffs’ purported right to a ‘climate system capable of sustaining human life’ has no basis whatsoever in this Nation’s history or tradition and is therefore not a fundamental right.”⁵ My government leaders are denying that the very foundation of life on Earth, our climate system, is one of my unalienable rights as a human living in this Nation. They say it is not one of the rights that I was endowed with when I was born. They say that my government can deprive me and all human civilization of the climate foundation of life, and discriminate against me, other children and all future generations in favor

¹ The United States Of America; The Office Of The President Of The United States; Council On Environmental Quality; Office Of Management And Budget; Office Of Science And Technology Policy; The United States Department Of Energy; The United States Department Of The Interior; The United States Department Of Transportation; The United States Department Of Agriculture; The United States Department Of Commerce; The United States Department Of Defense; The United States Department Of State; The United States Environmental Protection Agency

² *Juliana v. United States*, 217 F. Supp. 3d 124 (D. Or. 2016) (Exhibit S).

³ Exhibit S.

⁴ See also District Court order granting in part and denying in part Defendants Motion for Summary Judgment and Motion for Judgment on the Pleadings (Exhibit T).

⁵ Defendants’ Reply Brief on Interlocutory Appeal (Exhibit EE).

of supporting a fossil fuel-based economy and the narrow interests fossil fuels support, over policies that power clean energy and don't threaten my life and my security.

Our lawsuit makes a number of other claims, including that the United States government has a fiduciary responsibility to protect our public trust resources, such as the air, fresh water, the sea and the shores of the sea, not just for my generation, but for future generations as well. My co-plaintiffs and I are beneficiaries of rights under the public trust doctrine, unalienable rights that are secured by the substantive due process clause of the Fifth Amendment and the Posterity Clause of the Constitution. Defendants have failed in their duty of care to safeguard the interests of my generation as the present and future beneficiaries of the public trust.

We have a tremendous amount of evidence, mostly from government documents, showing that the U.S. government has knowingly endangered our health and welfare by creating and promoting a national fossil fuel-based energy system, through controlling (1) Energy planning and policies; (2) fossil fuel extraction and production; (3) subsidies, financial and R&D support; (4) imports and exports; (5) interstate fossil fuel infrastructure and transport; (6) power plants and refineries; (7) energy standards for appliances, equipment, and buildings; (8) road, rail, freight, and air transportation; (9) government operations.⁶ All of these deliberate orchestrated actions by the United States have cumulatively resulted in dangerous levels of atmospheric CO₂, which deprive us of our fundamental rights to life, liberty, and property. Importantly, the Defendants have admitted many of the allegations in our complaint, including that greenhouse gases “pose risks to human health and welfare” and “threaten the public health and welfare of current and future generations;” that the U.S. has emitted 25 percent of cumulative global CO₂ emissions from 1850 to 2012; and current CO₂ concentrations are “unprecedented for at least 2.6 million years.”⁷

While the Defendants have been unsuccessful at stopping our case, they have certainly delayed it, and time is not on our side. Just weeks before we were set to begin what would have been, and certainly will be, the most important trial of the century for my generation, the Supreme Court issued a temporary stay of our trial in order to consider whether to stay our case and review it before a final decision.⁸ While the Supreme Court ultimately denied the defendants' request and lifted the stay, the case has bounced up and down between the U.S. Supreme Court, the Ninth Circuit Court of Appeals and the District Court, while fossil fuels continue to be extracted and

⁶ Expert Report of James Gustave (“Gus”) Speth (Exhibit U); Declaration of Peter A. Erickson (Exhibit E).

⁷ Defendants Answer ¶¶ 5, 151, 208-09; 213 (Exhibit FF); Exhibit R.

⁸ *In re United States*, 139 S. Ct. 16, *vacated*, 139 S. Ct. 452 (2018).

burned.⁹ As our planet drifts ever-closer to the point of no return, we knew we had to do something.

Our request for a Preliminary Injunction during the Delay on Appeal

In February, we filed a motion to the Ninth Circuit Court of Appeals seeking an injunction to stop the actions by the U.S. government that are continuing to put me and other young people in danger by worsening climate change. Specifically, we asked:

This Court should preliminarily enjoin, for the pendency of this interlocutory appeal, Defendants from authorizing through leases, permits, or other federal approvals: (1) mining or extraction of coal on Federal Public Lands; (2) offshore oil and gas exploration, development, or extraction on the Outer Continental Shelf; and (3) development of new fossil fuel infrastructure, in the absence of a national plan that ensures the above-denoted authorizations are consistent with preventing further danger to these young Plaintiffs.¹⁰

This injunction is urgently needed because, despite long-standing knowledge of the resulting destruction to our Nation and the profound harm to myself and my co-plaintiffs, the federal government's ongoing development of the fossil fuel-based energy system is actively harming us and making it more difficult for us to ever solve this crisis. While a complete halt on these actions may seem like a radical request to some of you, scientists tell us that nothing short of stopping these kinds of additional fossil fuel development can avert the worst effects of climate change, and prevent us from entering a period of irreversible baked-in, or runaway, heating. I wish incremental actions were enough, but the government's long-standing actions perpetuating a fossil fuel energy system have put us in this situation. But here's the upshot, our top experts say that neither the injunction we seek, nor our ultimate remedy in the case will hurt the economy. In fact, they say that it will *help* the economy and create new jobs, and is our only real shot at preventing our economy from tanking from the increasing costs of climate disasters, the enormous economic threats that climate change poses, and the lost opportunity to lead the market transition away from fossil fuels that other nations are outpacing us on.¹¹

Please listen to the experts; The harm is real and is happening to us now

⁹ For the briefing before the Ninth Circuit Court of Appeals on the government's interlocutory appeal see Exhibit P (Defendants' Opening Brief); Exhibit Q (Plaintiffs' Answer Brief); Exhibit EE (Defendants' Reply Brief); *see also* Exhibit O (*Amicus* brief submitted by 80 law professors in support of Plaintiffs)

¹⁰ Exhibit A.

¹¹ Declaration of Joseph E. Stiglitz (Exhibit I).

In *Juliana v. United States*, my co-plaintiffs and I are very fortunate to be supported by some of the world's top climate change science and solution experts. I've included some of their written expert testimony as attachments to my testimony and I encourage you to read them.

According to Dr. Jerome Paulson, Professor Emeritus at George Washington University who submitted a declaration in support of our preliminary injunction filing: "Each month that passes by without action by the federal government to reduce fossil fuel extraction and GHG emissions exacerbates this already grave public health emergency facing our nation's most vulnerable population — our children."¹²

Nobel Prize-winning economist Joseph Stiglitz testified: "There is no urgency to promote more fossil fuels. There is no urgency for energy supply. There is no urgency for employment or economic growth. There is, however, real urgency to stop the climate crisis and the already-dangerous status quo from worsening, and to protect these young people's constitutional rights. There are very real and substantial societal costs and risks of moving forward with these fossil fuel enterprises while this lawsuit is pending."¹³

Dr. Steve Running, Professor Emeritus at the University of Montana and Nobel prize winner testified: "The Federal Government has for many years had knowledge, information, and scientific recommendations that it needed to transition the Nation off of fossil fuels in order to first prevent against, and now try to stop, catastrophic climate change. We are well beyond the maxim: 'If you find yourself in a hole, quit digging.'"¹⁴

Dr. Ove Hoegh-Guldberg, Professor of Marine Studies and the Director of the Global Change Institute at The University of Queensland stated in his declaration: "Th[e] absolute amount of excess heat absorbed by our oceans is tremendous: the equivalent of energy from approximately 1.5 Hiroshima-sized atomic bombs per second over the past 150 years, at-present the equivalent of approximately 3-6 Hiroshima-sized bombs every second" (see Figure 1).¹⁵

¹² Exhibit D, p. 7.

¹³ Exhibit I, p. 15.

¹⁴ Exhibit G, p. 26.

¹⁵ Exhibit F, p. 4.

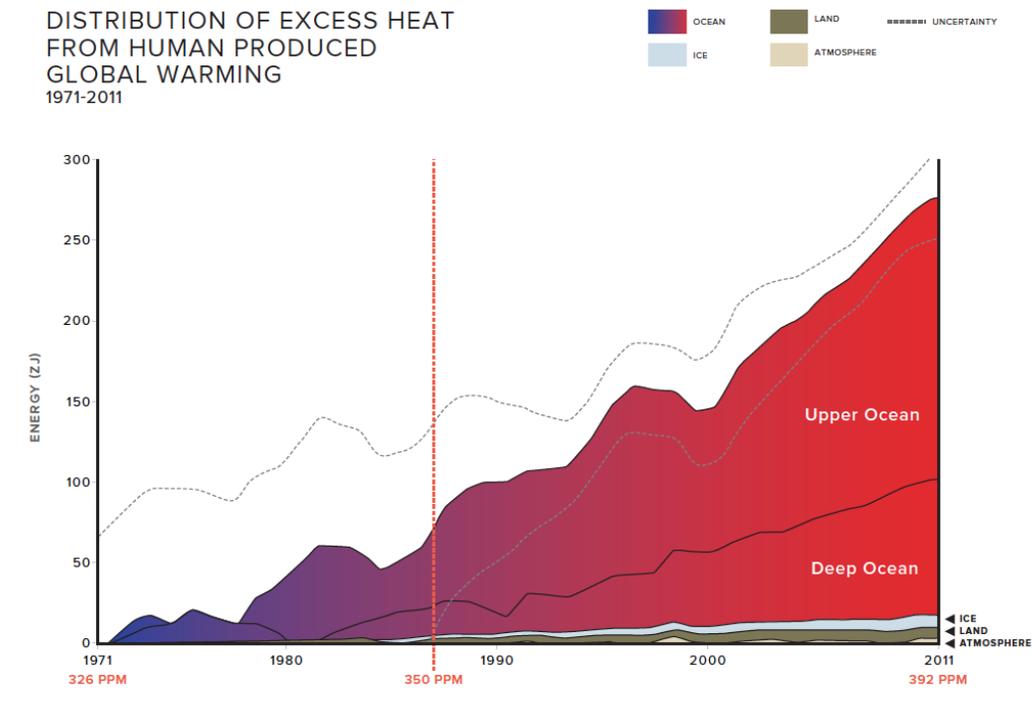


Figure 1: Distribution of global-warming energy accumulation (heat) relative to 1971 and from 1971 to 2011. Half of the human-produced global warming heat has entered the ocean since 1997.¹⁶

Over the past few months, we have heard stories on the news of entire towns in the midwest wiped off of the map by massive flooding events triggered by a historic ‘bomb cyclone.’ Hurricane Florence, which hit North Carolina last fall and brought historic flooding, Hurricane Michael, which flattened the community of Mexico Beach, Florida in 2018, and Hurricane Maria that decimated Puerto Rico in 2017, have become our new normal. Most recently, Hurricane Dorian devastated the Bahamas and caused significant damage in the Southeastern United States. These storms will only get worse unless we take urgent action.¹⁷

My fellow plaintiff Jayden experienced one of these climate change-driven super storms first hand in 2016, when she woke up to find feet of standing water in her bedroom. Her house in Rayne, Louisiana had been flooded in a ‘thousand-year storm’, yet these storms seem to be coming year after year. Her family is still making repairs on their home after three years.¹⁸

¹⁶ Chart is a modified version of a chart found in Nuccitelli, D. et al., *Comment on Ocean heat content and Earth's radiation imbalance. II. Relation to climate shifts*, Physics Letters A, Vol. 376, Issue 14 (2012).

¹⁷ Declaration of Kevin E. Trenberth (Exhibit B).

¹⁸ Exhibit W.

Wildfire

It's not just storms that we have to worry about. For my co-plaintiffs living in the Western states, including Oregon and Washington, they are suffering from a wildfire season extended by two and a half months that is shrouding their communities with smoke for months on end, causing innumerable respiratory health issues, and taxing emergency response funds (see Figure 2). It is not just rural communities that are experiencing this smoke, it is urban areas as well. My co-plaintiff Aji has experienced air quality warnings advising him to stay inside and has had school and youth sports activities canceled so he was harmed by breathing the air. Aji has described how scary it is to see people walking down the street in gas masks in August in Seattle, where he lives, which used to be the most beautiful time to be outside in the Pacific Northwest.¹⁹



Figure 2: Wildfire smoke shrouds Seattle where my co-plaintiff Aji lives.²⁰

Sea Level Rise

If we don't make serious change now, in just a few decades some the largest cities in the United States will first become uninhabitable and then be entirely submerged, as well a vast majority of the state of Florida. My fellow plaintiff, Levi, will watch his family home and the entire island that he grew up on go underwater with just a few feet of sea level rise, which could hit by mid-century. He will become a climate refugee long before then (see Figures 3 and 4).²¹

¹⁹ Declaration of Steven W. Running (Exhibit G); Declaration of Aji. P (Exhibit X).

²⁰ Agueda Pacheco-Flores, *Puget Sound air-quality warnings: Beware of smoke from British Columbia fires*, The Seattle Times (Aug. 13, 2018); available at: <https://www.seattletimes.com/seattle-news/british-columbia-wildfire-smoke-is-impacting-air-quality-warnings-issued-for-vulnerable-groups/>.

²¹ Declaration of Levi D. (Exhibit Y); Declaration of Dr. James Hansen (Exhibit L); *see also* Hansen, J., et al., (2016). *Ice melt, sea level rise and superstorms: Evidence from paleoclimate*

U.S. Government Global Sea Level Rise Projections

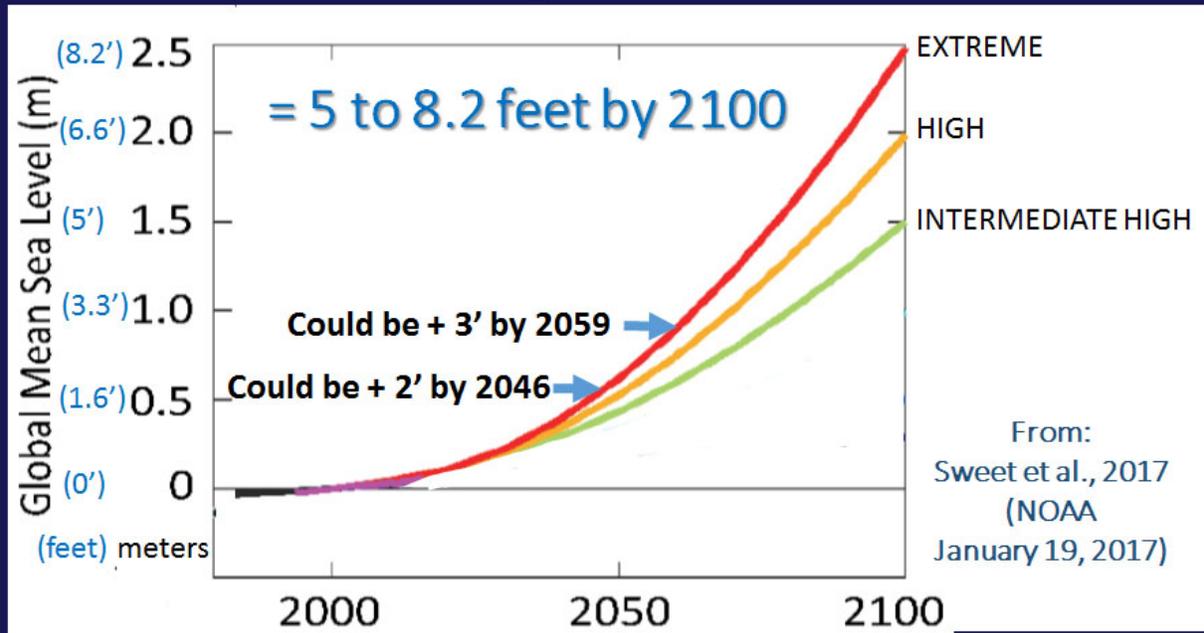


Figure 3: U.S. government sea level rise projections through 2100.²²

data, climate modeling, and modern observations that 2°C global warming could be dangerous. Atmos. Chem. Phys., 16, 3761-3812, doi:10.5194/acp-16-3761-2016.

²² Exhibit Z.

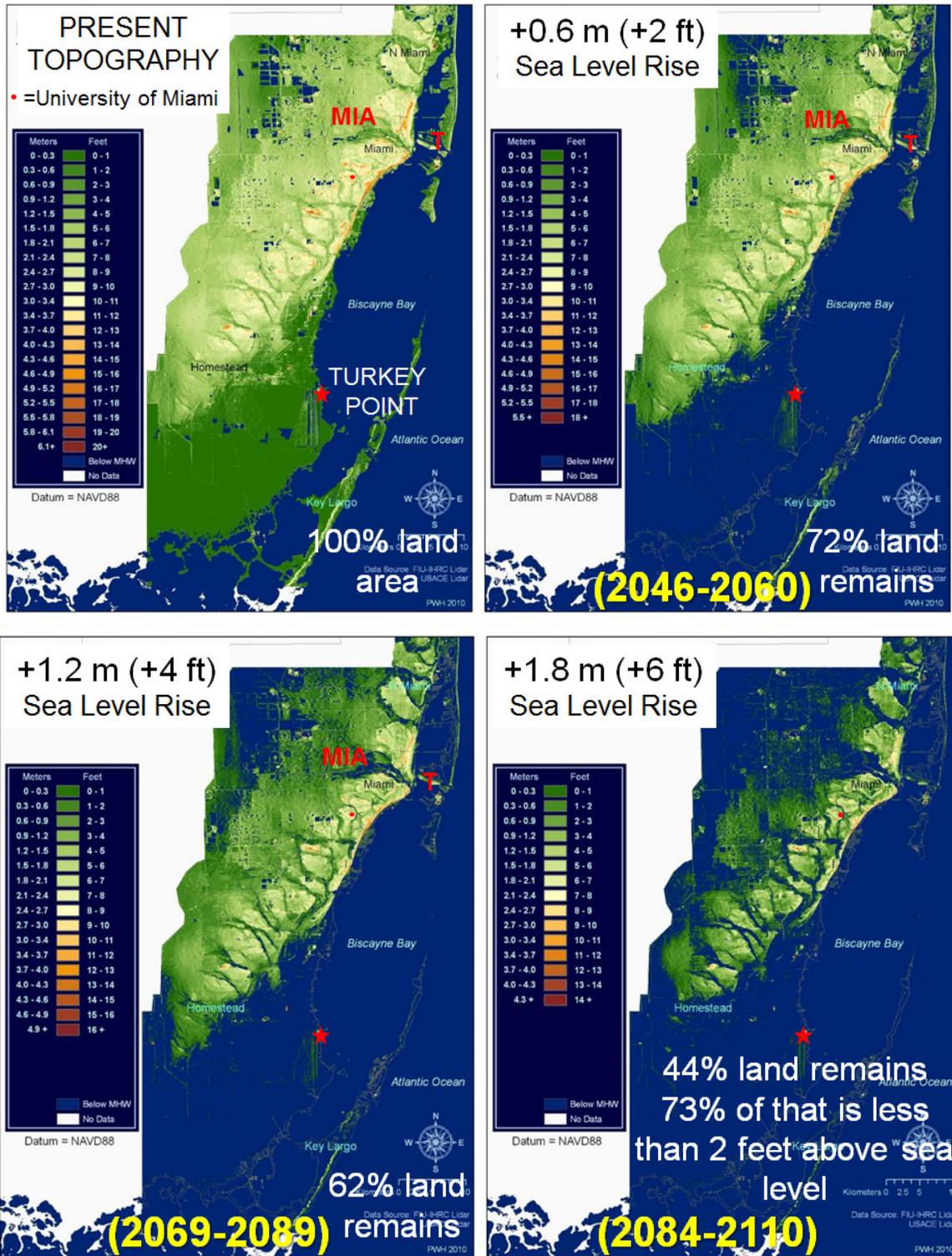


Figure 4: Sea level rise projections for southern Florida.²³

²³ Exhibit Z.

The economic impacts of sea level rise to our country will be astronomical. Just 25 years from now, coastal properties in the U.S. worth some [\\$136 billion](#) will be at risk of chronic flooding. By the end of the century, that rises to [\\$1 trillion](#) in properties at risk of chronic flooding - not to mention the billions of dollars that would be lost in other sectors.²⁴

National Security Threat

Many people in communities throughout the United States, including some along the Washington coast, are already being forced from their homes because of flooding and sea level rise. All of these people, and many more, will be displaced permanently if we do not act now. This displacement would in turn lead to massive geo-political destabilization. An expert declaration provided by retired Vice Admiral and Former Inspector General of the United States Department of the Navy, Lee Gunn, states:

Climate change is the most serious national security threat facing our Nation today. Climate change contributes to increased extreme weather events, rapidly changing coastlines, and conflicts over basic resources like food and water, which lead to humanitarian crises with increased migration and refugee flows. Climate change is a “threat multiplier” and “catalyst for conflict” and directly threatens our military and the “Department of Defense’s ability to defend the Nation.” Climate change poses unprecedented risks to our Nation’s economic prosperity, public health and safety, and international stability.

Vice Admiral Gunn goes on:

The great danger for young people, is that they are being handed a situation that is out of their control, a situation made more egregious due to the fact that the Defendants have a complete understanding of precisely how dangerous the situation is that they are handing down to these Plaintiffs.²⁵

Public Health

The medical community across the country is sounding alarm bells about the public health emergency that climate change is causing. As an *amicus brief* filed in support of my case in the Ninth Circuit, on behalf of 78 doctors and medical professional and 14 medical organizations,²⁶ stated:

²⁴ Union of Concerned Scientists, *Underwater: Rising Seas, Chronic Floods, and the Implication for US Coastal Real Estate* (2018), available at: <https://www.ucsusa.org/global-warming/global-warming-impacts/sea-level-rise-chronic-floods-and-us-coastal-real-estate-implications>.

²⁵ Exhibit K.

²⁶ The organization are: American Academy of Allergy, Asthma and Immunology; American Academy of Pediatrics; American Association of Community Psychiatrists; American Heart

The medical community widely considers the health effects of human-induced climate change, GHG emissions, and the other air pollutants that are emitted when fossil fuels are combusted to be significant public health threats, representing an unacceptably high level of risk for the current and future health of the U.S. population.²⁷

The Targets You Set Will Matter

What is clear now is that climate change is already dangerously affecting people within the United States with 1 degree of warming. It is not just scientists who have come to that conclusion. My co-plaintiffs and I, along with other communities and individuals that are experiencing the devastating impacts I have just described, understand the perils of living in this climate system. The situation is only going to get worse if the planet becomes 1.5°C warmer than pre-industrial levels. This is the temperature target that is called for by the Paris Climate Accord. It is the target called for in the Green New Deal, and by the countless cities, states, and climate advocacy groups around the country that have endorsed it. To be clear, 1.5°C of warming, or approximately 425 parts per million (ppm) of carbon dioxide in the atmosphere, is genocide, and a death sentence for human civilization as we know it. Even the 2018 IPCC report on the impacts of 1.5°C concluded that allowing the globe to warm to 1.5°C will involve devastating impacts. Chapter 5 of the report states plainly that 1.5°C is not safe:

Warming of 1.5°C is not considered ‘safe’ for most nations, communities, ecosystems, and sectors and poses significant risks to natural and human systems as compared to current warming of 1°C (*high confidence*) (see Chapter 3, Section 3.4, Box 3.4, Box 3.5, Cross-Chapter Box 6 in Chapter 3).

This body should never endorse a target that destroys Levi’s island and much of Florida, will inundate New York City, where I grew up, damages the lungs of children in the West, decimates the rich croplands of the midwest, or floods homes across the country from fossil fuel-fed unprecedented storms.

The now-pervasive 1.5°C target first appeared in the lead up to the 2009 UNFCCC Conference of Parties in Copenhagen, Denmark (COP 15), as a result of the advocacy of the Alliance of Small Island States (AOSIS). At a time where international political negotiations still revolved around 2°C, AOSIS advocated for “*well below 1.5°C*,” and relied on the work of Dr. James Hansen, one of our experts, and his colleagues’ research arguing that a 350 ppm CO₂ target was

Association; American Lung Association; American Pediatric Society; American Thoracic Society; Infectious Diseases Society of America; International Society for Children’s Health and the Environment; Medical Society Consortium on Climate and Health; National Association of County and City Health Officials; National Environmental Health Association; National Medical Association; and Society for Academic Emergency Medicine.

²⁷ Exhibit N, p. 8.

necessary to preserve a habitable climate.²⁸ In later research, Hansen and his colleagues determined that 350 ppm would only lead to 1°C of long-term warming, which was an important target to aim for by 2100.²⁹ Yet as time went on and contentious climate negotiations ran their course, the “well below” portion of AOSIS’s “well below 1.5°C” position was lost, and the world’s governments settled on 1.5°C as a compromise goal. But they did so without any scientific support for the notion that we would be safe with 1.5 degrees of warming.

We have to ask ourselves: Are we willing to ‘compromise’ on our safety and our future?

In the long term, 1.5°C warming means melting most of the ice sheets on the planet and more than 70 feet of sea level rise (see Figure 5).³⁰ The reason we know this is because this is what sea levels were the last time carbon dioxide levels were as high as they are today. According to a study by McGranahan et. al., over 600 million people live within 30 feet above sea level.³¹ The Fourth National Climate Assessment, using modest estimates of sea level rise, found that “[s]ea level rise might reshape the U.S. population distribution, with 13.1 million people potentially at risk of needing to migrate due to a SLR of 6 feet (about 2 feet less than the Extreme scenario) by the year 2100.”³²

²⁸ Hansen, J., et al., (2008). *Target atmospheric CO₂: Where should humanity aim?* Open Atmos. Sci. J., 2, 217-231, doi:10.2174/1874282300802010217.

²⁹ Hansen, J., et al., (2013). *Assessing “dangerous climate change”: Required reduction of carbon emissions to protect young people, future generations and nature.* PLOS ONE, 8, e81648, doi:10.1371/journal.pone.0081648.

³⁰ Expert Report of Dr. Harold R. Wanless, p. 6-7 (Exhibit Z); Declaration of Eric Rignot (Exhibit H).

³¹ McGranahan, G., Balk, D., & Anderson, B. (2007). *The rising tide: assessing the risks of climate change and human settlements in low elevation coastal zones.* Environment and urbanization, 19(1), 17-37.7

³² U.S. Global Change Research Program, “Ch. 8 Coastal Effects”, *Fourth National Climate Assessment, Volume II, Impacts, Risks, and Adaptation in the United States* 335 (2018), <https://nca2018.globalchange.gov>.



Figure 5: Map of the south Atlantic and Gulf coasts showing the inundation that would occur with 70 feet of sea level rise.³³

All of these people, and more, will be displaced if we allow the 1.5°C target to remain in place. Even the 2018 IPCC report plainly states that 1.5°C warming is not safe, but governments and groups continue to push us towards this disaster. At 1.5°C we also lose the world's coral reefs and ocean life becomes threatened, meaning our food sources disappear and the rich biodiversity of our planet crashes.

The writing is on the wall: this body needs to look beyond the arbitrary 1.5°C target for one that is based in the best available science, and that will allow us to avoid the most grievous impacts of climate change. Scientists tell us that 1°C (350 ppm CO₂) is the maximum level of long-term warming that our civilization can survive this century. And we likely need to return even closer to preindustrial CO₂ levels of 280 ppm over the longer term. So why aren't we acting like it?

Is it radical to seek integration of all schools instead of just some? Is it radical to stand up for the rights of children and future generations? Is it radical to want to stop the danger we face? Is it radical to want to save what you love?

A Remedy is Still Possible but the Window is Closing

We have the technology to follow the path of emissions reductions the experts say we need to in order to have a chance at health and survival for us and our planet. It is within reach to transition to a decarbonized energy system by 2050, and to increase natural carbon sequestration through

³³ Exhibit Z.

reforestation and sustainable agriculture to bring us back to 350 ppm by the end of the century.³⁴ The U.S. needs to do its part in the world to make that happen. It will not happen without us.

While many critics often cite the expense of a transition to renewable energy, experts expect a transition off of fossil fuels would have a minimal increase on national energy costs, and the costs would be well below the historic spikes in energy costs due to volatile fossil energy prices (see Figure 6).³⁵ This temporary increase in energy system costs is trivial compared to the oppressive costs we can expect if we continue to stumble our way into an unmitigated climate catastrophe.

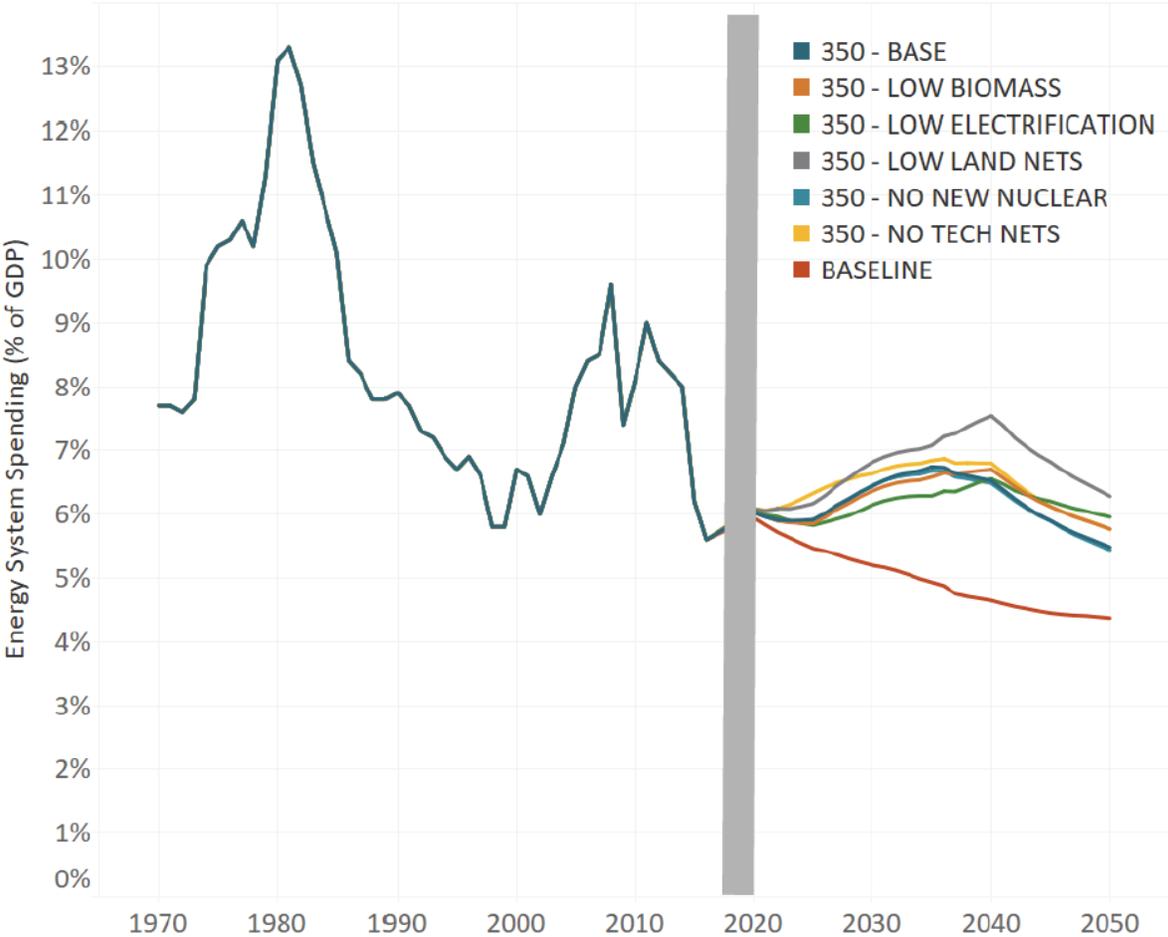


Figure 6: Total spending on the U.S. energy system represented as a percentage of GDP. Historical spikes from the 1970s oil crisis and high oil prices in 2006-2010. Modeled variations

³⁴ Declaration of Mark Z. Jacobson (Exhibit C); Declaration of James H. Williams (Exhibit J); Exhibit V.

³⁵ Exhibit V.

on the right illustrate the cost of multiple scenarios that transition the U.S. off of fossil fuels by 2050.³⁶

Because CO₂ is the primary driver of climate destabilization, all government policies regarding CO₂ pollution and CO₂ sequestration should be aimed at reducing global CO₂ concentrations below 350 ppm by 2100. Other greenhouse gases should also be reduced as much as possible and as rapidly as possible. Time is running out. We can no longer afford to base greenhouse gas reduction targets, with tangible consequences for life and death, on politics rather than science.

We are at a critical juncture — never in my life have I seen so much momentum to address the climate challenge. We must not waste this energy, and as such, we must reevaluate our goals and where they are coming from. We can't truly succeed if we're relying on targets based on political compromise instead of the best available science.

We have a fundamental right to a liveable future, and that future requires us to limit global warming to 1°C by the end of the century.

Long-Standing Government Knowledge

My involvement in the *Juliana* lawsuit has given me insight into the injustices of climate change, and a better understanding of the United States Government's responsibility for it.³⁷ In preparing our case, we uncovered documents that show us that the Government has known about the threats of carbon dioxide for more than half a century. One of my co-plaintiffs, Alex, uncovered a 1961 [letter](#) to President Kennedy, where U.S. Senator Clinton Anderson voices the predictions of scientists about catastrophic climate change and sea level rise due to fossil fuel CO₂ emissions.³⁸ Just a few years later, President Lyndon B. Johnson received a more pointed warning in a report from noted climate scholar Charles David Keeling, and dozens of university researchers, that “man is unwittingly conducting a vast geophysical experiment,” by burning fossil fuels.³⁹ This 1965 White House report clearly outlined the connection between the burning of fossil fuels and climate change (see Figure 7).

³⁶ Williams, J. et al. *Assessing the feasibility of 350 PPM CO₂ targets in the United States*. 2019.

³⁷ Expert Report of James Gustave (“Gus”) Speth (Exhibit U).

³⁸ Exhibit BB.

³⁹ Report of the Environmental Pollution Panel President's Science Advisory Committee, *Restoring the Quality of our Environment* (1965); available at: <https://babel.hathitrust.org/cgi/pt?id=uc1.b4116127;view=1up;seq=11>.

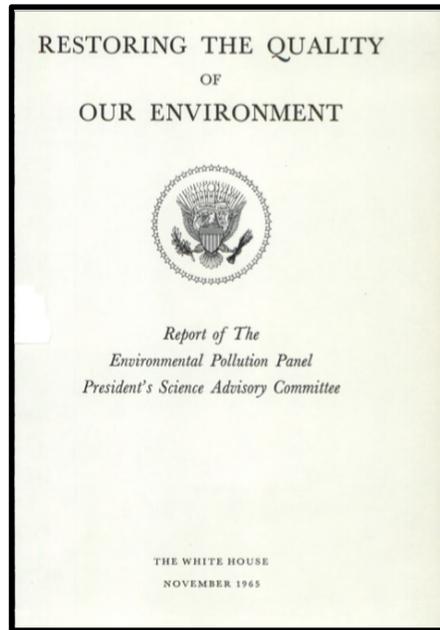


Figure 7: Cover of 1965 Restoring the Quality of our Environment report.

Back in September 1969, Daniel Patrick Moynihan, Urban Affairs Adviser to President Nixon, wrote White House counsel John Ehrlichman stating that CO₂ emissions resulting from burning fossil fuels was a problem perhaps on the scale of “apocalyptic change,” threatening the loss of cities like New York and Washington D.C. from sea level rise. The 1969 Moynihan Letter urged the Federal Government to immediately address this threat. Moynihan wrote that it was “pretty clearly agreed” that carbon dioxide content would rise 25 percent by 2000. “This could increase the average temperature near the earth’s surface by 7 degrees Fahrenheit. This in turn could raise the level of the sea by 10 feet. Goodbye New York. Goodbye Washington, for that matter.”⁴⁰

Despite these warnings, and the many more that followed, our nation’s leaders actively perpetuated climate change by permitting fossil fuel extraction on public lands and subsidizing fossil fuel extraction (see Figure 8).

⁴⁰ Exhibit CC.

U.S. FOSSIL FUEL PRODUCTION AND GLOBAL CO₂ CONCENTRATION
1949-2017

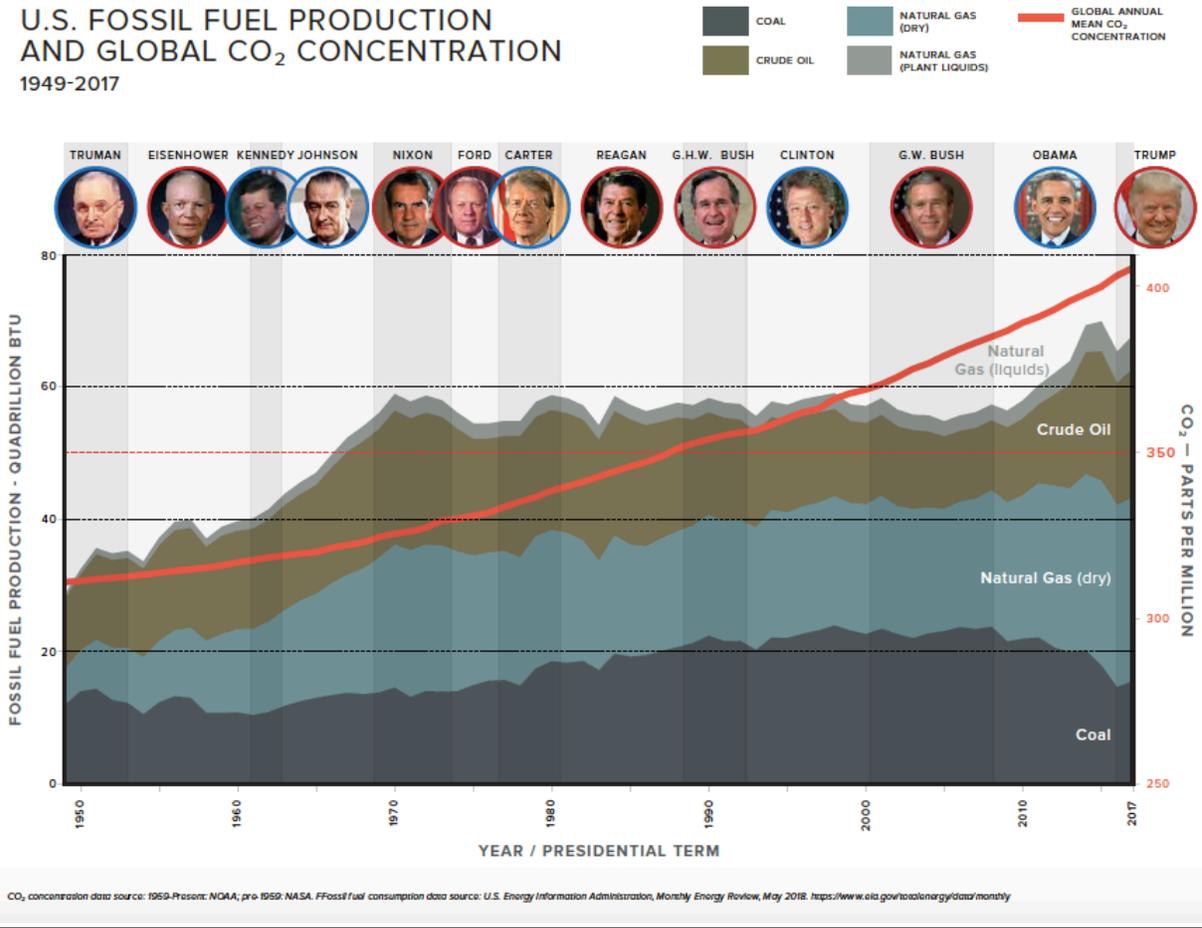


Figure 8: U.S. fossil fuel production and CO₂ concentration for every presidential administration since President Truman.⁴¹

Historical Precedent for Our Case and Our Unalienable Rights

The *Juliana v. United States* lawsuit is not without precedent. In fact, it has ample support in the historic record, and even in the words of the Framers of the U.S. Constitution. According to expert historian Andrea Wulf, there are deep roots to the constitutional right to a stable climate. In her expert report, she discusses how the Founders believed that “Nature is the domain of liberty,” linking national “happiness, dignity, and independence” to the quality of the lands. She goes on to discuss how James Madison’s speech of 1818 was “emblematic of how deeply rooted the importance of nature in balance was to the Framers and to the young nation”:

Madison was the first American politician to write that ‘the atmosphere is the breath of life. Deprived of it, they all equally perish,’ referencing animals, man

⁴¹ Exhibit U.

and plants. He spoke of the balanced composition of the atmosphere and the give and take of animals and plants, which allowed the atmosphere the aptitude to function so as to support life and the health of beings, according to nature's laws.⁴²

The Framers adopted John Locke's philosophy ("laws human must be made according to the general laws of Nature... otherwise they are ill made") that human laws must conform to nature's laws for the preservation of humankind. As such, Thomas Jefferson wrote extensively about this concept, stating "that our Creator made the earth for the use of the living and not of the dead ... that one generation men cannot foreclose or burthen its use to another."⁴³

All of these examples clearly demonstrate the fact that, while the Founding Fathers were unable to foresee the grave threat of human-caused climate change hundreds of years ago, they nevertheless intended to enshrine the protection of the public trust into our nation's constitution, and to ensure the fundamental right of present and future generations to access to the natural resources that previous generations benefitted from, and on which human survival depends.

Wulf goes on to reference other American presidents who have voiced the Government's responsibility to preserve the natural world for future generations, such as Theodore Roosevelt, who said:

The function of our Government is to insure to all its citizens, now and hereafter, their rights to life, liberty and the pursuit of happiness. If we of this generation destroy the resources from which our children 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.⁴⁴

In Conclusion

I was born into a world in which my future *and* my past are uncertain. Born into a world where my culture and inheritance are literally slipping into the sea. Born into a world where my people are going extinct. Growing up in this world, a world with an omnipresent threat of climate change has had lasting impacts on my mental health. Thinking about the future is a constant source of anxiety and depression for me, but I am not alone.

⁴² Exhibit AA.

⁴³ Thomas Jefferson to Thomas Earle, Sept. 24 1823, *The Writings of Thomas Jefferson* vol. VII, 310-11 (H.A. Washington ed. 1854).

⁴⁴ Exhibit AA.

According to Dr. Lise Van Susteren, “it is the emotional toll of climate change that is even more catastrophic, especially for our children. It has the capacity to destroy children psychologically.”⁴⁵

In Judge Aiken’s 2016 opinion, she cites the Supreme Court when it wrote in *Obergefell v. Hodges*:

The nature of injustice is that we may not always see it in our own times. The generations that wrote and ratified the Bill of Rights . . . did not presume to know the extent of freedom in all its dimensions, and so they entrusted to future generations a charter protecting the right of all persons to enjoy liberty as we learn its meaning. When new insight reveals discord between the Constitution's central protections and a received legal stricture, a claim to liberty must be addressed.⁴⁶

Today I am telling you, Judge Aiken was right: “the right to a climate system capable of sustaining human life is fundamental to a free and ordered society.”

In order to begin to address the devastating impacts of climate change, including the physical and emotional toll that climate change is having on me and my peers, the federal government must halt its actions that promote fossil fuels and cause climate change – *now*. For years, the federal government and the same adults who created the disaster have marginalized us. No more. Climate change is here now. Waiting for the future is already too late.

That is why I am asking all of you and this entire House to endorse the fundamental rights and the remedy sought in *Juliana v. United States* on the record, and to sign on to amicus curiae briefs in support of me and my co-plaintiffs, as your other colleagues have, including Senators Ron Wyden, Jeff Merkley, and Sheldon Whitehouse, and Representatives Debra Haaland, Peter DeFazio, Earl Blumenauer, and Rashida Tlaib.

Now is your time to stand in solidarity with me and my co-plaintiffs, America’s youth, and communities around the world to fight for a just future free from catastrophic climate change.

Thank you,

Vic Barrett
Madison, Wisconsin
Plaintiff, *Juliana v. United States*
Beneficiary of the Public Trust and the U.S. Constitution

⁴⁵ Exhibit M, p. 4.

⁴⁶ Exhibit S.

EXHIBITS

- Exhibit A Urgent Motion for Preliminary Injunction
- Exhibit B Declaration of Kevin E. Trenberth in Support of Urgent Motion for Preliminary Injunction
- Exhibit C Declaration of Mark Z. Jacobson in Support of Urgent Motion for Preliminary Injunction
- Exhibit D Declaration of Jerome A. Paulson in Support of Urgent Motion for Preliminary Injunction
- Exhibit E Declaration of Peter A. Erickson in Support of Urgent Motion for Preliminary Injunction
- Exhibit F Declaration of Ove Hoegh-Guldberg in Support of Urgent Motion for Preliminary Injunction
- Exhibit G Declaration of Steven W. Running in Support of Urgent Motion for Preliminary Injunction
- Exhibit H Declaration of Eric Rignot, Ph.D in Support of Urgent Motion for Preliminary Injunction
- Exhibit I Declaration of Joseph E. Stiglitz, Ph.D in Support of Urgent Motion for Preliminary Injunction
- Exhibit J Declaration of James H. Williams in Support of Urgent Motion for Preliminary Injunction
- Exhibit K Declaration of Vice Admiral Lee Gunn, USN (Ret.) in Support of Urgent Motion for Preliminary Injunction
- Exhibit L Declaration of Dr. James E. Hansen in Support of Urgent Motion for Preliminary Injunction

Exhibit M	Expert Report of Lise Van Susteren, M.D.
Exhibit N	Brief of <i>Amici Curiae</i> Public Health Experts, Public Health Organizations, and Doctors
Exhibit O	Brief of <i>Amicus Curiae</i> Law Professors
Exhibit P	Appellants’ Opening Brief for Interlocutory Appeal
Exhibit Q	Plaintiffs-Appellees’ Answering Brief for Interlocutory Appeal
Exhibit R	Findings & Recommendation, Thomas M. Coffin (May 1, 2017)
Exhibit S	Opinion and Order-MTD, Ann Aiken (November 10, 2016)
Exhibit T	Opinion and Order-MSJ, Ann Aiken (October 15, 2018)
Exhibit U	Corrected Expert Report of James Gustave (“Gus”) Speth
Exhibit V	Executive Summary of EER Research
Exhibit W	Declaration of Jayden F. in Support of Plaintiffs’ Opposition to Defendants’ Motions Dismiss
Exhibit X	Declaration of Aji P. in Support of Plaintiffs’ Urgent Motion for Preliminary Injunction
Exhibit Y	Declaration of Levi D. in Support of Plaintiffs’ Urgent Motion for Preliminary Injunction
Exhibit Z	Expert Report of Dr. Harold R. Wanless
Exhibit AA	Expert Report of Andrea Wulf

- Exhibit BB Clinton P. Anderson letter to President Kennedy (February 14, 1961)
- Exhibit CC Daniel P. Moynihan memo to John Ehrlichman (September 17, 1969)
- Exhibit DD First Amended Complaint for Declaratory and Injunctive Relief
- Exhibit EE Appellants' Reply Brief for Interlocutory Appeal
- Exhibit FF Federal Defendants' Answer to First Amended Complaint for Declaratory and Injunctive Relief
- Exhibit GG Mark Jacobson et al., "100% Clean and Renewable Wind, Water, and Sunlight All-Sector Energy Roadmaps for 139 Countries of the World," *Joule* 1, 108-121 (2017)
- Exhibit HH Abstracts of 18 Peer-Reviewed Published Journal Articles from 2009-2018 by 96 Co-Authors Forming the Scientific Basis of "100% Clean, Renewable Wind-Water-Solar (WWS) All-Sector Energy Roadmaps for Town, Cities, States, Countries, and the World"
- Exhibit II Declaration of Victoria B. in Support of Plaintiffs' Opposition to Defendants' Motion for Summary Judgment (redacted version)
- Exhibit JJ Climate science summary explaining why government climate and energy actions, plans, and policies must be based on a maximum target of 350 ppm atmospheric CO₂ and 1°C by 2100 to protect young people and future generations