Cooper Brinson (Oregon Bar No. 153166)
Civil Liberties Defense Center, 1430 Willamette St. #359, Eugene, OR 97401, (541) 687-9180
cbrinson@cldc.org

Carter Dillard (California Bar No. 206276)
Matthew Hamity (California Bar No. 303880)
Animal Legal Defense Fund, 525 E. Cotati Ave., Cotati, CA 94931, (707) 795-2533
cdillard@aldf.org, mhamity@aldf.org

Justin Marceau (California Bar No. 243479)
2255 E. Evans Ave., Denver, CO 80208, jmarceau@law.du.edu

Jessica L. Blome (California Bar No. 314898)
Greenfire Law, PC, 2550 Ninth Street, Suite 204B, Berkeley, CA 94710, (510) 990-9502, ext. 5
jblome@greenfirelaw.com

(*Pro Hac Vice* applications pending)

**Attorneys for Plaintiffs**

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**UNITED STATES DISTRICT COURT**
**FOR THE DISTRICT OF OREGON**

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| Animal Legal Defense Fund, Seeding Sovereignty, Ian Petersen, Cody Shotola-Schiewe, Michael Geotz, Willow Phelps through her mother Erika Mathews, and Dr. Sarah Bexell on behalf of Future Generations,<br><br>Plaintiffs,<br>v.<br><br>United States of America, United States Department of the Interior, Secretary of the Interior Ryan Zinke, United States Department of Agriculture, Secretary of Agriculture Sonny Purdue, United States Environmental Protection Agency, EPA Administrator Andrew R. Wheeler, United States Department of Defense, and Secretary of Defense Jim Mattis,<br><br>Defendants. | Case No. _____<br><br>**COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF** |

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Plaintiff non-profit organizations Animal Legal Defense Fund and Seeding Sovereignty, their members and supporters; individuals Ian Peterson, Cody Shotola-Schiewe, Michael Geotz, Willow Phelps by through her mother Erika Mathews, and Dr. Sarah Bexell of the University of Denver on behalf of Future Generations (Plaintiffs) bring this Complaint and allege as follows:

## I. INTRODUCTION

*"This country is big enough to leave some land alone, as sanctuary for those who, from time to time, feel thinned to get away from it all. Otherwise, we'll turn this country into a cage."*

- Senator Frank Church of Idaho, champion of The Wilderness Act

The United States was founded on the concept of freedom as political separation from others, as withdrawal from the crowds of Europe into a relative wilderness, and independence from unwanted and unconsented intrusions that naturally follow such withdrawal. The concept of nature as freedom, the idea of a place free from humans, and the notion of a pre-Anthropocene world, or what the Declaration of Independence in its foundational paragraph called "the powers of the earth, the separate and equal station" among "the Laws of Nature and of Nature's God," flows throughout documentation of this Nation's founding. The concept is implicit in the words, "We the People"—words inked in the relative wilds of North America by people who could never have imagined the loss of nature to which they were accustomed and would have taken for granted in structuring any system of rights. This same concept, of freedom from others, was later passed into our jurisprudence as "the right to be let alone," that which "one of our wisest Justices characterized as 'the most comprehensive of rights and the right most valued by civilized men.'" *Hill v. Colorado*, 530 U.S. 703, 716–717 (2000) (quoting *Olmstead v. U.S.*, 277 U.S. 438, 478 (1928)).

The fundamental human right to autonomy, along with its many variations as privacy or liberty or bodily integrity, are made coherent by the concept of the absence of human power, or wilderness, which is the quintessence of being let alone. The founders' use of nature or the nonhuman world as a fundamental concept, and its continued use as an implicit concept in all of the cases establishing the right to be free of the state's influences, position the right to be let alone as the correct articulation and basis upon which to order the United States Government.[1] Indeed, it is absurd to think we could be free from limitless state surveillance but not free from the incomparable threat to human well-being posed by the climate change this Government is imposing upon its own people. At the heart of liberty is the right "to define one's own concept of existence, of meaning, of the universe, and of the mystery of human life. Beliefs about these matters could not define the attributes of personhood [if] they formed under compulsion of the State." *Planned Parenthood v. Casey,* 505 U.S. 833 (1992). This case asks the Court to recognize the substantive right to be let alone in the context of wilderness by compelling the Government to mitigate the impacts of climate change on American wilderness,[2] and to reverse a course of conduct wherein the United States has become a recognized national threat to itself, to its own wellbeing and security—also something the founders could never have foreseen.

Over the many years since designating Yellowstone National Park as the first national park in 1872, the United States has set aside more than 640 million acres of federally-managed public land (about 28 percent of the United States), more than109 million acres of which is specially designated as wilderness (about 5 percent of the United States). Specially-designated

[1] Throughout the Complaint, the government of the United States of America will be referred to as the "Government."

[2] Wilderness refers to an environment as near as possible to that which existed at the time of the Nation's founding, akin to John Locke's "state of nature," where a right to such an environment is in turn an "interpolation and extrapolation" of the constitutional right to be let alone.

wilderness areas are absolutely protected from human influence to preserve valued landscapes and their biological and physical attributes in a state that is free from human development, disturbance, and manipulation. But federally-managed public lands also provide a critical resource to United States citizens seeking solitude from human influence in wilderness, without which the right to be let alone cannot be meaningfully exercised. Taken as a whole, so long as these federally-managed lands are retained by the Government, they provide one of the last reminders of the human connection to the natural world, with inspirational, therapeutic, spiritual, cultural, and psychological values that grow increasingly important in a world dominated by urbanization and anthropogenic climate change. The degradation of wilderness and the values therein is a degradation of human freedom, as well as a violation of the social contract on which this Nation was founded.

Plaintiffs and their members are scientists, wildlife advocates, and outdoor enthusiasts who fear for their physical and mental wellbeing as a result of climate change-related impacts on federally-owned and managed public lands, which can manifest in the form of increased frequency and severity of rockslides, avalanches, flash flooding, and wildfires, as well as reduction in stream water flow, snow pack, and native edible plants. Plaintiffs and their members are especially vulnerable to these dangers, because they visit federal lands often for their mental and physical health and wellbeing, because they rely on safe encounters with wilderness for their research, and because they care deeply about the preservation and conservation of vulnerable species especially impacted by changing ecosystems. Plaintiffs and their members refrain from experiencing federal lands as often as they need to for their mental and physical wellbeing, to conduct their research, or to maintain their connection to wilderness because they fear physical injury from altered weather patterns and degraded physical landscape caused by climate change.

Government officials who act with intent to harm or with reckless disregard for life, liberty, and property have been found to engage in conduct that "shocks the judicial conscience" contrary to the Constitution's guarantee of substantive due process. This case will demonstrate that, as a result of national policies that promote, subsidize, and develop carbon-intensive industries, the Government bears a higher degree of responsibility than any other individual, entity, or country for exposing Plaintiffs to the dangerous conditions on federal lands caused by climate change. These damaging national policies have persisted despite knowledge of the consequences. Indeed, as early as 1965, President Lyndon Johnson's Science Advisory Committee (Committee) issued a report that acknowledged anthropogenic pollutants like carbon dioxide and other greenhouse gases had caused and would continue to cause dangerous, accelerating changes to the Earth's climate.[3] The Committee identified fossil fuel extraction, animal agriculture, and large-scale commercial logging as major sources of such pollutants. Anthropogenic climate change, according to the Committee, threatens to destroy the global environment, and along with it, "the health, longevity, livelihood, recreation, cleanliness, and happiness of citizens" who have no say in the production of carbon dioxide pollution "but cannot escape [its] influence." *Id.*

The Government's promotion, development, and subsidization of fossil fuel extraction, animal agriculture, and large-scale commercial logging as well as its failure to act to reduce or eliminate the disastrous impacts of excess greenhouse gases in the atmosphere has caused and will continue to cause grave injury to Plaintiffs, their members, and future generations. Plaintiffs, therefore, respectfully seek an injunction compelling the Government to protect Plaintiffs' constitutional right to wilderness by ordering the Government to prepare and implement an

[3] *See* Environmental Pollution Panel, President's Science Advisory Committee, Restoring the Quality of Our Environment (November 1965).

enforceable national remedial plan to mitigate climate change impacts caused by fossil fuel extraction, animal agriculture, and large-scale commercial logging on federal lands. Absent judicial intervention, the Government will continue to knowingly destabilize the climate system, thereby destroying the wilderness on which Plaintiffs and future generations depend for the exercise of fundamental autonomy and liberty.

## II. JURISDICTION AND VENUE

1. Plaintiffs bring this action pursuant to the United States Constitution, Article III, Section 2, which extends the federal judicial power to all cases arising in equity under the Constitution.

2. This Court has jurisdiction pursuant to 28 U.S.C. § 1331 (federal question), 28 U.S.C. § 2201 (creation of remedy), and 28 U.S.C. § 2202 (further relief) as this action arises under the laws of the United States.

3. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391(e)(3) because individual Plaintiff Ian Petersen resides in this judicial district, the Government are the agencies, officers, and employees of the United States, and there is no real property involved in this action.

4. Pursuant to the District's Local Rules, divisional venue lies in the Eugene Division because the individual Plaintiffs reside in this division of the judicial district, and the climate change-induced degradation of wilderness, along with the corresponding harms to Plaintiffs, occur in substantial part in this division. D. Or. L. R. 3-2.

## III. PLAINTIFFS

5. Plaintiff **Animal Legal Defense Fund** is a national non-profit animal protection organization founded in 1979 that uses education, public outreach, investigations, legislation, and litigation to protect the lives and advance the interests of animals, including those living in

wilderness. The Animal Legal Defense Fund is supported by more than 200,000 members and supporters across the country and the world, including in Oregon. The Animal Legal Defense Fund promotes the humane treatment of wildlife and campaigns for the preservation of wilderness and wildlife habitat, as well as the prevention of species extinction and the cascading loss of biodiversity caused by climate change. The Animal Legal Defense Fund's core mission of improving the lives of animals is fundamentally impaired by the Government's reckless disregard to the impacts of climate change on wilderness. ALDF's members, many of whom are wildlife watchers and enthusiasts, have suffered aesthetic and recreational harm because climate change has made it increasingly difficult to observe threatened species in wilderness; as many as one in six wildlife species are threatened with extinction due to climate change. Furthermore, ALDF's members are often prevented from seeking the communion with nature they desire because members reasonably fear for their safety in wilderness due to climate-related extreme weather events, such as rock slides, flooding, hurricanes, glacial melt, and wildfire.

6. For example, Animal Legal Defense Fund member **Leslie Patten** is a botanist who gave up her career in landscape architecture to live among the wilderness of the Shoshone National Forest in Cody, Wyoming. Leslie has watched the forest in and around her home explode in wildfire over the past decade and feels distraught over the fires' impacts to home, the wilderness surrounding it, wildlife with whom she feels a deep emotional connection, and trail access. She is unable to return to some of her favorite, most-frequented trails, as they are closed indefinitely due to wildfire, drought, and tree death from beetle bark infestations.

7. White bark pine trees, found in high altitudes, have become increasingly sparse in the Greater Yellowstone Ecosystem, where Leslie lives, due to beetle kill, which is something Leslie has personally witnessed on her annual hikes to the Wind River mountains since 1997.

Leslie has also seen the effect of beetle kill around her home in the Shoshone National Forest. Specifically, the spruce forest on neighbor's land is so devastated by beetles that her neighbors extensively logged the area. Watching her neighbor's forest die caused Leslie's mental and physical health to suffer, and she will continue to suffer as more and more trees die in her beloved forest. Trails she used to explore are no longer hike-able from increasing numbers of downed trees from beetle kill. And while she used to climb over many of these trees, she has been injured doing so and thus rarely takes that chance anymore.

8. After a lifetime of hiking and visiting wilderness, and now living full-time next to one of our wildest places in America, Leslie needs wild refuges where she can wander for days without seeing a person or even a trail; a place where the natural forces of the Earth are allowed to shape the land; where her eyes can come to rest in a limitless horizon; and where the ageless drama of life is played out by the animals that live there. That drama, of life and death, is the primary spiritual predicament she seeks to understand when she goes out alone. To take time out and contemplate the wild deepens her pondering and awareness of our paradoxical presence on this Earth. As climate change decreases her opportunity for such necessary solitude, Leslie is concerned that her physical and mental health will continue to suffer.

9. In another example of the ways in which the Animal Legal Defense Fund's members are injured by the Government's failure to protect wilderness from climate change, member **Will Gadd** is best known for wild outdoor adventures in multiple different sports, but he's most proud of his ability to complete those adventures safely and share them with others. Among many other accolades, Will was a National Geographic "Adventurer of the year" and recently became the first person to climb a frozen Niagara Falls. Last winter he used his ice climbing skills to find new life forms under a glacier, a world first. As an ice climber,

mountaineer, paraglider, hiker, rock climber, kayaker, and all-around outdoor enthusiast, Will frequently encounters the impacts of climate change during his every-day life. He has witnessed ice and glacier melt while climbing in conditions that are much more dangerous today than they were years ago when he first began climbing. On a recent ice climbing trip, Will feared for his safety because warming temperatures had made the ice unexpectedly soft. He has had to cancel or cut short myriad trips in wilderness as a result of concerns for sudden storms and wildfire. Will is harmed by the Government's actions and inactions to stem the severity of climate change, because he is prevented from reasonably and safely exercising his right to wilderness on which he relies for his physical and mental wellbeing as well as his global status as an outdoor adventurer and educator.

10. In addition to the aesthetic, economic and reputational harm the Government has caused Will as an outdoor adventurer, the Government has caused and will continue to threaten Will's safety as he carries out his research interest. Over the years, will Will has developed expertise in glacial life, both present and historic, and now guides researchers into wilderness so they can study and understand climate change impacts in the Arctic regions of the world. As climate change makes research trips to wilderness increasingly dangerous, Will and the researchers he guides will be forced to abandon important projects that could have unlocked answers to key climate change questions for the benefit of Future Generations.

11. Plaintiff **Seeding Sovereignty** is a national organization birthed at Standing Rock to amplify the role of indigenous knowledge for environmental justice. Seeding Sovereignty's advocacy for Indigenous people takes many forms, but its members and supporters focus on creating grassroots support for environmental protection in the areas of indigenous water rights, land and food sovereignty, climate refugee protection, environmental health and the rights of

nature. Wilderness protection is germane to the Seeding Sovereignty's organizational purpose because the Native people of North America were born in wilderness, and climate change threatens their culture and tradition like no other previous threat. Seeding Sovereignty is a project of the Earth Island Institute, a non-profit organization founded in 1982 to serve as the organizational home for more than 200 grassroots environmental action projects.

12. Seeding Sovereignty works to educate the public about the need to mitigate the impacts of climate change because loss of wilderness and wild places has historically caused and will continue to cause direct and sustaining injury to Indigenous people's health, well-being, ways of life, and cultural heritage. The peoples, lands, and resources of Indigenous communities in the United States, including Alaska and the Pacific Rim, face an array of climate change impacts and vulnerabilities. The consequences of observed and projected climate change have undermined indigenous ways of life that have persisted for thousands of years. Native cultures are directly tied to Native places and homelands, and many Indigenous peoples regard all people, plants, and animals that share our world as relatives rather than resources. Language, ceremonies, cultures, practices, and food sources evolved in concert with the inhabitants, human and non-human, of specific homelands. Without the specific wild places where Indigenous peoples can live and carry out their cultural traditions, tribal identity and sovereignty is threatened, and the indigenous way of life will disappear.

13. Seeding Sovereignty members and activists protested the Government's failure to mitigate the impacts of climate change at the Standing Rock Sioux Reservation near Lake Oahe in South Dakota. In early 2016, the Government was preparing to approve construction of Energy Transfer Partner's Dakota Access Pipeline. The Dakota Access Pipeline is a 1,172-mile underground oil pipeline that runs from the Bakken shale oil fields in western North Dakota to

Southern Illinois, crossing beneath the Missouri and Mississippi Rivers, as well as Lake Oahe. Many in the Standing Rock Sioux Tribe considered the pipeline and its intended crossing of the Missouri River a threat to clean water and ancient Indigenous burial grounds. In April 2016, members of the Standing Rock Sioux Tribe established a camp as a center for cultural preservation and spiritual resistance to the pipeline, which later grew to more than 1,000 people. Indigenous people from across the country joined the protest against the Dakota Access Pipeline because the pipeline would permit additional fossil fuel combustion in the United States, releasing millions of tons of greenhouse gases into the air and exacerbating climate change threats to wilderness and Indigenous ways of life. As a formal organization, Seeding Sovereignty continues the Dakota Access Pipeline protest to avert the extraordinary and disproportionate threats to Native American life posed by climate change impacts on wilderness. Such threats are unconscionable and unacceptable, as the loss of liberty to indigenous people will be permanent.

14. Plaintiff **Future Generations, by and through their Guardian Dr. Sarah Bexell,** retain the legal right to inherit well-stewarded federally-managed lands and to protection of their future lives and liberties—all of which are imminently threatened by the actions of the Government challenged herein. Guardian Bexell stands in this case both to demand effective governmental action to protect these fundamental rights and, until that is done, a cessation of governmental action that exacerbates the imposed risk to wilderness. Dr. Sarah Bexell is a researcher, wildlife conservation advocate, and child development specialist. Dr. Bexell has been engaged in wildlife conservation, conservation education, and humane education for over 25 years. Currently, she is Clinical Associate Professor with the Graduate School of Social Work and Director of Humane Education with the Institute for Human-Animal Connection, both at the University of Denver, and Director of Conservation Education at the Chengdu Research Base of

Giant Panda Breeding, China. Her work focuses on developing and evaluating education programs to facilitate the human-animal bond to promote animal rights, healthy child development, and wildlife and nature preservation. She has worked in China for 19 years to build capacity of conservation and humane education professionals. Her teaching focuses on global sustainable development and humane education.

15. Dr. Bexell and her colleagues have demonstrated that wilderness health and availability are critical to an innate human need to understand and associate with nature. Dr. Bexell has worked in China for two decades, where millions of children have no natural places to play and where the few conservation areas that do exist are highly degraded and offer no chance of solitude in the most populated country on Earth. Due to a career focusing on enhancing the child-nature-animal bond, Dr. Bexell is deeply concerned about the impact of climate change on human development, and specifically early childhood development, if wilderness continue to disappear globally. Future Generations have an interest in ensuring that the climate system remains stable enough to secure their constitutional right to find solitude in wilderness. Future Generations are suffering both immediate and threatened injuries as a result of actions and omissions by the Government alleged herein and will continue to suffer life-threating and irreversible injuries without the relief sought. Future Generations have suffered and will continue to suffer harm to their health, personal safety, cultural and spiritual practices, and recreational interests from the impacts of climate change on wilderness.

16. Plaintiff **Willow Phelps**, by and through her mother Erika Mathews, is an 11-year-old, sixth grader who lives in Ringwood, New Jersey. Willow's backyard backs up to the hiking trails of Ringwood State Park, which she frequents so she can witness in solitude the beauty of nature and wildlife, including black bears, foxes, and coyotes. Willow has developed a

special and unique connection with the wildlife living in Ringwood State Park and feels emotionally connected to their well-being. As a result, for most of her young life, Willow has advocated for animal welfare in her school, local community, state, and across the country. Her advocacy includes educating the public about the ways individuals can reduce the impacts of climate change on factory farms and in wilderness because she knows climate change harms her enjoyment of nature and wildlife.

17. Storm surges and extreme weather events such as hurricanes have caused a significant increase in water in and around Willow's home. Excess water combined with warmer temperatures have extended ideal conditions for insect habitat, and Willow and her family have witnessed a dramatic increase in the number of insects in Ringwood State Park. Willow and her family must spray themselves and their companion animals with increasingly severe chemicals in order to prevent insect-borne diseases, such as West Nile Virus and Lime Disease. Willow and her family fear for the long-term health consequences of using these chemicals and blame the Government for failing to address the underlying cause of increasing insect infestation—climate change.

18. Willow participates in a competitive swimming team, which practices every summer in a lake within Ringwood State Park. The New Jersey Department of Environmental Protection closed Ringwood State Park's lake throughout the entire summer of 2018 after a dangerous Blue-algal bloom broke out in the waters. Scientists attribute more frequent Blue-algae blooms to climate change, as warmer temperatures and extreme weather events encourage the growth and migration of upstream nutrient pollution from animal agriculture into downstream lakes. Willow's swim team cancelled her swim season because of the Blue-algal bloom, and she must now refrain from recreating in the lake entirely, an activity that contributes

to her physical and mental well-being, as a result of the Government's failure to mitigate the impacts of climate change on wilderness.

19. An avid hiker and surfer, Willow fears the loss of biodiversity in the forest surrounding her home to extreme weather events, the increasing frequency and severity of which threatens her life while she recreates in wilderness. She needs the peace and relaxation afforded by hiking in the forest with her family and fears the effect that loss of forest access will have on her mental health now and in the future.

20. Willow and her family spend substantial time on the East Coast, surfing, recreating on the beach, and playing in the sun. Willow's favorite beach is Deal Beach near Asbury Park, New Jersey. As a surfer, Willow fears that rising sea levels resulting from climate change will destroy many of the surf breaks she now enjoys because the geologic features that create those surf breaks will be flooded by sea level rise. In August 2018, Girls Wave Riding Surf School, a summer camp Willow attends every year at Deals Beach, was cancelled because a hurricane threatened the girls' safety. Even though the hurricane never made landfall in New Jersey, it caused a dangerous undertow and big waves, making the surf too dangerous for Willow and her campmates. Scientists now project that Deals Beach, along with the remainder of the New Jersey coastline, may disappear by 2045. The impacts from warmer water temperatures and rising sea levels caused by the Government have negatively impacted and will continue to negatively impact Willow's future ability to enjoy the same areas on the coast that she now loves.

21. Plaintiff **Ian Petersen** is a resident of Eugene, Oregon and member of the Animal Legal Defense Fund. Ian is 26 years old and first experienced the Oregon wilderness at the age of seven, sparking what would become a deep bond with, and appreciation for, the pristine beauty

and tranquility found in wilderness. Ian moved to Oregon in 2009 in large part because he so relished his previous wilderness experiences and realized that wilderness could meaningfully enrich his life in ways he could not replicate in any other setting. Ian is harmed by the Government's actions and inactions to stem the severity of climate change, as Ian is prevented from reasonably and safely exercising his right to wilderness on which he relies for his physical and mental wellbeing.

22. Every year since 2009, and at least three weekends a month, Ian retreated to the wilderness seeking refuge from the incessant noise and intrusions of everyday life. Ian hiked, backpacked, and cross-country skied in wilderness throughout the Pacific Northwest, and Oregon in particular, including Opal Creek Wilderness and Bull of the Woods Wilderness in Mount Hood National Forest, as well as on Mount Jefferson in Willamette National Forest, all of which have been made more dangerous by the acts and omissions of the Government in the face of anthropogenic climate change. Specifically, Ian has been harmed by increasingly frequent and severe wildfires, which, in addition to endangering Ian's physical safety, pollute the air he breathes and the water he drinks. While Ian previously thrived on the challenge of pushing to the limits of his potential during hiking trips in wilderness, the growing number of "bad air" days have precluded this kind of self-discovery and self-actualization; instead, Ian has been forced to cut hiking trips short due to difficulty breathing in the smoky air and has also had to reroute or cancel trips due to wildfire closures.

23. Increased weather volatility as a result of climate change has led to sudden, short-term, unforeseen storms, which exposed Ian to substantial danger in wilderness before he has the chance to exit to safety. Caught in such a storm on a backpacking trip, Ian observed multiple

trees toppling while the ground shook beneath him. These dead or dying trees or tree branches,[4] which have multiplied in number due to climate-change-induced drought and bark beetle infestations, are prone to fall and also serve as wildfire fuel loads, further exacerbating the dangers Ian faces and fears in wilderness.

24. Increased temperatures and diminished snowpack caused by the Government's actions and inactions have prevented Ian from safely exercising his right to wilderness during winter. Whereas Ian had previously enjoyed quiet and solitude while backcountry skiing in high elevation on Mount Hood, the lack of snow cover in lower elevation snow parks has forced more people to recreate in the higher elevation areas alongside him. As more people recreate in smaller physical landscapes, snowpack further degrades, increasing the likelihood of avalanche. Moreover, as temperatures rise and precipitation decreases, even in these higher elevation areas, snow cover is frequently inadequate, leaving areas of exposed rock and creating further risk of injury to Ian. As a result, Ian fears for his personal safety in areas he once felt safe and avoids certain areas in order to protect himself from climate-change related physical injuries in wilderness.

25. Far from experiencing the enhanced self-knowledge and autonomy he seeks in wilderness, the Government's actions and omissions have harmed Ian psychologically, emotionally, and physically by subjecting him to a degraded, polluted, and crowded wilderness in which he increasingly finds himself preoccupied with merely surviving.

26. Plaintiff **Michael Goetz** is a resident of Portland, Oregon and member of the Animal Legal Defense Fund. Since 2010, Michael has recreated in the Pacific Northwest wilderness at least two times per month, including Salmon Huckleberry Wilderness in the Mount

[4] Such trees are called "widowmakers" by both the Forest Service and the Occupational Health and Safety Administration for their propensity to kill and maim those nearby.

Hood National Forest, the Mount Adams Wilderness in Gifford Pinchot National Forest, and the Tatoosh Wilderness in Mount Rainier National Park. While backcountry skiing, hiking, and mountain biking in these areas, Michael has observed the adverse impacts of climate change on wilderness, as precipitated in substantial part by the actions and omissions of the Government. The increased frequency and intensity of wildfires has interfered with the otherwise expansive views available in these areas on which Michael relies for emotional catharsis and a feeling of liberation from the human world. The smoke has reduced the air quality in wilderness to such an extent that on one occasion, Michael woke up on a backpacking trip and could not see his hand in front of his face. He has had to reroute several trips due to wildfire closures.

27. The thinner snowpack has made backcountry skiing more dangerous. At Mount Rainier, for example, Michael must contend with the increased likelihood of outburst floods due to the unprecedented speed at which glaciers are melting. Fluctuations in temperature from day to night have also increased the risk of avalanche, creating various weak layers of "sugar snow" that now can last all season long, causing Michael to fear for his safety in wilderness. Per the Northwest Avalanche Center, a collaborative effort of the U.S. Forest Service and the non-profit Northwest Avalanche Center, seven of the nineteen avalanche deaths in the 2018 winter season occurred in Washington wilderness areas within which Michael recreates.

28. Climate change has also made avalanches more difficult for Michael to predict. Previously, Michael would dig a pit in the snow and, by examining the size, shape and consistency of the snowflakes of particular layers, he could determine how well—or how poorly—those layers have bonded to one another. Now, however, the severe temperature fluctuations have created so many different types of snow that Michael's test pits have become exceedingly difficult to evaluate. Because he cannot perform the necessary tests, Michael has

refrained and will continue to refrain from recreating in wilderness as often as he needs to for his aesthetic and spiritual fulfillment because of the increased risk of avalanche to his physical safety. The Government's failure to mitigate the impacts of climate change have made wilderness more dangerous, which threatens Michael's health and safety.

29. Given the considerable dangers in wilderness as precipitated by the acts and omissions of the Government with regard to greenhouse gas emissions and resulting climate change, Michael has grown fearful of recreating alone, and no longer can safely enjoy the natural solitary wilderness experiences so vital to his wellbeing.

30. Plaintiff **Cody Shotola-Schiewe** is a resident of Portland, Oregon. Cody is 25-years-old and has been seeking out wilderness experiences for over a decade throughout the Pacific Northwest. A member of the Animal Legal Defense Fund, Cody journeys into the wilderness three-to-four times a month, including as a wilderness guide, as well as at least once a month entirely alone for purposes of personal stress management, spiritual renewal, and meditation. As a result of the Government's actions and inactions, Cody's right to wilderness has been impeded, harming his personal safety and mental health.

31. Cody has engaged and will continue to engage in a variety of activities in wilderness, including backpacking, climbing, mountaineering, and backcountry skiing, all of which are jeopardized by climate change impacts, caused in substantial part by the Government, including the increased duration, frequency, and intensity of wildfires and drought, as well as diminished snowpack, and increased risk of rockfall, avalanche, and flash flooding.

32. As a result of climate change, several of the ice-climbing routes that Cody once navigated have substantially melted, leaving behind unsafe conditions. On Mount Hood for example, Cody has been unable to attempt several of the more challenging routes, due to this

increased risk of rock fall and avalanche. With the number of safe climbing routes significantly reduced, the remaining few safe routes have become increasingly popular and crowded, which both prevents Cody from having the solitary, meditative experience he seeks and even further increases the danger of rock fall and avalanche.

33. Cody fears that the adverse impacts of elevated temperatures, shrinking glaciers, diminished snowpack, as well as the increased incidence of avalanche, rockfall, and wildfire will entirely preclude him from safely exercising his right to wilderness in the near future. As a result of the acts and omissions of the Government, Cody has suffered psychological harm, as he can no longer safely experience the natural quiet and solitude of the wilderness that he depends upon for stress reduction and spiritual rejuvenation.

## IV. DEFENDANTS

34. Defendant the **United States of America** (United States) is the sovereign trustee of public lands, including forests and wilderness. In its sovereign capacity, the United States has assumed control of our nation's air space and atmosphere. In its sovereign capacity, the United States is responsible for limiting greenhouse gas emissions from major sources including fossil fuels, logging, and animal agriculture. By failing to limit and phase-out greenhouse gas emissions, the United States has allowed dangerous levels of emissions to build up in the atmosphere, exacerbating climate change impacts on public lands, impermissibly infringing upon Plaintiffs' right to wilderness, and endangering Plaintiffs in violation of their Constitutional rights.

35. Defendant the **United States Department of the Interior** (Interior) manages one-fifth of the Nation's public land, including wilderness areas, forests, and grazing lands; thirty-five thousand miles of coastline; and 1.76 billion acres of the Outer Continental Shelf. Interior

administers several departments, bureaus, and services with authority to hold interest in real property and manages federal lands, including the Bureau of Land Management (BLM). (*See* Mineral Leasing Act of 1920, 30 U.S.C. § 181, *et seq*.; *see also* Federal Land Policy and Management Act of 1976, 43 U.S.C. § 1719(a), the Office of Surface Mining and Reclamation, the Bureau of Ocean and Energy Management, the National Parks Service (National Park Service Organic Act, 54 U.S.C. § 100101(a)), and the Fish & Wildlife Service (National Wildlife Refuge System, 16 U.S.C. § 668dd). The Bureau of Land Management, National Parks Service, and Fish & Wildlife Service, together with the United States Department of Agriculture's Forest Service, administer the National Wildlife Preservation System (16 U.S.C. § 1131, *et seq*.).

36. Defendant **Ryan Zinke** is the current Secretary of Interior and, in his official capacity, is responsible for all actions of Interior.

37. Defendant the **United States Department of Agriculture** (USDA) is a federal agency with authority over our nation's food and agriculture, as well as our national forests, which serve the vital role of absorbing carbon dioxide from our atmosphere—referred to as "carbon sequestering." The USDA administers several departments, bureaus, and services with authority to hold interest in real property and manage federal lands, including the U.S. Forest Service. (*See* Mineral Leasing Act of 1920, 30 U.S.C. § 181, as amended; *see also* Surface Mining Control and Reclamation Act of 1977, 30 U.S.C. § 1273; National Forest Management Act of 1876, 16 U.S.C. § 471, *et seq.*; Multiple Use and Sustained Yield Act, 16 U.S.C §§528-31). The USDA's Forest Service, together with the BLM, National Parks Service, and Fish & Wildlife Service, administers the National Wildlife Preservation System (16 U.S.C. § 1131, *et seq*.).

38. Defendant **Sonny Perdue** is the current Secretary of Agriculture and, in his official capacity, is responsible for all actions of the USDA.

39. Defendant **Andrew R. Wheeler** is the current Administrator of the United States Environmental Protection Agency (EPA) and, in his official capacity, is responsible for all actions of EPA. The EPA permits and regulates the commercial logging, animal agriculture, and fossil fuel extraction and development in the U.S. under the Clean Air Act; the Clean Water Act; the Comprehensive Environmental Response, Compensation, and Liability Act; the Safe Drinking Water Act; and the Resource Conservation and Recovery Act, among other statutes and applicable regulations. The stated mission of the EPA is to protect human health and the environment and ensure that the Government's actions to reduce environmental risks are based on the best available science.

40. Defendant **United States Department of Defense** (DOD) is a federal agency charged with ensuring the security of this nation. DOD considers climate change a threat multiplier for its potential to exacerbate many challenges, including infectious disease, regional instability, mass migrations, and terrorism. Climate change has impacted and will continue to impact all military installations, as well as the DOD's supply chains, equipment, vehicles, and weapon systems.

41. Defendant **Jim Mattis** is the current Secretary of Defense and, in his official capacity, is responsible for all actions of DOD.

## V. STATEMENT OF FACTS

### A. Human activities have contributed to global warming and climate change.

42. Greenhouse gases are gases that absorb infrared radiation in the atmosphere and include carbon dioxide ($CO_2$), methane ($CH_4$), Nitrous Oxide, ($N_2$), Ozone ($O_2$), and fluorocarbons. When greenhouse gases absorb the sun's infrared radiation, global atmospheric

temperatures increase, which in turn causes changes to the Earth's climate, including atmospheric degradation, ocean acidification, and loss of wilderness. This phenomenon is known as the "greenhouse effect," and the changes to the global climate are commonly referred to as "climate change."

43. According to the Intergovernmental Panel on Climate Change (IPCC),[5] greenhouse gases occur naturally and are essential to the survival of humans and millions of other living organisms because they keep some of the sun's warmth from reflecting back into space, making Earth habitable. However, a century and a half of industrialization, which resulted in clear-felling forests, unprecedented fossil fuel combustion, and large-scale animal agriculture, has driven up quantities of greenhouse gases in the atmosphere. As populations, economies, and standards of living grow, so does the cumulative level of greenhouse gas emissions.

44. The IPCC has identified some basic, well-established scientific links:

- The concentration of greenhouse gases in the Earth's atmosphere is directly linked to the average global temperature on Earth;
- The concentration of greenhouse gases in the Earth's atmosphere has been rising steadily, and mean global temperatures along with it, since the time of the Industrial Revolution; and
- The most abundant greenhouse gas, carbon dioxide, is the product of burning fossil fuels.

45. Increasing greenhouse gas emissions has led to altered ocean circulation systems, ocean acidification, coral reef die-offs, permafrost melt, deglaciation, sustained drought, wildfire, and severe and sudden storm surges across the world.

[5] The Intergovernmental Panel on Climate Change (IPCC) was set up by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) to provide an objective source of scientific information.

46. As early as 1975, scientists recommended that the global community work together to reduce carbon emissions to preindustrial levels, so global annual temperature could stabilize.

47. Scientists predict that if the global average annual temperature increases by 2° C, then Earth will suffer permanent ecosystem loss.

48. As atmospheric concentrations of carbon dioxide ($CO_2$), the most common greenhouse gas, rise so does average annual temperature. When scientists first began measuring the global atmospheric concentration of $CO_2$ in 1958, the $CO_2$ level stood at 316 parts per million (ppm). In September 2013, global atmospheric $CO_2$ concentrations crossed exceeded 400 ppm for the first time in 800,000 years (which predates human life). As of December 2017, global atmospheric $CO_2$ concentrations stood at 405.14 ppm. As of NOAA data released September 5, 2018, the August 2018 global atmospheric $CO_2$ concentrations stood at 406.99 ppm.

49. On October 6, 2018, the IPCC released a Special Report on the impacts of global warming. The IPCC found that global warming is likely to reach 1.5° C above pre-industrial levels as soon as 2030 if atmospheric carbon continues to increase the global temperature at the current rate.

50. If greenhouse gas emissions remain constant, scientists expect the global atmospheric concentration of $CO_2$ to reach 500 ppm in 2068, and the global average annual temperature to be 3° C higher.

51. Absent sustained national efforts to reverse this warming trend, within only fifty years, Earth will cease to exist as humans know it today.

52. Temperatures are increasing much faster in the Western United States than for the planet as a whole. Since 1970, average annual temperature in the Western United States has increased by 1.9° F, about twice the pace of global average warming.

53. Continued global climate change will lead to irreversible changes in major ecosystems and the planetary climate system. Ecosystems as diverse as the Northern Rocky Mountains, Pacific Temperate Rainforest, and the Alaskan Arctic Tundra are approaching thresholds of dramatic change through warming and drying. Mountain glaciers that formerly engulfed Northwest Montana are melting in alarming retreat, and the downstream effects of reduced water supply in the driest months are having and will continue to have repercussions on wilderness, biodiversity, and human life that transcend generations.

54. The IPCC recommends decreasing carbon emissions from targeted sectors, including fossil fuel combustion, animal agriculture, and deforestation. Without these targeted reductions, the IPCC estimates that global warming will exceed 1.5° C over pre-industrial levels, resulting in catastrophic, long-term impacts to the Earth's ecosystem which will last "millennia."

**B. The Government has known for decades that fossil fuel combustion, deforestation, and animal agriculture contribute to climate change.**

55. More than fifty years ago in 1965, President Lyndon B. Johnson's Scientific Advisory Committee recognized that "[p]ollutants have altered on a global scale the carbon dioxide content of the air" through "the burning of coal, oil, and natural gas" and "will modify the heat balance of the atmosphere to such an extent that marked changes in climate, not controllable through local or even national efforts, could occur."[6] President Johnson's report further acknowledged that anthropogenic pollutants endangered "the health, longevity,

[6] Environmental Pollution Panel, President's Science Advisory Committee, Restoring the Quality of Our Environment at 1, 9-10, (1965) [hereinafter "President Johnson's report"].

livelihood, recreation, cleanliness, and happiness of citizens who have no direct stake in their production, but cannot escape their influence." President Johnson's report also identified "pollution from farm animal wastes" as a key source of climate change. The Government, despite these warnings, took no action.

56. In 1969, Daniel Patrick Moynihan, then-Senior Advisor to President Nixon, wrote that it was "'pretty clearly agreed' that carbon dioxide content would rise 25 percent by 2000, '[t]his could increase the average temperature near the earth's surface by 7 degrees Fahrenheit," he wrote. 'This in turn could raise the level of the sea by 10 feet. Goodbye New York. Goodbye Washington, for that matter.'"[7] Moynihan also noted that temperature increase would lead to a significant rise in sea level, potentially resulting in the loss of major coastal cities, and urged immediate government action in response. The Government, having been duly warned by Mr. Moynihan, chose to ignore this warning and took no action.

57. Throughout the late 1970s, 1980s, and 1990s, the Government released report after report finding that projected increases in atmospheric $CO_2$ from fossil fuel combustion, deforestation, and animal agriculture would increase temperatures on the earth and fundamentally alter global climate. The Government has also released proclamations, studies, and guidance documents on the contributions to and effects of climate change. Despite this trove of evidence demonstrating the impacts of climate change on the earth's ecosystem, the Government continued its policies to subsidize, develop, and promote the very activities that cause climate change.

[7] Linda Yorba, Nixon Administration Debated Global Warming, (July 3, 2010), available at http://www.msnbc.msn.com/id/38070412/ns/politics/t/nixon-administration-debated-global-warming/.

58. From 1987 to 1989, Congress held eighteen hearings about climate change and its projected impacts on human health and the environment. Still, the Government took no action to avert the impacts of climate change on human health or the environment.

59. When confronted with a near-complete catalog of its own official publications, testimony, and statements made by or on behalf of the Government regarding climate change, on January 13, 2017, the United States Department of Justice admitted that officials and persons in the Government have been aware of the evidence of climate change, its causes, and its consequences for more than fifty years.

**C. Climate change will have catastrophic impacts on the Nation's wilderness.**

60. The Government owns and controls about 47 percent of the land in the Western United States, which is defined as the land west of the Rocky Mountains, inclusive of those states in which the Rocky Mountain range is located. This land is managed by various Government agencies, but Interior's Bureau of Land Management (BLM), National Parks Service, and Fish & Wildlife Service, and the USDA's Forest Service control the vast majority.

61. On September 24, 2018, University of California-Berkeley Professor and U.S. National Park Service Principal Climate Change Scientist Dr. Patrick Gonzalez published a report warning of the threat climate change poses to the Nation's 417 National Parks. According to the study, "climate change exposes the national park areas more than the United States as a whole . . . because extensive parts of the national park area are in the Arctic, at high elevations, or in the arid southwestern U.S."[8] Between 1895 and 2010, mean annual temperature of the national park area increased 1.0° C double the U.S. rate as a whole, with temperature increasing most dramatically in Alaska. These temperature increases have resulted in significant drought

[8] *See* P. Gonzalez, et al., Disproportionate Magnitude of Climate Change in United States National Parks, Environ. Res. Lett 13 104001 (2018).

and physical and ecological changes, with climate change outpacing dispersal capabilities of many plant and animal species.

62. Of the many environmental resources that are threatened by climate change, those "most significant for wilderness ecosystems are probably (1) the provision of fresh water, (2) natural hazard regulation, particularly fire, and (3) the conservation of biodiversity."[9]

**1. Ice and Snow Melt**

63. A reliable supply of water is crucial for ecosystems.

64. Much of the water in the Western United States is stored naturally in winter snowpack in the mountains. The snowpack melts and replenishes streams and rivers in the late spring and summer, when there is very little rainfall. Climate change threatens this natural storage by changing the timing of snowmelt and the amount of water available in streams and rivers (streamflow) throughout the year.

65. Scientists are able to gauge the onset of spring snowmelt by evaluating streamflow gauges throughout the Western United States. Depending on location, the onset of spring snowmelt is occurring one-to-four weeks earlier today than it did in the late 1940s.

66. According to data from the National Oceanic and Atmospheric Administration, National Aeronautics and Space Administration, and the United Nations, spring snowpack in many parts of Western Washington and Oregon has dropped 50 to 70 percent since the early 1900s because of climate change.

67. On the Oregon's Mount Hood, for example, the Department of Commerce's National Weather Service recorded a 30 percent reduction in snowfall since 1975, and several of the mountain's twelve glaciers have receded up to 60 percent since the early 1900s.

[9] Gail Kimbell, USDA Forest Service Climate Change and Wilderness Briefing Paper (2008), https://www.wilderness.net/NWPS/documents/FS/Chiefs-Long-climate.pdf.

68. Climate change is credited with up to 60 percent of the changes in river flows and snowpack in the Western United States over the past fifty years.

69. Higher temperatures and longer summers are also causing glaciers to melt. In the mid-twentieth century, Glacier National Park had 150 glaciers; today, there are twenty-six. Within the next decade or so, the glaciers for which this park was named will be gone.

70. As glaciers melt, the number and size of glacial lakes increase, as does instability in permafrost regions and the frequency of rock avalanches.

71. Climate change has resulted in a greater number of days where temperatures rise significantly during the day and fall back down at night. Such temperature changes cause ice inside rocks to expand and contract, creating cracks which increase the likelihood of rockslides.

72. Climate change models indicate that winters in the Pacific Northwest, including Oregon, will get wetter and warmer, as precipitation shifts away from snow and toward rain. Rains will arrive in sudden, violent bursts, leading to an increased likelihood of avalanches, bursts of liquefied mud slurries, and outbursts of trapped water from beneath the glaciers called jökulhlaups.

73. With diminished snowpack, winter recreation seasons in wilderness have been shortened, and the number of safe hiking, climbing, and backcountry skiing routes have decreased. A shorter season with fewer routes necessarily increases crowding in wilderness areas available for these activities.

74. For ice climbing in particular, the shortened season and scarcity of safe routes frequently creates a "bottleneck," where climbers must wait in high altitude for climbers ahead in line to clear, increasing the danger and reducing solitude. Moreover, as more people are climbing

on a particular route, ice breaks down and becomes more crevassed, which further increases the risk of rockfall.

**2. Fire**

75. According to the Forest Service, the combination of higher overall temperatures and less frequent, more intense rainstorms over long periods of time have aggravated and will continue to aggravate and cause more frequent droughts in American forests.

76. As the climate warms, average summer precipitation is projected to drop throughout the Western United States. For example, precipitation is expected to decline by fourteen percent in Oregon by 2080. Drought-stricken forest soils make trees more vulnerable to fire and insects throughout the summer and fall, making fire conditions even worse. According to the Forest Service, this widespread temperature-induced drought stress is expected to cause dramatic increases in the amount of biomass consumed by fire throughout much of the North American Boreal Forest, especially in continental interior regions.

77. Warmer temperatures also cause more intense and frequent rainstorms and warmer winters, which impede ecosystems from storing water reserves, leading to higher tree mortality rates, which in turn leads to more dead trees that fuel wildfire generation.

78. Fires are a natural part of forested landscapes, but each year climate change has caused the fire season to come earlier and last longer. Fires are burning hotter and bigger, making them more damaging and dangerous to wildlife and people. In fact, compared to forty years ago, wildfires burn twice as many acres per year, and the fire season is two months longer.

79. The number of large wildfires—defined as those covering more than 1,000 acres—is increasing throughout the Western United States. Indeed, over the past twelve years, every state in the West has experienced an increase in the average number of large wildfires per

year compared to the annual average from 1980 to 2000. The highest level of acreage burned by wildfire in each state has occurred since 2000.

80. On September 2, 2017, a 15-year-old boy igniting fireworks during a burn ban in the Columbia River Gorge in the states of Oregon and Washington started the Eagle Creek Fire. The fire burned 50,000 acres and burned for three months before being declared completely contained. No matter how a wildfire ignites, scientists agree that climate change has created the perfect conditions for wildfires to burn hotter and longer, threatening the physical safety of Plaintiffs who recreate in wilderness.

81. During the summer of 2018, the state of Oregon experienced its largest wildfire—the Klondike fire, which began in July and has burned 167,000 acres as of the filing of this Complaint. Dry conditions caused by below-average precipitation caused the Klondike fire to grow rapidly, engulfing homes and forcing evacuations by humans and wildlife alike.

82. More frequent fires cause an increase in greenhouse gas emissions because burning organic matter emits carbon compounds.

83. Heat and drought tend to stress and overwhelm the physiological capability and structural integrity of plants, making them more vulnerable to disease, parasites, and insects. In turn, plant diseases and infestations are strongly influenced by weather and climate. Warm, dry conditions facilitate the spread of beetles, wood borers, blister rust, needle blight, and other destructive insects and diseases.

84. In a study that tracked eighty undisturbed tree stands in wilderness and other protected federal areas since 1955, scientists found that eighty-seven percent had experienced an increase in the rate of tree mortality due to insects; in the Western United States, the dieback rate has doubled.

85. Dead trees pose a serious, direct threat to persons in wilderness because they can lose large branches or fall over and kill those in proximity. The Forest Service refers to these dead branches as "widowmakers."

86. On August 8, 2016, the BBC reported that a man was killed by a widowmaker in Edinburgh, Scotland when the dead tree fell on his tent while he slept.

87. Climate models suggest that the combination of higher overall temperatures and less frequent, more intense rainstorms over long time periods will generate droughts that kill trees and create dangerous widowmakers.

88. Intense rainstorms in winter prevent trees from storing water reserves, which leads to higher tree mortality rates.

89. Dry trees are susceptible to insect invasion and disease infection, creating even more widowmakers.

90. Increased wildfires in wilderness and forests endanger persons who live in or travel to these areas through smoke exposure, leading to increased death tolls as well as smoke-related illnesses.

91. Persons who rock climb, paddle, mountain bike, and backcountry ski in wilderness, are particularly at risk, because they often recreate in environments and seasons with high fire risks. Burned areas are in turn frequently closed to visitors, and even when they remain open, fire can degrade them to a point where they are less attractive for users, impeding the experience central to a person's feelings of naturalness and solitude.

**3. Loss of Biodiversity**

92. Wilderness, especially large connected parcels, provides important habitat for the Nation's rich assortment of plant and wildlife species. Loss of wilderness will certainly lead to loss of biodiversity in these important ecosystems.

93. Large undisturbed wilderness landscapes that can serve as natural laboratories, controls, and benchmarks are critical to increased understanding of the natural world.

94. Wild areas are living museums of geological, biological, and ecological values.

95. Wild areas cannot be replicated.

96. Preservation of ancient forest ecosystems allows researchers to do the work that contributes to their sense of identity and gives them and others greater autonomy over the development of their personal ideas and values. A greater pool of information, and hence a more complete understanding of the natural world and its relationship to mankind, also originates from researchers' activities. This information is the basis for individuals to develop opinions on issues that affect their everyday lives and is essential for effective decision making. *See generally Tennessee Valley Authority v. Hill,* 437 U.S. 153, 178 (1978) (citing H.R. Rep. No. 93-412, 93d Cong., 1st Sess., 4-5 (1973)).

97. Examples of biodiversity loss are already abundant. For example, in April 2015, the Great Lakes Wolf population on Isle Royale National Park in Lake Superior was at a record low of three individuals. In the past, wolves from Canada had travelled across the frozen lake to mate with the isolated population on Isle Royale, providing necessary genetic diversity for the packs living there. Climate change has decreased the formation or persistence of the ice bridges that allow such migrations, and these bridges are not expected to form at all after 2040.

98. On October 15, 2018, the Proceedings of the National Academy of Sciences released a report finding that the biomass of insects and arthropods in the El Yunque Rain Forest of Puerto Rico has decreased 60-fold between January 1977 and January 2013. As insect populations have plummeted, insect-eating frog and bird populations have fallen by 50% since

1990. President Theodore Roosevelt made the El Yunque Rain Forest a national reserve, and El Yunque remains the only tropical rain forest in the National Forest System.

99. Not all insect populations are unable to adapt to climate change. Vectors, such as ticks and mosquitos, thrive in warmer, wetter climates. As such, global climate change has been implicated in having a potentially serious impact on the future spatial and temporal distribution of vector-borne diseases. In particular, warming temperatures are predicted to both enhance transmission intensity and extend the distribution of diseases such as malaria, dengue, and Lime disease.[10]

100. Climate change may cause extinction of certain ecosystems all together, including alpine tundra, California chaparral, and blue oak woodlands. Certain public lands, including Bandelier National Monument and Mesa Verde National Park, are at risk of altogether losing their forests. Many species of vegetation, including tree species, are responding to climate change by migrating northward and to higher altitudes, and studies predict that species with restricted ranges will be most vulnerable.

101. On Mount Rainier, the highest mountain of the Cascade Mountain Range of the Pacific Northwest, for example, higher temperatures are drawing trees upward into mountain meadows. The forest canopy will eventually reduce or eliminate the sun's rays in these meadows, causing the flora and fauna of the mountain meadows to go extinct.

102. Climate changes may be most intense at higher elevations, including the alpine and sub-alpine wilderness areas of the Northern Rocky and Cascade Mountains. Given their relative geographical isolation and idiosyncratic environmental adaptations, montane species are "especially susceptible" to climate change. As a result, the primeval characteristics that set an

[10] *See* John Brownstein, et al., Effect of Climate Change on Lyme Disease Risk in North America, ECOHEALTH, Mar. 2005, 2(1):38-46.

area apart and qualify it for wilderness designation will almost certainly change over time as glaciers melt and precipitation patterns shift.

103. Mountain climbers, hikers, and other outdoor enthusiasts who recreate in high altitude climates will be impacted by the loss of biodiversity, as they will lose access to certain species of edible plants and fresh water that provide sustenance during their long stints in wilderness. In addition, these people will lose access to landscapes like meadows with which they harbor a deep, aesthetic connection.

104. Indigenous people will be impacted by the loss of biodiversity as they lose access to species of edible plants important to their culture for myriad reasons including: medicinal, cultural, aesthetic, and tradition.

105. According to the EPA, there is widespread agreement within the scientific community that the incidence of cyanobacterial blooms, also known as Blue-green algae, is increasing both in the U.S. and worldwide. Blue-green algae blooms lead to a depletion of oxygen in the water, a release of toxins, as well as taste and odor problems. The recent increase in the occurrence of Blue-green algae blooms can be attributed to increasing anthropogenic activities and their interaction with factors known to contribute to the growth of the blooms. Point sources (which may include discharges from sewage treatment plants and confined animal feeding operations) and non-point sources (which may include diffuse runoff from agricultural fields, roads and stormwater), may be high in nitrogen and phosphorus and can promote or cause excessive fertilization (eutrophication) of both flowing and non-flowing waters.

106. Anthropogenic climate change has recently been identified as a contributing factor to Blue-algae blooms because the changing climate has altered many environmental conditions that may promote growth and dominance of Blue-green algae, such as warmer water

temperatures, changes in salinity, increases in atmospheric carbon dioxide concentrations, changes in rainfall patterns, intensifying of coastal upwelling, and sea level rise.

107. Freshwater lakes across the United States with no history of Blue-algae are being closed in order to prevent human contact with the toxins associated with algal blooms, such as Lake Superior in August 2018 and the lake within Ringwood State Park in August 2018, the closure of which has caused Plaintiff Willow Phelps injury.

**D. The Government has endangered our national security by creating climate change.**

108. Absent judicial intervention, the impacts of climate change pose a grave national security threat. In 2007, the Center for Naval Analyses Military Advisory Board (CNA MAB)[1] issued a report titled "National Security and the Threat of Climate Change," which was signed by eleven retired three- and four-star flag and general officers. That report analyzed current scientific evidence on the subject of climate change and concluded that, among other things, the "nature and pace of climate changes being observed today, and the consequences projected by the consensus scientific opinion are grave and pose equally grave implications for our national security." *Id*.

109. Unchecked, climate change is a "threat multiplier for instability in some of the most volatile regions in the world," and immediate action should be taken to both assess the impacts on climate change and to mitigate those changes. *Id*.

110. Also in 2007, the Government Accountability Office (GAO) noted that Defendants had yet to develop guidance for federal land managers, preventing climate change mitigation and adaptation.[11]

[11] U.S. Gov't Accountability Office, *Climate Change: Agencies Should Develop Guidance for Addressing the Effects on Federal Land and Water Resources*, Report to Congressional Requestors, August 2007, at 156.

111. In 2008, the Government released a National Intelligence Assessment (NIA) concerning the effects of climate change on national security. According to Dr. Thomas Fingar, the Chairman of the National Intelligence Council and a key participant in the NIA's production:

> We judge global climate change will have wide-ranging implications for US national security interests over the next 20 years. . . . We judge that the most significant impact for the United States will be indirect and result from climate-driven effects on many other countries and their potential to seriously affect US national security interests. . . . Climate change could threaten domestic stability in some states, potentially contributing to intra- or, less likely, interstate conflict, particularly over access to increasingly scarce water resources. We judge that economic migrants will perceive additional reasons to migrate because of harsh climates, both within nations and from disadvantaged to richer countries.[12]

112. In 2010, as commander of the U.S. Joint Forces Command, Secretary Mattis signed off on the Joint Operating Environment, which lists climate change as one of the security threats the military expected to confront over the next 25 years.

113. The DOD acknowledged the severity of climate change and its connections to national security when, in its 2014 Quadrennial Defense Review, climate change was classified as a "threat multiplier."[13] "Pentagon leaders have identified three main ways that climate change will affect security; accelerating instability in parts of the world wracked by drought, famine, and climate-related migrations; threatening U.S. military bases in arid Western states or on vulnerable coastlines; and increasing the need for U.S. forces to respond to major humanitarian disasters." *Id.*

114. In 2015, President Obama's National Security Strategy (NSS) recognized climate change one of the "top strategic risks to [American] interests" on the same level as

[12] Statement of the Record of Dr. Thomas Fingar, "National Intelligence Assessment on the National Security Implications of Global Climate Change to 2030" (June 25, 2008), available at https://fas.org/irp/congress/2008_hr/062508fingar.pdf.
[13] U.S. Dept. of Defense, Quadrennial Defense Review (2014), available at http://archive.defense.gov/pubs/2014_quadrennial_defense_review.pdf.

"Catastrophic attack on the U.S. homeland or critical infrastructure; Threats or attacks against U.S. citizens abroad and our allies; Global economic crisis or widespread economic slowdown; Proliferation and/or use of weapons of mass destruction; Severe global infectious disease outbreaks."

115. Per the 2015 NSS, "Climate change is an urgent and growing threat to our national security, contributing to increased natural disasters, refugee flows, and conflicts over basic resources like food and water. The present-day effects of climate change are being felt from the Arctic to the Midwest. Increased sea levels and storm surges threaten coastal regions, infrastructure, and property. In turn, the global economy suffers, compounding the growing costs of preparing and restoring infrastructure."

116. In unpublished written testimony provided to the Senate Armed Services Committee after his confirmation hearing in January of 2017, Secretary Mattis stated, "Climate change is impacting stability in areas of the world where our troops are operating today. It is appropriate for the Combatant Commands to incorporate drivers of instability that impact the security environment in their areas into their planning."

117. Notwithstanding the consensus that climate change represents a dire national security threat, as acknowledged even by Defendant Mattis, Defendant's National Security Strategy omits climate change as a national security threat, even going so far as to remove reference to climate change entirely, instead indicating that "[e]xcessive environmental and infrastructure regulations" were the real threat.

118. The Government's wholesale failure to mitigate the impacts of climate change constitutes an abrogation of its duty to protect American citizens as a matter of national security.

### E. The Government has created and enhanced the dangers of climate change by permitting, subsidizing, and deregulating fossil fuel extraction and consumption, animal agriculture, and large-scale commercial logging.

#### 4. Fossil Fuel Combustion

119. According to the EPA, fossil fuel combustion is the primary source of greenhouse gas emissions in the United States. Nearly 29 percent of 2016 greenhouse gas emissions came from fossil fuel combustion for transportation. Approximately 28 percent of 2016 greenhouse gas emissions came from electricity production, and an additional 22 percent of 2016 emissions came from energy production for industry use. Eleven percent of 2016 greenhouse gas emissions came from burning fossil fuels to heat businesses and homes.

120. Fossil fuels are natural fuels, such as oil, coal, or natural gas, formed in the geological past from the remains of living organisms. Fossil fuels are a type of organic material, which means they are carbon-based compounds found naturally in terrestrial and aquatic environments. Put simply, fossil fuels act as carbon storage areas because carbon that is locked in these fossil fuels does not cycle through Earth. When humans burn fossil fuels, the stored carbon is released into the atmosphere as carbon dioxide. The carbon is then free to cycle through the atmosphere as a greenhouse gas.

121. Public lands are a source of fossil fuel extractions.

122. Combined, in 2015 federal lands accounted for 42 percent of all coal, 22 percent of all crude oil, and 15 percent of natural gas produced in the United States.

123. Over the last decade, the lifecycle emissions associated with these publicly-owned fossil fuel resources amounted to 20 percent of all U.S. greenhouse gas emissions.

124. The Government, through the Department of Interior's BLM, makes fossil fuel resources available for commercial production and encourages the development of fossil fuel resources. In line with this policy, each of BLM's state offices conducts quarterly competitive

sales to lease available federally-owned and managed lands to fossil fuel developers. In 2017, the BLM generated $360 million from oil and gas lease sales, an 86 percent increase over the BLM's 2016 income of $192.5 million. Among these sales, which together were the highest in a decade, rights to a total of 949 parcels of federal land, covering 792,832 acres, were sold for the sole purpose of fossil fuel extraction and eventual combustion.

125. In addition to regular lease sales, bonus bids from oil and gas leasing in calendar year 2017 brought in $358,036,988 in revenue to the Government. This is the highest grossing sale year since 2008, when bonus bids came to $408,631,537. Calendar year 2017 sales also outpaced 2016 sales of $192,482,007.

126. The BLM awards oil and gas leases for a term of 10 years and as long thereafter as there is production of oil and gas in paying quantities. A "bonus bid" is a one-time payment in exchange for exclusive access to explore a parcel of federal land for its potential in fossil fuel extraction and is accompanied by an exclusive lease for a set period of time.

127. The BLM also leases land for coal mining and production. In 2015, the BLM announced that 40 percent of coal produced in the United States comes from federally owned and managed lands.

128. The BLM, together with the Forest Service, coordinates the leasing of oil and natural gas rights underlying 192 million acres of National Forest System Lands. For example, in 2017, the BLM and Forest Service approved Arch Coal's lease to mine 17 million tons of coal on 1,700 acres of roadless wildlands in the Gunnison National Forest on Colorado's pristine West Slope. Arch Coal plans to carve six miles of roads and scrape 50 drilling pads—with vents to release the methane—into the Sunset Roadless Area, adjacent to the West Elk Wilderness, destroying habitat for black bear, elk, beaver, and Canada lynx.

129. The Forest Service, along with BLM, coordinates and authorizes the leasing of federally managed lands for the extraction of oil and gas pursuant to authority granted by Congress under the Mineral Leasing Act of 1920, as amended by both the Federal Onshore Oil and Gas Leasing Reform Act, and the Mineral Leasing Act for Acquired Lands.

130. The Forest Service, in conjunction with BLM, issues leases and mining permits for coal mining development and oversees coal mining on federally managed lands pursuant to authority granted by Congress, under the Mineral Leasing Act of 1920, as amended, and the Surface Mining Control and Reclamation Act of 1977, 30 U.S.C. § 1273.

131. Together with the BLM, the Forest Service also manages Bears Ears National Monument. In 2017, President Donald J. Trump directed the BLM and Forest Service to shrink the Bears Ears National Monument from 1.4 million acres to 220,000 acres, so the remaining acres could be leased for fossil fuel production. President Trump also directed the agencies to shrink the size of Grand Staircase-Escalante National Monument from 1.9 million acres to 1 million acres for the same reason.

132. The National Parks Service oversees the exercise of non-federal oil and gas rights on lands manages by the National Parks Service. As of the filing of this Complaint, the National Park Service oversees hundreds of active oil and gas wells across twelve national monuments or preservations areas, recreation areas, or national rivers and parks. According to the National Park Service, at least thirty additional areas within its land management jurisdiction are eligible for fossil fuel development and extraction because titleholders' subsurface mining rights for oil and gas development are inside park boundaries.

133. Interior has jurisdiction over fossil fuel production in U.S. waters, or the territorial sea, through its Bureau of Ocean Energy Management. On January 4, 2018, Interior Secretary

Ryan Zinke announced the draft National Outer Continental Shelf Oil and Gas Leasing Program, which will allow fossil fuel development in 90 percent of U.S. waters, an astronomical increase from the current 6 percent of waters previously made available for this purpose.

134. In addition to leasing federal public lands for fossil fuel exploitation, the Government permits, subsidizes, funds, and incentivizes fossil fuel production and consumption. In total, the Government is one of the largest energy asset managers in the world.

135. Unless enjoined, the Government's permitting, subsidization, funding, and incentivization of fossil fuel production and consumption have caused and will continue to cause climate change and Plaintiffs' injuries.

136. Examples of major fossil fuel projects follow.

**i. Keystone XL and Dakota Access Pipelines**

137. In 2017, President Trump's Department of State approved construction of the Keystone XL Pipeline, and his Army Corps of Engineers approved the Dakota Access Pipeline.

138. The Keystone XL pipeline will carve through thousands of miles of land in order to transport 830,000 barrels per day of heavy crude oil and diluted bitumen from Canadian oil sand facilities through the Midwest to refineries along the U.S. Gulf Coast, which are built to handle the heavy crude oil that comes out of tar sands.

139. According to the EPA, extracting oil from tar sands generates more greenhouse gas emissions than extracting oil through more conventional methods. In addition, as each oil pipeline is built, more oil is extracted at a faster rate, meaning greenhouse gases are released more quickly.

140. By approving the Keystone XL Pipeline, the Government has endorsed the production of tar sands oil, which has had and will continue to have devastating impacts on the

environment, including the destruction of millions of acres of the North American Boreal Forest in Alberta.

141. The Dakota Access Pipeline will extend 1,168 miles across North Dakota, South Dakota, Iowa, and Illinois, crossing through communities, farms, tribal land, sensitive natural areas and wildlife habitat, including nine threatened, endangered, and candidate species. The Dakota Access Pipeline project was conceived to address the growing amount of oil from shale gas reserves being shipped out of North Dakota by freight trains.

142. By increasing the availability of fossil fuels, the Dakota Access Pipeline will result in more greenhouse gas emissions, which will contribute to climate change and impact the environment.

#### ii. Drilling in the Coastal Plain of the Arctic National Wildlife Refuge

143. The Coastal Plain of the Arctic National Wildlife Refuge is home to more than 250 animal species, as well as the largest concentration of land-based polar bear dens in the United States.

144. Every Congress since 1986 has introduced a bill that would designate more wilderness areas in the Arctic National Wildlife Refuge, none of which have passed.

145. In 2017, Congress opened the Coastal Plain for fossil fuel development.

#### iii. Executive Order 13783

146. On March 28, 2017, President Trump issued Executive Order 13783 (E.O.), which he titled "Promoting Energy Independence and Economic Growth." Among many failures, the E.O. directed the EPA to immediately repeal the Clean Power Plan, through which EPA had established strict carbon emission limitations for existing fossil fuel-fired power plants across the United States. The E.O. instructed EPA to initiate new notice-and-comment

rulemaking "as appropriate" to suspend, revise, or rescind the Clean Power Plan. It also directed the Attorney General to request a stay "or otherwise delay further litigation" relating to the Clean Power Plan pending the implementation of the E.O.

147. President Trump, through the E.O., also revoked a number of previous executive orders and presidential memoranda designed to reduce or eliminate the Nation's reliance on fossil fuels or mitigate the impacts of climate change. For example, the E.O. directed the Council on Environmental Quality (CEQ) to rescind guidance requiring federal agencies to consider climate change when conducting reviews under the National Environmental Policy Act. In April 2017, the CEQ issued a notice announcing the withdrawal of this guidance.

148. The E.O. also reversed former-President Obama's moratorium on coal leasing on federal lands.

149. The E.O represents the starkest example of how the Government is not only failing to mitigate the impacts of climate change but also actively promoting the very industries and activities that contribute to one-third of global atmospheric carbon. The E.O. shocks the conscious as a matter of policy and as a direct threat the Plaintiffs' rights to life, liberty, and wilderness.

150. With the E.O., the Government's prior deliberate indifference to its climate change impacts evolved into a reckless disregard for its climate change impacts, which unconstitutionally infringe upon Plaintiffs' right to be let alone in wilderness.

**5. Animal Agriculture**

151. Today, the majority of American farmland is dominated by industrial agriculture—the system of intensive food production developed in the decades after World War II, featuring enormous single-crop operations and animal production facilities. Intensive food production relies on chemicals and pharmaceutical products to increase production.

152. According to the United Nations Food and Agriculture Organization (UNFAO), with emissions estimated at 7.1 gigatons of carbon dioxide-equivalents per year, representing 14.5 percent of human-induced greenhouse gas emissions, the livestock sector plays an important role in climate change.[14]

153. Beef and cattle milk production account for the majority of emissions, respectively contributing 41 and 20 percent of the sector's emissions. Pork, poultry, and eggs contribute 17 percent of the sector's emissions. The strong projected growth of this production will result in higher emission shares and values over time.

154. Feed production and processing and enteric fermentation from ruminants are the two main sources of emissions, representing 45 and 39 percent of sector emissions globally. Manure storage and processing represent 10 percent. The remainder is attributable to the processing and transportation of animal products.

155. The expansion of pasture and feed crops into forests accounts for 9 percent of the sector's emissions.

156. Cutting across categories, the consumption of fossil fuels along the sector supply chains accounts for about 20 percent of sector emissions.

157. In 2016, 9 percent of U.S. greenhouse gas emissions came from agriculture.

158. The production of one calorie of animal protein requires more than ten times the fossil fuel input as a calorie of plant protein.

159. Congress forbade the EPA from using federal appropriations to promulgate or implement regulations to control greenhouse gas emissions "resulting from biological processes associated with livestock production" in 2016. In addition, Congress prohibited the EPA from

[14] *See*, P.J. Gerber, et al., "*Tackling Climate Change Through Livestock: A Global Assessment of Emissions and Mitigation Opportunities*," UNFAO (Rome 2013).

requiring "mandatory reporting of greenhouse gas emissions from manure management systems," which EPA previously characterized as "essential in guiding the steps we take to address the problem of climate change." As a result, EPA lacks access to critical data about livestock production's contribution to total air pollution and corresponding climate change impacts.

160. Despite deliberate steps taken to prevent data collection, the EPA now alleges it does not have enough information about greenhouse gas emissions from animal agriculture to justify greenhouse gas regulation of animal agriculture in any way.

161. At every stage of livestock production, the United States subsidizes, facilitates, and incentivizes farmed animal production and consumption. Government subsidization creates artificially high demand for animal products, the prices for which should reflect the true costs of production on the climate.

**iv. Concentrated Animal Feeding Operations**

162. Unless enjoined, the Government's permitting, subsidization, funding, and incentivization of animal agriculture have caused and will continue to cause climate change and Plaintiffs' injuries.

163. Much of American crop harvests go to feed livestock in concentrated animal feeding operations, or CAFOs, where animals are fed a high-calorie, grain-based diet, often supplemented with antibiotics and hormones, to maximize the animals' weight gain.

164. According to the EPA, methane emissions from animal waste storage and enteric fermentation contribute to climate change.

165. Livestock, especially ruminants such as cattle, produce Methane ($CH_4$) as part of their normal digestive processes. This process is called enteric fermentation, and it represents one-third of the emissions from the agriculture economic sector.

166. The way in which manure from livestock is managed also contributes to $CH_4$ and Nitrous Oxide ($N_2O$) emissions. Different manure treatment and storage methods affect how much of these greenhouse gases are produced. Manure management accounts for about 15 percent of the total greenhouse gas emissions from the agriculture economic sector in the United States.

167. Methane traps up to 100 times more heat in the atmosphere than carbon dioxide within a five-year period and seventy-two times more within a twenty-year period. Methane also has a shorter atmospheric lifetime of ten years, as compared to 230 years for $CO_2$.

168. Methane accounts for 18 percent of greenhouse gas emissions in the United States, and animal agriculture is one of the primary sources of methane emissions.

169. Reducing methane emissions by forty million tons is equivalent to reducing 1,400 million metric tons of $CO_2$ in the atmosphere.

**v. Monoculture**

170. At the core of American food production is monoculture, the practice of growing single crops intensively on a very large scale. Corn, wheat, soybeans, cotton and rice are all grown this way in the United States.

171. Various management practices on agricultural soils lead to increased availability of nitrogen in the soil and result in emissions of $N_2O$. Specific activities that contribute to $N_2O$ emissions from agricultural lands include the over-application of synthetic and organic fertilizers that evaporate excess $N_2O$ into the atmosphere, the growth of nitrogen-fixing crops, the drainage of organic soil, and irrigation practices. Management of agricultural soils accounts for over half of the emissions from the agriculture economic sector.

172. Monoculture farming relies heavily on synthetic fertilizers. These fertilizers are needed because growing the same plant (and nothing else) in the same place year after year

quickly depletes the nutrients that the plant relies on, and these nutrients have to be replenished for the next planting .

173. Nitrous oxide molecules stay in the atmosphere for an average of 114 years before being removed by a sink or destroyed through chemical reactions. The impact of one pound of $N_2O$ on warming the atmosphere is 300 times that of 1 pound of $CO_2$.

174. USDA has admitted that the dominant drivers of greenhouse gases related to land use in the United States are the conversion of forests and grasslands, which act as carbon sinks, to cropland and pasture for animal agriculture.

175. Smaller sources of agricultural emissions include $CO_2$ from liming and urea application, $CH_4$ from rice cultivation, and burning crop residues, which produces $CH_4$ and $N_2O$.

176. The Government's failure to prevent large swaths of former grasslands and forest lands from being converted into monocultures has exacerbated the impacts of climate change.

177. Rather than regulate monoculture, the Government actively subsidizes specific crops through the provision of monetary subsidies, crop insurance, price supports, and other taxpayer-funded programs designed to incentivize the mass production of single crops on large acreages of land.

178. The Government's inactions and actions have contributed to climate change, which has destroyed and will continue to destroy American wilderness.

**vi. Livestock Grazing**

179. Unless enjoined, the Government's permitting, subsidization, funding, and incentivization of livestock grazing on federal lands have caused and will continue to cause climate change and Plaintiffs' injuries.

180. Presently, the Government, through Interior's Bureau of Land Management, leases 22,000 grazing permits to ranchers who have the right to graze their cattle on 270 million acres of public "rangelands" across the Western United States.

181. As early as 1978, the Senate Committee on Commerce, Science, and Transportation recognized that "overgrazing" and "overenthusiastic introduction of livestock" causes a "loss of, or a decline in, the quality of soil" which may intensify climate change.

182. The conversion of native grasslands in the Mountain West to "rangeland" has reduced the productivity of such lands. When combined with methane emissions from cattle that are non-native to the land, vast areas that once operated as a carbon sink are now a source of greenhouse gas emissions.

183. The USDA admits that improving management on federal lands in the U.S. alone would sequester 11 million additional tons of carbon dioxide annually.

**6. Logging and Deforestation**

184. Deforestation contributes to climate change because trees absorb carbon dioxide through photosynthesis, serving as "storage units" for greenhouse gases. Forests, therefore, can act as a sink (storage basin) or source of greenhouse gas emissions.

185. In 1989, Tom Spies, research forest ecologist for USDA's PNW Research Station and Jerry Franklin, University of Washington professor, developed a generic definition of old-growth forests for the Forest Service. The definition reads, in part: "Old-growth forests are ecosystems distinguished by old trees and related structural attributes . . . that may include tree size, accumulations of large dead woody material, number of canopy layers, species composition, and ecosystem function."

186. When European settlers arrived at the start of the 17th Century, old-growth forests covered much of the northern two-thirds of North America. By the late 1800s, as much as 90 percent of these forests had been cut.

187. Twenty percent of North American forests have been permanently cleared for agriculture uses.

188. Planted forests (or forest plantations) are composed of trees established through planting or through deliberate seeding of native or introduced species. Establishment is either through afforestation on land which has not carried forest within living memory or by reforestation of previously forested land.

189. Converting old-growth forests into younger-growth forest plantations results in a forest capable of only about 31 percent of its carbon sequestration potential.

190. Forest fragmentation is the breaking of large, contiguous, forested areas into smaller pieces of forest; typically, these pieces are separated by roads, agriculture, utility corridors, subdivisions, or other human development. Fragmentation occurs incrementally, beginning with cleared patches here and there, within an otherwise unbroken expanse of tree cover. Over time, those non-forest patches tend to multiply and expand until eventually the forest is reduced to scattered, disconnected forest islands. The surrounding non-forest lands and land uses seriously threaten the health, function, and value of the remaining forest.

191. Isolated fragments of forest tend to emit carbon through above-average numbers of decomposing trees caused by a phenomenon referred to as “edge-related tree mortality.” Forest edges interface more with human activities, are exposed to pesticides and herbicides, and receive more light that deep within forests, all of which decrease biodiversity and forest health and cause tree deaths.

192. The Government, through the Forest Service and BLM, builds roads, so humans can access different parts of the forest for commercial logging, human recreation, grazing, and other services. Roads cause forest fragmentation, which lead to edge-related tree deaths and increased carbon emissions.

193. The Forest Service and BLM focus their management and development of forests on each forest's commodity values, especially timber and grazing, at the expense of non-commodity values such as wildlife and wilderness preservation.

194. Nationwide, the commercial logging industry now emits more carbon than the residential and commercial sectors combined.

195. Federally-authorized commercial logging reduces the carbon storage potential of U.S. forests by 42 percent.

196. The intensity of logging in the U.S. South is visible from space. Satellite images of global forest cover document that from 2000 to 2012, the rate of disturbance of southern U.S. forests from logging was four times the rate of South American rainforests.

197. In Oregon, timber harvesting is now the state's single largest source of greenhouse gas emissions.

198. The Forest Service has increased timber production on national forests from 2.5 billion board feet (bbf) in 2011 to 2.8 bbf in 2014.

199. President Trump's proposed 2018 budget targets 3.2 bbf, which represents 60 percent of Forest Service Lands.

200. The Forest Service authorizes significant logging and mining of forest lands through the National Forest Management Act of 1876, 16 U.S.C. §§ 471, *et seq*., as well as the Multiple Use and Sustained Yield Act, 16 U.S.C. §§ 528-31.

201. Unless enjoined, the Government's permitting, subsidization, funding, and incentivization of commercial logging on federally-managed lands have caused and will continue to cause climate change and Plaintiffs' injuries.

**F. Despite its clear mandate to do so, Government agencies authorized to recommend wilderness areas for permanent protection have failed to do so.**

202. In 1964, Congress passed the Wilderness Act, "[i]n order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition." 16 U.S.C. § 1131(a).

203. Congress declared that it is the "policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness." 16 U.S.C. § 1131(a).

204. The following activities are expressing prohibited in Wilderness Areas: "no commercial enterprise and no permanent road; no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area." 16 U.S.C. § 1133(c).

205. At 16 U.S.C. § 1131(c), "wilderness" is defined as follows:

> A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this chapter an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain

> ecological, geological, or other features of scientific, educational, scenic, or historical value.

206. The Wilderness Act established the National Wilderness Preservation System (NWPS), which is administered by the Government through Interior by the National Park Service (40 percent of wilderness areas); BLM (8 percent of wilderness areas); and Fish & Wildlife Service (18 percent of wilderness areas) together with the Forest Service (33 percent of wilderness areas). Through the NWPS, the Government designates qualifying federal lands as "Wilderness Areas" to be protected in perpetuity.

207. These four federal agencies manage most of the 110 million acres of designated Wilderness Areas, as well as many other lands. They also protect lands as possible additions to the NWPS and review the wilderness potential of lands for official wilderness designation.

208. In total, 765 areas on 109 million acres of federal land are designated Wilderness Areas in the United States, representing 18 percent of federal land administered by the four major federal land management agencies, and 5 percent of all land in the United States, has been designated as wilderness, largely in Alaska.

209. Alaska, because of its size and relative pristine condition, dominates wilderness statistics—more than 52 percent of designated wilderness is in Alaska.

210. In total, 16 percent of all land (federal, state, private, and other) in Alaska has been designated as wilderness. In contrast, 3 percent of all land in the United States outside Alaska has been designated as wilderness.

211. Since 1981, BLM has prohibited wilderness review of BLM lands in Alaska.

212. The BLM and Forest Service, through the Federal Land Management Planning Act, have authority to inventory and manage study areas for wilderness characteristics to determine whether formal recommendation to Congress for wilderness designation is warranted.

213. Wilderness Study Areas (WSA) have many of the same characteristics as designated Wilderness Areas but have not been granted wilderness designation by Congress. WSAs are protected from development, although not as stringently as Wilderness Areas, and contain ecologically important, beautiful, and untrammeled wildlands that rival those found in designated Wilderness Areas.

214. As of April 1993, the last time the Government comprehensively studied the perpetual status of WSAs, the BLM and Forest Service managed 869 study areas, comprising 33 million acres.

215. To date, the BLM and Forest Service have failed to recommend wilderness designation for the majority of these WSAs.

216. According to the National Park Service, in 2009, 26 million acres of wilderness were eligible for designation within thirty-six national park units.

217. BLM has removed many study areas from consideration for wilderness designation because they were flat or lacked "vegetative screening," making them incapable of providing sufficient opportunities for solitude.

218. Wilderness areas, with their rich biodiversity and stabilized ecosystems, provide the most productive natural carbon sequestration in the world. Absent their sustained preservation, humans will not be able to reduce the amount of greenhouse gases in the atmosphere or reverse the trend of global climate change.

**G. The right to wilderness is an essential pre-condition to the exercise of the rights to liberty and autonomy.**

219. Wilderness refers to an environment as near as possible to that which existed at the time of the Nation's founding, akin to John Locke's "state of nature," where the right to such

an environment is in turn an "interpolation and extrapolation" of the constitutional right to be let alone.

220. Being in nature may be important for some wilderness visitors whereas being away from human influence may be significant for others. Often the combination of these motives is conducive to spirituality and contemplation, to privacy and autonomy.

221. Spiritual experience in wilderness has been characterized by emotions of awe and wonderment at nature, feelings of connectedness with the nonhuman world, inner calm, joy, religious-like or self-transcending feelings of peace and humility, as well as "facilitating the sacredness of life, meaning and purpose."[15]

222. Studies have demonstrated that experiencing the solitude and naturalness of wilderness frequently has restorative, therapeutic benefits that continue long after the end of a particular wilderness experience, in part because the experiences "provided time and space to think about meaning and purpose in relation to suffering, the limits of human life, and nonmaterial pleasures." *Id.*

223. Given the benefits of solitude in wilderness, "wilderness therapy" treatments have become increasingly common, with researchers finding that wilderness has substantial therapeutic benefits in and of itself, i.e. even separate and apart from other treatment.

224. For children, play in nature is important physically and psychologically. Adult recollections of special places and preferred play areas provide testament to the importance of nature in childhood. Natural areas have been found to satisfy some critical developmental needs of young children, and many scientists fear that without exposure to nature and outdoor play development could be hindered. Increasingly, children have fewer opportunities to play outdoors,

[15] David N. Cole and Troy E. Hall, *Privacy functions and wilderness recreation: Use density and length of stay effects on experience*, ECOPSYCHOLOGY, (Sept. 10, 2010), 2:2, at 67-75.

especially in natural or even semi-natural areas. As climate change erodes wilderness, many children will never develop a personal bond with the natural world and may grow up believing they are separate from, versus a part of, the natural world, which will cause substantial injury to their development.

225. Youth participating in wilderness therapy programs improved significantly in mood and behavior during treatment, and those improvements continued when they returned home. [16]

226. As people increasingly seek out places that are remote, less popular, and without well-developed trails and established campsites in wilderness, those areas will necessarily become even more crowded and degraded, making the right to wilderness, and its rare combination of solitude and naturalness in particular, even more precious.

227. This phenomenon is compounded by the shortened window in which conditions are suitable for recreating as a result of climate change, which in turn creates greater crowding and degradation of wilderness.

228. The Government's reckless disregard for the harm to Plaintiffs caused by its failure to mitigate the impacts of climate change on wilderness undermines the social contract because people cannot meaningfully consent without a state of nature available for exit.

## VI. LEGAL FRAMEWORK

### H. The United States Constitution guarantees a fundamental right to privacy and autonomy, undergirded by the Social Contract Theory.

229. The liberty interest recognized by the Due Process Clause of the Fifth and Fourteenth Amendments to the United States Constitution permits individuals to lead their lives

[16] Ellen Behrens, et al., *The Evidence Base For Private Therapeutic Schools, Residential Programs, And Wilderness Therapy Programs*, JOURNAL OF THERAPEUTIC SCHOOLS AND PROGRAMS (2010) 4:1 at 106-117.

free from unreasonable and arbitrary governmental impositions. *Planned Parenthood v. Casey*, 505 U.S. 833, 851, (1992) (describing the heart of U.S. constitutional liberty under the Fourteenth Amendment as "the right to define one's own concept of existence, of meaning, of the universe, and of the mystery of human life," absent "compulsion of the State."); *see also Obergefell v. Hodges,* 135 S. Ct. 2071 (2015); *Lawrence v. Texas,* 539 (U.S. 558 (2003); *Griswold v. Connecticut*, 381 U.S. 479 (1965), *Roe v. Wade*, 410 U.S. 113, (1973).

230. The word *liberty* cannot be defined by a definitive list of rights. Instead, it must be viewed as a rational continuum of freedom through which every facet of human behavior is safeguarded from arbitrary impositions and purposeless restraints.

231. In this light, the Supreme Court has observed that the Due Process Clause of the Fourteenth Amendment protects abstract liberty interests, including the right to personal autonomy, bodily integrity, self-dignity, and self-determination, where those liberties are deeply rooted in the Nation's history and tradition or fundamental to our scheme of ordered liberty.

232. Evidence of fundamental rights may be found in "the usual repositories of our freedom, such as federal and state constitutional provisions, constitutional doctrines, statutory provisions, common-law doctrines, and the like." *Williams v. AG of Ala*., 378 F.3d 1232, 1244 11th Cir. 2004).

233. A right that is "a necessary condition to exercising" a fundamental right may itself be implied as fundamental. *See Juliana v. United States*, 217 F. Supp. 3d 1224, 1250 (D. Or. 2016)..

234. In *Juliana v. United States*, the United States District Court for the District of Oregon recognized the right to a climate system capable of sustaining human life as a necessary

condition to exercising other rights to life, liberty, and property. *See Juliana v. United States*, 6:15-CV-01517-TC, 2016 WL 6661146, at *16 (D. Or. Nov. 10, 2016).

235. Another example: The First Amendment's protection of the freedom of association necessarily encompasses the freedom to not associate. *California Democratic Party v. Jones,* 530 U.S. 567, 574–75 (2000) (noting that "a corollary of the right to associate is the right not to associate").

236. Thus, the freedom to choose not to associate by seeking solitude in wilderness is an indispensable corollary to this right because it is impossible to truly and voluntarily consent to association if there is no alternative.

237. The Supreme Court has long recognized an individual right to privacy and autonomy guaranteed by the substantive due process protections contained in the United States Constitution.

**I. The right to wilderness is a precondition to exercising the fundamental liberty and autonomy rights as envisioned by the Framers' incorporation of the social contract theory into the United States Constitution.**

238. According to the Supreme Court, "it is always safe to read the letter of the Constitution in the spirit of the Declaration of Independence." *Cotting v. Kan. City Stock Yards Co.*, 183 U.S. 79, 107 (1901).

239. When drafting the Declaration of Independence,[17] the Framers relied heavily on John Locke's theory of the social contract, which allows for an implicit agreement among the members of a society to cooperate for social benefits, for example, by sacrificing some individual freedom for state protection. To have meaning, the social contract requires that a

[17] "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness. -- That to secure these rights, Governments are instituted among Men, deriving their just powers from the Consent of the governed . . ." Declaration of Independence, para. 2 (U.S. 1776).

"state of nature," or wilderness, exist so that individuals can meaningfully consent to the social contract provided by the state or later exit that contract in the event of arbitrary government interference with individual liberty.

240. The "state of nature" refers to "the vast wilderness of the earth . . . free and unpossessed" as well as "a state of perfect freedom" in which persons could "order their actions, and dispose of their possessions and persons, as they think fit, within the bounds of the law of nature, without asking leave, or depending upon the will of any other man."[18]

241. People who have consented to government must be able to revoke consent by exiting civil society and returning to the "state of nature."

242. Several early colonial charters and state bills of rights effected Locke's social contract by expressly reserving to the people tithe right to exit or otherwise travel freely among the several states.[19]

243. The United States Constitution can be viewed as a tangible embodiment of a new agreement. In this manner, the social contract concept is brought down from the rarified stratosphere of natural law-natural rights theorizing and made concrete.

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[18] *See* John Locke, *The Second Treatise on Government*, 35-36 (1690; last amended March 2008).

[19] The Liberties of the Massachusetts Colonies in New England (1641), art. 17, available at http:// history.hanover.edu/texts/masslib.html ("Every man of or within this Jurisdiction shall have free liberties, notwithstanding any Civil power to remove both himself, and his family at their pleasure out of the same, provided there be no legal impediment to the contrary."); Pa. Const. of 1776, Declaration of Rights, art. XV, reprinted in 5 The Federal and State Constitutions, Colonial Charters, and Other Organic Laws of the States, Territories, and Colonies Now or Heretofore Forming the United States of America 3081, 3084 (Francis Newton Thorpe ed., 1909) ("That all men have a natural inherent right to emigrate from one state to another that will receive them, or to form a new state in vacant countries, or in such countries as they can purchase, whenever they think that thereby they may promote their own happiness."); Vt. Const. art. XVII (1777), available at http:// avalon.law.yale.edu/18th_century/vt01.asp ("That all people have a natural and inherent right to emigrate from one State to another, that will receive them, or to form a new State in vacant countries, or in such countries as they can purchase[] whenever they think that thereby they can promote their own happiness."); Vt. Const. art. XXI (1786), available at http:// avalon.law.yale.edu/18th_century/vt02.asp.

244. The most obvious inclusion of the Locke's philosophy in the Constitution is in the Ninth Amendment, which provides, "The enumeration in the Constitution of certain rights, shall not be construed to deny or disparage others retained by the people." U.S. Const. amend. IX. Rights cannot be "retained by the people" unless they exist antecedent to government.

245. Courts continue to cite Locke as authority for upholding the right to be left alone in the face of government encroachment.[20]

246. The fundamental right to be let alone, in particular, derives from the Declaration of Independence and the social contract. Justice Brandeis indicated as much when he wrote:

> "The makers of our Constitution undertook to secure conditions favorable to the pursuit of happiness. They recognized the significance of man's spiritual nature, of his feelings and of his intellect. They knew that only part of the pain, pleasure and satisfactions of life are to be found in material things. They sought to protect Americans in their beliefs, their thoughts, their emotions and their sensations. They conferred, as against the Government, the right to be let alone—the most comprehensive of rights and the right most valued by civilized men."

*Olmstead v. United States*, 277 U.S. 438, 478 (1928); *see also Pavesich v. New England Life Ins. Co*., 122 Ga. 190, 50 S.E. 68, 69–70 (1905) ("The individual surrenders to society many rights and privileges which he would be free to exercise in a state of nature, in exchange for the

[20] *See Florida Rock Industries, Inc. v. United States*, 8 Cl. Ct 160, 168-169 (1985) ("Our guiding principle should derive from our Lockean tradition—a tradition that speaks about justice and natural rights…. When government wishes to encroach on those rights in order to discharge its collective functions, it must give all the individuals on whom it imposes its obligations a fair equivalent in exchange."); *Lynch v. Household Fin. Corp*., 405 U.S. 538, 552, (1972) ("That rights in property are basic civil rights has long been recognized. J. Locke, Of Civil Government 82—85 (1924)"); *Garner v. United States*, 501 F.2d 228, 235 (9th Cir. 1972) (Wallace, J., dissenting) ("Concern for the accusatorial system is a concern for the preservation of individual privacy as well, reflecting the Lockean notion that government is essentially a restraint on liberty and ought to leave the individual alone."); *In re Cincinnati Radiation Litig*., 874 F. Supp. 796, 815 (S.D. Ohio 1995) ("John Locke, the ideological father of the American Revolution," asserted that "[t]he function of the law … [is] to protect individual liberty from restraint by government or others."); *Brown & Williamson Tobacco Corp. v. FTC*, 710 F.2d 1165, 1177 n.6 (6th Cir. 1983) (stating that Locke called for rules of law designed to protect against arbitrary government); *United States v. Ganz*, 806 F. Supp. 1567, 1575 (S.D. Fla. 1992) (describing the "The consent theory of government, expounded by philosophers such as John Locke and Jean Jacques Rousseau and adopted by our founding fathers," as well as emphasizing the government's "higher standard in carrying out our common duties [under the social contract]."); *Doe v. Prosecutor, Marion Cty*., Ind., 566 F. Supp. 2d 862, 887 (S.D. Ind. 2008) ("The social contract reflected in our Constitution imposes limits on law enforcement to protect liberty and privacy.").

benefits which he receives as a member of society. But he is not presumed to surrender all those rights, and the public has no more right, without his consent, to invade the domain of those rights which it is necessarily to be presumed he has reserved, than he has to violate the valid regulations of the organized government under which he lives. The right of privacy has its foundation in the instincts of nature. It is recognized intuitively, consciousness being the witness that can be called to establish its existence.")

247. While *Griswold*, *Roe*, *Lawrence*, *Obergefell,* and other decisional privacy cases under the Due Process Clause do not mention the social contract specifically, they recognize that certain governmental actions may be invalid not because they contradict some explicit provision of the Constitution, but because they violate the social contract principles concerning the rightful province of government in the lives of individuals. *See Obergefell v. Hodges,* 135 S. Ct. 2071 (2015); *Lawrence v. Texas,* 539 U.S. 558 (2003); *Griswold v. Connecticut*, 381 U.S. 479 (1965), *Roe v. Wade*, 410 U.S. 113, (1973).

248. Courts also continue to recognize the right to exit the body politic and travel freely among the several states as important guardians of individual liberty. *See Kent v. Dulles,* 357 U.S. 116, 125 (1958).[21]

249. Indeed, the necessity of wilderness to the exercise of each of these fundamental, social contract-derived rights was recently recognized by this very district court while articulating the government's continued affirmative duty to safeguard public trust assets, or the literal "state of nature" in the face of climate change:

[21] "The right to travel is a part of the 'liberty' of which the citizen cannot be deprived without the due process of law under the Fifth Amendment….Freedom of movement is basic to our scheme of values); *Kerry v. Din*, 135 S.Ct. 2128, 2133 (2015) (plurality opinion, Scalia, J) (referencing Blackstone's recognition that "the "personal liberty of individuals consist[ed] in the power of locomotion, of changing situation, or removing one's person to whatsoever place one's own inclination may direct; without imprisonment or restraint."); *Construction Industry Ass'n of Sonoma City v. City of Petaluma*, 375 F. Supp. 574, 581 (N.D. Cal. 1974) (noting that the question of where to live should be "within the exclusive realm of that individual's prerogative.").

> The Social Contract theory, which heavily influenced Thomas Jefferson and other Founding Fathers, provides that people possess certain inalienable lights and that governments were established by consent of the governed for the purpose of securing those rights. Accordingly, the Declaration of Independence and the Constitution did not create the rights to life, liberty, or the pursuit of happiness—the documents are, instead, vehicles for protecting and promoting those already-existing rights. Cf. Robinson Twp., 83 A.3d at 948 (plurality opinion) (rights expressed in the public trust provision of Pennsylvania Constitution are "preserved rather than created" by that document); Minors Oposa, 33 I.L.M. at 187 (the right of future generations to a "balanced and healthful ecology" is so basic that it "need not even be written in the Constitution for [it is] assumed to exist from the inception of humankind").

*Juliana v. United States*, 217 F. Supp. 3d 1224, 1260–61 (D. Or. 2016), motion to certify appeal denied, No. 6:15-CV-01517-TC, 2017 WL 2483705 (D. Or. June 8, 2017).

250. The Government's reckless disregard for Plaintiffs' injuries caused by the impacts of climate change undermines the social contract itself, as citizens have entered the social contract for benefits of security,[22] and the Government, despite having acknowledged climate change as a grave national security threat, continues to deliberately exacerbate that threat and amplify its harmful consequences. Due to the Government's actions, Plaintiffs now find themselves bound to a contract (1) to which they cannot meaningfully consent, with no remaining state of nature as an alternative, and (2) that should be dissolved anyway as the government has not met its fundamental social contract obligations as envisions by the Framers.

### J. The United States recognizes wilderness as the baseline for the state of nature, which must be protected as a necessary condition to exercising the fundamental rights to liberty, privacy, and autonomy.

251. The United States implicitly recognizes wilderness as the environmental baseline that must be protected as a necessary condition to exercising the fundamental rights to liberty, privacy, and autonomy.

[22] *See* John Locke, The Second Treatise on Government, p. 16 (1690; last amended March 2008) at 16 (where security "is one great reason of men putting themselves into society, and quitting the state of nature . . . ")

252. For example, when Congress first protected the wilderness that would later become Yosemite National Park during Abraham Lincoln's presidency through the Yosemite Park Act of 1864, Congress recognized that it had a duty to provide citizens with opportunities to connect with nature in perpetuity.

253. Following along those lines, in 1916 Congress established the National Park Service through the National Park Service Organic Act "to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." 54 U.S.C. § 100101, *et seq*.

254. Today, the National Park Service administers 417 national park sites.

255. The Ninth Circuit has recognized that Congress established national parks in part to "preserve for people a setting for respite and reflection," with the protection of "visitors' fundamental right to be left alone" being one of the "primary purposes of our national parks." *U.S. v. Munoz* 701 F.2d 1293, 1298 (9th Cir. 1983). The *Munoz* case not only affirms privacy as a fundamental right but connects wilderness to that right and restrains the government from interfering with those rights on federally-managed lands. *Id.* Yet in *Munoz,* the intrusion at issue—a traffic stop—is modest compared to the Government's reckless actions to exacerbate climate change, which will unconstitutionally infringe upon Plaintiffs' right to be let alone.

256. In 1931, Congress enacted the Shipstead-Newton-Nolan Act, which served as the first step toward protecting the naturalness of what remains one of the flagship areas of legally designated wilderness areas, the Boundary Waters Canoe Area in northern Minnesota. This legislation protected nearly 1.3 million acres of national forest land, larger than any primitive

area heretofore established by the Forest Service and required its "natural features" to be "preserve[d]... in an unmodified state of nature." 16 U.S.C. § 577b.

257. As explained in Section VI, infra, in 1964, Congress passed the Wilderness Act, "[i]n order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition." 16 U.S.C. § 1131(a). Congress defined wilderness as an area "untrammeled by man" in its "natural Condition." Just as the "state of nature" in Locke's social contract theory refers to both political and literal wilderness, the Wilderness Act refers to both the physical characteristics of wilderness and wilderness as a "state of being" akin to the purest form of solitude. *See Mont. Wilderness Ass'n v. McAllister,* 666 F.3d 549, 556 (9th Cir. 2011), aff'd, 460 F. App'x 667 (9th Cir. 2011).

258. In its policy statement supporting the enactment of the Federal Land Policy and Management Act of 1976, Congress declared that "public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air, and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use." 43 U.S.C. § 1701(a)(8).

259. Similarly, Congress declared, "by virtue of its statutory authority for management of the National Forest System, research, and cooperative programs, and its role as an agency in the Department of Agriculture, [the Forest Service] has both a responsibility and an opportunity to be a leader in assuring that the Nation maintains a natural resource conservation posture that

will meet the requirements of our people in perpetuity," when enacting the National Forest Management Act in 1976. 16 U.S.C. § 160(6).

260. Responding to international treaty obligations, in 1973, Congress directed the Fish & Wildlife Service to conserve and protect endangered species and the ecosystems on which they depend to prevent extinction. Today, the Fish & Wildlife Service administers myriad environmental and wildlife laws designed to preserve species in their natural habitat before human interference causes their harassment or extinction.

261. Through these policy pronouncements, despite actions to the contrary, the Government has recognized that wilderness is the baseline for Locke's state of nature, thereby acknowledging each American's fundamental right to wilderness in order to meaningfully exercise rights to privacy and autonomy. Absent judicial intervention, the Government will not act to stop or abate the worst impacts of climate change on wilderness, forever impeding on plaintiffs' fundamental rights without a compelling purpose.

## VII. CLAIMS FOR RELIEF

### First Claim for Relief
### (Due Process under the Fifth and Fourteenth Amendments)

262. Plaintiffs hereby re-allege and incorporate by reference each of the allegations set forth in the preceding paragraphs.

263. The Fifth and Fourteenth Amendments to the Constitution recognize and preserve the fundamental right of citizens to be free from government actions that harm life, liberty, and property. These inherent and inalienable rights derive from the basic social contract, antecedent to government, and include the right to privacy and autonomy—in other words, to be let alone.

264. The right to be let alone exists on a "rational continuum which, broadly speaking, includes a freedom from all substantial arbitrary impositions and purposeless restraints." *See Planned Parenthood of Southern Pa. v. Casey*, 505 U.S. 833, 848-49 (1992).

265. The right to wilderness is a necessary condition to exercising Plaintiffs' fundamental right to be let alone, which is meaningless unless Plaintiffs have the option to exit civil society and retreat to a state of nature.

266. The Government has authorized and subsidized fossil fuel extraction, commercial logging, and animal agriculture, thereby causing and exacerbating anthropogenic climate change, endangering Plaintiffs, and destroying wilderness, in violation of Plaintiffs' fundamental right to be let alone.

267. The Government has failed to correct or mitigate the harms they created with deliberate indifference to Plaintiffs' injuries. Moreover, the Government's deregulation and obstruction, through Executive Order 13783, shock the public conscience by affirmatively reversing the moderate progress that had been made by the previous Administration and taking affirmative steps to endanger the planet, Nation, and Plaintiffs.

268. With Executive Order 13783, the Government recklessly disregarded Plaintiffs' right to be let alone.

269. The Government does not have a state interest in permanently altering the Earth's climate system, which will destroy wilderness, and impermissibly interfere with Plaintiffs' right to be let alone, when reasonable alternatives exist to mitigate the impacts of climate change now.

270. Plaintiffs pray for relief as more fully set forth below.

**Second Claim for Relief**
**(Self-Determination under the Ninth and Fourth Amendments and *Munoz*)**

271. Plaintiffs hereby re-allege and incorporate by reference each of the allegations set forth in the preceding paragraphs.

272. John Locke's social contract theory required a state of nature to which persons in a civil society might return, lest the consent of the governed be rendered invalid.

273. The Framers relied on Locke's social contract theory and incorporated the social contract principles of consent and exit in the Declaration of Independence, the Preamble to the Constitution, and the Ninth Amendment, such that the inherent liberty rights of "the people" were not sacrificed through the "consent of the governed," but rather, "retained" as fundamental to our scheme of ordered liberty.

274. Referring to the Ninth Amendment, Justice Goldberg's concurrence emphasized that "it cannot be presumed that any clause in the constitution is intended to be without effect." *Griswold v. Connecticut*, 381 U.S. 479, 490–91 (1965) (quoting *Marbury v. Madison*, 5 U.S. 137, 174 (1803)).

275. Among the rights "retained by the people" under the Ninth Amendment is the right to self-determination through the right to wilderness, as informed by the social contract principles of consent and exit.

276. The social contract's emphasis on consent and exit continue to be reflected through the rights to freedom of movement and travel under the Due Process clause of the Fifth and Fourteenth Amendments.

277. Rather than securing Plaintiffs' rights of self-determination as demanded by the social contract and the Constitution, the Government has leveraged the power "gifted" by the

people to authorize and subsidize acts that destroy the state of nature and infringe upon Plaintiffs' rights.

278. Specifically, the Government, through its cumulative action and omissions has caused and will continue to contribute and exacerbate the degradation of wilderness through the authorization and subsidization of fossil fuel extraction, commercial logging, and animal agriculture, which emit the vast majority of greenhouse gases into the global atmosphere.

279. The Government's aggregate actions and omissions have destroyed and will continue to destroy the state of nature and will continue to threaten national security, thereby undermining the social contract principles on which the Constitution was founded and violating Plaintiffs' Ninth Amendment "retained right" of self-determination.

280. Together with the Ninth Amendment, by causing climate change and acting with reckless disregard for Plaintiffs' rights and injuries, the Government has violated and will continue to violate Plaintiffs' right to be let alone in the solitude of wilderness under the principles of the Fourth Amendment as articulated in *U.S. v. Munoz* 701 F.2d 1293, 1298 (9th Cir. 1983).

281. The Government's past actions have demonstrated that, even when presented with clear and convincing evidence of the deleterious effects of their actions, they have consistently chosen to repeat such actions so as to deliberately amplify the harms arising from them. Consequently, it is clear that the Government will not change course voluntarily.

282. Plaintiffs pray for relief as more fully set forth below.

**Third Claim for Relief**
**(Freedom of Association under the First Amendment)**

283. Plaintiffs hereby re-allege and incorporate by reference each of the allegations set forth in the preceding paragraphs.

284. The First Amendment's protection of the freedom of association necessarily encompasses the freedom to not associate. *California Democratic Party v. Jones,* 530 U.S. 567, 574–75 (2000).

285. The freedom to choose not to associate is an indispensable corollary to this right because it is impossible to truly and voluntarily consent to association if there is no alternative. Only by having the right to wilderness can citizens meaningfully exercise this right not to associate, thereby avoiding the substantial intrusive impacts of government-exacerbated climate change.

286. By authorizing and subsidizing activities that exacerbate climate change and degrade wilderness, the Government subjected Plaintiffs to the influence of others without their consent, and to such a degree that Plaintiffs can no longer safely exercise their right to wilderness.

287. The aggregate acts and omissions of the Government have unconstitutionally caused, and continue to materially contribute to, degradation of our country's wilderness, intruding upon Plaintiffs' First Amendment rights by impermissibly infringing upon Plaintiffs' right to be let alone free from human influence in wilderness.

288. Plaintiffs pray for relief as more fully set forth below.

## VIII. PRAYER FOR RELIEF

A. Declare that Plaintiffs and their members have a fundamental right to privacy and autonomy, and a right to be let alone free from human interference in wilderness is a necessary condition to exercising those rights.

B. Declare that the United States Government has violated and is violating Plaintiffs' constitutional rights under the First, Fifth, Fourteenth, and Ninth Amendments by

causing and/or contributing to a dangerous concentration of greenhouse gases in the atmosphere;

C. Declare that the United States Government has acted and is acting with reckless disregard to Plaintiffs' rights by impermissibly infringing upon Plaintiffs' right to be let alone free from human influence in wilderness;

D. Enjoin the Government from further violations of the Constitution underlying each claim for relief;

E. Declare Executive Order 13783 to be unconstitutional on its face;

F. Appoint a special master to facilitate the immediate review of potential Wilderness Areas for designation as a means to reduce the impacts of climate change on wilderness, in keeping with statutory mandates. *See generally* 16 U.S.C. § 1642(a)(2); (c)(1)(A)-(H);

G. Order the Government to prepare and implement an enforceable national remedial plan to expeditiously phase out commercial logging of old-growth forests, animal agriculture, and fossil fuel development and extraction in order to draw down greenhouse gases until the climate system has stabilized for the protection of wilderness on which Plaintiffs now and in the future will depend for the exercise of their fundamental autonomy and privacy rights;

H. Award Plaintiffs reasonable attorney's fees and costs associated with bringing this action;

I. Retain jurisdiction over this action to monitor and enforce the Government's compliance with the orders of this Court; and

J. Grant to Plaintiffs such other and further relief as the Court deems just and proper.

Dated October 22, 2018

Respectfully submitted,

*/s Cooper Brinson*

Cooper Brinson (OR Bar No. 153166)
Civil Liberties Defense Center
1430 Willamette St. #359
Eugene, OR 97401
(541) 687-9180
cbrinson@cldc.org

*/s Carter Dillard*

Carter Dillard (CA Bar No. 206276)
Matthew Hamity (CA Bar No. 303880)
*Pro Hac Vice application pending*
Animal Legal Defense Fund
525 E. Cotati Ave.
Cotati, CA 94931
(707) 795-2533
cdillard@aldf.org
mhamity@aldf.org

*/s Justin Marceau*

Professor Justin Marceau (CA Bar No. 243479)
*Pro Hac Vice application pending*
Of Counsel, Animal Legal Defense Fund
University of Denver
Sturm College of Law
2255 E. Evans Ave.
Denver, CO 80208
jmarceau@law.du.edu

*/s Jessica L. Blome*

Jessica L. Blome (CA Bar No. 314898)
*Pro Hac Vice application pending*
Greenfire Law, PC
2550 Ninth Street, Suite 204B
Berkeley, CA 94710
(510) 990-9502, ext. 5

jblome@greenfirelaw.com

**Attorneys for Plaintiffs**