192. Spring runoff in Montana is projected to increase through the 21<sup>st</sup> century because of warmer temperatures and earlier snowmelt. Increased January-April runoff will lead to increasingly low streamflow in July-September. [CW 293:8-18].

193. The science is clear that there are catastrophic harms to the natural environment of Montana and Plaintiffs and future generations of the State due to anthropogenic climate change. [SR 105:9-21, 149:15-150:7]. The degradation to Montana's environment, and the resulting harm to Plaintiffs, will worsen if the State continues ignoring GHG emissions and climate change. [SR 105:22-106:18, 137:10-15, 168:17-169:7, 169:19-21; CW 318:2-5, 316:17-317-14; DF 428:6-12; JS 712:8-12].

## V. CLIMATE CHANGE IS ALREADY HARMING PLAINTIFFS.

- 194. The unrefuted testimony established that Plaintiffs have been and will continue to be harmed by the State's disregard of GHG pollution and climate change pursuant to the MEPA Limitation.
- 195. Plaintiff Rikki Held lives on her family's ranch twenty miles outside of Broadus, Montana. Broadus is a ranching community in Southeastern Montana, with a population of approximately 450 people in the town and approximately 2000 in Powder River County.
- a. Rikki has experienced climate change-related harms to herself and her family ranch, including harms from flooding, severe storms, wildfires, and drought.
- b. The Powder River runs through Rikki's ranch. The ranch includes five pivot fields and pine-covered hills. Rikki and her family have raised cattle on the ranch, grew crops to feed cattle, and owned horses.

c. Rikki started riding horses and herding livestock when she was four. Rikki grew up involved in ranching activities, working with livestock, haying, and fixing fences.

- d. Rikki's grandparents are from Broadus and her dad grew up in Broadus.
- e. Rikki and her family run a motel that rents rooms to travelers. Rikki often works for the family motel business. The primary source of Rikki's family's income is the ranch (currently leased) and motel business. Loss of this income affects Rikki personally.
- f. Impacts to the climate are already harming Rikki's home, family, community, income, and way of life.
- g. Rikki was often required to work outside on the ranch regardless of the temperatures or air quality. Rikki's physical well-being has been harmed by wildfires and wildfire smoke, as well as extreme heat.
- h. In 2012, the Ash Creek fire burned seventy miles of power poles, causing the loss of electricity on Rikki's ranch for a month.

  Electricity is required to access water for both cattle and Rikki's house on the ranch, so the loss of electricity harmed both cattle and Rikki.
- i. Climate change has impacted the snowpack on the ranch in recent years, with snow typically not lasting through the winter.

  Reduced winter snowpack means less natural water available for cattle. As a result, the cattle must rely on water tanks, which are far apart and expensive to install. With less water, there is also less grass available for the cattle to eat.

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j. With less water and grasses, cattle travel further for water and food, and lose weight. This means the cattle are not as valuable and the ranch profits and income declined.

- k. Wildfires have closed roads around Broadus limiting the number of people that can reach Rikki's family motel business, causing lost income for Rikki and her family.
- l. Climate change has caused increased variability in water levels in the Powder River. Rikki's family relies on the river to water their livestock. Increasingly, the river levels are extremely low while at other times the river floods.
- m. In 2017, the Powder River flooded and eroded the riverbank on Rikki's ranch, undercutting a fifty-year-old fence. Since then, continued flooding has eroded about fifty feet of riverbank, with floodwaters that nearly reach Rikki's home.
- n. Rikki experiences stress and despair from how climate change impacts her well-being, the well-being of her family, and the well-being of other Montanans. Montana is Rikki's home and seeing how climate change is impacting Montana and her family ranch is a heavy emotional burden for Rikki.
- o. Rikki faces economic harm, including barriers to keeping family wealth and property intact and decreased future economic opportunities.
- 196. Plaintiffs Lander Busse and Badge B. are brothers, living in Kalispell, Montana.
  - a. Lander and Badge enjoy hunting and fishing.

- b. Lander and Badge hunt with their parents and grandparents. Hunting is an important family activity.
- c. Lander and Badge's ability to hunt and fish is inhibited due to climate change consequences, including extreme heat and wildfires.
- d. Climate change has adversely impacted Lander and Badge's ability to fish by rendering certain waterways impassible by raft due to low instream levels or too-warm water temperatures, which harm fish and decrease their populations.
- e. Lander and Badge have had their ability to fish limited or foreclosed due to fishery closures as a result of climate change-induced conditions in Montana's rivers. Lander and Badge have also had their access to rivers limited for other recreational activities.
- f. The extreme temperatures and smoke have at times made hunting unbearable and impossible for Lander and Badge. Smoky conditions have also impacted their fishing activities.
- g. Due to climate change, the wildfire smoke in Kalispell, and in other parts of Montana where Badge recreates, makes it difficult for Badge to breathe and triggers a cough, which negatively impacts his health and well-being.
- h. In 2018, a wildfire near the Busse's home forced their family to prepare to evacuate. Preparing to evacuate was a traumatic experience for Lander and Badge. Badge is worried that wildfires will continue to threaten his home.

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- i. Lander has seasonal pollen allergies, which are worsening due to the increased pollen count and a changing climate.
- j. Lander is an accomplished musician and theater performer and often performs outdoors. Climate change and wildfires have hampered his ability to perform music and theater at a high level and have negatively impacted his physical well-being.
- k. Badge is named after the Badger-Two Medicine, an area where he frequently recreates and fishes. Wildfires in the Badger-Two Medicine have destroyed trees and have degraded areas important to Badge and where he enjoys visiting and recreating, which has had a powerful emotional impact on Badge. Badge experiences a sense of loss and distress knowing that the area is being damaged and degraded due to climate change. Badge feels as if a part of him were lost in the Badger Two-Medicine fire.
- l. Badge is passionate about skiing and has skied for as long as he can remember. Climate change is reducing Badge's ability to participate in this important recreational activity.
- m. Badge is anxious when he thinks about the future that he, and his potential children, will inherit.
- n. Lander and Badge care deeply about protecting Montana's environment, which is an integral part of their family traditions, culture, and identity. Witnessing the current impacts of climate change in Montana is traumatic for both Lander and Badge.
- o. Lander and Badge are experiencing the loss of ties to the land in Montana.

- 197. Plaintiff Sariel Sandoval is a member of the Confederated Salish and Kootenai Tribes and is from Ronan, Montana.
- a. Sariel and her family have a deep connection to the natural world, and have a unique connection to the land, the natural environment, and the seasons. Climate change is harming Sariel's culture and tribal practices. Sariel went to a Salish language immersion school called Nkwusm in Arlee. At school, Sariel was taught her native language and learned about the Salish culture.
- b. Sariel was excited to receive her Salish name, which means "Person Who Brings the Cedar." Cedar has important cultural significance because it provides a connection through the land to the Creator.
- c. Sariel feels a strong sense of connection to her community. She believes that carrying on her community's traditions is important because it is their way of life and reflects their connection to the land.
- d. Gathering and using sweet grass and bear root is important to Sariel culturally and spiritually.
- e. Sariel is concerned about how climate change affects the seasons because her culture is very ingrained with the land and the seasons. It also affects plants and foods her tribe needs to survive, and she is concerned that these changes will change the community itself. Because of earlier-than-normal snowmelt and the consequent drying of mountain streams as a result of climate change, plants used in Salish and Kootenai medicines are becoming scarcer and more difficult for tribe members to gather.
- f. Coyote Stories are a culturally important type of Creation Story that can only be told when there is snow on the ground. Sariel is

not know what will happen to the stories when there is no more snow.

- g. Climate change impacts Sariel's ability to partake in cultural and spiritual activities and traditions, which are central to her individual dignity. Climate change has disrupted tribal spiritual practices and longstanding rhythms of tribal life by changing the timing of natural events like bird migrations.
- h. Sariel worked at Blue Bay Campground the summer after she graduated high school. Sariel lost a few weeks of work and income due to the nearby Finley Point fire (also known as the Boulder 2700 Fire) in 2021. The fire also led to the road being shut down, homes being lost, and people being evacuated.
- i. Sariel is often unable to see the mountains near her home due to wildfire smoke.
- j. Berry picking is a staple cultural activity for Sariel and her family. Some huckleberry bushes are not producing fruit because of drought and Sariel must travel higher up into the mountains to find healthy huckleberries.
- k. Climate change has a profound emotional impact on Sariel, who experiences stress and despair about the impacts her community is facing due to climate change.
- I. Sariel was greatly distressed when she learned that Montana was almost at the point of no return with respect to climate change.
- 198. Plaintiff Kian Tanner lives on his family's property in Bigfork, Montana.

- a. Kian's property has been degraded by wildfire smoke.
- b. Kian is a passionate fly fisher and has fished with his dad since he was about four years old. Kian hopes he will be able to preserve this tradition and fish for the next fifty years or more.
- c. The warmer water temperatures, lower oxygen levels, and declining instream flows due to climate disruption are harming Montana's rivers and fish. These climate impacts have decreased fishing opportunities for Kian as he has had to cancel fishing trips due to wildfires. Not being able to fish is devastating for Kian.
- d. Kian lives near and enjoys visiting and recreating in Glacier National Park, which is a very special place for Kian. He is distressed he will never be able to see the natural glaciers as they have historically existed, and as other generations experienced them.
- e. Kian enjoys downhill and cross-country skiing, which is an activity he does with his mom, who taught him to ski. Kian cross-county skis on his family's property. Impacts to the climate have reduced his opportunities to downhill and cross-country ski.
- f. Increased smoke in the summer has harmed Kian's ability to play soccer, fish, and otherwise recreate outside, activities which are crucial for his emotional health and foundational to his family. Kian's soccer practices have been cancelled due to heat and wildfire smoke.
- g. The smoke often forces Kian to seek refuge indoors, which makes him feel very claustrophobic.

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- h. Kian's fears about impacts to the climate take an emotional toll on him and he feels a heavy burden to carry the mantel of the generation that must address climate change.
- 199. Plaintiff Georgianna Fischer (Georgi) is from Bozeman, Montana.
- a. Georgi's family has lived in Montana for generations. Goergi's great grandmother, Mary "Polly" Wisner Renne, is someone that Georgi admires because of her work to protect Montana's environment. Renne was a key figure in establishing protections for the Lee Metcalf Wilderness Area.
- b. Georgi is a competitive Nordic skier. She has competed on the national level, including Junior National Championships, U.S. National Championships, and the 2021 NCAA competition. She trains eleven months of the year, six days a week. Georgi's ability to compete and participate in Nordic skiing has been directly impacted by climate disruption. Declining winter snowpack has inhibited Georgi's ability to complete necessary and appropriate training and hinders her ability to continue to compete at a high level, which adversely impacts her health and mental well-being.
- c. In recent years there has not been enough snow to groom trails or create tracks in the snow to Nordic ski race until January, although historically tracks were created in November.
- d. Georgi's summer Nordic skiing training has been impacted by wildfires and wildfire smoke. Practices have been cancelled or curtailed due to smoke and the smoke prevents Georgi from training at a high intensity. Georgi is increasingly worried about the long-term effects that the exposure to heavy wildfire smoke while training has on her health and respiratory

system. Extreme heat also harms Georgi and her ability to recreate and train outdoors. The heat has caused her to feel dizzy, nauseous, generally unwell, and has caused persistent nosebleeds that led Georgi to seek medical attention.

- e. Georgi enjoys paddleboarding, rafting, backpacking, hiking, and other outdoor activities. Georgi's recreation on Montana's rivers has been impaired due to low water levels and stream flows. Georgi and her family have had to cancel river rafting trips, including one on the Smith River, due to low stream flow.
- f. Georgi experiences feelings of despair and hopelessness because of the declining winter snowpack and what that trend entails for her snow-based sport.
  - 200. Kathryn Gibson-Snyder (Grace) is from Missoula, Montana.
- a. Grace's recreation on Montana's rivers and streams has been affected due to both low water levels and flooding conditions. Because of climate change, Grace's access to the Clark Fork River for recreational activities has been increasingly impaired, limiting her ability to enjoy activities important to her health and family.
- b. Grace enjoys many outdoor activities, including long-distance biking, hiking, soccer, and kayaking.
- c. Grace has been harmed by wildfire smoke and extreme heat; which have adversely impacted her ability to play competitive soccer. Smoke and heat have led to fewer soccer practices and the cancellation of games. Wildfires have impacted Grace's ability to go outside, enjoy outdoor activities, and have placed her safety, health, and well-being at risk.

smoke.

- d. One of Grace's environmental community education events was cancelled due to wildfire smoke.
  - e. Grace has had hiking activities impacted by wildfire
- f. Grace experiences psychological harms, is distressed from day-to-day climate conditions, and is anxious about climate change. It is devastating for Grace to think that Montana's special landscapes, like Glacier National Park's glaciers, will not exist as they have in the past, or at all, when she is older.
- g. Even though Grace would like to raise children in Montana, she questions whether she can morally bring children into the world, because of her knowledge and fear of the world that her children would grow up in if climate change is not ameliorated.
  - 201. Plaintiff Olivia Vesovich is from Missoula, Montana.
- a. Olivia has exercise-induced asthma and is therefore particularly vulnerable to smoke-filled air. In smoky conditions, Olivia feels she is suffocating if she spends more than thirty minutes outdoors. During smoky conditions, Olivia is forced to stay inside and reduce or eliminate the outdoor activities she enjoys. Olivia has been forced to spend recent summers away from Montana due to the smoke-filled air and her asthma.
- b. Olivia suffers from spring pollen allergies, which force her to stay indoors and prevent her from engaging in the recreational activities she enjoys. Olivia's spring allergies cause her eyes to swell shut and can cause eye pain for weeks at a time. Olivia's allergies have become progressively worse in recent years.

c. Olivia is affected emotionally and psychologically by climate change, and experiences bouts of depression when she thinks about the dire projections of the future. Olivia would like to have children of her own, but she questions whether this is an option in a world devastated by the effects of climate change.

- d. Olivia experiences psychological harms and is distressed from day-to-day climate conditions and is anxious about climate change. There are days when Olivia feels paralyzed by the impacts and threats of climate change and she fears that it is too late to address climate change.
- e. For Olivia, climate anxiety is like an elephant sitting on her chest and it feels like a crushing weight. This climate anxiety makes it hard for her to breathe.
  - 202. Plaintiff Claire Vlases is from Bozeman, Montana.
- a. Claire works as a ski instructor at Big Sky Resort, and her ability to earn money is harmed by climate disruption, which is decreasing Montana's winter snowpack and the number of days Claire can work. Claire has been sent home from her job as a ski instructor without working her scheduled shift, and without pay, because of insufficient snow. Claire relies on her income as a ski instructor, so the lost income is a financial hardship for her.
- b. Claire regularly visits Glacier National Park where she loves to hike. Seeing the loss of glaciers in Glacier National Park is terrifying for Claire and reduces her enjoyment of the park. Claire's ability to enjoy hiking in Glacier National Park has also been diminished due to increasing wildfire smoke, which obstructs the beautiful views and is harmful to her health.

- c. Claire has been harmed by the reduced snowpack in Montana and the related impacts to winter sports and tourism.
- d. Claire's ability to run cross-country has been harmed by extreme heat and wildfire smoke. Claire has had cross-country practices cancelled due to dangerously smoky air quality conditions. The heat and smoke make it difficult for Claire to train and compete.
- e. Claire's family has water rights to Bozeman Creek.

  Claire and her family use the water for drinking, plumbing, watering their garden, and all other water needs at their home.
- f. Claire's water security is threatened by Montana's melting glaciers, declining snowpack, and increasing summer drought conditions, which lead to water scarcity and low water levels in Bozeman Creek.
- g. As an individual born with a disability, Claire relies on the outdoors for recreational therapy to replace the physical therapy her insurance stopped providing when she was ten years old. The outdoors helped Claire to grow strong and she continues to rely on activities like skiing, biking, hiking, and running to maintain her physical health. Claire depends on a clean and healthful environment for her physical and mental health and well-being.
- h. Climate change impacts harm Claire's mental health, causing her to feel stress, anxiety, and a sense of helplessness about the future.
- 203. Plaintiff Taleah Hernández is from Polson, Montana, and lives on the Flathead Indian Reservation.
- a. Taleah has been forced to remain inside for extended periods of time during the summer because of poor air quality caused by excessive wildfire smoke. Wildfires have caused Taleah to lose electricity at her

home and forced her to prepare to evacuate her home. The Boulder 2700 fire in 2021, forced Taleah to cut down trees around her property for fire safety.

- b. Taleah works outdoors with horses and other animals. Dangerous air quality conditions created by wildfire smoke have caused Taleah to miss days of work, lose pay, and lose opportunities to ride horses.
- c. Wildfires and wildfire smoke have prevented Taleah from participating in outdoor recreation activities, including hiking and paddleboarding on Flathead Lake.
- d. Changes in weather and climate patterns, including warming winter temperatures, have reduced the number of opportunities Taleah has to ice skate on Flathead Lake in the winter.
- e. Wildfires and wildfire smoke have caused Taleah physical and emotional distress.
  - 204. Plaintiff Eva L. is from Livingston, Montana.
- a. Eva enjoys many outdoor activities, including backpacking, climbing, and cycling, which are central to her family life.
- b. Eva has been harmed by wildfire smoke in Montana on numerous occasions, and Eva has suffered eye, nose, and throat irritation and headaches because of the smoky air.
- c. Eva and her family had a family trip to Glacier National Park negatively impacted by excessive wildfire smoke, which posed risks to Eva's health and safety.
- d. Eva has been harmed by the impacts of extreme flooding. In 2018, flooding along the Shields River damaged a bridge and rendered impassable for more than a year the primary route from Eva's home to

the town of Livingston. A temporary bridge was also washed away due to extreme flooding. Eva's family eventually decided to relocate because of this hardship. Being cut off from town was very stressful for Eva and her family.

- e. Eva moved to Livingston and now lives near the Yellowstone River. Eva feels a strong connection to the river. In 2022, there was major flooding along the Yellowstone River, including in Livingston. [CW-41; JS-11]. Eva helped fill sandbags to hold back the flood waters. [P108, P109]. A park near Eva's home was underwater. [P110]. Eva saw her community and close friends lose property due to flooding.
- f. The 2022 flooding in Livingston caused Eva acute emotional distress, panic, and dread. Parks and other public places she often visits were significantly damaged, preventing her enjoyment of them.
- g. Eva's access to the Yellowstone River in summer 2016 was significantly curtailed, as a 180-mile portion of the river was closed for several weeks due to a parasite growth in cutthroat and rainbow trout perpetuated by abnormally high air temperatures and historically low river flows.
- h. Eva has experienced forced relocation and the loss of ties to the land.
- i. Eva has had her ability to access Montana's rivers for other recreational activities limited due to river conditions.
- j. Wildfire smoke has impacted Eva's ability to hike and spend time outdoors with her family.
- k. Eva is anxious about how she, her family and community can adapt to the devastation of public resources and infrastructure as the impacts of climate change worsen. Eva is increasingly anxious about the

climate change impacts she and her family are experiencing. She is distressed that climate change will worsen if action is not immediately taken.

- 205. Plaintiff Mica K. is from Missoula, Montana.
- a. Rising temperatures and wildfires resulting from climate change make it difficult for Mica to recreate outdoors and participate in activities he loves, and which are important to his health and well-being.
- b. Mica has been forced to spend extended periods of time indoors and has lost school recess time because of wildfire smoke. In 2019, a forest fire started approximately one mile from Mica's home, and Mica is anxious that, as climate change worsens, he may lose his family home.
- c. Wildfire smoke has impacted Mica's training as a long-distance runner. Mica is an avid runner, running his first half-marathon when he was nine. He runs regularly with his dad. Running is a way for Mica to be in nature and relieve stress. Running in smoke makes Mica feel sick, so he cannot run as much due to increasingly smoky summers in Missoula. Smoke has limited Mica's ability to train and compete in sports.
- d. Mica gets frustrated when he is required to stay indoors during the summer because of wildfire smoke.
- e. Mica's family now avoids camping and other outdoor activities in August and September due to wildfire smoke and its negative effect on Mica's health.
- f. Mica was recently diagnosed with exercise-induced asthma, which puts him at greater risk for respiratory hardship when the air is smoky.

- g. Mica's favorite animal is the pika. Mica understands the pika is uniquely vulnerable to climate impacts, and its survival is in jeopardy due to climate change.
- h. Mica's outdoor recreation activities such as enjoying the views of glaciers in Glacier National Park are disrupted by climate change. Seeing the glaciers recede in Glacier National Park is depressing for Mica.
- i. Climate change causes Mica to feel anxious, stressed, and depressed, and makes it hard for him to sleep at times.
- 206. Plaintiffs Jeffrey K. and Nathaniel K. are brothers who grew up in Montana City, Montana.
- a. Jeffrey K. has pulmonary sequestration and is uniquely susceptible to respiratory complications, such as infections. Nathaniel K. also has respiratory issues. Both Jeffrey and Nate are therefore especially vulnerable to poor air quality, such as smoke-filled air caused by wildfires. [LB 487:21-488:11, 505:4-25].
- b. The increasing length and severity of the wildfire season harms Jeffrey's and Nathaniel's health, especially given their young age and pre-existing respiratory health conditions. It has forced their family to make changes in daily activities. [LB 487:21-488:11, 505:4-25].
- 207. Plaintiffs Ruby D. and Lilian D. are from Bozeman, Montana. Shane Doyle is their father and he testified on their behalf.
- a. Ruby and Lilian are members of the Crow Nation.

  Ruby and Lilian regularly travel to the Crow Reservation to visit family members and engage in traditional cultural activities.

- b. Ruby's Crow name is Biachəgata, which means "Pretty Woman." Lilian's Crow name is Malesch, which means "Loved by Many."
- c. Abnormal and extreme weather conditions caused by climate change have impacted Ruby's and Lilian's ability to engage and otherwise partake in cultural practices that are central to their spirituality and individual dignity.
- d. Ruby and Lilian visit their family on the Crow Reservation several times a year. Ruby and Lilian attend Crow Fair on the Crow Reservation every year. Crow Fair takes place each August and is a large gathering to celebrate cultural activities and events. Many people, including Ruby and Lilian, stay in teepees. Attending Crow Fair is a highlight for Ruby and Lilian. Ruby and Lilian love dancing at Crow Fair, and enjoy the parades, the rodeo, and doing family events.
- e. In recent years, increasing temperatures at Crow Fair have made it hard to wear traditional regalia and participate in cultural activities because it is dangerously hot, sometimes over 100 degrees.
- f. Wildfire smoke has also made it difficult for Ruby and Lilian to enjoy the Crow Fair.
- g. It is a huge disappointment to Ruby and Lilian when they are unable to dance or participate in other events at the Crow Fair due to heat or smoke.
- h. Crow Fair used to coincide with when chokecherries were ripe, which was important because many meals eaten at Crow Fair involved

chokecherries. In recent years chokecherry harvest has become much harder to predict, and drought has meant there are less chokecherries available for the festival.

- i. Ruby and Lilian pick chokecherries with their family as part of the Crow tradition. They enjoy participating in the process of picking the berries, processing them into syrup, and eating them. But due to drought and heat, fewer chokecherries are available and some stands that usually have berries had none. Increased wildfire frequency has impacted the ability of Ruby and Lilian to participate in these traditional cultural practices.
- j. Ruby was diagnosed with asthma when she was eight years old and had an acute form of pneumonia. As a result, Ruby stays inside when it is smoky, and Lilian often stays inside too. This is a disappointment for Ruby and Lilian.
- k. During the Bridger fire, which burned near Bozeman in 2020, Ruby and Lilian were worried to see a fire so close to their home and it brought up concerns about whether they were safe.
- 1. Climate disruption has impacted Ruby and Lilian's outdoor recreation activities, such as rafting, swimming, and floating. Drought has created low river conditions that have impacted Ruby and Lilian's ability to enjoy recreating on the river because it has such low flow.
- m. Ruby and Lilian believe that protecting Montana's environment and natural resources is important because in their culture taking care of the Earth is their responsibility.
- 208. The testimony of the Youth Plaintiffs and their guardian was credible and was undisputed.