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# IN THE THIRD JUDICIAL DISTRICT COURT SALT LAKE COUNTY, STATE OF UTAH

NATALIE R., a minor, by and through her guardian, DANIELLE ROUSSEL; SEDONA M., a minor, by and through her guardian, CREED MURDOCK; OTIS W., a minor, by and through his guardian, PAUL WICKELSON; LYDIA M., a minor, by and through her guardian, HEATHER MAY; LOLA MALDONADO; EMI S., a minor, by and through her guardian, DAVID GARBETT; and DALLIN R., a minor, by and through his guardian, KYLE RIMA,

Plaintiffs,

vs.

STATE OF UTAH; SPENCER COX, Governor of the State of Utah, in his official capacity; DEPARTMENT OF NATURAL RESOURCES, OFFICE OF

## COMPLAINT FOR DECLARATORY RELIEF

Tier II

Case No.

Judge

<sup>\*</sup> Counsel to seek admission pro hac vice

ENERGY DEVELOPMENT; THOM CARTER, Energy Advisor and Executive Director of Department of Natural Resources, Office of Energy Development, in his official capacity; DEPARTMENT OF NATURAL RESOURCES, BOARD OF OIL, GAS, AND MINING; DEPARTMENT OF NATURAL RESOURCES, DIVISION OF OIL, GAS, AND MINING; JOHN R. BAZA, Director of Department of Natural Resources, Division of Oil, Gas, and Mining, in his official capacity,

Defendants.

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#### COMPLAINT FOR DECLARATORY RELIEF

Natalie R., by and through her guardian, Danielle Roussel; Sedona M., by 1. and through her guardian, Creed Murdock; Otis W., by and through his guardian, Paul Wickelson; Lydia M., by and through her guardian Heather May; Lola Maldonado; Emi S., by and through her guardian, David Garbett; and Dallin R., by and through his guardian Kyle Rima (collectively, "Youth Plaintiffs"), bring this action for declaratory relief pursuant to Utah's Declaratory Judgment Act, Utah Code § 78B-6-401, et seq., against the State of Utah; Spencer Cox, in his official capacity as Governor of the State of Utah; the Department of Natural Resources, Office of Energy Development; Thom Carter, in his official capacity as Energy Advisor and Executive Director of the Utah Department of Natural Resources, Office of Energy Development; the Utah Department of Natural Resources, Board of Oil, Gas, and Mining; the Utah Department of Natural Resources, Division of Oil, Gas, and Mining; and John R. Baza, in his official capacity as the Director of the Utah Department of Natural Resources, Division of Oil, Gas, and Mining (collectively, "Defendants").

#### I. INTRODUCTION

2. The past and continuing development of Utah's fossil fuels presents an existential threat to Utah's youth. Because of the development and combustion of fossil fuels, Utah has the worst average air quality of any state in the nation and is already experiencing profoundly dangerous climate changes, including increasing temperatures and deadly heat waves, increasingly frequent and severe wildfires and wildfire smoke,

exceptional drought, exacerbation of medical conditions and health risks, and other harms. Dangerous air quality and climate change in Utah are already harming the health and safety of Utah's youth, interfering with their healthy development, and taking years off of their lives. Yet, despite the dangers of Utah's critical air quality and climate emergencies to its youth, Utah's government continues to throw fuel on the fire, maximizing, promoting, and systematically authorizing fossil fuel development in the state as a matter of official state policy, codified in statute. Utah Code §§ 79-6-301(1)(b)(i), 40-10-1(1), 40-10-17(2)(a), 40-6-1, 40-6-13. By and through these unconstitutional statutory provisions, and Defendants' systematic actions in carrying them out, Utah's government is affirmatively harming the health and safety of Utah's youth and substantially reducing their lifespans, violating their rights under Utah's Constitution, and necessitating judicial relief.

- 3. Youth Plaintiffs are children and youth in Utah, between the ages of 9 and 18, who have been and continue to be seriously harmed by the dangerous air pollution and extraordinary climate changes caused and exacerbated by Defendants' express statutory policy and actions in maximizing, promoting, and systematically authorizing fossil fuel development in Utah. The harms and threats posed to Youth Plaintiffs by Defendants' statutory policy and actions are existential, harming life and the foundation of life, and rise to the level of constitutional rights violations.
- 4. As children and youth, because of their unique physical and developmental vulnerabilities, age, and generational characteristics, Youth Plaintiffs are

uniquely vulnerable to and disproportionately harmed by air pollution and the climate crisis. Youth Plaintiffs, most of whom cannot vote, are politically and economically powerless to change Utah's statutory policy and actions that are causing dangerous air pollution and climate change. Faced with injuries they have no other means to redress, Youth Plaintiffs need judicial relief to protect their rights.

- 5. For decades, Defendants have known and acknowledged in official reports that the development and combustion of fossil fuels cause dangerous air pollution and climate change, harming and threatening the health, safety, and wellbeing of Utah's youth.
- 6. Knowing of the dangers, Defendants have actively caused and continue to cause and worsen the air quality and climate crises in Utah. Defendants have engaged in a longstanding and ongoing unconstitutional pattern and practice of maximizing, promoting, and systematically authorizing fossil fuel development in Utah. The State officially codified its unconstitutional policy to maximize, promote, and systematically authorize the development of fossil fuels through its coal program in 1979, Utah Code §\$ 40-10-1(1), 40-10-17(2)(a), and through its oil and gas program in 1983, Utah Code §\$ 40-6-1, 40-6-13. In 2006, in the midst of Utah's already critical air pollution and climate crises, the State enacted another unconstitutional statute cementing the State's policy to "promote the development" of "natural gas, coal, oil, oil shale, and oil sands[.]" Utah Code § 79-6-301(1)(b)(i). These statutory provisions constitute the "State's Fossil Fuel Development Policy" or "Defendants' Fossil Fuel Development Policy".

- Plaintiffs challenge these laws and Defendants' historic and ongoing conduct in implementing them as unconstitutional.
- 7. Defendants' Fossil Fuel Development Policy is facially unconstitutional. With Utah's air quality and climate crises presenting an existential threat to the lives, health, and safety of Utah's youth, there is no set of circumstances in which statutory provisions directing the maximization, promotion, and systematic authorization of fossil fuel development can be constitutional.
- 8. In carrying out the State's Fossil Fuel Development Policy, Defendants are responsible for significant levels of dangerous air pollution that have caused, and are causing, dangerous air quality and climate change in Utah, endangering Youth Plaintiffs' health and safety, and substantially reducing their lifespans.
- 9. Youth Plaintiffs seek declarations that, by substantially reducing their lifespans and endangering their health and safety, the State's Fossil Fuel Development Policy, and Defendants' maximization, promotion, and systematic authorization of fossil fuels pursuant thereto, violates their rights under Article I, sections 1 and 7 of the Utah Constitution to life and to be free from government conduct that substantially endangers their health and safety.
- 10. Given the dire emergency of the air quality and climate crises in Utah and Defendants' ongoing causation and contributions thereto through the State's Fossil Fuel Development Policy, Plaintiffs also respectfully plea that they be granted a swift hearing on their claims and of their evidence. Utah

R. Civ. P. 57 ("The court may order a speedy hearing of an action for a declaratory judgment and may advance it on the calendar.").

#### II. JURISDICTION AND VENUE

- 11. This Court has original jurisdiction over this action pursuant to Article VIII, section 5 and Article I, section 11 of the Utah Constitution and Utah Code section 78A-5-102(2).
- 12. This Court has the power to grant declaratory and equitable relief pursuant Utah's Declaratory Judgment Act, Utah Code § 78B-6-401, *et seq.*, as well as the general equitable powers of this Court.
- 13. Venue in this action is proper in this Court under Utah Code section 78B-3-307.

#### III. PLAINTIFFS

- 14. Plaintiff **Natalie R.**, by and through her guardian Danielle Roussel, is fifteen years old and resides in Salt Lake City, Utah.
- 15. Because of air pollution and increasing wildfires resulting from the development and combustion of fossil fuels, Natalie is frequently exposed to dangerous air quality throughout the year, harming her physical and mental health and safety, her ability to enjoy her life, and substantially reducing her lifespan. Due to unsafe air quality, Natalie has often had to wear a mask just to go outside. When Natalie is exposed to unsafe air quality, she often experiences physical symptoms, including painful headaches. In 2020, there was a wildfire close to Natalie's home that caused air quality in her area to go over 500 on the air quality index for multiple

days. She has often experienced such poor air quality that she has been unable to see down her own street and has had to stay indoors for her own health and safety, preventing her from physical and social activities necessary for her health, safety, and development. Air quality is often so dangerous that her school will require her and her friends to stay indoors.

- 16. Natalie has been and is being harmed by the increasing temperatures and heatwaves in Utah resulting from climate change. She increasingly has to stay inside for her own safety because of dangerously high temperatures, preventing her from activities necessary for her health and development.
- 17. Natalie has been and is being harmed by drought conditions in Utah resulting from climate change. Decreased snowfall, decreased snowpack, decreased precipitation, and warming temperatures are diminishing water sources that provide water for Natalie's family and her community, threatening their water security.
- 18. Natalie's ability to safely recreate and obtain exercise for her own health and development is also being harmed. Natalie is a member of her school's track and cross country team and has had numerous practices and competitions cancelled because it has been too dangerous for her and her teammates to even be outside during the unsafe air quality and extreme heat. When Natalie has to run for practice or events in Utah's elevated temperatures, she experiences dizziness and often feels like she is going to pass out. Natalie has enjoyed skiing since she was five. In the ten years that Natalie has been skiing she has witnessed the ski season become shorter due to the lack of snow. Her ability to safely enjoy and obtain exercise and

recreation through track, cross country, and skiing has been and is being reduced and threatened by air pollution, increasing temperatures, decreasing snowfall, diminished snowpack, and the shortened ski season resulting from climate change. Natalie and her family also have a cabin near Flathead Lake, Montana where they go for summer vacations. Natalie's ability to safely recreate and enjoy the property and surrounding areas has been harmed by wildfire smoke. On several occasions, Natalie and her family have had to leave Montana early due to the dangerous wildfire smoke. Even out of state, Natalie is unable to escape the dangerous air quality that Defendants' Fossil Fuel Development Policy contributes to and makes worse.

19. Natalie's mental health also suffers as a result of air pollution and climate change. Every day Natalie experiences stress and anxiety because of the harms she is experiencing from continuing fossil fuel development and combustion and because of what the increasing dangers from continuing emissions will mean for her and her future. With air pollution frequently at unsafe levels throughout the year in Utah, Natalie often experiences dread just thinking about going outside. Natalie experiences stress and anxiety knowing that climate change will continue to harm her health and safety and affect all of the major decisions in her life, like where she can live to try to minimize the harms to her health and safety. She experiences cognitive impairment because of the climate crisis and feels that she can't do anything, even an activity as simple as using water to brush her teeth, without being reminded of the climate crisis. Natalie wants to have a family

- but experiences stress and anxiety about the safety of the world for her and her potential children because of climate change.
- 20. Natalie has been actively involved in climate advocacy since June 2020, when she began striking over climate change at the Utah State Capitol, striking alone for six months before she was joined by other youth advocates. Natalie has now attended Friday climate strikes for over 70 Fridays. Natalie talks to everyone she can about climate change and the necessity of reducing atmospheric GHGs and emissions. She speaks at climate rallies, and has helped to organize numerous climate advocacy events. To reduce air pollution and try to reduce the harms of climate change, Natalie eats a vegan diet, strives to purchase only used goods, conserves water, and strives for her household to be zero waste. However, Natalie cannot reduce the harms she is suffering from dangerous air quality and climate change as long as Defendants continue to implement their Fossil Fuel Development Policy.
- 21. Plaintiff **Sedona M.**, by and through her guardian Creed Murdock, is seventeen years old and resides in Park City, Utah.
- 22. Sedona is often exposed to dangerous air quality in Utah because of air pollution and increasing wildfires resulting from the development and combustion of fossil fuels, harming her physical and mental health and safety, her ability to enjoy her life, and substantially reducing her lifespan. Sedona has suffered from asthma her whole life and was diagnosed when she was just a one-year-old living in Salt Lake City. When she was a baby, Sedona had to be treated with nebulizers several times a week, and often

several times a day, to help prevent life-threatening asthma attacks in Utah's dangerous air quality. She often had to be treated with steroids to control her asthma in the hazardous air conditions, and by the time she was three, she needed steroids daily. Because of Utah's dangerous air quality, Sedona was often unable to go outside during preschool. She still often has to stay indoors for her own health and safety because of hazardous air quality in Utah, preventing her from activities necessary for her own health and development. Utah's unsafe air quality poses such a danger to Sedona that, when she was three and a half years old, she and her family had to move to higher elevation on her doctor's recommendations just to reduce her exposure. Sedona takes daily prescribed medication and carries a prescription inhaler to help control her asthma. When Sedona is exposed to dangerous air quality, she experiences pain in her chest and lungs, difficulty breathing, and coughing, and it can trigger life-threatening asthma attacks.

23. Increasingly frequent and severe wildfires brought on by climate change are harming Sedona. Wildfire smoke conditions are becoming increasingly prevalent in Utah, frequently exposing Sedona to dangerous air quality and endangering her life, health, safety, and development. The dangerous air quality resulting from wildfires exacerbates Sedona's asthma, often and increasingly requiring her to remain indoors for her own safety. In 2021, Sedona's family had to be evacuated because a nearby wildfire threatened her home and made it unsafe to be in the area. Sedona's school had to cancel classes for several days because of the fire, disrupting her education and development.

- Sedona has been and is being harmed by the increasing temperatures and 24. heatwaves in Utah resulting from climate change. Because of increasing temperatures, Sedona often and increasingly must remain indoors for her own health and safety and is prevented from engaging in activities necessary for her health, safety, and development. Sedona's home does not have air conditioning and increasingly frequent days and prolonged periods of extreme heat have caused her home to get so hot at times that it activates the fire alarms, threatening her health and safety even within her own home. Trees in Sedona's yard are dying from increased beetle predation, drought, and higher temperatures brought on by climate change, presenting a fire hazard and danger that limbs or an entire tree could fall and hurt Sedona or her home. Several trees in Sedona's yard that provided shade for her home have already died from increased beetle predation, drought, and higher temperatures brought on by climate change, and several more trees die each year, causing economic harm, making Sedona's home hotter, and increasing the dangers to her of rising temperatures and heatwaves.
- 25. Loss of snow accumulation, decreased snowpack, decreased precipitation, and warming temperatures resulting from climate change are diminishing water sources for Sedona's family and her community, threatening their water security.
- 26. Sedona's ability to safely recreate, access the outdoors, and obtain exercise as necessary for her own physical and mental health and development is being harmed by air pollution and climate change. Sedona enjoys hiking,

climbing, rafting, biking, and skiing for the exercise she needs for her health and development. However, dangerous air quality and climate change are making it increasingly unsafe for Sedona to even be outdoors. Sedona has often had, and increasingly has, to forego, change, or cancel plans for outdoor activities because of dangerously high temperatures and wildfire smoke. When she is able to participate in outdoor activities, they are becoming increasingly dangerous because of unsafe air quality and climate change. Sedona has been and is increasingly being exposed to dangerous smoke conditions while camping, hiking, and rafting. Areas she cares about and has recreated in have already been destroyed by wildfires and she has even been on trips where she has had to pass by or through active wildfires. Drought conditions are diminishing Utah's water sources and making it increasingly difficult for Sedona to access and utilize Utah's water bodies for swimming, rafting, and fishing. Increasing temperatures, lack of snow, increased winter rain, and shortening winters are reducing Sedona's ability to ski and participate in other winter snow activities and resulting in increasing icy and hazardous conditions that are making them more dangerous.

27. Sedona's mental health and development also suffers as a result of air pollution and climate change. She experiences stress and anxiety because of the harms to her health that she has already suffered from Utah's dangerous air quality and because of the further dangers to her physical health from continuing exposure to Utah's dangerous air quality. She also experiences stress and anxiety because of what continuing fossil fuel development means for her future. Watching the lack of winter snow,

Sedona experiences stress and anxiety knowing that it will worsen Utah's drought and contribute to summer wildfires and smoke conditions dangerous to her health and safety. Sedona's home has already been subject to evacuation orders for wildfires and she has witnessed wildfires first hand, causing her stress and anxiety for her safety and the safety of her loved ones.

- 28. To reduce air pollution and help the climate, Sedona and her family reduce their vehicle miles, drive a hybrid vehicle, carpool, and use public transportation and biking for transportation as much as possible. However, Sedona's efforts will not reduce the injuries she is suffering and will suffer as long as Defendants continue to implement their Fossil Fuel Development Policy.
- 29. Plaintiff **Otis W.**, by and through his guardian Paul Wickelson, is twelve years old and resides in Salt Lake City, Utah.
- 30. Because of air pollution and increasing wildfires resulting from the development and combustion of fossil fuels, Otis is frequently exposed to dangerous air quality throughout the year in Utah, harming his physical and mental health and safety, his ability to enjoy his life, and substantially reducing his lifespan. As a result of the dangerous air quality in Utah, Otis experiences painful headaches. The air quality is often so dangerous that Otis must remain inside for his own safety, preventing access to the outdoors and exercise he needs for his health and development. Due to dangerous air quality, Otis has often had days where his school has not allowed him or his peers to go outside.

- 31. Otis rides his bike for fun and exercise, and as much as possible for transportation to avoid creating additional pollution, including the three miles to and three miles back from his school. However, because of the dangerous air quality in Utah resulting from fossil fuel development and combustion, Otis is often exposed to dangerous air quality while biking and it's often unsafe for him to even ride his bike.
- 32. Increasingly intense rain events brought on by climate change are resulting in flooding and water intrusion in Otis's home, threatening his shelter and presenting a risk of dangerous mold growth. During intense rain events, water has frequently leaked into Otis's basement and has even resulted in flooding over a foot deep, causing damage and economic harm. Flooding from an intense rain event also damaged the local library Otis relies on for learning, socializing, and community events, resulting in its closure for four years, harming his educational and social development.
- 33. Decreased snowfall, decreased snowpack, decreased precipitation, and warming temperatures are diminishing water sources that provide water for Otis's family and his community, threatening their water security. Because of drought brought on by climate change, Otis and his family have received notices from their community government advising them to decrease their water use. Trees in Otis's yard are dying from the drought and increased temperatures, presenting a danger that limbs or an entire tree could fall and hurt Otis or his home. Several trees in Otis's yard that provided shade for his home have already died from increased heat and drought conditions, making Otis's home, which does not have air

- conditioning, hotter and increasing the dangers to him of rising temperatures and heatwaves.
- 34. Increasing heatwaves, wildfires, and wildfire smoke are making it increasingly dangerous for Otis to camp, backpack, raft, and hike because he could be caught or trapped in conditions in which it is unsafe to even be outdoors. He and his family have had to cancel, change, and cut trips short because wildfires and wildfire smoke made the trips hazardous to Otis's health.
- 35. Otis enjoys skiing on Utah's famous slopes. However, warming temperatures, decreased snowfall and snowpack, and shortening winters mean that Otis is, and increasingly will be, able to ski less often and may not be able to ski at all in the future. When Otis is able to go skiing, conditions are often icy or patchy as climate change increases rain-on-snow events and thaws before subsequent freezes, making it more dangerous and difficult for Otis to get exercise he needs for his health and development.
- 36. Otis's mental health and development also suffers as a result of air pollution and climate change. Otis experiences stress and anxiety because of the increasing dangers of the worsening climate crisis. Otis has friends and family members who have had to evacuate from wildfires and whose homes have burned down in wildfires, causing Otis stress and anxiety for his safety and the safety of his loved ones. In 2021, Otis's grandparents had to evacuate their home, where he frequently visits, when a wildfire destroyed homes as near as three blocks away.

- 37. To reduce air pollution and help the climate, Otis rides his bike and the bus for transportation and eats a vegetarian diet. However, Otis's efforts will not reduce the injuries he is suffering and will suffer as long as Defendants continue to implement their Fossil Fuel Development Policy. Only Utah's Courts can provide the timely relief Otis needs to reduce the harms to his life, health, and safety resulting from Defendants' Fossil Fuel Development Policy.
- 38. Plaintiff **Lydia M.**, by and through her guardian Heather May, is sixteen years old and resides in Salt Lake City, Utah.
- 39. Because of air pollution and increasing wildfires resulting from the development and combustion of fossil fuels, Lydia is exposed to dangerous air quality throughout the year in Utah, harming her physical and mental health and safety, her ability to enjoy her life, and substantially reducing her lifespan. When Lydia is exposed to unsafe air quality, she often experiences pain in her sinuses and throat, painful migraines, and fatigue. Due to dangerous air quality, Lydia has had days where her school has not allowed her or her peers to go outside. The air quality has often been so dangerous that Lydia has had to remain indoors, preventing her from engaging in physical and social activities necessary for her health, safety, and development.
- 40. Lydia often hikes in the hills near her neighborhood and throughout the state for her physical and mental health. However, increasing temperatures, wildfires, wildfire smoke, and air pollution resulting from fossil fuel development and combustion are making it increasingly unsafe

for Lydia to even be outdoors without risking respiratory illness or heat sickness. Areas that Lydia cares about and used to hike have already been destroyed by wildfires.

- 41. Decreased snowfall, decreased snowpack, decreased precipitation, and warming temperatures are diminishing water sources that provide water for Lydia's family, threatening their water security.
- 42. Because of drought conditions brought on by climate change, in the 2019-2020 season, Lydia's rowing team had its practices cancelled and its season ended early, preventing Lydia from partaking in an activity she relied on for her physical, mental, and social health and development.
- 43. Lydia experiences stress and anxiety every day because of the injuries she is already experiencing from continuing fossil fuel development and combustion and because of what the increasing dangers from continuing emissions will mean for her ability to live a healthy life. With the threats to her health, safety, and future mounting with every day of continuing fossil fuel development and combustion, and her government continuing to promote fossil fuels, Lydia often experiences overwhelming dread and hopelessness and is unable to focus on just living her life as a teenager. Because of the dangers of climate change, Lydia feels she has no determination or autonomy over her own future. She experiences stress and anxiety because every major decision in her life will be affected by climate change, including where she can live to try to preserve her safety and whether to have children. Lydia wants to have a family but experiences anxiety about the safety of the world for her and her potential children

- because of climate change. She doesn't want to put children into peril by bringing them into a world that isn't safe for them.
- 44. To reduce air pollution and try to reduce the harms of climate change, Lydia often eats a vegetarian or low-meat diet, strives to purchase only used goods, conserves water, and her family has installed solar panels and drives an electric car. However, Lydia cannot reduce the injuries she is suffering from dangerous air quality and climate change as long as Defendants continue to implement their Fossil Fuel Development Policy.
- 45. Plaintiff **Lola Maldonado** is eighteen years old and resides in Salt Lake City, Utah.
- 46. Because of air pollution and increasing wildfires resulting from the development and combustion of fossil fuels, Lola is exposed to dangerous air quality throughout the year in Utah, harming her physical and mental health and safety, her ability to enjoy her life, and substantially reducing her lifespan. Lola experiences physical pain and difficulty breathing when she is exposed to unsafe air quality in Utah. Lola has suffered from vocal cord dysfunction, a condition associated with exposure to dangerous air quality in which her vocal cords would seize up, making it difficult for her to breathe and speak and causing coughing spells, sometimes to the point of vomiting. Because of unsafe air quality, Lola often has to avoid going outside entirely for her own safety, preventing her from physical and social activities necessary for her health and development. The air quality is often so dangerous that she has to wear a mask outdoors.
- 47. Lola has been and is being harmed by the increasing temperatures and heatwaves in Utah resulting from climate change. As a result of the

- dangerously high temperatures, Lola has often had to remain indoors for her own safety and has been unable to participate in activities that are crucial for her health and development.
- 48. Loss of snow accumulation, decreased snowpack, decreased precipitation, and warming temperatures resulting from climate change are diminishing water sources for Lola's family and her community, threatening their water security.
- 49. Lola's ability to safely obtain exercise necessary for her physical and mental health and development has been and is being harmed by dangerous air quality and climate change in Utah. Lola enjoys going on walks with her family and is an avid hiker, runner, mountain biker, rollerblader, and participant in her school's track and cross country teams. Air pollution, wildfire smoke, and increasing temperatures are making it increasingly dangerous for Lola to engage in these activities. When she is exposed to dangerous air quality during outdoor activities, Lola experiences pain in her chest and lungs, coughing, nausea, and difficulty breathing. Her track and cross country teams have often been unable to practice outdoors and have had to cancel practices because of dangerous air quality. When she is exposed to high temperatures during outdoor activities, Lola experiences faintness, dizziness, weakness, and heat exhaustion. Lola's track and cross country teams have to have ambulances present during events because of the dangers from the heat and, when she has to compete in the heat, Lola has collapsed at the finish line on several occasions. Her track and cross country teams often have to cancel practices or move practices to early

hours throughout the season because of the extreme heat. Last year, the biggest preseason event of Lola's cross country season had to be cancelled because high temperatures made it too dangerous. Lola has also had biking team practices cancelled because of the dangerous high temperatures. She is increasingly exposed to wildfire smoke while hiking and has had to modify and cancel hiking trips because of wildfire smoke.

- 50. Lola also enjoys cross-country and alpine skiing to exercise for her health and development. Increasing temperatures, lack of snow, increased winter rain, and shortening winters are reducing Lola's ability to engage in these activities and resulting in increasing icy and hazardous conditions that are making them more dangerous. Lola has already suffered physical injuries skiing in dangerous conditions resulting from warming temperatures.
- 51. Lola is suffering harms to her mental health because of air pollution and climate change. She experiences stress and anxiety because of the injuries she is already experiencing and because of what continuing fossil fuel development will mean for her future. Knowing that her health is suffering, that it is increasingly unsafe for her to go outside, and that her lifespan is being reduced by Utah's unsafe air quality causes Lola stress and anxiety. She also experiences stress and anxiety that Utah's dangerous air quality will trigger her vocal cord dysfunction. Lola also experiences stress and anxiety knowing that climate change will continue to worsen, harming her ability to access the outdoors and safely maintain her health, and affecting major decisions in her life, like having a family. She experiences stress and anxiety because she wants to have a family but has known, since she first

learned about climate change in the fifth grade, that she will not have her own kids because continuing greenhouse gas ("GHG") emissions will increasingly threaten her safety and the safety of any children she would bring into the world.

- 52. Lola has been a committed advocate for climate and air quality justice in Utah since she was in the fifth grade. She started an environmental club at her high school; helped develop a resolution for her school district to transition to renewable energy; works on her school district's sustainability taskforce, recycling committee, and farm to school committee; is active in Utah Youth Environmental Solutions; and tries to reduce her own impact by driving less, eating a mostly plant-based diet, and reducing energy usage. However, Lola knows that her efforts will not reduce the injuries she is suffering to her health and safety as long as Defendants continue to implement their Fossil Fuel Development Policy.
- 53. Plaintiff **Emi S.**, by and through her guardian David Garbett, is nine years old and resides in South Salt Lake, Utah.
- 54. Because of air pollution and increasing wildfires resulting from the development and combustion of fossil fuels, Emi is frequently exposed to dangerous air quality throughout the year in Utah, harming her physical health and safety, her ability to enjoy her life, and substantially reducing her lifespan. When Emi is exposed to unsafe air quality, she experiences difficulty breathing. The air quality in Utah is often so dangerous that Emi must remain inside for her own safety, preventing access to the outdoors and exercise that she needs for her physical and mental health and

- development. Due to dangerous air quality, Emi has often had days where she and her peers have not been allowed to go outside at school.
- 55. Emi enjoys playing outside and roller skating, hiking, camping, and rafting with her family, but increasing temperatures and heatwaves, wildfires, and wildfire smoke are making it increasingly dangerous for Emi to even be outdoors. Emi has been and is increasingly exposed to wildfire smoke, including while playing outside, camping, and hiking. Because of dangerous conditions brought on by the development and combustion of fossil fuels, Emi and her family often have to daily assess Emi's ability to safely engage in outdoor activities, and often have to keep Emi indoors or change or cancel plans because of wildfire smoke, air pollution, and increasing temperatures. During periods of dangerous air quality, Emi and her family have often had to seek higher elevation to try to reduce Emi's exposure to unsafe air quality.
- 56. Loss of snow accumulation, decreased snowpack, decreased precipitation, and warming temperatures are diminishing water sources for Emi's family and her community, threatening their water security.
- 57. Emi and her sister often visit the creek behind her mother's home and dip their feet in the water for relief from Utah's increasingly hot summer temperatures, but because of drought brought on by climate change, the creek is disappearing in the summer and was reduced to only a trickle in the Summer of 2021.
- 58. Since she was five, Emi has enjoyed skiing to obtain exercise she needs for her physical and mental health and development. She tries to ski as often

as she can with her family and as a member of her ski team. However, increasing temperatures, lack of snow, increased winter rain, and shortening winters brought on by fossil fuel development and combustion mean that Emi is able to go skiing increasingly less often and may not be able to ski at all in the future. When Emi is able to go skiing, climate change is increasingly resulting in icy, patchy, and other hazardous conditions that are making it more dangerous and difficult for Emi to get the exercise she needs for her health and development. Emi also enjoys sledding, but because of lack of snow, she is increasingly unable to go sledding in Utah's disappearing winters.

59. Emi's mental health and development also suffers as a result of dangerous air quality and climate change. Even though Emi is only nine, she already worries for her current health and her future because of Utah's unsafe air quality and worsening climate change. Emi experiences worry and sadness because she knows that, if climate change continues, there will be no more cold winters when she is older, and that the world may become too hot for humans to live in. Emi experiences worry and sadness that she may not be able to ski at all in the near future because of climate change. Emi cares deeply for animals and she also worries and experiences sadness for the health and safety of animals because of the worsening climate crisis. Emi loves playing and being outdoors, and she experiences sadness when air pollution, increasing temperatures, and wildfire smoke brought on by the development and combustion of fossil fuels force her to stay indoors.

- 60. Emi often thinks about how climate change and dangerous air quality are harming her and she wants to do everything she can to prevent them from worsening. Emi and her cousin have even started planning a book about how climate change is harming human and animal health. However, Emi's efforts will not reduce the injuries she is suffering and will suffer as long as Defendants continue to implement their Fossil Fuel Development Policy. Only Utah's Courts can provide the timely relief Emi needs to reduce the harms to her life, health, and safety resulting from Defendants' Fossil Fuel Development Policy.
- 61. Plaintiff **Dallin R.**, by and through his guardian Kyle Rima, is seventeen years old and resides in Riverton, Utah.
- 62. Because of air pollution and increasing wildfires resulting from the development and combustion of fossil fuels, Dallin is exposed to dangerous air quality in Utah throughout the year. Air pollution in Utah significantly harms Dallin's physical and mental health and safety, his ability to enjoy his life, and is substantially reducing his lifespan. Dallin experiences respiratory distress, shortness of breath, pain, and difficulty breathing because of dangerous air quality in Utah resulting from pollution from fossil fuel development and combustion, and from smoke from the increased prevalence of wildfires brought on by climate change. Because of unsafe air quality, Dallin often has to avoid going outside entirely for his own safety, preventing him from physical and social activities necessary for his health, safety, and development. He has been prescribed inhalers because of the respiratory symptoms he experiences due to unsafe air

- quality. In 2020, Dallin experienced respiratory symptoms exacerbated by dangerous air quality so severe that he was immobile for a month, unable to walk ten feet without feeling sick and losing his breath. During the academic year, his school has required him and his peers to stay indoors for lunch and recreation periods due to unsafe air quality.
- 63. Dallin has been and is being harmed by the increasing temperatures and heatwaves in Utah resulting from climate change. In 2020, Dallin experienced a dangerous heatwave in Riverton that lasted a week, for which excessive heat advisories were issued. Dallin again experienced a dangerous heatwave in Riverton in June of 2021. As a result of dangerously high temperatures, Dallin increasingly has to remain indoors for his own safety and is unable to participate in outdoor activities that are crucial for his health and development.
- 64. Loss of snow accumulation, decreased snowpack, decreased precipitation, and warming temperatures resulting from climate change are diminishing water sources for Dallin's family and his community, threatening their water security.
- 65. Dallin is harmed by the lengthening and worsening pollen season resulting from climate change because he experiences seasonal allergies that are becoming more severe each year and that cause him to experience inflammation and redness in his eyes, congestion, and sneezing. Dallin has to take allergy medication to relieve his symptoms almost every day in the spring and summer.

- 66. Dallin's ability to safely recreate and obtain exercise necessary for his own health and development is being harmed by air pollution and climate change. He has long been an avid participant in outdoor sports and has worked as a soccer and baseball referee. When Dallin spends time outdoors or participates in sports and outdoor activities, he often experiences pain and difficulty breathing because of dangerous air quality. Dallin has had practices and games in which he would have played cancelled because of unsafe air quality and has had games for which he would have refereed cancelled because of unsafe air quality, resulting in loss of income. Dallin and his family go camping every year in Utah and have seen and been exposed to wildfire smoke in areas where they vacation, have been prevented from accessing waterways in Utah because of dangerous algal blooms, and have even had to cancel vacation plans because of wildfires and wildfire smoke.
- 67. Dallin's mental health also suffers as a result of air pollution and climate change. He experiences stress and anxiety because of the injuries he is already experiencing from fossil fuel development and combustion and because of what continuing GHG emissions will mean for his future and his safety. The climate crisis weighs on him so much that he often experiences cognitive impairment, finding it difficult to think about other things. Communities near Dallin's home and the homes of his family members in Utah have already received wildfire evacuation notices, causing Dallin additional stress and anxiety for his own safety and the safety of his loved ones. Even though he wants to stay in Utah, get married, and start a family, Dallin experiences frequent stress and anxiety about where he will be able

- to live to minimize injuries from climate change and whether it will be safe to bring additional children into a world in which they too will be threatened by the worsening climate crisis.
- 68. Dallin is committed to climate advocacy, has been active in extracurricular activities through his high school that focus on climate change, and when it is safe enough for him go outside without experiencing adverse health effects from heat, pollen, and air pollution often carpools, walks, or rides his bike for transportation to reduce air pollution. However, Dallin knows that his efforts will not reduce the injuries he is suffering and will suffer as long as Defendants continue to implement their Fossil Fuel Development Policy. Dallin has always dreamed of running for office to try to address the worsening climate crisis, but knows that, with continuing emissions resulting from Defendants' Fossil Fuel Development Policy, by the time he could run for office it would be too late to avert many of the worst near- and long-term harms of the climate crisis. Only Utah's Courts can provide the timely relief he needs to reduce the harms to his life, health, and safety resulting from Defendants' Fossil Fuel Development Policy.
- 69. As described above, Youth Plaintiffs are actively being harmed in uniquely individualized and particular ways by Defendants' Fossil Fuel Development Policy and the resulting dangerous air quality and climate change. Youth Plaintiffs are harmed physically by Defendants' Fossil Fuel Development Policy. Youth Plaintiffs are harmed psychologically, mentally, and emotionally by Defendants' Fossil Fuel Development Policy. Youth Plaintiffs are also injured because Defendants continue to harm them and

put them at greater risk of even more physical and mental health harm than they already experience by continuing to implement their Fossil Fuel Development Policy, worsening Utah's already critical air quality and climate crises. Defendants' Fossil Fuel Development Policy places Youth Plaintiffs at great risk of sustaining additional irreversible physical and mental health harms.

- 70. Defendants' Fossil Fuel Development Policy worsens each Youth Plaintiff's individual injuries each year. The dangerous air pollution and climate changes underlying Youth Plaintiffs' injuries, and consequently, Youth Plaintiffs' injuries, will increase with additional air pollution resulting from the development and combustion of fossil fuels pursuant to Defendants' Fossil Fuel Development Policy. Youth Plaintiffs will continue to suffer similar and additional injuries with additional emissions resulting from the development and combustion of fossil fuels pursuant to Defendants' Fossil Fuel Development Policy.
- 71. Defendants' Fossil Fuel Development Policy hastens the irreversibility and worsening of Youth Plaintiffs' existing injuries and that hastening, in and of itself, is an injury to Youth Plaintiffs. Another separate injury to each Youth Plaintiff is the deprivation of their ability to act in their own interest to preserve the window of opportunity to prevent irreversible and inevitable worsening injury going forward. The opportunity to prevent irreversible and inevitable worsening injuries to Youth Plaintiffs is still available now and is being progressively foreclosed by Defendants' ongoing implementation of their Fossil Fuel Development Policy.

#### IV. DEFENDANTS

- 72. Defendant **State of Utah** has jurisdiction over all natural resources within its domain, including the atmosphere (air), water, public lands, minerals, and fish and wildlife. The State of Utah, through its legislature and governor, codified the State's Fossil Fuel Development Policy to maximize, promote, and authorize the development of fossil fuels in Utah Code sections 79-6-301(1)(b)(i), 40-10-1(1), 40-10-17(2)(a), 40-6-1, and 40-6-13.
- 73. Defendant **Spencer Cox** is the **Governor of the State of Utah** and is sued in his official capacity. The Governor sets energy and mineral development goals and objectives for the State, Utah Code § 79-6-401(3)(b)(ii), and has review and approval power over comprehensive planning for the development and conservation of the state's natural resources. Utah Code § 79-2-202(4)(a), (b).
- Development ("OED") is the State's primary source for advancing energy and mineral development in the state. Utah Code § 79-6-401(3)(a). OED implements state policy to promote the development of natural gas, coal, oil, oil shale, and oil sands, and the governor's energy and mineral development goals and objectives. Utah Code §§ 79-6-401(3)(b)(i), 79-6-301(1)(b).
- 75. Defendant **Thom Carter** is the **Energy Advisor** and **Executive Director of OED** and is sued in his official capacity. The Energy Advisor advises the governor on energy-related matters, annually reviews and proposes updates to the state's energy policy, and promotes, as the governor

considers necessary, the development of renewable and nonrenewable energy resources. Utah Code § 79-6-201(2)(a)-(c)(i). The Energy Advisor coordinates across state agencies to assure consistency with state energy policy and coordinates energy-related regulatory processes within the state. Utah Code § 79-6-201(2)(d), (g).

- 76. Defendants **Board of Oil, Gas, and Mining ("BOGM")** and **Division of Oil, Gas, and Mining ("DOGM")**, are respectively a regulatory board and division within the Department of Natural Resources ("DNR"). BOGM and DOGM respectively regulate and implement regulation of the exploration for and development of coal, oil, gas, and other fossil fuels in the State of Utah. BOGM's and DOGM's authority over fossil fuel development extends to all lands in the State of Utah, including lands of the United States or the lands subject to the jurisdiction of the United States. Utah Code §§ 40-6-18, 40-10-2(1).
- 77. Defendant **John R. Baza**, is the **Director of DOGM** and is sued in his official capacity. Utah Code § 40-6-15.

#### V. FACTUAL BACKGROUND

- A. DEFENDANTS' UNCONSTITUTIONAL FOSSIL FUEL DEVELOPMENT POLICY
- i. Defendants' Unconstitutional Fossil Fuel Development Policy Causes Dangerous Levels of Air Pollution, Harming Youth Plaintiffs
- 78. Defendants' Fossil Fuel Development Policy is codified in the following statutory provisions, each of which directs the maximization, promotion,

and systematic authorization of fossil fuel development in Utah, causing the dangerous air pollution harming Youth Plaintiffs:

- a. In 1979, the State codified its Fossil Fuel Development Policy to maximize, promote, and systematically authorize the development of fossil fuels in two provisions of the Utah Coal Mining and Reclamation Act. Utah Code §§ 40-10-1(1), 40-10-17(2)(a). Section 40-10-1 calls for the maximization, promotion, and systematic authorization of coal development, directing BOGM and DOGM to "insure the existence of an expanding and economically healthy underground coal mining industry."
- b. Similarly, section 40-10-17(2)(a) calls for the maximization, promotion, and systematic authorization of coal development in Utah by requiring that any permit issued under the Utah Coal Mining and Reclamation Act shall require operations to "[c]onduct surface coal mining operations so as to maximize" the amount of coal recovered.<sup>1</sup>
- c. In 1983, the State further codified its Fossil Fuel Development Policy to maximize, promote, and systematically authorize the development of fossil fuels in two provisions of the Utah Oil and Gas

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<sup>&</sup>lt;sup>1</sup> The provisions of the Utah Coal Mining and Reclamation Act "relating to permits . . . and enforcement . . . [are] applicable to" surface coal mining as well as "surface operations and surface impacts incident to an underground coal mine with those modifications to the permit application requirements, permit approval or denial procedures, and bond requirements as are necessary to accommodate the distinct difference between surface and underground coal mining methods." Utah Code § 40-10-18.2.

Conservation Act. Utah Code §§ 40-6-1, 40-6-13. Section 40-6-1 calls for the maximization, promotion, and systematic authorization of oil and gas development, directing BOGM and DOGM "to foster, encourage, and promote the development, production, and utilization" of "oil and gas[,]" and to "authorize and to provide for the operation and development of oil and gas properties in such a manner that a greater ultimate recovery of oil and gas may be obtained . . . ."

- d. Section 40-6-13 further directs BOGM and DOGM to maximize, promote, and systematically authorize the development of oil and gas, stating that the Utah Oil and Gas Conservation Act "shall never be construed to require, permit or authorize the board or any court to make, enter or enforce any order, rule, regulation, or judgment requiring restriction of production of any pool or of any well . . . to an amount less than the well or pool can produce[.]"<sup>2</sup>
- e. In 2006, in a provision of the Utah Energy Act, the State enacted yet another law solidifying its Fossil Fuel Development Policy to maximize, promote, and systematically authorize the development of fossil fuels and expanding it to include oil shale and oil sands, declaring that it "is the policy of the state" to "promote the

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<sup>&</sup>lt;sup>2</sup> Consistent with the direction in Utah Code §§ 40-6-1 and 40-6-13, BOGM has interpreted its directive and promulgated rules "to realize the greatest ultimate recovery of oil and gas[,]" R649-2-1, and declared that "[i]t is the policy of [DOGM] to promote the development of any mineral resources on land under its jurisdiction." R649-3-27(2).

development" of "natural gas, coal, oil, oil shale, and oil sands[.]" Utah Code § 79-6-301(1)(b)(i).

- 79. Each statutory provision codifying the State's Fossil Fuel Development Policy mandates or directs Defendants to administer state programs in a manner to maximize, promote, and systematically authorize the development of fossil fuels in Utah. These policy mandates have resulted in and are resulting in fossil fuel development, combustion, and ensuing air pollution that is endangering the lives, health, and safety of Youth Plaintiffs.
- ii. Defendants' Conduct to Maximize, Promote, and Systematically Authorize the Development of Fossil Fuels Causes Dangerous Levels of Air Pollution that Harm and Threaten Youth Plaintiffs
- 80. In implementing the State's Fossil Fuel Development Policy, and prior to its codification, as a matter of de facto policy, Defendants have historically engaged and continue to engage in an ongoing pattern and practice of maximizing, promoting, and systematically authorizing the development of fossil fuels by engaging in conduct that includes, but is not limited to, the following:
  - a. Defendants Coordinate State Energy Policy and Develop and Implement State Goals, Objectives, Programs and Energy Plans to Maximize and Promote the Development of Fossil Fuels
- 81. Pursuant to the State's Fossil Fuel Development Policy, Defendants coordinate state energy policy and develop and implement state goals, objectives, programs, and energy plans to maximize and promote fossil fuel development in Utah. For example:

- a. The Governor and his predecessors have developed, and the Governor develops energy and mineral development goals and objectives, and comprehensive plans for the State to maximize and promote the development of fossil fuels in Utah;
- b. OED develops energy plans for the State to maximize and promote the development of fossil fuels in Utah;
- c. OED promotes energy and mineral development workforce initiatives to maximize and promote the development of fossil fuels in Utah;
- d. OED supports research initiatives to maximize and promote the development of fossil fuels in Utah;
- e. OED seeks funding for, participates in federal programs to advance, and administers federally funded state fossil fuel energy programs to maximize and promote the development of fossil fuels in Utah;
- f. The Energy Advisor coordinates across state agencies and coordinates energy-related regulatory processes to maximize and promote the development of fossil fuels in Utah;
- g. The Energy Advisor advocates before federal and local authorities for energy-related infrastructure projects to maximize and promote the development of fossil fuels in Utah;
- h. In recommending energy-related executive or legislative actions the Energy Advisor considers beneficial to the state, including updates to the state's energy policy, as contained in section 79-6-301, on

information and belief, Defendant Energy Advisor has never proposed any actions or updates to reduce the development of fossil fuels in Utah.<sup>3</sup>

- i. The State of Utah brings and OED works to support legal challenges to regulatory programs and initiatives that would reduce fossil fuel development in Utah.
- 82. Defendants' coordination of state energy policy and program development, and development and implementation of state goals, objectives, and plans to maximize and promote the development of fossil fuels facilitates, leads to, and increases the amount of fossil fuel development in Utah, and the ensuing air pollution that is harming and endangering the lives, health, and safety of Youth Plaintiffs.

## b. Defendants Regulate and Systematically Authorize Permits for the Development of Fossil Fuels in Utah

- 83. Defendants BOGM and DOGM implement regulatory programs that carry out the unconstitutional statutes of the State's Fossil Fuel Development Policy.
- 84. BOGM and DOGM have engaged in a historical and ongoing pattern and practice of regulating and systematically authorizing permits for the development of fossil fuels in Utah, causing dangerous air pollution that is harming Youth Plaintiffs.

<sup>&</sup>lt;sup>3</sup> Utah Code Section 79-6-203(2)(d) gives the Energy Advisor authority to recommend "any energy-related or legislative action the energy advisor considers beneficial to the state" including updates to Section 79-6-301.

- 85. With limited exceptions,<sup>4</sup> no extraction of fossil fuels can lawfully occur in Utah without a permit from DOGM.
- 86. Present annual oil production in Utah has more than doubled since 2003.

  Between 1960 and November 2021, DOGM and its predecessors authorized operations that cumulatively produced approximately 1,709,140,620 barrels of crude oil in Utah.
- 87. Present annual natural gas production in Utah has nearly quadrupled since 1960. Between 1960 and November 2021, DOGM and its predecessors authorized operations that cumulatively produced approximately 14,386,078,152,000 cubic feet of natural gas, or 14,386,078,152 MCF.<sup>5</sup>
- 88. Present annual coal production in Utah has roughly tripled since 1960.

  Between 1960 and 2020, DOGM and its predecessors authorized operations that cumulatively produced approximately 931,247,641 short tons of coal in Utah. In 2008, Utah produced its one-billionth ton of coal.
- 89. Fossil fuel development operations authorized by DOGM continue to emit air pollution and produce fossil fuels that, when combusted, result in additional air pollution.
- 90. Defendants' historic and ongoing systematic authorization of fossil fuel development in Utah has cumulatively resulted in and continues to cause

<sup>&</sup>lt;sup>4</sup> Permits are not required for "the extraction of coal by a landowner for his own noncommercial use from land owned or leased by him" or for "the extraction of coal as an incidental part of" highway construction or "other construction under rules established [by DOGM]." Utah Code § 40-10-5.

<sup>&</sup>lt;sup>5</sup> 1,000 cubic feet equal one MCF.

- further substantial levels of air pollution, harming Youth Plaintiffs' health and safety and diminishing their lifespans.
- 91. Defendants continue to promote and authorize fossil fuel development in Utah. Ongoing fossil fuel development in Utah is done pursuant to Defendants' Fossil Fuel Development Policy with the approval and full support of Defendants.

# B. DEFENDANTS' FOSSIL FUEL DEVELOPMENT POLICY CAUSES AND CONTRIBUTES TO THE DANGEROUS AIR QUALITY AND CLIMATE CHANGE HARMING YOUTH PLAINTIFFS

- 92. Oil and gas wells authorized by Defendants emit dangerous air pollution, including particulate matter, carbon dioxide ("CO<sub>2</sub>"), methane, carbon monoxide, nitrous oxide, and volatile organic compounds that act as ozone precursors. Coal mines authorized by Defendants emit particulate matter and methane. In terms of their contribution to climate change, methane emissions in Utah are at least equal to the contribution from all of Utah's transportation GHG emissions.
- 93. The combustion of fossil fuels extracted under Defendants' authorization causes additional air pollution, including GHGs; particulate matter; volatile organic compounds; oxides of nitrogen, sulfur, and carbon; and ozone.
- 94. A substantial majority of the fossil fuels extracted in Utah, all of which are extracted pursuant to Defendants' Fossil Fuel Development Policy, are combusted within the state, causing and contributing to the dangerous air quality harming youth Plaintiffs. Not including smoke from wildfires brought on by fossil fuel induced-climate change, which further contribute

- to dangerous air quality, approximately 85% of the pollutants affecting air quality in Utah are fossil fuel combustion products.
- 95. GHGs from the combustion of fossil fuels extracted in Utah pursuant to Defendants' Fossil Fuel Development Policy cause and contribute to climate change harms in Utah regardless of where the fuels are combusted.
- 96. Between 1960 and November 2021, coal, oil, and gas extracted in Utah with DOGM's or its predecessors' authorization, once combusted, resulted in approximately 3,106,203,665 metric tons of CO<sub>2</sub> emissions.<sup>6</sup> The combustion of fossil fuels extracted in Utah has also resulted in, and continues to result in substantial levels of GHG emissions other than CO<sub>2</sub>.
- 97. Continued maximization, promotion, and authorization of fossil fuel development by Defendants pursuant to the State's Fossil Fuel Development Policy will result in additional development and combustion of fossil fuels, further causing additional dangerous air pollution in Utah, further harming and endangering Youth Plaintiffs.
- 98. Utah contains significant quantities of fossil fuels not yet extracted. For example, state-wide recoverable coal resources total over 15 billion tons. The upper Green River Formation in the Uinta Basin alone holds an estimated in-place resource of over 1 trillion barrels of oil. The largest oil shale deposits in the world are in the Eocene Green River Formation, which covers parts of Utah. Utah's estimated in-ground oil shale resources are over 300 billion barrels of oil—some of the largest in the world. Utah's oil

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<sup>&</sup>lt;sup>6</sup> This figure does not include emissions from the combustion of coal extracted in Utah from January through November 2021.

- sands resources are the largest in the United States. Utah's oil sand deposits contain 14 to 15 billion barrels of measured oil in place, with an additional estimated resource of 23 to 28 billion barrels.
- 99. With air quality in Utah already at unsafe levels, and atmospheric levels of GHGs already well past safe levels, every molecule of additional emissions from the development and combustion of Utah's fossil fuels harms and endangers Youth Plaintiffs and exacerbates their existing injuries.
- 100. Any reduction in fossil fuel development in Utah is meaningful in addressing Youth Plaintiffs' injuries and reducing the risk of future harm. With atmospheric levels of GHGs already well past safe levels, and air quality already at dangerous levels in Utah, every molecule of fossil fuel air pollution emissions prevented is meaningful in preventing worsening air quality and climate change harms to Youth Plaintiffs.
- 101. The theory of "perfect substitution" or "leakage" under which it is assumed that limiting production of fossil fuels in one place will never limit consumption or affect emissions because another source somewhere else will always substitute for the missing production, is and has been shown to be false and contrary to basic economic principles of supply and demand.

# C. DEFENDANTS' FOSSIL FUEL DEVELOPMENT POLICY HARMS YOUTH PLAINTIFFS' HEALTH AND SAFETY AND SUBSTANTIALLY SHORTENS THEIR LIVES

### i. The Dangerous Air Quality Harming Youth Plaintiffs Resulting from Defendants' Fossil Fuel Development Policy

- 102. Due to air pollution from the development and combustion of fossil fuels, based on air quality index data, Utah has the worst average air quality of any state in the nation, and is the only state with an average air quality index rating over 50. Living in Utah, Youth Plaintiffs are regularly exposed to dangerous air pollution from the development and combustion of fossil fuels resulting from Defendants' Fossil Fuel Development Policy.
- 103. With ongoing development and combustion of fossil fuels extracted pursuant to Defendants' Fossil Fuel Development Policy occurring throughout the year, with ozone formation worsening with higher temperatures brought on by climate change, and with smoke from increasingly frequent and severe wildfires brought on by climate change occurring more frequently, Youth Plaintiffs are frequently exposed and unable to escape the dangerous air quality conditions in their communities resulting from Defendants' Fossil Fuel Development Policy.
- 104. Air pollution due to fossil fuel development and combustion poses an existential threat to the health and safety of youth and children in Utah, including Youth Plaintiffs, causing and exacerbating medical conditions, substantially shortening lifespans, and causing deaths.

## a. Youth and Children are Particularly Vulnerable To and Disproportionately Harmed By Air Pollution

- 105. As youth and children, Youth Plaintiffs are particularly vulnerable to and disproportionately harmed by air pollution due to their age and developing bodies.
- 106. All children, even those without pre-existing illness, are considered a sensitive population to air pollution.
- 107. The physiological features of youth and children make them disproportionately vulnerable to the harms of air pollution. Children's organs, such as the lungs and brain, are still developing, making them particularly vulnerable.
- 108. Compared to adults, children spend more time outside, tend to engage in more rigorous activity, and inhale more air (and therefore more air pollution) per unit of time and body weight.
- 109. The risk of the adverse health effects of air pollution increase with exposure and are greater for individuals exposed throughout their lifetimes beginning in their youth, like Youth Plaintiffs, than for individuals exposed beginning at later ages.
- 110. Childhood exposure to air pollution can result in impaired physical and cognitive development with life-long consequences.

#### b. The Physical Harms to Youth and Children from Air Pollution Begin During Fetal Development and Impose a Lifetime of Hardship

- 111. The medical harms of air pollution to youth and children begin immediately during fetal development. Air pollution during fetal development triggers miscarriages, stillbirths, and premature births; and significantly increases the incidences of birth defects, low birth weight, infant medical conditions, and infant deaths.
- 112. Exposure to air pollution during fetal development and youth is associated with both immediate and lifelong injuries to health. (Figure 1).



**Figure 1:** The harms to children's health from air pollution begin with early exposure and last a lifetime.<sup>7</sup>

113. The link between air pollution and harms to children's physical health is well established for a wide range of health conditions, including cardiovascular and respiratory diseases, central nervous system disorders, metabolic conditions, reproductive dysfunction, organ damage, cancer, and other serious health effects.

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<sup>&</sup>lt;sup>7</sup> Source: World Economic Forum, Children Are Dying From Air Pollution. Here's How We Can Protect Them, https://www.weforum.org/agenda/2021/11/how-we-can-protect-children-dying-from-air-pollution/.

- 114. Exposure to air pollution affects all systems in children's bodies, including neurological function, cardiovascular health, respiratory function, kidney function, and reproductive health.
- 115. Exposure to polluted air triggers both acute effects in children (such as respiratory distress and asthma attacks), which Youth Plaintiffs are already experiencing, as well as chronic effects including cancer and increased risk of heart disease, diabetes, and stroke later in life.
- 116. The risk of onset of negative health effects is associated with a single or combined exposure to air pollution. Even if youth do not feel any immediate symptoms from exposure to air pollution, exposure is still harmful. Even short-term exposure can cause long-term health effects.
- 117. With Youth Plaintiffs consistently exposed to air pollution in Utah resulting from the development and combustion of fossil fuels pursuant to Defendants' Fossil Fuel Development Policy, their immediate and long-term physical health is being significantly harmed by Defendants.

#### c. Air Pollution Harms the Cognitive Development and Mental Health of Youth and Children

- 118. Exposure to polluted air is associated with and causes profound harms to the cognitive development and mental health of youth and children, whose developing brains are uniquely vulnerable to air pollution.
- 119. The harms to the cognitive development and mental health of youth and children from exposure to air pollution begins during fetal development and can last a lifetime.

- 120. Exposure to air pollution during fetal development and childhood is associated with and causes impaired cognitive development and cognition, neurological disorders, and other harms.
- 121. Children exposed to air pollution are significantly more likely to have brain inflammation, damaged brain tissue, attention problems, and decreased memory, cognition, and intelligence. Brain inflammation is a key factor in many central nervous system disorders, including Alzheimer's and Parkinson's diseases.
- 122. Exposure to air pollution during childhood is associated with and causes harms to mental health, including anxiety, depression, and suicide. Children who are exposed to air pollution are significantly more likely to experience anxiety and depression.
- 123. Dangerous air quality can result in school and social event cancellations for children, like those Youth Plaintiffs are experiencing, disrupting their education and social learning during a period crucial to their cognitive, emotional, and social development.
- 124. Youth Plaintiffs are often forced to remain indoors to minimize their exposure to the unsafe air quality and temperatures in Utah. Being cooped up indoors is associated with and causes feelings of anxiety and depression.
- 125. With Youth Plaintiffs frequently exposed to air pollution in Utah resulting from the development and combustion of fossil fuels pursuant to Defendants' Fossil Fuel Development Policy, their cognitive development and immediate and long-term mental health is being significantly harmed by Defendants.

#### d. Air Pollution in Utah is Taking Years Off Youth Plaintiffs' Lives

- 126. Experts estimate that, because of premature death and other medical harms resulting from Utah's already dangerous air quality, 75% of Utahns are losing at least one healthy year of life, 23% are losing at least five healthy years of life, and, on average, Utahns are losing approximately three healthy years of life. These sobering statistics do not account for the unique vulnerabilities of and disproportionate impact to children or increasing smoke from wildfires.
- 127. Due to their unique sensitivities and vulnerabilities to air pollution, Utah's youth and children, including Youth Plaintiffs, are disproportionately harmed, losing even greater numbers of years of healthy life off their lifespans.
- 128. Not including wildfire smoke, approximately 85% of the air pollution causing medical harm to and shortening the lifespans of Utah's Youth, including Youth Plaintiffs, is the product of fossil fuel combustion and development.
- 129. Utah's youth and children, including Youth Plaintiffs, will lose even greater numbers of years off their lifespans because of increasing smoke from wildfires caused and exacerbated by climate change.
- 130. By causing and contributing to Utah's hazardous air quality, Defendants' Fossil Fuel Development Policy is affirmatively causing harm to Youth

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<sup>&</sup>lt;sup>8</sup> Isabella M. Errigo et al., *Human Health and Economic Costs of Air Pollution in Utah: An Expert Assessment*, 11 Atmosphere 1238 (2020).

- Plaintiffs' physical and mental health and development and taking years off their lives.
- 131. Medical data demonstrates significant measurable reductions and improvements in medical conditions and improvements in longevity from reductions in air pollution.
- Development Policy will lead to a reduction in the air pollution in Utah harming Youth Plaintiffs, thereby at least partially alleviating their injuries. If Defendants stop maximizing, promoting, and systematically authorizing fossil fuel development pursuant to the State's Fossil Fuel Development Policy, it will reduce the risk of harm these children are being exposed to from Utah's air quality crisis and avoid emissions that would otherwise make the crisis worse.

### ii. The Dangerous Climate Change Harming Youth Plaintiffs Resulting from Defendants' Fossil Fuel Development Policy

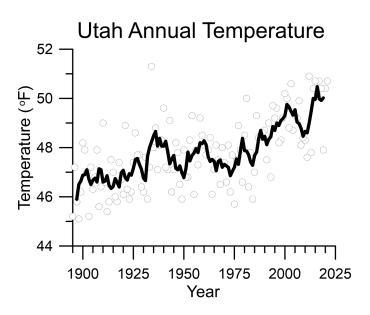
133. Well-documented and observable changes in the climate system in Utah highlight that the current level of atmospheric CO<sub>2</sub> concentration resulting from the development and combustion of fossil fuels has already taken Utah into a danger zone for Youth Plaintiffs. Current CO<sub>2</sub> and GHG concentrations are resulting in the warming of air and land surfaces, dangerous and deadly heat waves, increased prevalence and persistence of drought and water scarcity, increasingly frequent and severe wildfires, worsening air quality, changes in rainfall and atmospheric air circulation patterns that affect water and heat distribution, and other changes that are

already harming Youth Plaintiffs' health and safety and development. Further emissions from fossil fuel development and combustion resulting from Defendants' Fossil Fuel Development Policy will only increase and worsen these harms to Youth Plaintiffs.

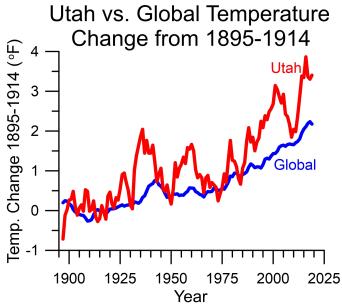
#### a. Dangerous Temperature Increase, Heatwaves, and Other Heat-Related Changes

- 134. Youth Plaintiffs are experiencing increasing temperatures and heatwaves that are harming them and their ability to safely grow to adulthood in Utah. As a result of GHG emissions from fossil fuel development and combustion, Utah's average annual temperatures have already risen substantially and continue to rise.
- 135. Utah has warmed more than the global average increase of 1.8°F since 1850. As of the end of 2021, Utah's five-year average temperature (for 2017-2021) had increased 4.1°F over Utah's five-year average temperature for 1895-1899. (See Figure 2). Since becoming a state in 1896, all but two years have been warmer for Utah than 1895 (1895's average temperature was colder than 1895's and 1905's average temperature was equal to 1895's). Temperatures have consistently risen in most Utah locations since 1970, at a rate of 0.6°F per decade through 2021. This is triple the rate of warming from 1895 to 1970 of 0.2°F per decade, demonstrating accelerated warming in Utah. Utah is warming 70% faster than the global average since 1970. (See Figure 3). Temperature trends in the past five decades have made Utah America's fifth fastest-warming state and eastern Utah one of the world's fastest warming places. Under a high emissions scenario, which is what

will happen if Defendants continue to maximize, promote, and systematically authorize the development of fossil fuels, Utah's average daily maximum temperatures could increase by 6-7°F by 2050 and by 12°F by 2100, subjecting Youth Plaintiffs to even greater injuries to their health and safety than they already face.



**Figure 2:** Utah Average Annual Temperatures from 1895-2021; circular symbols indicate individual years' temperatures with the black line indicating the five-year moving average.



**Figure 3:** Change in annual temperatures from 1895-1914 average for Utah (red: five-year moving average) and the globe (blue: five-year moving average).

- 136. Over the last decade, Utah experienced eight of its hottest years ever recorded. Utah recorded its hottest summer on record in 2021, forcing many of Youth Plaintiffs to remain indoors for long periods during which temperatures were too dangerous for them to be outside. The Salt Lake City area, where many of Youth Plaintiffs live, broke its high temperature record with a high of 107°F. St. George hit 117°F, tying the all-time high for the entire state.
- 137. Extreme heat days in Utah, measuring over 100°F, are occurring more frequently and extreme heatwaves are becoming more frequent. The extreme heatwave that rolled through the American West in late June of 2021, including Utah, which caused hundreds of deaths and made it unsafe for Youth Plaintiffs to be outdoors, was made 150 times more likely and 3.6°F hotter than it would have been without anthropogenic climate change. If global warming reaches 2°C, such an extreme heatwave is

- projected to occur every five to ten years, compared with once every 1,000 years without anthropogenic climate change. With continuing emissions, heat waves will continue to rise in frequency, intensity, duration, and spatial extent, increasingly harming Youth Plaintiffs.
- 138. Higher temperatures and heat waves from anthropogenic climate change increase the risk of heat-related illnesses and death for Youth Plaintiffs. Heat waves are the deadliest weather events in the U.S., causing more fatalities than tornadoes, hurricanes, floods, and earthquakes combined. If fossil fuel development and combustion continues under a business as usual scenario, the Southwest will experience the highest increase in annual premature deaths due to heat in the country.
- 139. As youth and children, Youth Plaintiffs are disproportionately harmed by and uniquely vulnerable to the dangers of increasing temperatures and heat waves resulting from climate change. Youth are particularly vulnerable to and at an increased risk of heat-related illness and death compared to adults due to their greater surface area to body mass ratio, lower rate of sweating, and slower rate of acclimatization. Youth also spend more time recreating outside, engage in more rigorous activities, and have a harder time self-regulating. Youth also face higher risk of dying or becoming ill due to extreme heat than adults.
- 140. Increased heat exposure is particularly devastating for youth and children at multiple stages of development. Climate-induced extreme heat causes fetal death. Extreme weather events can lead to low birthweight and preterm birth of babies. Infant mortality increases 25% on extremely hot

days, with the first seven days of life representing a period of critical vulnerability. Extreme heat places children at higher risk of kidney and respiratory disease as well as fever and electrolyte imbalance. Heat illness is also a leading cause of death and illness in high school athletes with nearly 10,000 episodes occurring annually. Hotter temperatures lead to more emergency department visits for children with heat-related illnesses, bacterial enteritis, otitis media and externa, infectious and parasitic diseases, nervous system diseases, and other medical issues.

- 141. Increasing temperatures are also worsening the already dangerous air quality conditions in Utah resulting from Defendants' Fossil Fuel Development Policy. Increasing temperatures from climate change are increasing ozone formation in Utah, worsening air pollution and the resulting harms to Youth Plaintiffs. Ozone levels are projected to increase as a result of climate change.
- 142. Increasing temperatures from climate change are also causing longer and worse pollen seasons, harming youth, like Dallin, who suffer from seasonal allergies. Increasing temperatures allow plants to pollinate earlier and higher CO<sub>2</sub> concentrations in the air increase pollen production. Pollen is a common trigger of both allergies and asthma. Asthma already affects 6.2% of children age 0–17 in Utah, including Youth Plaintiff Sedona, and increased pollen production increases the risk of asthma attacks. An increase in allergy and asthma symptoms can affect children's physical and psychological health by interfering with sleep, play, and school attendance and performance.

- 143. Increasing temperatures due to anthropogenic climate change are increasing the risk and spread of vector-borne diseases in Utah carried by mosquitoes and ticks, such as West Nile virus and Lyme disease. As temperatures warm, the habitat range of mosquitos and ticks increases and their breeding seasons lengthen, exposing Youth Plaintiffs to increased risk of disease. As youth and children, Youth Plaintiffs are disproportionately vulnerable to the increasing risk of vector-borne diseases resulting from climate change. Compared to other age groups, youth and children spend more time outdoors and engage in activities that bring them in close contact with areas and habitat in which ticks and mosquitos are present. Youth are particularly vulnerable to climate change-related diseases. The vast majority (approximately 88%) of current sufferers of diseases due to climate disruption are children.
- 144. The increasing temperatures and resulting harms to Youth Plaintiffs will only increase with continuing development and combustion of fossil fuels pursuant to Defendants' Fossil Fuel Development Policy.

#### b. Wildfires and Wildfire Smoke

- 145. Each of the Youth Plaintiffs is already being harmed by exposure to smoke from wildfires brought on by climate change. Wildfires produce dangerous air quality both locally and in downwind areas by spewing fine particulate matter, carbon monoxide, oxides of nitrogen, and volatile organic compounds that are ozone precursors into the air.
- 146. As youth and children, Youth Plaintiffs are particularly vulnerable to and at an increased risk of injuries to their health from dangerous air quality,

including from wildfire smoke. As with exposure to air pollution generally, exposure to wildfire smoke causes, and increases Youth Plaintiffs' risk of, premature death, adverse chronic and acute cardiovascular and respiratory health outcomes, cancer, reproductive problems, premature birth and birth defects, and other medical problems.

- 147. Utah, in particular northern and western Utah (with populations consisting of over 25% children), already experiences dangerous air quality from wildfire smoke. In the summer of 2021, Utah experienced some of the worst air quality in the world because of wildfire smoke, with the Salt Lake City area, where many of Youth Plaintiffs live experiencing the worst air quality in the world on August 6, 2021.
- 148. Youth Plaintiffs are already experiencing harms to their health and safety from exposure to wildfire smoke in Utah, including headaches, shortness of breath, painful breathing, forced time indoors, and the risk of triggering existing and developing additional medical problems. With dangerous air pollution from Defendants' Fossil Fuel Development Policy already reducing the number of years of healthy life in Youth Plaintiffs' lifespans, the additionally increasingly dangerous air quality in Utah resulting from wildfire smoke further compounds the dangers and resulting harms to Youth Plaintiffs' health, safety, and lives.
- 149. Climate change is increasing both the number and severity of fires in Utah and across the West. The average number of acres burned during the warm season (May through September) in the western U.S. during the period from 2001 to 2018 nearly doubled relative to the period from 1984 to 2000,

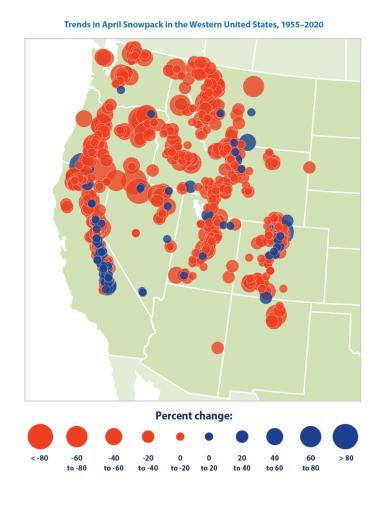
with a 70% increase in acres burned in Utah. For the period between 1979 and 2020, anthropogenic climate change was responsible for at least 68% and as much as 88% of the atmospheric conditions fueling increasingly destructive wildfires in the American West, including Utah. About half of the acres burned by western U.S. wildfires from 1984–2015 can be attributed to climate change.

- 150. Increasingly frequent and severe wildfires in Utah brought on by climate change also threaten the destruction of homes and communities, harming and endangering lives and health. Communities in which Youth Plaintiffs live and in which their families live have already seen destruction from wildfires.
- 151. The wildfire smoke conditions in Utah harming Youth Plaintiffs are projected to worsen as climate change leads to increasingly frequent and severe wildfires and will only further worsen with continuing GHG emissions resulting from Defendants' Fossil Fuel Development Policy.

## c. Changing Precipitation Patterns, Drought, Flooding, and Other Harmful Climate Disruptions

- 152. Anthropogenic climate change is causing changes in Utah's rain and snowfall, accumulation of snowpack, the intensity of storms, and the frequency and severity of droughts and floods, harming Youth Plaintiffs and endangering their lives, health, and safety.
- 153. Climate change is increasing the probability and incidence of drought and water scarcity in Utah, including severe and long-duration droughts, through rising temperatures and changing precipitation patterns. Utah is

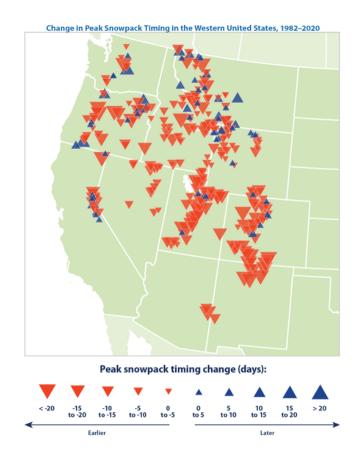
- the second driest state in the nation and is already experiencing drought conditions and water scarcity due to anthropogenic climate change.
- 154. Utah is currently experiencing its worst drought in recorded history, which is the driest 22-year period in 1,200 years. 2020 was Utah's driest year on record overall and Utah experienced its most intense period of drought on record in 2021, with 100% of all land in the state experiencing drought categorized as extreme or exceptional drought.
- 155. Drought and water scarcity pose profound dangers to Youth Plaintiffs' lives, health, and safety, threatening food and water security, creating shortages of water for human consumption and sanitation, and increasing the risk of wildfire, which in turn contributes to worse air pollution and air quality in Utah.
- 156. Ninety-five percent of Utah's water supply comes from melting snowpack. Due to rising temperatures, the amount of precipitation falling as rain relative to snow is increasing in Utah. Increasing temperatures and diminished snowfall have caused Utah's snowpack to decrease since the 1950s. The snowpack in some areas decreased nearly 80% between 1955 and 2020. (Figure 4).



**Figure 4:** Trends in April snowpack, the month snowpack usually peaks in Utah, between 1955–2020.9

157. The timing of the peak of Utah's snowpack has also shifted and continues to shift toward an earlier date, meaning that Utah's snowpack is melting earlier, increasing the risk of summer water shortages. In many areas, peak snowpack date shifted more than twenty days earlier between 1982 and 2020 alone. (Figure 5).

<sup>&</sup>lt;sup>9</sup> Source: U.S. EPA Climate Change Indicators: Snowpack, https://www.epa.gov/climate-indicators/climate-change-indicators-snowpack.



**Figure 5:** Change in date of peak snowpack in the Western U.S. from 1982 to 2020. 10

- 158. As snowfall decreases and the snowpack melts prematurely, less water flows into Utah's reservoirs, creating a deficit in Utah's surface water supply, leading to water scarcity and water security issues. Utah's reservoir levels are declining to alarming levels as a result of anthropogenic climate change, threatening the water security of Youth Plaintiffs.
- 159. Drought has shriveled the Great Salt Lake, the country's largest body of water after the Great Lakes, to its lowest level in recorded history, resulting in vast areas of parched, exposed lakebed. In July of 2021, the Great Salt

<sup>&</sup>lt;sup>10</sup> Source: U.S. EPA Climate Change Indicators: Snowpack, https://www.epa.gov/climate-indicators/climate-change-indicators-snowpack.

Lake reached its lowest mark since measurements began in 1847 and has continued dipping. At its average water elevation, the Great Salt Lake spreads over 1,700 square miles, but in the summer of 2021, it spanned only about 950 square miles after losing 44% of its surface area. In November of 2021, the Lake covered only 937 square miles.

- 160. While the Great Salt Lake's water is not drinkable for humans, lake-effect snowstorms contribute approximately 10% of the snow that inhabitants of the surrounding areas, including Youth Plaintiffs, rely on for water. Thus, diminishing lake levels threaten human water security.
- of pesticides and agricultural chemicals have migrated into many of the lakes, including the Great Salt Lake, over many decades. The exposed lakebeds pose additional threats to air quality. When wind blows over the parched lakebeds, it picks up dust, blowing it into populated areas, exposing millions of people in Utah, including Youth Plaintiffs, to dust storms laced with particulate matter, arsenic, and other toxic chemicals. Ninety percent of the dust in the Wasatch Front comes from dry lakebeds. Dust from the exposed lakebeds accumulates in snowpack, causing earlier snowmelt, further disrupting water supply and threatening water security.
- 162. The increasing severity of drought conditions in Utah is a direct function of anthropogenic climate change brought on by fossil fuel development and combustion. Anthropogenic climate change has contributed approximately 46% of the severity of the current drought conditions in the American West. Drought conditions will continue to become more

prevalent and severe in Utah with continuing GHG emissions from fossil fuel development and combustion resulting from Defendants' Fossil Fuel Development Policy.

Higher temperatures and drought brought on by anthropogenic climate 163. change are increasing harmful algal blooms in Utah's waters, increasing the risk of sickness and death in Youth Plaintiffs. Exposure to toxic algae blooms through swimming or other water sports, breathing in water spray that contains toxins, drinking contaminated water, or eating contaminated fish can cause medical harm, including: skin, eye, nose, and throat irritation; stomach pain; headache; neurological symptoms; vomiting; diarrhea; liver and kidney damage; and death. Youth and children are particularly susceptible to the dangers of exposure to harmful algae blooms because they have more sensitive skin than adults, spend more time in the water, and are more likely to swallow or inhale affected water. Toxic algal blooms now plague Utah's lakes, reservoirs, and other waters each summer, presenting dangers to waters used for recreation and human consumption. For each of the past six summers, blooms have affected Utah Lake, sickening more than 100 people in 2016 with vomiting, diarrhea, headaches, and rashes, and spreading to the Jordan River, near Youth Plaintiff Dallin's home and where he often recreates. Algal blooms led to a lake-wide warning for Utah Lake in summer of 2021, with DNR warning that "children should not be allowed in the water." As DNR acknowledged in 2021, the "magnitude of harmful algal blooms (HABs) continues to be a concern" on "Utah's water bodies."

- 164. Climate-induced changes in water supply and water quality are also harming agriculture in Utah. Increased heat, water shortages, and associated issues such as pests, crop diseases, and weather extremes (including fires) hurt crop and livestock production and quality, threatening food security and increasing malnutrition through decreased yields, increased prices, and decreased calorie availability.
- 165. When storms do bring precipitation to Utah, it falls more intensely due to anthropogenic climate change, increasing the risk of harms to Youth Plaintiffs' health and safety from flooding and contaminated waters. As temperatures increase, there is increased evaporation and consequently a greater amount of water vapor in the atmosphere. Increased atmospheric water vapor produces higher intensity precipitation events, even if drier conditions in an area are otherwise increasing. Heavier rainfall creates greater sediment runoff into surface waters like lakes and rivers, introducing contaminants from agriculture, an overload of minerals, and a variety of disease pathogens.
- 166. Intense rainfall increases the risk of flooding. Floods in Utah from extreme precipitation events have increased and are projected to continue increasing due to anthropogenic climate change. Warmer temperatures lead to rapid and early snowmelt, resulting in flooding. Warmer temperatures also increase the incidence of rain-on-snow events, which increase flooding. Drought conditions and higher intensity precipitation events brought on by climate change also increase the risk of flash floods in Utah. Flash floods alone have increased six-fold in Utah from 2000–2020.

- 167. Flooding causes property damage and poses a danger to human life, health, and safety. Flooding physically harms and endangers human beings, causes deaths, contaminates drinking water, compromises sewage systems, and increases waterborne diseases. Floods can also create stagnant waters that become breeding grounds for vector-borne diseases like West Nile virus.
- 168. The anthropogenic climate change-induced drought conditions and changing precipitation patterns in Utah harming Youth Plaintiffs will worsen with continuing GHG emissions resulting from Defendants' Fossil Fuel Development Policy.

#### d. Mental Health Harms to Youth and Children

- of Defendants' Fossil Fuel Development Policy. As youth and children, Youth Plaintiffs are disproportionately injured by the psychological (cognitive, emotional, social, and functional) effects of the climate crisis, harming their psychosocial health and wellbeing. Experiencing and expecting dangerous climate harms can be traumatic, with lasting consequences for mental health, especially for developing youth.
- 170. Childhood is a condition of life when a person is most susceptible to psychological damage. The disturbances in childhood from the climate crisis can harm brain development and permanently and adversely affect the prefrontal cortex, with lifelong adverse consequences.

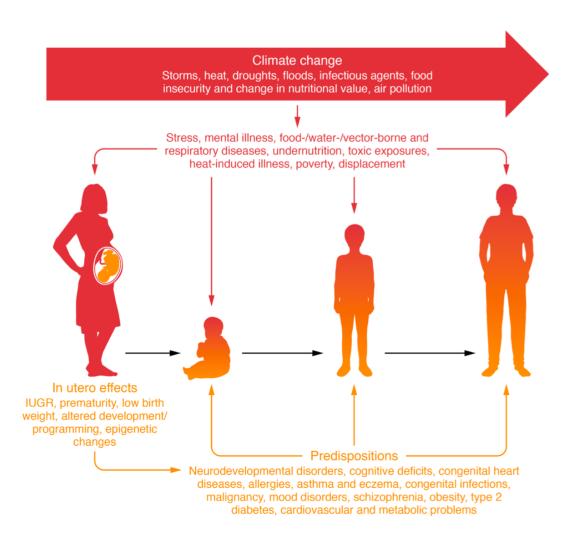
- 171. Psychological health harms related to climate change include elevated levels of anxiety, depression, post-traumatic stress disorder, increased incidences of suicide, substance abuse, social disruptions like increased violence, and a distressing sense of loss.
- 172. Many youth, including Youth Plaintiffs, experience anxiety over the climate crisis. Climate anxiety is associated with cognitive, emotional, and functional impairment. For instance, Youth Plaintiffs Natalie and Dallin find it difficult to concentrate or think of other things because of the anxiety they experience because of the climate crisis and often experience feelings of stress and dread. Distress about climate change is associated in young people with feelings of having no future, that humanity is doomed, and with feelings of betrayal and abandonment by government and by adults.
- 173. The psychological stressors of the climate crisis can have significant, long-lasting negative implications on the mental health of youth. Chronic stress related to the climate crisis increases the risks of physical and mental health problems. The physical and psychological stressors and harms of the climate crisis may exacerbate pre-existing mental and physical health problems in youth.
- 174. Climate changes, such as heat waves and wildfires, make it unsafe to spend time outdoors and can necessitate school and social event cancellations, such as those experienced by Youth Plaintiffs, disrupting youth's education and social learning during a period crucial to their cognitive, emotional, and social development.

- 175. Youth also face physiological and psychological barriers to family formation as a result of the climate crisis. For example, increasingly children, including Youth Plaintiffs Natalie, Lydia, Lola, and Dallin are experiencing stress and anxiety and expressing that they do not think they should have, will have, or will be able to safely have children, because they are and their children would also be subject to the increasing dangers of the climate crisis.
- 176. Increasing temperatures, wildfire smoke, and other increasing dangers of the climate crisis increase the risk of premature birth, birth defects, and other pregnancy complications that threaten the health of both pregnant mothers and their babies.
- 177. The harms to Youth Plaintiffs' mental health and development will worsen as continuing GHG emissions from Defendants' Fossil Fuel Development Policy exacerbate Utah's already critical climate crisis. A declaration of the unconstitutionality of Defendants' Fossil Fuel Development Policy would lead to a reduction in GHG emissions, at minimum slowing the climate crisis and thereby helping to alleviate the harms to Youth Plaintiffs' mental health and development.

#### e. Youth Plaintiffs Will Disproportionately Experience the Increasingly Worsening Harms of Utah's Climate Crisis

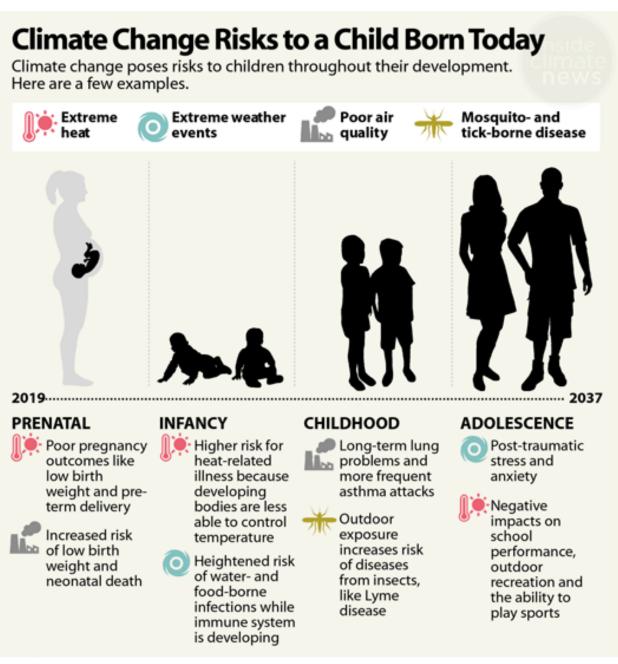
178. The physiological features of Youth Plaintiffs, as youth and children, make them disproportionately vulnerable to the harms of the climate crisis. Children's still-developing organs, such as the lungs and brain, make them particularly vulnerable to environmental stresses, pollution, and injuries.

Childhood exposure to climate disruptions can result in impaired physical and cognitive development with life-long consequences. (See Figures 6 and 7).



**Figure 6:** The harmful effects of climate disruption and air quality impairment on children start before they are born and result in lifelong hardships.<sup>11</sup>

<sup>11</sup> Source: Susan E. Pacheco, *Catastrophic Effects of Climate Change on Children's Health Start Before Birth*, 130 J. Clinical Investigation 562 (2020), https://www.jci.org/articles/view/135005.



SOURCE: Lancet

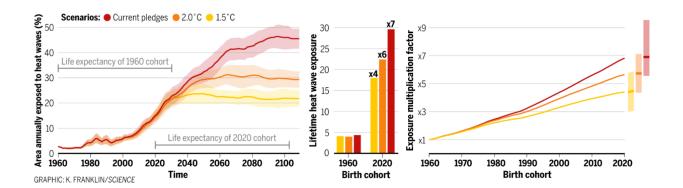
PAUL HORN / InsideClimate News

**Figure 7:** The harmful effects of climate disruption and air quality impairment on children throughout their development.

179. As youth and children, Youth Plaintiffs are also disproportionately vulnerable to the physical and psychological harms of the climate crisis

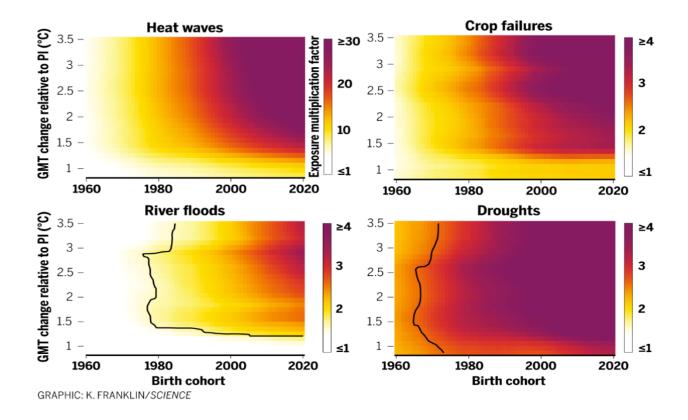
because, as they grow older, they will experience increasingly numerous, frequent, and severe injuries in comparison with present generations of adults. Today's youth, including Youth Plaintiffs, and future generations of Utah's children, will experience worse and more frequent climate harms than today's generation of adults. With continued development and combustion of fossil fuels, dangerous climate harms, including extreme heat waves, drought, and wildfires, will continue to rise in frequency, intensity, duration, and spatial extent. Youth Plaintiffs will therefore face such events in greater prevalence, frequency, and severity in their lifetimes than older generations.

180. Under current GHG emission rates, children born in 2020 are expected to face more than a seven-fold increase in overall extreme climate events, such as heat waves, wildfires, crop failures, droughts, and floods, when compared with people born in 1960. An adult born in 1960 will likely experience between two and six extreme heatwaves in their lifetime regardless of future emissions, whereas a child born in 2020 will likely experience between 21 and 39 extreme heatwaves in their lifetime if global warming is allowed to reach 2.4°C, (Figure 8), and will experience far more under current emissions trajectories, which are on track for up to 3.9°C of warming by 2100. If global warming reaches 3.5°C, a child born in 2020 will likely experience 44 times more extreme heatwaves in their lifetime than an adult born in 1960. The lifetime exposure disparities between youth, including Youth Plaintiffs, and present generations of adults are similar across other harms of the climate crisis. (Figure 9).



**Figure 8:** Left: Global land area exposed to heat waves annually under three GHG emissions scenarios. Middle: Lifetime heatwave exposure for persons born in 1960 and 2020 under three emissions scenarios. Numbers above bars indicate exposure multiplication factors relative to persons born in 1960. Right: Exposure multiplication factors for lifetime heat wave exposure by birth year relative to persons born in 1960 under three emissions scenarios. 12

<sup>&</sup>lt;sup>12</sup> Source: Wim Thiery et al., *Intergenerational Inequities in Exposure to Climate Extremes*, 374 Science 158 (2021), https://doi.org/10.1126/science.abi7339.



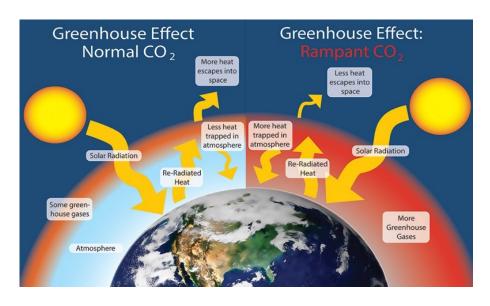
**Figure 9:** Extreme event exposure multiplication factors by birth year under a range of global warming trajectories relative to someone living in the preindustrial (PI) period.<sup>13</sup>

#### D. THE SCIENCE BEHIND ANTHROPOGENIC CLIMATE DISRUPTION AND THE DANGERS OF DEFENDANTS' FOSSIL FUEL DEVELOPMENT POLICY

181. There is an overwhelming scientific consensus that human-caused climate change is occurring now, harming and endangering humans and the natural systems on which human life depends. The present rate of global warming is unprecedented in the historic and prehistoric record and is primarily the result of anthropogenic GHG emissions from the development and combustion of fossil fuels. This release of GHG emissions into the atmosphere has disrupted Earth's energy balance, changing Earth's

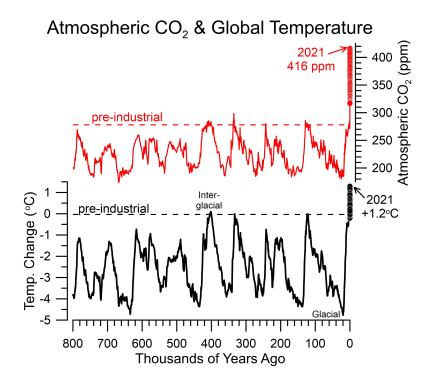
<sup>&</sup>lt;sup>13</sup> Source: Thiery, Note 12, *supra*.

- climate, and is resulting in dangerous climate changes that are harming Youth Plaintiffs.
- 182. Carbon dioxide is the GHG most responsible for trapping excess heat and energy within Earth's atmosphere. Excess CO<sub>2</sub> and other GHGs create an "energy imbalance" that drives warming temperatures and climate disruption. GHGs in the atmosphere act like a blanket over Earth to trap the heat received from the sun. (Figure 10). Scientists have understood this basic mechanism of global heating since at least the late-nineteenth century. More GHGs in the atmosphere means that more heat is retained on Earth, with less heat radiating back out into space, causing a disruption in Earth's energy balance. This imbalance causes Earth to heat up until it reaches an equilibrium in which it again radiates as much energy from space as it absorbs from the sun.



**Figure 10:** While GHGs, like CO<sub>2</sub>, normally trap some of the sun's heat, which prevents the planet from freezing (left side), with increasing atmospheric concentrations of GHGs, the planet is now experiencing an energy imbalance and is warming at an unprecedented rate (right side).

- 183. A substantial portion of every ton of CO<sub>2</sub> persists in the atmosphere for millennia, continuing to cause warming and affect the climate long after it was emitted. Because of its long duration in the atmosphere, CO<sub>2</sub> steadily accumulates, increasing Earth's energy imbalance. It requires centuries for the climate system to reach a new equilibrium consistent with a changed atmospheric composition. As a result of Earth's excess concentrations of CO<sub>2</sub> and existing energy imbalance caused by previous GHG emissions, Earth already has substantial additional warming above today's levels "in the pipeline." Earth will continue to heat up and the climate change harms and threats to Youth Plaintiffs will become more frequent and severe. Ongoing GHG emissions of today and additional emissions of tomorrow from Defendants' Fossil Fuel Development Policy will only further increase atmospheric concentrations of GHGs, Earth's resulting energy imbalance, and the resulting warming and climate dangers harming Youth Plaintiffs.
- 184. The latency of additional warming and climate dangers from existing excess concentrations of CO<sub>2</sub> and continuing additional emissions means that the harm from past and present day GHG emissions will be disproportionately borne by today's youth and children, including Youth Plaintiffs, and future generations.
- 185. Atmospheric CO<sub>2</sub> levels and global temperature are closely correlated as depicted in the graph below (Figure 11). The correlation of CO<sub>2</sub> levels and global temperature holds true tens of millions of years into Earth's past. For hundreds of thousands of years, CO<sub>2</sub> levels have naturally fluctuated between 180 and 280 ppm.



**Figure 11:** Correlation of atmospheric concentrations of CO<sub>2</sub> and global temperature change from pre-industrial temperatures for the last 800,000 years.<sup>14</sup>

186. The atmospheric concentration of CO<sub>2</sub> has been increasing, and continues to increase, as a direct result of development and combustion of fossil fuels. (See Figure 12). Current atmospheric CO<sub>2</sub> concentrations are higher than levels have been in millions of years. The global annual average atmospheric CO<sub>2</sub> concentration for 2021 was 416.45 ppm compared to the pre-industrial concentration of 280 ppm.

<sup>&</sup>lt;sup>14</sup> Data Sources: Dieter Lüthi et al., *High-Resolution Carbon Dioxide Concentration Record* 650,000-800,000 Years Before Present, 453 Nature 379 (2008); M. Rubino et al., *A Revised* 1000 Year Atmospheric d<sup>13</sup>C-CO<sub>2</sub> Record From Law Dome and South Pole, Antarctica, 118 J. Geophysical Rsch. 8482 (2013); James Hansen et al., *Climate Sensitivity, Sea Level and Atmospheric Carbon Dioxide*, 371 Phil. Transactions Royal Soc. 20120294 (2013); https://gml.noaa.gov/ccgg/trends/; https://data.giss.nasa.gov/gistemp/.

### ATMOSPHERIC CARBON DIOXIDE (1960-2021) Amount of carbon dioxide (parts per million)

**Figure 12:** Atmospheric CO<sub>2</sub> at Mauna Loa Observatory. This graph shows the station's monthly average CO<sub>2</sub> measurements since 1960 in parts per million. The seasonal cycle of highs and lows (small peaks and valleys) is driven by summertime growth and winter decay of Northern Hemisphere vegetation.

Years

- 187. For the first time in the measurable paleoclimatic record, CO<sub>2</sub> levels have risen by more than 130 ppm within only 150 years, a rate 100 times faster than the natural increase in CO<sub>2</sub> from 180 ppm 20,000 years ago to 270 ppm 11,000 years ago that drove the end of the last ice age.
- 188. The concentrations of other GHGs in the atmosphere have also increased. For example, the concentration of methane, a GHG that is 86 times more potent at trapping heat than CO<sub>2</sub>, has increased approximately 250% since the mid 1800s.
- 189. The present level of atmospheric CO<sub>2</sub> concentrations, Earth's energy imbalance, and the resulting level of warming and other climate changes, both realized and latent, are already dangerous. Additional GHG emissions

further increase the danger and risk triggering climatic tipping points and amplifying feedback loops after which runaway, catastrophic climate change becomes unstoppable and irreversible for hundreds of years. For instance, present rates of warming are already beginning to thaw permafrost in the Earth's polar regions, releasing methane previously frozen in place, thereby causing additional warming, which causes yet more permafrost thaw, creating an amplifying feedback loop.

- 190. With atmospheric CO<sub>2</sub> already at concentrations that are now causing dangerous climate disruption, continued GHG emissions from fossil fuels will further disrupt Earth's climate system, imposing profound and mounting risks of ecological, economic, and social collapse, and further harm to Youth Plaintiffs.
- 191. There is a scientific consensus that the maximum safe level of atmospheric CO<sub>2</sub> for humanity is 350 ppm. The best available science today prescribes that global atmospheric CO<sub>2</sub> concentrations must be reduced to no more than 350 ppm by 2100 (with further reductions thereafter) in order to restore Earth's energy balance and stabilize the climate system as necessary to preserve conditions that are safe for human life. Emissions reduction and sequestration pathways back to 350 ppm by 2100 would stabilize long-term global heating at no more than 1°C above pre-industrial temperatures.
- 192. There are two steps to reducing atmospheric CO<sub>2</sub> levels to a maximum level of 350 ppm by 2100: (1) near complete elimination of fossil fuel CO<sub>2</sub>

- emissions by 2050; and (2) sequestering excess CO<sub>2</sub> already in the atmosphere by maximizing carbon sequestration capacity.
- 193. With every additional year of continuing emissions from Defendants' Fossil Fuel Development Policy, it becomes that much more difficult to reach 350 ppm by 2100. At some point, the ability to return to safe CO<sub>2</sub> concentrations will become physically impossible for hundreds of years to come.
- 194. To avoid causing further harm to Youth Plaintiffs, and to preserve the possibility of reducing atmospheric CO<sub>2</sub> concentrations to 350 ppm by 2100, as necessary to preserve a safe future for Youth Plaintiffs, this Court must declare Defendants' Fossil Fuel Development policy unconstitutional. If Defendants stop maximizing, promoting, and systematically authorizing the development of fossil fuels, it will reduce the risk of harm Youth Plaintiffs are being exposed to by slowing the worsening climate crisis and avoiding emissions that would otherwise make the crisis worse. Reducing emissions today also keeps the achievement of long-term safety a realistic possibility for Youth Plaintiffs.

## E. DEFENDANTS' LONGSTANDING KNOWLEDGE OF THE DANGERS OF AIR QUALITY IMPAIRMENT AND CLIMATE CHANGE FROM FOSSIL FUELS

195. Since at least the 1960s, Utah government-sponsored reports have detailed that dangerous air quality results from the development and combustion of fossil fuels. In June 1962, the Utah Legislative Council, Air Pollution Advisory Committee submitted a report entitled "Air Resources of Utah" detailing the harmful effects of air pollution in Utah from fossil fuels.

- 196. Former Governor Michael O. Leavitt stated in January 1993, in a charge to Utah's Department of Environmental Quality ("DEQ"), that "clean air" is "essential to" Utah's "quality of life and economic development."
- 197. In his 10-Year Strategic Energy Plan, issued in 2011, former Governor Herbert acknowledged that "Utah also suffers some of the worst air quality days in the Nation. It will be critical for human health and the environment and economic development to implement energy development in a way that takes this unique situation into account." The plan acknowledges that the development and combustion of fossil fuels causes air quality impairment in Utah.
- 198. State governmental documents from at least as early as 1996 demonstrate Utah state governmental knowledge of anthropogenic climate change. In the 1996 report *Utah Greenhouse Gas Emissions Estimates for 1990 and 1993*, DEQ and DNR stated that "[i]t is now generally accepted that the Earth is being warmed by human activities, in particular greenhouse gas emissions from the burning of fossil fuels." The report stated that "the areas most vulnerable to" climate disruption include "air quality, and human health." The report stated: "Drastic cuts in emissions would be required in order to stabilize atmospheric composition. Because greenhouse gases remain in the atmosphere for decades to centuries, merely stabilizing emissions at current levels would allow the greenhouse effect to intensify for more than a century." In the 1996 report, DEQ and DNR acknowledged part of the role Defendants play in causing climate change, stating that "states can

- significantly affect their emissions of greenhouse gases" because of their "direct regulatory authority over the sources" of CO<sub>2</sub> emissions.
- 199. For decades, Defendants have known of the dangerous harms of air pollution and climate change resulting from the development and combustion of fossil fuels, that air pollution and climate change resulting from the development and combustion of fossil fuels are harming Utahn youth and children, and that continuing fossil fuel development would consign current and future generations of Utahn children and youth to irreversible and catastrophic consequences.
- 200. Air pollution and climate change are already, and, absent science-based reductions, will increasingly result in massive adverse economic impacts to Utah's economy. Economic and financial losses from air pollution and climate change are wide-ranging and span across many sectors, including healthcare, tourism, sports and recreation, wildlife and fisheries management, forestry, disaster relief, and agriculture, among others.
- 201. Fossil fuel energy is the least efficient and most dangerous and unsustainable form of energy available to Utah.
- 202. Alternative means that do not cause dangerous air pollution and climate change harms to Youth Plaintiffs are now and have long been available to meet Utah's energy needs and to foster economic activity. Non-fossil fuel-based energy systems across all sectors, including electricity generation and transportation systems, are currently economically feasible and technologically available to employ in Utah. Experts have already concluded the feasibility of, and prepared a roadmap for, the transition of

Utah's all-purpose energy systems (for electricity, transportation, heating/cooling, and industry) to a 100% renewable portfolio by 2050, which, in addition to direct climate benefits, will reduce air pollution and save lives and costs associated with air pollution.

# F. A DECLARATORY JUDGMENT THAT DEFENDANTS' FOSSIL FUEL DEVELOPMENT POLICY VIOLATES PLAINTIFFS' CONSTITUTIONAL RIGHTS WOULD REDUCE EMISSIONS AND PLAINTIFFS' INJURIES

- 203. A declaratory judgment in Youth Plaintiffs' favor would substantially influence and stop the conduct of Defendants in causing Youth Plaintiffs' injuries through their ongoing causation and worsening of Utah's air quality and climate crises. With Utah's climate and air quality crises already harming Youth Plaintiffs' health and safety and reducing their lifespans, continued maximization, promotion, and systematic authorization of fossil fuel development further harms and endangers Youth Plaintiffs in violation of their rights under Utah's Constitution. Consequently, the State's Fossil Fuel Development Policy, which directs Defendants to maximize, promote, and systematically authorize fossil fuel development, must be declared unconstitutional.
- 204. A declaratory judgment by Utah's courts regarding the constitutionality of government policy and conduct carries a presumption that government officials will abide by an authoritative judicial interpretation of Utah's Constitution. A declaratory judgment of the unconstitutionality of the State's Fossil Fuel Development Policy would invalidate the statutory provisions directing Defendants' harmful conduct and instruct Defendants

that their ongoing maximization, promotion, and systematic authorization of fossil fuel development is constitutionally impermissible. In response to a declaration of the unconstitutionality of the State's Fossil Fuel Development Policy, Defendants would align their conduct with the Court's ruling and stop maximizing, promoting, and systematically authorizing fossil fuel development in Utah, thereby reducing the air pollution causing Youth Plaintiffs' harms. Such reduction in emissions would reduce, and at least delay, the increasing prevalence, likelihood, and severity of the air quality and climate change harms injuring and threatening Youth Plaintiffs, thereby at least partially alleviating Youth Plaintiffs' injuries.

205. A declaration of the unconstitutionality of the State's Fossil Fuel Development Policy as codified and implemented would end Defendants' ongoing pattern and practice of maximizing, promoting, and systematically authorizing fossil fuel production and development that is causing Plaintiffs' injuries.

#### VI. CLAIMS FOR RELIEF

#### FIRST CAUSE OF ACTION

Violation of Youth Plaintiffs' Substantive Due Process Right to Life Under Article 1, Sections 1 and 7 of Utah's Constitution

- 206. Youth Plaintiffs hereby reallege and incorporate by reference each of the allegations set forth above.
- 207. By and through the State's Fossil Fuel Development Policy, Defendants affirmatively maximize, promote, and systematically authorize fossil fuel development in Utah, causing air pollution and resulting dangerous air

- quality that is harming Youth Plaintiffs, substantially reducing their lifespans and the number of healthy years in their lives.
- 208. Article 1, section 7 of the Utah Constitution protects persons from government policies and conduct that deprive them of life without due process of law. The right to life in Article 1, section 7 of Utah's Constitution is a fundamental right. The right to life is the most fundamental right protected by Utah's Constitution. *State v. Phillips*, 540 P.2d 936, 940 (Utah 1975), *disavowed on other grounds by State v. Taylor*, 664 P.2d 439 (Utah 1983).
- 209. When determining the meaning of a constitutional provision, other provisions dealing generally with the same topic assist in arriving at a proper interpretation of the constitutional provision at issue. *In re Worthen*, 926 P.2d 853, 866-67 (Utah 1996). Article 1, section 7 and Article 1, section 1 of Utah's Constitution deal generally with the same topic. Both provisions concern protection of the right to life. Under Article 1, section 1, the right to life protected by Utah's constitution encompasses the right to "enjoy" life. Utah Const. Art. 1, § 1. The right of all persons to "enjoy . . . their lives" is "inherent and inalienable." Utah Const. Art. 1, § 1.
- 210. Diminishment of and significant endangerment of a person's health and safety significantly reduces their ability to enjoy their life. A person's reasonable security in their health and safety is necessary to "enjoy...their lives[.]" Utah Const. Art. 1, § 1.
- 211. The words "lives" in Article 1, section 1 and "life" in Article 1, section 7 of Utah's Constitution are constitutional terms and are to be taken in their broadest sense. *McGrew v. Indus. Comm'n*, 85 P.2d 608, 610 (Utah 1938).

- 212. The protections against governmental deprivations of life in Article 1, sections 1 and 7 of Utah's Constitution are implicated by government policies and conduct that substantially reduce a person's lifespan. The protections against governmental deprivations of life in Article 1, sections 1 and 7 of Utah's Constitution are implicated by government policies and conduct that substantially reduce the number of healthy years in a person's life such that their ability to enjoy such years is substantially diminished.
- 213. The protections against governmental deprivations of life afforded in Article 1, sections 1 and 7 of Utah's Constitution restrict government from implementing policies and conduct that substantially reduce a person's lifespan, unless such policies and conduct are narrowly tailored to achieve a compelling government interest. The protections against governmental deprivations of life afforded in Article 1, sections 1 and 7 of Utah's Constitution restrict government from implementing policies and conduct that substantially reduce the number of healthy years in a person's lifespan, unless such policies and conduct are narrowly tailored to achieve a compelling government interest.
- 214. Utah's history and traditions reflect strong constitutional protections for the lives of youth and children.
- 215. The State has a compelling interest in protecting the lives and longevity of youth and children. The protection of human life is among the primary purposes for which government exists. Government policies and conduct that substantially reduce the lifespans of their citizens, unless narrowly

- tailored to achieve a compelling government interest, betray the purpose for which governments are founded.
- 216. Defendants have codified a State Fossil Fuel Development Policy to maximize, promote, and systematically authorize the development of fossil fuels in Utah. By implementing the State's Fossil Fuel Development Policy, Defendants have caused and contributed to, and continue to cause and contribute to dangerous air quality in Utah, substantially reducing Youth Plaintiffs' lifespans in violation of their right to life. By implementing the State's Fossil Fuel Development Policy, Defendants have caused and contributed to, and continue to cause and contribute to dangerous air quality in Utah, substantially reducing the number of healthy years in Youth Plaintiffs' lifespans in violation of their right to life.
- 217. Defendants' Fossil Fuel Development Policy is not narrowly tailored to achieve any underlying compelling state interest. Defendants' Fossil Fuel Development Policy is not narrowly tailored to providing adequate, reliable, or affordable energy. Defendants' Fossil Fuel Development Policy is not narrowly tailored to supporting Utah's economy. Defendants' Fossil Fuel Development Policy is not narrowly tailored to raising revenue. Technologically and economically feasible means of providing adequate, reliable, and affordable energy; supporting economic development; and raising revenue are available which do not substantially reduce Utahns' lifespans or the number of healthy years in Utahns' lives, including those of Youth Plaintiffs.

- 218. Defendants' Fossil Fuel Development Policy is not rationally related to any legitimate government interest. The purpose of the government's role in resource and energy development is to extend, protect, and promote human life, health, and wellbeing, not to harm and reduce the lifespans of Utah's residents. When alternative means of providing energy, supporting the economy, and raising revenue are technologically and economically feasible, it is not rational to cause harm to children's and youth's lives and lifespans. The climate changes and dangerous air quality resulting from the development and combustion of fossil fuels undermine Utah's economy.
- 219. An actual controversy of a justiciable nature exists between Youth Plaintiffs and Defendants concerning whether Defendants' Fossil Fuel Development Policy impermissibly infringes upon Youth Plaintiffs' constitutional rights to life.
- 220. Youth Plaintiffs are entitled to a declaration by this Court that Defendants' Fossil Fuel Development Policy infringes upon Youth Plaintiffs' rights to life secured by Article 1, sections 1 and 7 of the Utah Constitution.
- 221. If necessary, Youth Plaintiffs are also entitled to such further relief as may be appropriate to ensure that Defendants cease their affirmative violations of Youth Plaintiffs' rights to life.

#### **SECOND CAUSE OF ACTION**

Violation of Youth Plaintiffs' Substantive Due Process Right to Liberty Under Article 1, Sections 1 and 7 of Utah's Constitution

222. Youth Plaintiffs hereby reallege and incorporate by reference each of the allegations set forth above.

- 223. By and through the State's Fossil Fuel Development Policy, Defendants have and continue to affirmatively maximize, promote, and systematically authorize fossil fuel development in Utah, causing air pollution and resulting dangerous air quality and climate change that is harming and endangering Youth Plaintiffs' health and safety.
- 224. Article 1, section 7 of the Utah Constitution protects persons from government policies and conduct that deprive them of liberty without due process of law.
- 225. Article 1, section 7 and Article 1, section 1 of Utah's Constitution deal generally with the same topic. Both provisions concern protection of liberty. Under Article 1, section 1, the right to liberty protected by Utah's constitution encompasses the right to "enjoy" liberties. Utah Const. Art. 1, § 1. The right of all persons to "enjoy . . . their liberties" is "inherent and inalienable." Utah Const. Art. 1, § 1.
- 226. The words "liberties" in Article 1, section 1 and "liberty" in Article 1, section 7 of Utah's Constitution are constitutional terms and are to be taken in their broadest sense. *McGrew v. Indus. Comm'n*, 85 P.2d 608, 610 (Utah 1938).
- 227. The liberty protected by Article 1, sections 1 and 7 of the Utah Constitution is not limited to the exercise of rights specifically enumerated in the Utah Constitution. The enumeration of rights in the Utah Constitution "shall not be construed to impair or deny others retained by the people." Utah Const. Art. 1, § 25.
- 228. In addition to the rights specifically enumerated, the Utah Constitution protects rights that are "natural," "intrinsic," or "prior" in the sense that the

Utah Constitution presupposes them. *In re J.P.*, 648 P.2d 1364, 1373 (Utah 1982). The protection of such inherent, presupposed rights is one of the basic principles for which organized government exists. Rights which are not specifically enumerated in Utah's Constitution are considered fundamental if they are rooted in history and the common law and are so fundamental to our society and so basic to our constitutional order as to be implicit in the concept of liberty.

- 229. The liberty protected under Article 1, sections 1 and 7 of Utah's Constitution includes a person's right to be free from government conduct that substantially endangers their health and safety. The right to be free from government conduct that substantially endangers one's health and safety is a fundamental right. Article 1, sections 1 and 7 of Utah's Constitution restrict government from implementing policies and conduct that substantially endanger a person's health and safety, unless such policies and conduct are narrowly tailored to achieve a compelling government interest.
- 230. The right to be free from government conduct that substantially endangers a person's health and safety is rooted in Utah's history and common law. The government of the Territory of Utah afforded, and the State of Utah has afforded since statehood, statutory and common law protection from conduct that endangers health and safety.
- 231. The right to be free from government conduct that substantially endangers an individual's health and safety is so fundamental to our society and so basic to our constitutional order as to be implicit in the concept of liberty

protected under Article 1, sections 1 and 7. It "is the universally recognized right of the community in all civilized governments" to "be protected" against "impairment or imperilment" of health and safety, "a protection which the government not only has a right to vouchsafe to the citizens, but which it is its duty to extend in the exercise of its police power." *Olsen v. Hayden Holding Co.*, 70 P.2d 463, 465 (Utah 1937) (quoting *City of Seattle v. Hinckley*, 40 Wash. 468, 471 (1905)).

- 232. Utah's history and traditions reflect strong constitutional protections for the health and safety of youth and children.
- 233. The State has a compelling interest in protecting the health and safety of youth and children. The protection of health and safety is among the primary purposes for which government exists. Government policies and conduct that substantially endanger the health and safety of its citizens, unless narrowly tailored to achieve a compelling government interest, betray the purpose for which governments are founded.
- 234. Defendants have codified a State Fossil Fuel Development Policy to maximize, promote, and systematically authorize the development of fossil fuels in Utah. By implementing the State's Fossil Fuel Development Policy, Defendants have caused and contributed to, and continue to cause and contribute to dangerous levels of air pollution, causing and contributing to dangerous air quality and climate change, harming Plaintiffs in violation of their right to be free from government conduct that substantially endangers their health and safety.

- 235. Defendants' Fossil Fuel Development Policy is not narrowly tailored to achieve any underlying compelling state interest. Defendants' Fossil Fuel Development Policy is not narrowly tailored to providing adequate, reliable, or affordable energy. Defendants' Fossil Fuel Development Policy is not narrowly tailored to supporting Utah's economy. Defendants' Fossil Fuel Development Policy is not narrowly tailored to raising revenue. Technologically and economically feasible means of providing adequate, reliable, and affordable energy; supporting economic development; and raising revenue are available which do not substantially harm and endanger the health and safety of Utahns, including Youth Plaintiffs.
- 236. Defendants' Fossil Fuel Development Policy is not rationally related to any legitimate government interest. The purpose of the government's role in resource and energy development is to extend, protect, and promote human life, health, and wellbeing, not to harm the health and safety of Utah's residents. When alternative means of providing energy, supporting the economy, and raising revenue are technologically and economically feasible, it is not rational to cause harm to children's and youth's health and safety. The dangerous climate changes and air quality resulting from the development and combustion of fossil fuels undermine Utah's economy.
- 237. An actual controversy of a justiciable nature exists between Youth Plaintiffs and Defendants concerning whether Defendants' Fossil Fuel Development Policy impermissibly infringes upon Youth Plaintiffs' constitutional rights to be free from government conduct that substantially endangers their health and safety.

- 238. Youth Plaintiffs are entitled to a declaration by this Court that Defendants' Fossil Fuel Development Policy infringes upon Youth Plaintiffs' rights, secured by Article 1, sections 1 and 7 of the Utah Constitution, to be free from government conduct that substantially endangers their health and safety.
- 239. If necessary, Youth Plaintiffs are also entitled to such further relief as may be appropriate to ensure that Defendants cease their affirmative violations of Youth Plaintiffs' rights to be free from government conduct that substantially endangers their health and safety.

#### VII. PRAYER FOR RELIEF

WHEREFORE, Youth Plaintiffs respectfully request that this Court enter judgment in their favor and against each of the Defendants, and grant them the following relief:

- a. Adjudge and declare that Utah Code section 40-10-1(1) violates Youth Plaintiffs' right to life under Article 1, sections 1 and 7 of the Utah Constitution;
- b. Adjudge and declare that Utah Code section 40-10-1(1) violates Youth Plaintiffs' right to be free from government conduct that substantially endangers their health and safety under Article 1, sections 1 and 7 of the Utah Constitution;
- c. Adjudge and declare that Utah Code section 40-10-17(2)(a) violates Youth Plaintiffs' right to life under Article 1, sections 1 and 7 of the Utah Constitution;

- d. Adjudge and declare that Utah Code section 40-10-17(2)(a) violates Youth Plaintiffs' right to be free from government conduct that substantially endangers their health and safety under Article 1, sections 1 and 7 of the Utah Constitution;
- e. Adjudge and declare that Utah Code section 40-6-1 violates Youth Plaintiffs' right to life under Article 1, sections 1 and 7 of the Utah Constitution;
- f. Adjudge and declare that Utah Code section 40-6-1 violates Youth Plaintiffs' right to be free from government conduct that substantially endangers their health and safety under Article 1, sections 1 and 7 of the Utah Constitution;
- g. Adjudge and declare that Utah Code section 40-6-13 violates Youth Plaintiffs' right to life under Article 1, sections 1 and 7 of the Utah Constitution;
- h. Adjudge and declare that Utah Code section 40-6-13 violates Youth Plaintiffs' right to be free from government conduct that substantially endangers their health and safety under Article 1, sections 1 and 7 of the Utah Constitution;
- Adjudge and declare that Utah Code section 79-6-301(1)(b)(i) violates
   Youth Plaintiffs' right to life under Article 1, sections 1 and 7 of the
   Utah Constitution;
- j. Adjudge and declare that Utah Code section 79-6-301(1)(b)(i) violates Youth Plaintiffs' right to be free from government conduct that

- substantially endangers their health and safety under Article 1, sections 1 and 7 of the Utah Constitution;
- k. Adjudge and declare that Defendants' pattern and practice of affirmative actions in implementing the State's Fossil Fuel Development Policy by maximizing, promoting, and systematically authorizing the development of fossil fuels violates Youth Plaintiffs' right to life under Article 1, sections 1 and 7 of the Utah Constitution;
- 1. Adjudge and declare that Defendants' pattern and practice of affirmative actions in implementing the State's Fossil Fuel Development Policy by maximizing, promoting, and systematically authorizing the development of fossil fuels violates Youth Plaintiffs' right to be free from government conduct that substantially endangers their health and safety under Article 1, sections 1 and 7 of the Utah Constitution;
- m. Award Youth Plaintiffs their reasonable attorneys' fees and costs; and
- n. Award Youth Plaintiffs such further or alternative relief as the Court deems just and equitable.

Respectfully submitted this 15th day of March, 2022.

#### **DEISS LAW PC**

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