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## MONTANA FIRST JUDICIAL DISTRICT COURT LEWIS AND CLARK COUNTY

RIKKI HELD, et al.,

Plaintiffs,

V.

PLAINTIFFS' PROPOSED FINAL FINDINGS OF FACT AND CONCLUSIONS OF LAW

Defendants.

### PROCEDURAL HISTORY

On March 13, 2020, Rikki Held and fifteen other Montana youth (collectively the "Youth Plaintiffs") filed a Complaint for Declaratory and Injunctive Relief (Doc. 1) against the State of Montana, the Governor, Montana Department of Environmental Quality, Montana Department of Natural Resources and Conservation, Montana Department of Transportation, and Montana Public Service Commission (collectively "Defendants"). Plaintiffs' Complaint challenged the constitutionality of Defendants' long-standing implementation of a fossil fuel-based state energy system that causes and contributes to dangerous climate change in violation of Youth Plaintiffs' constitutional rights guaranteed under Article II, Section 3; Article II, Section 4; Article II, Section 15; Article II, Section 17; Article IX, Section 1; Article IX, Section 3 of the Montana Constitution; and the Public Trust Doctrine. (Doc. 1 ¶ 3-4).

Specifically, Plaintiffs' Complaint challenged the constitutionality of fossil fuel-based provisions of Montana's State Energy Policy Act, § 90-4-1001(1)(c)-(g), MCA; the limitation in the Montana Environmental Policy Act ("MEPA"), § 75-1-201(2)(a), MCA which forbids Defendants from considering the impacts of greenhouse gas ("GHG") emissions or climate change in their environmental reviews; and the aggregate acts Defendants have taken to implement and perpetuate a fossil fuel-based energy system pursuant to these two statutory provisions. (Doc. 1 ¶¶ 4, 105, 108, 118).

The Youth Plaintiffs asked this Court for a declaration of law concerning their constitutional rights; a declaration of law that the fossil fuel-based provisions of Montana's State Energy Policy, § 90-4-1001(1)(c)-(g), MCA, are unconstitutional; a declaration of law that § 75-1-201(2)(a), MCA, is unconstitutional; and a declaration of law that Defendants' past and ongoing affirmative aggregate actions to implement a fossil fuel-based energy system—carried out in

furtherance of the State Energy Policy and perpetuated through § 75-1-201(2)(a), MCA—is unconstitutional. (Doc. 1, Requests for Relief # 1-5). Plaintiffs' Complaint further requested injunctive relief to: enjoin Defendants from subjecting Plaintiffs to the fossil fuel-based State Energy Policy, § 90-4-1001(1)(c)-(g), MCA, § 75-1-201(2)(a), and aggregate acts; order Defendants to prepare a statewide GHG accounting; order Defendants to develop a remedial plan to reduce statewide GHG emissions in a manner consistent with the best available science and Plaintiffs' constitutional rights; retain jurisdiction until Defendants have fully complied with the Court's orders; and, if necessary, appoint a special master to review the remedial plan for efficacy. (Doc. 1, Requests for Relief # 6-9). Plaintiffs also requested an order awarding the Youth Plaintiffs their reasonable attorneys' fees and costs, and any such further or alternative relief as the Court deems just and equitable. (Doc. 1, Requests for Relief # 10-11).

On April 24, 2020, Defendants filed a Motion to Dismiss Plaintiffs' Complaint pursuant to Mont. R. Civ. P. 12(b)(1), 12(b)(6), and 12(h)(3). (Doc. 11). After oral argument was held on the Motion to Dismiss, the Court issued an Order on Motion to Dismiss on August 04, 2021, (Doc. 46), partially granting and partially denying Defendants' Motion to Dismiss.

As to relief sought, the Court found that Plaintiffs' requests for the Court to order Defendants to develop a remedial plan, to retain jurisdiction over the matter until Defendants have complied with the remedial plan, and, if necessary, appoint a special master to assist the Court in reviewing the remedial plan for efficacy exceeded the Court's authority to grant under the political question doctrine. (Doc. 46 at 21). Nevertheless, the Court agreed with Plaintiffs that prudential standing considerations did not merit dismissal of Plaintiffs' Complaint because the Court "may grant declaratory relief regardless of injunctive relief. The court possesses the authority to grant declaratory or injunctive relief, or both." (Doc. 46 at 22).

Finally, the Court declined to dismiss Plaintiffs' challenge to MEPA for want of administrative exhaustion, finding that "Youth Plaintiffs properly brought this action in district court rather than through the administrative review process." (Doc. 46 at 24). Thus, the Court's Order on Motion to Dismiss granted Defendants' motion with respect to Plaintiffs' Requests for Relief # 6, 7, 8, and 9, and denied Defendants' motion with respect to Plaintiffs' Requests for Relief # 1, 2, 3, 4, and 5.

Defendants filed their Answer to Plaintiffs' Complaint on September 17, 2021. (Doc. 53). Defendants' Answer responded to Plaintiffs' allegations, denying virtually all allegations in the Complaint, and raising several affirmative defenses.

Pursuant to the Court's December 27, 2021, Scheduling Order (Doc. 61), the parties engaged in discovery throughout 2022.

On May 6, 2022, Defendants filed a Motion for Clarification of Order on State's Motion to Dismiss pursuant to Rule 60(a), Mont. R. Civ. P. (Doc. 84), seeking clarification on whether Plaintiffs' Request for Relief # 5 had been dismissed by the Court's August 04, 2021, Order on Motion to Dismiss. Plaintiffs filed a Response in Opposition on May 20, 2022. (Doc. 102).

On June 10, 2022, Defendants filed a Petition for Writ of Supervisory Control with the Montana Supreme Court (OP 22-0315), requesting the Montana Supreme Court exercise supervisory control and "dismiss Request for Relief 5 from this case." On June 14, 2022, the Montana Supreme Court issued an Order denying Defendants' Petition for Writ of Supervisory Control. (OP 22-0315).

On June 15, 2022, the Court issued an Order Partially Granting Defendants' Motion to Modify Scheduling Order and Setting Scheduling Conference. (Doc. 145) ("Modified Scheduling Order"). The Modified Scheduling Order governed the timeline of the proceeding thereafter.

Pursuant to the Modified Scheduling Order, the parties engaged in discovery through the close of discovery on January 9, 2023—including disclosing expert witnesses (Docs. 222, 227), rebuttal expert witnesses (Docs. 240, 242), and conducting dozens of depositions.

On June 30, 2022, this Court issued an Order on Defendants' Rule 60(a) Motion for Clarification (Doc. 158), clarifying that "requests for injunctive relief contained in the complaint were dismissed, except for Request for Relief 5." (Doc. 158 at 3).

On July 19, 2022, Defendants filed a Motion for Independent Medical Examination, or, in the Alternative, Motion to Strike Opinions and Testimony of Plaintiffs' Expert Dr. Lise Van Susteren pursuant to Rule 35(a), Mont. R. Civ. P. (Doc. 163), alleging that Plaintiffs' allegations of mental health impacts as a result of climate change had placed their mental health at issue. (Doc. 163 at 2). On October 14, 2022, the Court issued an Order on Motion Under Rule 35(a) for Independent Medical Examinations, denying Defendants' motion (Doc. 225), ruling that IMEs were unwarranted because "Plaintiffs have not placed their mental health at the center of this case, nor is it really and genuinely in controversy," (Doc. 225 at 6), and because "Defendants have not established good cause for the requested examinations." (Doc. 225 at 7).

On July 20, 2022, Defendants filed a Second Motion for Clarification of Order on State's Motion to Dismiss pursuant to Rule 60(a), Mont. R. Civ. P. (Doc. 167). Defendants' Second Rule 60(a) Motion for Clarification sought clarification from the Court as to why Plaintiffs' Requests for Relief # 1, 2, 3, 4, and 5 "don't violate the political question doctrine." (Doc. 167 at 3). On September 22, 2022, the Court issued an Order on Second Rule 60(a) Motion for Clarification (Doc. 217), denying Defendants' Second Rule 60(a) Motion for Clarification of Order on State's Motion to Dismiss, confirming Plaintiffs' Requests for Relief # 1-4 (declaratory relief) do not violate the political question doctrine—observing:

While Justice Marshall thought it "a proposition too plain to be contested," the State is apparently unsure whether the judiciary has the power to declare statutes unconstitutional. This court assures the State that it can. Youth Plaintiffs' requests for relief 1-4 simply ask this court to determine whether the State Energy Policy, Mont. Code Ann. 90-4-1001[1](c)-(g), and the Climate Change Exception to the Montana Environmental Policy Act (MEPA), Mont. Code Ann. 75-1-201(2)(a), with their appurtenant acts and policies, violate the Montana Constitution—particularly the "clean and healthful environment" clause of Art. II, Sec. 3, and the "non-degradation" provision under Art. IX, Sec. 1....

This court agrees that climate change is a politically-charged issue, but whether the State's energy statutes violate the Montana constitution is a question for the courts, not the other branches of government. Constitutional and statutory interpretation are "the very essence of judicial duty." *Marbury* at 177. Furthermore, climate change is of paramount public importance, and if the State's position on so-called political questions were adopted, no controversial legislation would be reviewable by the courts. At the most basic level, the judiciary is not subservient to the legislature. To hold this controversy as non-justiciable due to the political question doctrine would completely upset the separation of powers.

(Doc. 217 at 3, 6).

The Court's Order on Second Rule 60(a) Motion for Clarification also confirmed Plaintiffs' Request for Relief # 5 does not violate the political question doctrine, observing:

In its first order on clarification, this court explained that request for relief #5 "would be a logical extension and result" if the State Energy Policy and Climate Change Exception are declared unconstitutional. The State, unwilling to accept that reasoning, has asked for more. Again, the State points to *Juliana* as a deus ex machina that will rescue it from judicial review. It won't. . . .

Request for Relief #5 has no relation, no bearing on the remedial plan. Request for Relief #5 simply asks the court to enjoin the State from subjecting Youth Plaintiffs to allegedly unconstitutional statutes. Once again, it is well within the purview of the judiciary to: a) declare statutes unconstitutional, and b) prevent the State from enforcing unconstitutional statutes.

(Doc. 217 at 6-7).

On September 30, 2022, pursuant to the Modified Scheduling Order (Doc. 145), Plaintiffs disclosed their expert witnesses with their Mont. R. Civ. P. 26(b)(4) expert disclosures. (Doc. 222). On October 31, 2022, Defendants disclosed their expert witnesses and their Mont. R. Civ. P.

26(b)(4) expert disclosures. (Doc. 227). On November 30, 2022, the parties exchanged rebuttal expert disclosures. (Docs. 239, 242).

Discovery in this case closed on January 9, 2023. Between the parties, discovery included the completion of thirty-six depositions, the exchange of twenty-two expert reports, the exchange of over 50,000 pages of documents, and responses to dozens of interrogatories.

On February 1, 2023, Plaintiffs and Defendants exchanged pre-trial motions *in limine*. Plaintiffs filed seven motions *in limine* (Docs. 260, 262, 264, 266, 268, 270, 272) and Defendants filed seven motions *in limine* (Docs. 284, 286, 288).

On February 1, 2023, Defendants filed a Motion for Summary Judgment pursuant to Mont. R. Civ. P. 56. (Doc. 290). On February 14, 2023, Plaintiffs filed a Response Brief in Opposition to Defendants' Motion for Summary Judgment. (Doc. 299). Plaintiffs also filed sixteen declarations from Plaintiffs, experts, and counsel in support of their Response Brief in Opposition to Defendants' Motion for Summary Judgment. (Docs. 300-315). On February 28, 2023, Defendants filed a Reply Brief in Support of Motion for Summary Judgment. (Doc. 332).

On March 16, 2023, Governor Greg Gianforte signed House Bill 170 into law, repealing the entirety of the Montana State Energy Policy, § 90-4-1001, MCA.

On March 31, 2023, Defendants filed a Motion to Partially Dismiss for Mootness pursuant to Mont. R. Civ. P. 12(b)(1), 12(b)(6), and 12(h)(3). (Doc. 339). Defendants' Motion to Partially Dismiss for Mootness sought to dismiss Plaintiffs' claims premised on the Montana State Energy Policy Act, § 90-4-1001, MCA, on the grounds that the repeal of § 90-4-1001, MCA, through H.B. 170 mooted Plaintiffs' claims concerning the statute.

On April 14, 2023, Plaintiffs filed a Response Brief in Opposition to Defendants' Motion to Partially Dismiss for Mootness. (Doc. 354). Plaintiffs also filed nine declarations from experts

in support of their Response Brief in Opposition to Defendants' Motion to Partially Dismiss for Mootness. (Docs. 355-363).

On April 26, 2023, unable to reach agreement on a joint proposed Pre-Trial Order, the Parties submitted individual proposed pre-trial orders. (Docs. 366, 367). On April 27, 2023, a Final Pre-Trial Conference was held with the Court.

In response to Judge Moses' April 6, 2023, Order on Summary Judgment in *MEIC*, et al. v. DEQ, et al., Cause No. DV- 56-2021-0001307, the Montana Legislature set out to clarify one of the MEPA provisions at issue in this proceeding, § 75-1-201(2)(a), MCA. On May 10, 2023, Governor Greg Gianforte signed into law House Bill 971, which clarified § 75-1-201(2)(a), MCA. The clarifications to § 75-1-201(2)(a), MCA enacted by HB 971 explicitly prohibit Montana's agencies from considering "an evaluation of greenhouse gas emissions and corresponding impacts to the climate in the state or beyond the state's borders" in their MEPA reviews.

On May 12, 2023, the Court held Oral Argument on Defendants' Motions for Summary Judgment, Motion to Partially Dismiss for Mootness, and Motion to Stay Proceedings.

On May 18, 2023, Defendants filed a Motion to Dismiss MEPA Claims based on the enactment of H.B. 971. (Doc. 376). On June 1, 2023, Plaintiffs filed a Response Brief in Opposition to Defendants' Motion to Dismiss MEPA Claims. (Doc. 382). Defendants filed a Reply in Support of Motion to Dismiss MEPA Claims and Request for Oral Argument on June 09, 2023. (Doc. 385).

On May 19, 2023, Governor Greg Gianforte signed into law Senate Bill 557, amending provisions of the Montana Environmental Policy Act, § 75-1-201, MCA.

On May 23, 2023, the Court issued an Order on Defendants' Motions to Dismiss for Mootness and For Summary Judgment. (Doc. 379). As to Defendants' Motion to Partially Dismiss

for Mootness (Doc. 343), the Court granted Defendants' Motion and dismissed without prejudice Plaintiffs' claims involving the State Energy Policy and Defendants' aggregate acts taken pursuant to and in furtherance of the State Energy Policy on redressability and prudential standing grounds. (Doc. 379 at 3-4). As to Defendants' Motion for Summary Judgment, (Doc. 290), the Court denied Defendants' Motion and allowed all of Plaintiffs' MEPA claims to proceed to trial. (Doc. 379 at 20-26). In denying Defendants' Motion for Summary Judgment, the Court observed that Defendants failed to set forth undisputed material facts in their Motion for Summary Judgment in violation of Rule 56(c)(3), Mont. R. Civ. P. (Doc. 379 at 5, 13).

On June 1, 2023, the Court issued an Order on Motions in Limine (Doc. 381), ruling on the parties' remaining motions *in limine* filed on February 1, 2023. As to Plaintiffs' Motions *in Limine*, the Court's Order granted Plaintiffs' motion # 2; granted in part and denied in part Plaintiffs' motions # 3 and 5; and denied Plaintiffs' motions # 4, 6, and 7. As to Defendants' Motions *in Limine*, the Court's Order granted Defendants' motions # 1, 4, 5, 6, 7; and denied Defendants' motions # 2 and 3.

On June 2, 2023, Defendants filed an Emergency Petition for Writ of Supervisory Control with the Montana Supreme Court (OP 23-0311), requesting again that the Montana Supreme Court exercise supervisory control over this Court, and reverse this Court's denial of the State's Motion for Summary Judgment. The State further asked the Montana Supreme Court to stay the trial set to begin June 12, 2023.

On June 6, 2023, the Montana Supreme Court issued an Order denying Defendants' Emergency Petition for Writ of Supervisory Control. (OP 23-0311). In denying Defendants' Petition, the Montana Supreme Court observed Defendants had "not demonstrated that HB 971's

amendments alter the allegations the Plaintiffs make in the Complaint" concerning the MEPA provision. (OP 23-0311 at 3).

On June 7, 2023, this Court entered the Final Pre Trial Order governing this proceeding (Doc. 384). In addition to "supersed[ing] the pleadings as to the remaining issues and govern[ing] the course of the trial of this case," (Doc. 384 at 38), the Court's Final Pre Trial Order also denied Defendants' Motion to Dismiss MEPA Claims, (Doc. 376). (Doc. 384 at 38).

Trial in this matter began on June 12, 2023, and lasted seven court days, ending on June 20, 2023.

On June 19, 2023, while trial in this matter was ongoing, Defendants filed a Bench Memorandum on the Constitutional and Procedural Limits of the Montana Environmental Policy Act. (Doc. 396). On June 25, 2023, Plaintiffs filed a Response to Defendants' Bench Memorandum (Doc. 402). This briefing discussed in detail SB 557.

Throughout these Findings of Fact and Conclusions of Law, the term "MEPA Limitations" shall mean § 75-1-201(2)(a), MCA, as it was in effect from 2011-2023, § 75-1-201(2)(a), MCA as clarified by HB 971 in 2023, as well as the limitations effectuated through SB 557 in 2023. All three statutes and laws are at issue here as the Court's final judgment conforms to the presentation of evidence at trial.

## FINDINGS OF FACT<sup>1</sup>

The following Findings of Fact and Conclusions of Law are based on the evidence and arguments that occurred during the course of the trial. The Court heard live testimony from twenty-seven witnesses in total. Plaintiffs presented testimony from twenty-four witnesses and Defendants

<sup>&</sup>lt;sup>1</sup> For the Court's convenience, citations to the trial transcript, exhibits, and demonstrative slides are in brackets and identified by witness using their initials. For example, "SR-14", refers to Steven Running demonstrative slide 14.

presented testimony from three witnesses. The Court admitted one hundred sixty-eight of Plaintiffs' Exhibits and four of Defendants' Exhibits.

#### I. PARTIES TO THE PROCEEDING

## A. Plaintiffs.

- 1. Plaintiffs consist of youth citizens of Montana who, at the time of filing their Complaint in March 2020, were between the ages of two and eighteen. Plaintiffs are now between the ages of five and twenty-two.
- 2. Plaintiffs are Montana youth Rikki Held, Lander Busse, Sariel Sandoval, Kian Tanner, Georgianna Fischer, Kathryn Grace Gibson-Snyder, Olivia Vesovich, Claire Vlases, Taleah Hernández, Badge B., by and through his guardian Sara Busse, Eva L., by and through her guardian Mark Lighthiser, Mica K., by and through his guardian Rachel Kantor, Jeffrey K., by and through his guardian Laura King; Nathaniel K., by and through his guardian Laura King, Ruby D., by and through her guardian Shane Doyle.
- 3. Rikki Held is from Broadus, Montana, was 18 years old when this case was filed, and is currently 22 years old. [57:8-14].
- 4. Lander Busse is from Kalispell, Montana, was 15 years old when this case was filed, and is currently 18 years old. [1235:12-16].
- 5. Sariel Sandoval is from Ronan, Montana, lives on the Flathead Indian Reservation, was 17 years old when this case was filed, and is currently 20 years old. [616:9-16].
- 6. Kian Tanner is from Bigfork, Montana, was 14 years old when this case was filed, and is currently 18 years old. [758:1-8].
- 7. Georgianna Fischer is from Bozeman, Montana, was 17 years old when this case was filed, and is currently 21 years old. [730:25-731:15].

- 8. Kathryn Grace Gibson-Snyder is from Missoula, Montana, was 16 years old when this case was filed, and is currently 19 years old. [190:19-191:3].
- 9. Olivia Vesovich is from Missoula, Montana, was 16 years old when this case was filed, and is currently 20 years old. [1139:11-17].
- 10. Claire Vlases is from Bozeman, Montana, was 17 years old when this case was filed, and is currently 20 years old. [871:2-8].
- 11. Taleah Hernández is from Polson, Montana, was 16 years old when this case was filed, and is currently 19 years old. [713:17-23].
- 12. Badge B. is from Kalispell, Montana, was 12 years old when this case was filed, and is currently 15 years old. [442:10-19].
- 13. Eva L. is from Livingston, Montana, was 14 years old when this case was filed, and is currently 17 years old. [214:24-215:5].
- 14. Mica K. is from Missoula, Montana, was 11 years old when this case was filed, and is currently 15 years old. [363:8-14].
- 15. Jeffrey K. is from Montana City, Montana, was 6 years old when this case was filed, and is currently 9 years old. [Compl. Doc. 1 ¶ 62].
- 16. Nathaniel K. is from Montana City, Montana, was 2 years old when this case was filed, and is currently 5 years old. [Compl. Doc. 1 ¶ 62].
- 17. Ruby D. is from Bozeman, Montana, was 12 years old when this case was filed, and is currently 15 years old. [554:17-555:3].
- 18. Lilian D. is from Bozeman, Montana, was 9 years old when this case was filed, and is currently 12 years old. [554:17-555:3].

#### B. Defendants.

- 19. Defendants are the State of Montana, Governor Greg Gianforte, Montana Department of Environmental Quality, Montana Department of Natural Resources and Conservation, Montana Department of Transportation, and Montana Public Service Commission. Defendants are sued in their official capacities.
- 20. Defendant State of Montana is a governmental entity. [Def. Answer, Doc. 11 ¶ 3; Agreed Facts, Final PTO, Doc. 384 at 2].
- 21. The State of Montana is a sovereign trustee over the Public Trust Resources within its domain, including the atmosphere (air), water, fish and wildlife, and public lands. As a sovereign trustee, the State is charged with protecting Public Trust Resources from substantial impairment and alienation for the benefit of present and future generations of Montanans. The State has an affirmative constitutional duty to maintain and improve a clean and healthful environment for present and future generations. [MNE 39:20–40:18; 41:6–11]
- 22. Defendant Greg Gianforte is the current Governor of Montana. [Def. Answer, Doc. 11 ¶ 83; Agreed Facts, Final PTO, Doc. 384 at 2].
- 23. As Governor, Governor Gianforte is charged with seeing that the State's laws are faithfully executed, including the Constitution. Mont. Const. art. VI, § 4.
- 24. Governor Gianforte has supervisory authority over the principal departments of the executive branch. [Def. Answer, Doc. 11 ¶ 83].
- 25. Governor Gianforte holds cabinet meetings, communicates with other state officers, oversees budget expenditures, and has authority to issue executive orders. [Def. Answer, Doc. 11 ¶ 84].

- 26. Defendant Montana Department of Environmental Quality ("DEQ") is a department of the State of Montana. [Def. Answer, Doc. 11 ¶ 86; Agreed Facts, Final PTO, Doc. 382 at 2].
- 27. DEQ implements laws within its legal authority. [Agreed Facts, Final PTO, Doc. 384 at 2; Def. Answer, Doc. 11 ¶ 88, 90].
- 28. DEQ is the primary administrator of Montana's environmental regulatory, environmental cleanup, environmental monitoring, pollution prevention, and energy conservation laws. [Def. Answer, Doc. 11 ¶ 88].
- 29. DEQ is mandated to ensure that all projects and activities for which it issues permits, licenses, authorizations, or other approvals comply with Montana's environmental laws and rules (including MEPA) to maintain and improve Montana's natural environment. [Agreed Facts, Final PTO, Doc. 384 at 2; Def. Answer, Doc. 11 ¶ 88].
- 30. DEQ is mandated to comply with the Montana Constitution and every state law. [CD 1308:6-12].
- 31. DEQ issues air quality permits for applications that demonstrate compliance with all applicable requirements of the Federal and/or Montana Clean Air Act and their implementing rules, including but not limited to coal and natural gas-powered energy plants, coal mining operations, and oil and gas refineries. [Agreed Facts, Final PTO, Doc. 384 at 2; Def. Answer, Doc. 11 ¶ 90].
- 32. DEQ prepares environmental review documents under MEPA, including for projects related to fossil fuels, such as natural resource extraction and power generating facilities. [CD 1313:21-1315:13].

- 33. DEQ has authority to certify certain pipelines that meet the definition provided in the Major Facility Siting Act, § 75-20-104(9)(b), MCA, and that comply with the requirements of the Major Facility Siting Act. [Agreed Facts, Final PTO, Doc. 384 at 2; Def. Answer, Doc. 11 ¶ 91].
- 34. DEQ permits coal mining for applications which meet the requirements set forth in Titles 82 ("Minerals, Oil, and Gas") and 75 ("Environmental Protection"). DEQ has issued permits for surface coal mining in Montana on state, private, and federal land. [Agreed Facts, Final PTO, Doc. 384 at 2; Def. Answer, Doc. 11 ¶ 92].
- 35. Pursuant to its statutory authority, DEQ has discretion to deny and revoke permits. [SN 1392:24-1393:6].
- 36. In the past 30 years, DEQ has never denied a permit for a coal, oil, or gas operation. [AH 831:22-832:1, 846:25-847:11].
- 37. Since 2011, pursuant to the MEPA Limitations DEQ has not analyzed in its environmental review documents the cumulative impacts of the permits it issues on GHG emissions, Earth Energy Imbalance, or climate change. [AH 846:1-3, 818:11-819:10].
- 38. Defendant Montana Department of Natural Resources and Conservation ("DNRC") is a department of the State of Montana. [Agreed Facts, Final PTO, Doc. 384 at 2; Def. Answer, Doc. 11 ¶ 3].
- 39. DNRC prepares environmental review documents under MEPA. [Shawn Thomas Perpetuation Deposition, 42:1-16].
- 40. DNRC manages the resources of the state trust lands through the State Board of Land Commissioners ("Land Board"). [Agreed Facts, Final PTO, Doc. 384 at 2; Def. Answer, Doc. 11 ¶ 95].

- 41. DNRC regulates, permits, and authorizes activities that result in significant GHG emissions in Montana. [Agreed Facts, Final PTO, Doc. 384 at 2].
- 42. DNRC issues leases, permits, and licenses for uses of lands under its jurisdiction, including licenses for exploration and leases for production and extraction of oil and gas in Montana and permits for drilling. [Agreed Facts, Final PTO, Doc. 384 at 2].
- 43. DNRC has exercised its authority to grant easements for the operational rights-of-way for interstate pipelines, with the approval of the Land Board, and issues land use licenses for the construction of rights-of-way and other activities on state lands and waterways for the construction and operation of interstate pipelines, which are used to transport fossil fuels. [Agreed Facts, Final PTO, Doc. 384 at 2; Def. Answer, Doc. 11 ¶ 95].
- 44. DNRC, through its Forestry Division, is responsible for planning and implementing forestry and fire management programs, as well as authorizing and permitting commercial timber sales on trust lands. [Agreed Facts, Final PTO, Doc. 384 at 3; Def. Answer, Doc. 11 ¶ 97].
- 45. Pursuant to its statutory authority, DNRC has discretion to deny and revoke leases, permits, and licenses.
- 46. Defendant Montana Department of Transportation ("MDT") is a department of the State of Montana. [Agreed Facts, Final PTO, Doc. 384 at 3].
- 47. MDT is responsible for state planning in the transportation sector and is charged with collecting and enforcing fuel taxes. [Agreed Facts, Final PTO, Doc. 384 at 3].
- 48. Defendant Montana Public Service Commission ("PSC") is a governmental entity. [Agreed Facts, Final PTO, Doc. 384 at 3].
- 49. PSC regulates, supervises, and controls public utilities, common carriers, railroads, and pipelines. [Agreed Facts, Final PTO, Doc. 384 at 3].

- 50. PSC sets standard-offer contracts for qualifying facilities and utility rates. [Agreed Facts, Final PTO, Doc. 384 at 3].
- 51. PSC is responsible for the safety of interstate pipelines, including crude oil or petroleum products that operate within or through Montana. [Agreed Facts, Final PTO, Doc. 384 at 3].
- 52. Each of the Defendants has an obligation to comply with the Montana Constitution when implementing their statutory duties.
- 53. Defendants' performance of their respective governmental functions has resulted in the extraction, transportation, and consumption of fossil fuels. [Agreed Facts, Final PTO, Doc. 384 at 3].
- 54. The extraction, transportation, and consumption of fossil fuels results in GHG emissions. [Agreed Facts, Final PTO, Doc. 384 at 3].
- 55. Defendants authorize the operation of coal-fired powerplants in Montana. [Def. Answer, Doc. 11 ¶ 118].
  - 56. The drilling for and production of oil in Montana is authorized by Defendants.
- 57. Montana has an abundance of energy sources, including fossil fuels yet to be extracted. [PE 944:24-946:4; PE-37].
- 58. The Montana Legislature and Governor enacted § 90-4-1001, MCA, (repealed) and § 75-1-201(2)(a), MCA, as amended. [Def. Answer, Doc. 11 ¶ 82].
- 59. Montana's State Energy Policy existed for decades. It was codified in law at § 90-4-1001, MCA. [Def. Answer, Doc. 11 ¶ 112].
- 60. Section 90-4-1001, MCA, articulated an aspiration of state policy to ensure an adequate supply of energy and avoid a high cost of energy. [Def. Answer, Doc. 11 ¶ 113].

- 61. Section 90-4-1001, MCA, was enacted by the Montana Legislature in 1993 and amended in 2011. [Def. Answer, Doc. 11 ¶ 115].
- 62. The Montana Legislature and Governor repealed the entirety of § 90-4-1001, MCA, when the Governor signed HB 170 into law on March 16, 2023.
- 63. HB 170 was proposed and signed into law for the purpose of attempting to moot Plaintiffs' case here by repealing a statute Plaintiffs challenged as unconstitutional.
- 64. The provisions of MEPA governing environmental reviews are codified at § 75-1-201, MCA.
- 65. In 2011, the Montana Legislature amended MEPA to curtail the scope of environmental reviews—enacting § 75-1-201(2)(a), MCA, which prohibited Montana's agencies from considering in their MEPA reviews "actual or potential impacts beyond Montana's borders . . . [or] actual or potential impacts that are regional, national, or global in nature."
- 66. On May 10, 2023, the Montana Legislature and Governor clarified § 75-1-201(2)(a), MCA, when the Governor signed HB 971 into law.
- 67. HB 971 clarifies § 75-1-201(2), MCA, and provides that Montana's agencies are prohibited from considering "an evaluation of greenhouse gas emissions and corresponding impacts to the climate in the state or beyond the state's borders." § 75-1-201(2)(a), MCA.
- 68. HB 971 was proposed and signed into law for the purpose of ending and prohibiting litigation against Defendants that requires them to consider and reduce Montana's GHG emissions and contributions to climate change. HB 971 makes it explicit that Defendants cannot consider climate change and GHG emissions when conducting a MEPA analysis. [AH, see 819:24-821:15].
- 69. HB 971 was proposed and signed into law for the purpose of trying to moot Plaintiffs' case here.

- 70. On May 19, 2023, the Montana Legislature and Governor Gianforte amended various provisions of MEPA that pertain to legal challenges to MEPA environmental reviews when the Governor signed SB 557 into law.
- 71. SB 557 was first introduced on March 27, 2023, and was passed by the Legislature in a little over one month and signed into law by the Governor on May 19, 2023.
- 72. SB 557 enacted a new § 75-1-201(6)(a)(ii), MCA, which limits redress for MEPA litigants who raise GHG or climate change issues as part of their challenge to a Montana agency's MEPA environmental review and limits who can challenge agency decisions and the scope of judicial review. The newly-enacted § 75-1-201(6)(a)(ii), MCA, provides in part:

[a]n action alleging noncompliance or inadequate compliance with a requirement of parts 1 through 3, including a challenge to an agency's decision that an environmental review is not required or a claim that the environmental review is inadequate based in whole or in part upon greenhouse gas emissions and impacts to the climate in Montana or beyond Montana's borders, cannot vacate, void, or delay a lease, permit, license, certificate, authorization, or other entitlement or authority unless the review is required by a federal agency or the United States congress amends the federal Clean Air Act to include carbon dioxide as a regulated pollutant.

## § 75-1-201(6)(a)(ii), MCA.

73. Defendants repeatedly cite to SB 557 as foreclosing redressability in this case in their June 19, 2023, Bench Memorandum on the Constitutional and Procedural Limits of the Montana Environmental Policy Act.

#### II. CLIMATE SCIENCE.

#### A. Climate Science 101.

74. Dr. Steven Running is a University Regents Professor Emeritus of Global Ecology in the College of Forestry and Conservation at the University of Montana. [SR-2]. Included in his background, Dr. Running currently co-chairs the standing Committee for Earth Science and Application from Space of the National Academy of Science, has previously served on the federal

Interagency Carbon Cycle Science Committee, as a Co-Chair of the National Center for Atmospheric Research Community Climate System Model Land Working Group, a Member of the International Geosphere-Biosphere Program Executive Committee, and the World Climate Research Program, Global Terrestrial Observing System, and just completed serving on the advisory NASA Earth Science Subcommittee, and the NOAA Science Advisory Board Climate Working Group. In 2007, Dr. Running shared the honor of the Nobel Peace Prize as a chapter Lead Author for the 4th Assessment Report of the Intergovernmental Panel on Climate Change ("IPCC"). [P193]. Dr. Running provided expert testimony in the general areas of the climate system, including the energy balance and imbalance, the physics of greenhouse gas emissions that are driving climate change, the global carbon cycle, the global hydrologic cycle, how they control this energy imbalance, and then how human caused fossil fuel development is harming Montana's ecosystems and hydrology. Dr. Running is a well-qualified expert and the Court finds his testimony informative and credible.

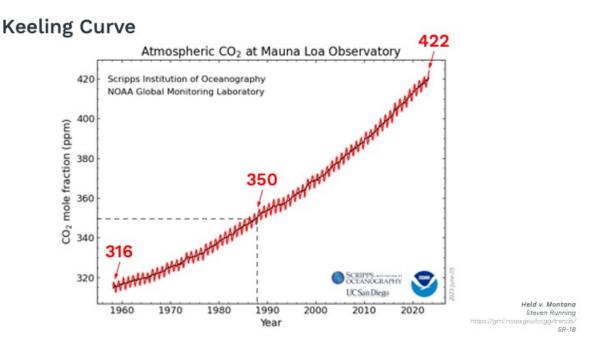
75. Dr. Cathy Whitlock is Regents Professor Emerita of Earth Sciences and a Fellow of the Montana Institute on Ecosystems at Montana State University ("MSU"). [CW-2]. Dr. Whitlock founded the MSU Paleoecology Lab and was founding co-director of the Montana Institute on Ecosystems, which has hubs at MSU and the University of Montana and serves as the statewide center for interdisciplinary environmental science. Dr. Whitlock was the lead author of the 2017 Montana Climate Assessment, and in 2020 co-authored a state-level Montana Climate Solutions Plan and a 2021 special report of the Montana Climate Assessment entitled Climate Change and Human Health in Montana. Dr. Whitlock was also co-lead author of the 2021 Greater Yellowstone Climate Assessment. Among her scientific honors, Dr. Whitlock is a Fellow of the Geological Society of America and the American Association for the Advancement of Science and

was elected to the National Academy of Sciences, the first person from the Montana University System to receive this honor. [P146]. Dr. Whitlock provided expert testimony explaining how human-caused fossil fuel development and the resulting release of CO<sub>2</sub> into the atmosphere are harming Montana's ecosystems, water supplies, communities, and the Plaintiffs themselves. Dr. Whitlock also discussed recent trends and future projections in temperature, precipitation, snow accumulation and snowmelt, and stream runoff in Montana and explained how they affect terrestrial ecosystems, communities, and the livelihoods of people that depend on these ecosystem services. Dr. Whitlock's testimony included projections for Montana's future are based on continuing or increasing the present rate of greenhouse gas emissions, a certainty that will occur unless Montana curtails reliance on fossil fuels. Dr. Whitlock primarily focused her testimony on the effect the emissions of greenhouse gases have in Montana. Dr. Whitlock is a well-qualified expert and the Court finds her testimony informative and credible.

- 76. There is greater than 99% scientific consensus that Earth is warming as a direct result of human GHG emissions, primarily from the burning of fossil fuels. [SR 102:10-103:9, 125:11-22, 141:18-20; CW 257:14-25; P6, P13, P23, P34, P223, P143; SR-22].
- 77. Fossil fuels include coal, crude oil or its derivatives (such as gasoline or jet fuel), and natural gas. [PE 901:24-902:8].
- 78. While there are several GHGs that are emitted from the burning of fossil fuels, carbon dioxide ("CO<sub>2</sub>") is the primary forcer of impacts to the climate because CO<sub>2</sub> is the GHG that is most responsible for trapping excess heat within Earth's atmosphere. [SR 114:20-116:10].
- 79. Science is unequivocal that dangerous impacts to the climate are upon us and are occurring due to human activities, primarily from the extraction and burning of fossil fuels. [SR 103:5-9; P6, P23, P34, P223, P143; SR-46, SR-47].

- 80. A substantial portion of every ton of CO<sub>2</sub> emitted by human activities persists in the atmosphere for as long as hundreds of years or millennia. As a result, CO<sub>2</sub> steadily accumulates in the atmosphere. [SR 166:2-10, 168:2-10; CW 279:14-20, 314:20-315:8, 318:2-5].
- 81. It is the cumulative effect of GHG emissions that causes the impacts to the climate being experienced today. [SR 168:2-16]. Human activity and the burning of fossil fuels have accelerated the accumulation of CO<sub>2</sub> to the point that 42% of the total accumulation of CO<sub>2</sub> emissions has happened in the last 30 years. [SR 141:16-142:2; SR-42].
- 82. It has long been understood that certain GHGs, including CO<sub>2</sub> and methane (CH<sub>4</sub>), trap heat in the atmosphere, causing the Earth to warm. [SR 107:16-25]. An American, Eunice Newton Foote was one of the first scientists to research and write about the ability of atmospheric carbon dioxide to affect solar heating in the 1850s. [SR 108:22-109:3; SR-14].
- 83. In 1896, Svante Arrhenius, a Swedish chemist, understanding the basic physics of how molecules like CO<sub>2</sub> operate, wrote that the then-new practice of burning fossil fuels emitting CO<sub>2</sub> could one day warm the planet. [SR 108:1-8]. Arrhenius, and other early climate scientists, understood the basic physics—the more CO<sub>2</sub> that was added to the atmosphere, the more the surface of the Earth would warm. [SR 108:8-13]. At the time of Arrhenius's work, atmospheric CO<sub>2</sub> levels were approximately 295 parts per million ("ppm"), above the pre-industrial levels of approximately 280 ppm. [SR 109:22-25; SR-14].
- 84. In 1958, Dr. David Keeling began the modern monitoring of atmospheric CO<sub>2</sub> at Mauna Loa, Hawaii, a remote location not near any local CO<sub>2</sub> sources. [SR 111:12-21]. The monitoring data, now replicated at dozens of stations worldwide, proved that CO<sub>2</sub> has continued to rise every year from 1958 to the present from an initial concentration of 315-316 ppm in 1958, to an annual mean level of around 424 ppm today. [SR 112:22-113:4, 113:16-114:8]. The curve

showing a long-term increase in CO<sub>2</sub> concentrations has become known as the "Keeling Curve." [SR 110:22-111:11, 113:20].



- 85. Between 1960 and 2000, CO<sub>2</sub> levels were rising at about 2 ppm per year, but since approximately 2000, CO<sub>2</sub> levels are now rising at about 3 ppm per year, primarily from fossil fuel emissions. [SR 117:14-20, 118:1-12, 121:9-11; SR-21].
- 86. CO<sub>2</sub> levels have fluctuated throughout history, but the rate of increase in atmospheric CO<sub>2</sub> is 100 times faster than in natural CO<sub>2</sub> fluctuations and cycles, and it is happening in a very short timeframe that is unprecedented in the geologic record. [SR 119:20-121:11; SR-19].
- 87. The continuous rise in atmospheric CO<sub>2</sub> has also caused global, national, and Montana air temperatures to rise, as measured by meteorological stations. Total global temperature rise over the last 120 years is on average 2.2°F. That is about 1.2°C. [SR 132:19-22; SR-38; CW 262:4-21; CW-18, CW-19, CW-20].

- 88. Montana is heating faster than the global average because higher latitudes are heating more quickly. [CW 263:20-264:7].
  - 89. Montana is getting warmer and the rate of warming is increasing. [CW 266:15-16].
- 90. The Earth has warmed by 1.3 to 2.2°F in only the last 35 years, as atmospheric CO<sub>2</sub> concentrations have risen from 350 ppm to over 420 ppm today. [SR 130:14-18; SR-35, SR-64]. It previously took 140 years for the Earth to warm by 0.9°F. [SR-35]. This means the Earth is heating more quickly now. 2020 was the second warmest year on record, and land areas were record warm. The ten warmest years on record have occurred since 2005, and since 1981, a new global temperature record has been set every three years. Since 1980, the Earth has not experienced a single year with below long-term average temperatures. [SE 131:20-132:10; SR-37].
- 91. The Earth's Energy Imbalance ("EEI") (the difference in energy from sun arriving at the Earth and the amount radiated back to space) is what climate scientists describe as the most critical metric for determining the amount of global heating and climate change we have already experienced and will experience as long as the Earth's energy imbalance exists. [SR 122:1-15, 129:17-20; SR-34]. Scientists measure and calculate how much extra energy, or heat, is being retained in Earth's systems, like oceans, ice, air, and land surface, compared to what Earth's natural balance would be if more heat escaped our atmosphere. [SR 122:1-15, 129:21-130:4].
- 92. The Earth's energy imbalance is currently significant and is due to accumulation of energy within Earth's oceans, ice, land, and air, with the energy measured in joules and the rate of additional energy measured in watts per square meter. [SR 124:14-125:18]. A watt is the addition of one joule of energy in one second, which is then averaged by the area of the Earth to yield watts per square meter. From 1971 to 2018, the Earth gained about 360 zeta joules of heat (a zeta is a unit with 21 zeros; a trillion has 12 zeros). [SR-29]. Adding this much energy over 48 years yields

an energy imbalance of about 0.5 W m<sup>-2</sup>. However, the rate of energy addition has continued to increase due to increasing GHG emissions and the Earth's energy imbalance for 2010 to 2018 is about 0.9 W m<sup>-2</sup>. [SR 122:14-24; SR-29; P79].

- 93. 358 zeta joules is enough energy to bring Flathead Lake to boil 40,000 times over. [SR 125:3-6; SR-30].
- As long as there is an energy imbalance, the Earth will continue to heat, our ice will continue to melt, and weather patterns will get more extreme. [SR 127:7-22, 131:9-15, 137:6-9, 149:2-14]. There is no scientific uncertainty that if more greenhouse gases are added to the atmosphere and more incoming energy received from the sun is trapped as thermal energy, the Earth's climate system will continue to heat up. [SR 125:7-22].
- 95. The scientific consensus is that CO<sub>2</sub> from fossil fuel pollution is the primary driver of Earth's energy imbalance. [SR 117:21-118:12; 125:11-22]. Due to the buildup of CO<sub>2</sub> from about 280 ppm to 419 ppm in the last 140 years (and to a lesser extent other GHGs), more solar energy is now retained on Earth and less energy is released back to space. [SR 130:8-14; P20, P22, P79; SR-14].
- 96. The buildup of CO<sub>2</sub> and the current EEI is due to anthropogenic climate change, not natural variability. [SR 103:5-9, 121:7-11].
- 97. Approximately 89% of annual anthropogenic CO<sub>2</sub> emissions, or 35 gigatons of CO<sub>2</sub>, is attributable to burning fossil fuels. [SR 115:9-17; SR-20]. Approximately 11% of annual anthropogenic CO<sub>2</sub> is from land use change, which includes wildfires, agricultural burning, and deforestation. [SR 115:18-22, 116:7-15; SR-20]. This means that fossil fuel use is around 10 times as large as other sources of emissions due to human management. [SR 115:15-21]. In terms of the CO<sub>2</sub> humans emit each year, approximately 48% of these emissions end up in the atmosphere,

29% are absorbed in back up in the biosphere, and 26% are absorbed by the oceans. [SR 115:7-117:10; SR-20].

- 98. To stabilize the climate system and stop the accumulation of more heat, atmospheric CO<sub>2</sub> concentrations must be reduced to 350 ppm or less this century. [SR 126:11-14, 171:16-25; SR-31, SR-32]. The best science we have says that returning to 350 ppm or less of atmospheric CO<sub>2</sub> would restore Earth's energy balance by allowing more of the energy received from the sun to be released back into space, rather than stay trapped like a warm blanket over Earth. [SR 126:15-127:3, 127:9-15, 128:12-18; P20, P21, P22, P79].
- 99. A stable climate system requires a return 350 ppm or less of atmospheric CO<sub>2</sub>. [SR 126:11-14, 128:12-22; P20, P21, P22, P79; SR-31]. Until atmospheric CO<sub>2</sub> concentrations are reduced to 350 ppm or less, extreme weather events and other climactic events such as droughts and heatwaves will occur more frequently and in greater magnitude, and Plaintiffs will be unable to live clean and healthy lives in Montana. [SR 128:22-129:5, 131:5-15, 149:2-150:7; SR-45; LVS-44].
- 100. The climate system became unstable by at least 1988 when atmospheric CO<sub>2</sub> rose above 350 ppm due to fossil fuel burning. [SR 130:6-18, 132:3-10; SR-35].
- 101. There is only one urgent pathway to restore Earth's energy balance, and it is to stop burning fossil fuels in order to stop releasing CO<sub>2</sub> pollution into the air. [SR 106:19-24, 126:7-14].
- 102. Each additional ton of CO<sub>2</sub> emitted into the atmosphere makes it more difficult to reach 350 ppm CO<sub>2</sub> by 2100 because CO<sub>2</sub> accumulates in the atmosphere. [SR 188:7-11].
- 103. Each additional ton of CO<sub>2</sub> emitted into the atmosphere exacerbates impacts to the climate and a destabilized climate system. [SR 106:15-18, 188:3-6; CW 279:14-20, 314:20-315:8, 318:2; P143].

- 104. If the 350 ppm target is not achieved by 2100, that failure will likely trigger climactic tipping points which will impose profound risks of ecological, economic, and societal collapse. [SR 114:8-19, 131:5-15].
- 105. There is scientific certainty that if fossil fuel emissions continue, the Earth will continue to heat more. [SR 106:15-18, 168:20-24; SR-46, SR-47].
- 106. Every ton of fossil fuel pollution contributes to global warming and impacts to the climate and thus increases the exposure of the Youth Plaintiffs to harms now and additional harms in the future. [SR 168:17-169:7; CW 279:14-20, 314:20-315:8, 318:2-5; PE-40].

## **B.** Climate Change Projections.

- 107. Future projections of increasing atmospheric CO<sub>2</sub> and other GHGs will increase the severity of all impacts to the climate for the foreseeable future, absent immediate efforts to drastically reduce fossil fuel use and the resulting GHG emissions. [SR 106:1-18, 169:22-170:10, 170:16-22; CW 269:14-18; SR-46, SR-47].
- 108. The computer models that scientists use are an important tool for predicting climate change and are reasonably relied upon by members of the scientific community. [SR 90:23-91:9].
- 109. Another area of uncertainty with climate models are feedback loops, which involve scenarios that can force more impacts to the climate than predicted. [SR 137:16-139:6; SR-41].
- 110. There is a strong scientific consensus that as GHG emissions continue to increase, impacts to the climate will become more severe. [SR 106:15-18, 137:3-9; SR-43].
- 111. The number of days in Montana with extreme heat, meaning temperatures over 90 degrees, is expected to increase by between 11 days to over a month by midcentury, and by as much as two months by the end of the century. [CW 273:6-20; CW-24, CW-28]. At the same time, the number of days above freezing will increase by weeks to months in the future. [CW 273:6-20, 275:21-276:7; CW-27; P222].

- 112. A high emission scenario projects 9.8°F of warming in Montana by 2100, relative to temperatures in 1971-2000. An intermediate emission scenario projects an increase of 5.6°F in Montana by 2100, relative to temperatures in 1971-2000. [CW 270:1-271:9; CW-23; P222].
- 113. According to the Intergovernmental Panel on Climate Change ("IPCC"), "Climate change is a threat to human well-being and planetary health (*very high confidence*). [SR-48]. There is a rapidly closing window of opportunity to secure a liveable and sustainable future for all (*very high confidence*). . . . The choices and actions implemented in this decade will have impacts now and for thousands of years (*high confidence*)." [SR 149:15-150:7; P143; SR-48, SR-63; LB-43].
- 114. According to the IPCC, "[i]n the near term, every region of the world is projected to face further increases in climate hazards (*medium to high confidence*, depending on region and hazard), increasing multiple risks to ecosystems and humans (*very high confidence*). Hazards and associated risks expected in the near-term include an increase in heat-related human mortality and morbidity (*high confidence*), food-borne, water-borne, and vector-borne diseases (*high confidence*). [SR-46, SR-47; LB-42].

# III. CLIMATE CHANGE DISPROPORTIONATELY HARMS CHILDREN, YOUTH, AND FUTURE GENERATIONS.

Doctor of Medicine degree in 1984. [LB-2]. Dr. Byron earned a M.S. in Energy Policy and Climate from Johns Hopkins in 2020. Dr. Byron's board certification is through the American Board of Pediatrics, from 1988 to present. From 1988-2015, Dr. Byron worked in Crow Agency, Montana, with Indian Health Service, providing primary care, emergency care, and public health services to the Crow Indian children. Since 2013, Dr. Byron has worked as a pediatric hospitalist at SCL Health in Billings, Montana. Dr. Byron has decades of experience caring for children who have suffered disruption in their lives and who bear the scars of Adverse Childhood Events (or ACEs).

Over the past decade, along with her husband, Dr. Rob Byron, Dr. Lori Byron has presented over 200 times locally, nationally, and internationally on climate change and health. Dr. Byron organized a group of pediatricians across the U.S. for the American Academy of Pediatrics who advocate on climate and health, just finished a 6-year term on the Executive Committee of the Council on Environmental Health and Climate Change with the American Academy of Pediatrics and recently completed a six-year term on the Children's Health protection Advisory Committee with the Environmental Protection Agency (EPA). Dr. Byron was an author on the 2021 report "Climate Change and Human Health in Montana: A Special Report of the Montana Climate Assessment," as well as other climate and health publications. [P189]. Dr. Byron provided expert testimony about whether climate change and the air pollution associated with it are negatively affecting children in Montana, including the 16 youth Plaintiffs, with a strong likelihood that those impacts will worsen in the absence of aggressive actions to mitigate climate change. Dr. Byron outlined ways in which climate change is already creating conditions that are harming the health and well-being of the Youth Plaintiffs. Dr. Byron testified that reducing fossil fuel production and use and mitigating climate change now will have immediate benefits to the health of the Youth Plaintiffs now and for the rest of their lives. Dr. Byron is a well-qualified expert and the Court finds her testimony informative and credible.

116. Dr. Lise Van Susteren is a board certified general and forensics clinical psychiatrist in practice for 30 years. [LVS-2]. She is a Clinical Associate Professor of Psychiatry and Behavioral Sciences at George Washington University in Washington DC. Over the course of Dr. Van Susteren's career, she has provided mental health services to people from all walks of life and across the entire socioeconomic spectrum. She has also worked as a behavioral profiler at the Central Intelligence Agency performing psychological profiles of world leaders. Dr. Van Susteren

is an expert in evaluating and treating individuals who have experienced trauma. In 2009, Dr. Van Susteren co-convened one of the first conferences on the psychological effects of climate change, warning that the U.S. mental health system is not prepared. In 2013, Dr. Van Susteren worked with Dr. James Hansen and a number of other experts on a paper, Assessing "Dangerous Climate Change": Required Reductions of Carbon Emissions to Protect Young People, Future Generations and Nature. (Hansen et al., 2013). Dr. Van Susteren is a founding member of the Climate Psychiatry Alliance. In May 2018, Dr. Van Susteren received the Distinguished Fellow award of the American Psychiatric Association, its highest membership honor. Over the last several years, Dr. Van Susteren has helped develop youth climate anxiety assessment tools, conducted research and reviewed data in assessing the mental health of young people faced with climate change. In May of 2022 Dr. Van Susteren was honored by the Washington Psychiatric Society, a district branch of the American Psychiatric Association, for her work on climate and mental health. [P195]. Dr. Van Susteren provided expert testimony on the physiological harms caused by climate change to Montana's youth, including the Youth Plaintiffs, the psychological harms caused by the MEPA Limitations, and the availability of remedies to alleviate Plaintiffs' psychological injuries. [LVS-8]. Dr. Van Susteren is a well-qualified expert and the Court finds her testimony informative and credible.

117. Mr. Michael Durglo, Jr., is a member of the Confederated Salish and Kootenai Tribes (CSKT). [MDJ-2, MDJ-3]. He has a Bachelor of Science degree in Environmental Science from Salish Kootenai College. Mr Durglo has worked for the Tribes for more than three decades in different capacities, and in his current role as Head of the Tribal Preservation Department and Chairman of the Climate Change Advisory Committee ("CCAC") he has worked extensively with tribal elders and youth on climate related issues. [P30, P156; MDJ-10]. He has been involved with

the Institute for Tribal Environmental Professionals' Climate Change Adaptation Planning Workshop, and he served as the co-chair of the National Tribal Science Council and the chair of the EPA Region 8 Tribal Operations Committee, consisting of EPA tribal environmental directors in Montana, Wyoming, Colorado, Utah, and North and South Dakota. He has taught workshops and seminars on climate adaptation planning throughout North America. [P154]. Mr. Durglo is a well-qualified expert and the Court finds his testimony informative and credible.

- 118. Children are uniquely vulnerable to the consequences of the climate crisis, which harms Plaintiffs' physical and psychological health and safety, interferes with family and cultural foundations and integrity, and causes economic deprivations. [LB 473:12-24, 474:12-477:12; LVS 1177:5-8, 1202:6-24, 1215:13-24, 1217:2-1222:11; MDJ 597:9-18, 600:23-604:14, 609:23-610:10; LB-9, LB-15, LB-16; LVS-11, LVS-25].
- 119. Children hold the same, or greater, rights under the Montana Constitution as adults, yet their political powerlessness, unique physiological characteristics and vulnerabilities, and lack of autonomy and dependency on caregivers render children more vulnerable to violations of their constitutional rights. Children are at a critical development stage in life, as their capacities evolve, and their physiological and psychological maturity develops more rapidly than at any other time in life. [LB 474:12-477:12, 485:10-486:1; LVS 1177:10-21, 1213:7-23, 1215:13-24].
- 120. The brains and lungs of children and youth are not fully developed until around the age of 25. [LB 474:18-25; LVS 1213:7-16].
- 121. All children, even those without pre-existing conditions or illness, are a sensitive population with respect to the effects of the impacts to the climate because their bodies and minds are still developing. [LB 473:12-24, 474:12-477:12; LVS 1177:2-1178:12, 1213:7-23; LB-9; LVS-11].

- 122. The physical and psychological harms from impacts to the climate are acute and chronic, and accrue from impacts to the climate such as heat waves, drought conditions, wildfires, air pollution, extreme weather events, the loss of wildlife, watching glaciers melt, and the loss of familial and cultural foundations and traditions. [LB 498:12-25, 524:11-22; LVS 1178:13-1179:6, 1196:6-11, 1200:7-1201:25, 1202:6-24, 1204:21-1205:19, 1206:19-1209:12, 1218:2-16, 1219:25-1220:11, 1221:19-21; MDJ 595:18-596:2, 597:6-18, 600:23-604:14, 606:11-607:2, 608:1-13, 609:23-610:10].
- 123. Mental and physical health are related and both mental and physical health impact the overall well-being of Plaintiffs and their ability to live happy and fruitful lives. [LB 527:19-528:1].
- 124. Climate change can cause increased stress and distress which can put strains on social relationships and have impacts on physical health via memory loss, sleep disorders, immunosuppression, or changes in digestion. [LB 526:8-16; LVS 1188:16-24; LVS-15]. For example:
  - a. Rikki has suffered from the consequences of drought and its impact to her family's ranch and financial security. She has also felt a sense of abandonment from climate disruption and a lack of proper action taken by Defendants. [LVS 1217:2-14].
  - b. Grace feels betrayed by the lack of help from her government and fearful due to the glaciers disappearing from a state she loves. [LVS 1217:15-1218:4].
  - c. Sariel has had profound mental impacts due to her spiritual connection to the land that is being taken away from her. [LVS 1218:5-16].
  - d. Mica has experienced a sense of loss from having to stay inside due to wildfire smoke. [LVS 1219:3-12].

- e. Badge's unique familial connections centered around being in a healthy Montana also creates a unique loss if this is taken away. [LVS 1219:25-1220:11].
- f. Olivia has expressed despair due to climate change. [LVS 1220:19-1221:6].
- g. Claire has been impacted by not being able to use all the money she raised for solar panels on renewable energy, fear and loss from glaciers melting, and anxiety over whether it is a safe world for her to have children. [LVS 1221:7-1222:11].
- 125. Heat waves are associated with significant psychological stress. Increased heat and temperature negatively effects cognition and is linked to increased incidence of aggression and exacerbation of pre-existing mental health disorders. [LVS 1197:1-1198:7, 1200:7-12; LVS-29].
- 126. Children have a higher risk of becoming ill or dying due to extreme heat. [LB-15, LB-16].
- 127. Drought is associated with anxiety, depression, and chronic despair, which has also been linked to suicide. [LVS 1200:24-1201:25].
- 128. Wildfires, including those witnessed by Badge, are extremely traumatic. Being surrounded by wildfires can make the world feel unsafe and the inability to breathe creates anxiety. [LVS 1202:6-24, 1204:21-1205:19].
- 129. The threat of loss can be enough to cause mental health harms, especially when there are no signs the future will be any different. [LVS 1203:15-1204:6].
- 130. As climate disruption transforms communities, some Plaintiffs are experiencing feelings that they are losing a place that is important to them, which is a phenomenon called *solastalgia*. Solastalgia describes the gripping sense of existential loss when treasured places are irreparably damaged or destroyed as a result of human carelessness or willful disregard for them,

and can cause profound distress. [LB 521:3-13; LVS 1202:14-24, 1204:7-20, 1218:2-4, 1220:12-18, 1221:19-21].

- 131. The psychological health effects children and young people can experience as a result of witnessing and experiencing the climate crisis disrupt and transform places they love and cherish 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. [LB 526:8-16; LVS 1179:24-1180:7, 1185:4-19, 1201:12-25, 1219:13-24; LVS-12].
- 132. The American Psychological Association has stated that the "evidence is unequivocal that exposure to climate- and weather-related disasters has serious impacts on psychological well-being, and that the chronic impacts of climate change, such as higher temperatures and drought, also have significant negative effects on mental health." [LVS-20]. The American Psychological Association has also found climate change and air pollution can cause long-term, even permanent effects, including changing developmental potential of children. [LVS 1189:1-6, 1190:20-1191:6; P83, P84; LVS-14, LVS-17].
- 133. The IPCC has found, with *very high confidence*, that climate change has "detrimental impacts" on mental health and the harms to mental health are expected to get worse. [LVS 1185:12-1186:3, 1192:23-1194:9, 1195:6-13; P127; LVS-23, LVS-24].
- 134. The 2021 report, Climate Change and Human Health in Montana, found that "[t]he mental health impacts of climate change are profound and varied." [LVS-27]. Extreme weather events, prolonged heat and smoke, and environmental change can all impact mental health and increase feelings of disconnectedness and despair. [LVS 1196:6-11; P31; LVS-28].
- 135. Climate change is increasing the intensity and frequency of heat waves such that by the end of the century, parts of Montana could experience as many as 54 additional calendar

days per year over 90 degrees Fahrenheit (or 32 degrees Celsius). Exposure to extreme heat can cause heat rash, muscle cramps, heatstroke, damage to liver and kidney, worsening allergies, worsening asthma, and neurodevelopmental effects. [LB 485:2-9; P31; LB-13, LB-14].

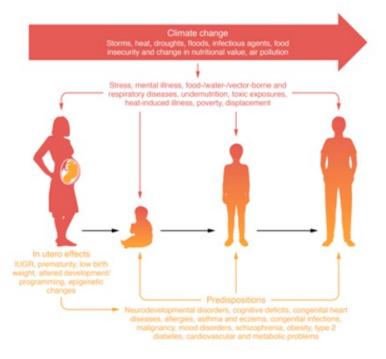
- 136. The psychological harms caused by the climate crisis can result in a lifetime of hardships for children. [LVS 1194:4-9, 1210:2-1211:2, 1213:24-1215:4; P127; LVS-12].
- 137. The physiological features of children make them disproportionately vulnerable to the impacts of the climate crisis and air pollution. Children's organs, including their lungs and brain, are still developing—which makes youth more vulnerable to environmental stresses, pollution, and injuries. [LB 474:14-25, 475:4-10; LVS 1213:7-23; LB-9, LB-10; LVS-11].
- 138. Children have a higher basal metabolic rate, which makes it harder for them to dissipate heat from their bodies. [LB 475:14-21].
- 139. Children breathe in more air per unit of time than adults and consume more food and water proportional to their body weight, making children more susceptible to polluted or contaminated air, water, or food. [LB 476:21-477:12].
- 140. Typical child behavior and physiology—which involves spending more time recreating outdoors and more difficulty self-regulating body temperature—also renders children more susceptible to excess heat, poor air quality, and other climate change impacts. [LB 476:21-477:12, 481:9-19].
- 141. Children have an immature central nervous system, which makes it more susceptible to damage by neurotoxicants. [LB 477:9-10].
- 142. Childhood exposure to climate disruptions and air pollution can result in impaired physical and cognitive development with lifelong consequences. Air pollution can trigger or

worsen juvenile idiopathic arthritis, leukemia, and asthma in children. [LB 482:9-21, 502:4-22; LB-25; LVS 1205:20-1206:8, 1207:18-1208:3].

- 143. Air pollution is like lead, there is no safe level. [LB 525:19-20].
- 144. Wildfire smoke is made up of ultra-fine particulate matter that causes neuroinflammation and increased risk in Parkinson's disease, amyotrophic lateral sclerosis, and dementias of all natures. This also causes an increased risk of psychosis in adolescence, as well as bipolar disorder, schizophrenia, depression, anxiety, and obsessive-compulsive disorder. The inflammation also sets people up for immune, cardiovascular, memory, and sleep problems. [LVS 1206:19-1209:6].
- 145. When children and youth are exposed to air pollution, it does not just impact lungs but gets into the bloodstream and circulates throughout the body and gets into the brain, kidneys, placenta, and other organs. [LB 502:4-22; LVS-30].
- 146. Often, the immediate effects of pollution cannot be seen, but the prolonged exposures are especially damaging. [LVS 1209:6-12].
- 147. Wildfire smoke has harmed the health of Plaintiffs Olivia, Jeffrey, and Nate, all who have pre-existing health conditions, and other Plaintiffs, including Badge and Eva. [LB 505:12-506:20, 508:23-509:1; LB-28].
- 148. The Air Quality in Flathead County, where Lander, Badge, and Kian live, was an "F" for 24-hour high particulate pollution days between 2018-2020. [LB 504:12-25; LB-27].
- 149. The Air Quality in Missoula County, where Grace, Olivia, and Mica live, was an "F" for 24-hour high particulate pollution days between 2018-2020. [LB 504:12-25; LB-27].

- 150. The Air Quality in Gallatin County, where Georgi, Claire, Ruby, and Lilian live, was an "F" for 24-hour high particulate pollution days between 2018-2020. [LB 504:12-25; LB-27].
- 151. The Air Quality in Powder River County, where Rikki lives, was an "D" for 24-hour high particulate pollution days between 2018-2020. [LB 504:12-25; LB-27].
- 152. Allergies are increasingly prevalent among children and climate disruption is extending the allergy season and exacerbating allergy symptoms. An increase in these symptoms can affect children's physical and psychological health by interfering with sleep, play, school attendance, and performance. [LB 484:25-485:9, 508:2-16; LVS-30].
- 153. Climate change is contributing to an increase in the severity and frequency of asthma in children. Six million children un the US ages 0-17 have asthma, which translates to approximately one in every 12 children suffering from the condition. [LB 485:7-8, 503:1-14, 505:4-25; LB-26, LB-30].
- 154. Children who have pre-existing respiratory conditions, including asthma, are especially vulnerable to climate impacts, including increasing air pollution and rising temperatures. This includes Plaintiffs Olivia, Mica, Ruby, Jeffrey, and Nate. [LB 487:21-488:11, 489:8-11; LVS 1205:20-1206:1; LB-17].
- 155. The adverse impacts of the climate crisis and air pollution on the physical and mental health of children can result in lifelong challenges and consequences. The climate crisis is limiting children's potential for development and inhibiting their opportunity to engage in Montana's most important institutions and heritage. [LB 509:2-510:25, 511:1-7; LVS 1189:1-6, 1191:10-15, 1194:4-9, 1210:8-1211:2; P116; LVS-12].

Climate Related Harms to Children's Health



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- 156. Children also face barriers to family formation as a result of the climate crisis. For example, increasingly youth, including Plaintiffs Olivia and Grace, are distressed by wishing to have children of their own while feeling forced to consider foregoing a family because they fear the world that their children would grow up in. [LB 497:4-21; LVS 1214:21-1215:1, 1221:19-1222:5; GGS 208:3-22].
- 157. Children, including Plaintiffs Rikki, Kian, Claire, and Taleah, face economic deprivations, including barriers to keeping family wealth and property intact and decreased future economic opportunities. [LB 500:9-21, 526:17-527:6; RH 62:13, 74:10-15, 75:5-12, 22-24, 76:9-13, 885:1-6; CV 887:9-16; LVS 1217:2-14].
- 158. For competitive athletes, like Kian, Georgi, Claire, and Grace, extreme heat threatens their health. [LB 490:6-491:15; LB-18].
- 159. For indigenous youth, like Ruby, Lilian, and Sariel, extreme weather harms their ability to participate in cultural practices and access traditional food sources, which is particularly

harmful to indigenous youth with their place-based cultures and traditions. [LB 491:23-493:9; MDJ 579:19-580:9].

- 160. For Plaintiffs like Eva, that have been impacted by extreme weather events such as flooding, there can be significant health impacts. [LB 499:4-20].
- 161. Because of their unique vulnerabilities, their stages of development as youth, and their average longevity on the planet in the future, Plaintiffs are disproportionately harmed by the climate crisis and face lifelong hardships. [LB 474:14-25, 475:4-10; LVS 1177:2-1178:12, 1189:1-6,1194:4-9, 1210:2-1211:2, 1213:7-23, 1215:13-24].
- Youth are more vulnerable to the mental health impacts of climate change because younger people are more likely to be affected by the cumulative toll of stress and have more adverse childhood experiences ("ACEs"). [LVS 1214:24-1215:4; LVS-25, LVS-31]. For children, more ACEs increases the likelihood of cumulative trauma that leads to mental and physical illness, as well as an increased risk of early death. [LB 521:14-16, 5236-15; LVS 1210:2-1211:2; LB-33; LVS-31].
- 163. ACEs can cause prolonged fear, anxiety, and stress, cognitive impairments, and unhealthy risk behaviors. ACEs can also cause long-term health impacts including increased risk of obesity, diabetes, heart disease, depression, strokes, chronic obstructive pulmonary disease, and broken bones. [LB 516:3-20, 519:16-520:4, 522:17-523:2; LB-34].
- 164. Youth Plaintiffs have all undergone significant harms due to exposure to extreme climate events that have the potential to be ACEs. [LB 521:1-13].
- 165. Exposure to repeated trauma or climate stress causes the fight or flight center in the amygdala to be activated rather than the prefrontal cortex, leading to dangerous or impulsive

behaviors. Exposure to long-term stress has cardiovascular, immune, hormonal and fertility impacts. [LVS 1211:3-1213:6, 1214:24-1215:4; P44].

- 166. Children born in 2020 will experience a two to sevenfold increase in extreme events, particularly heatwaves, compared with people born in 1960. [LB 495:1-11, 497:1-3; P45; LB-20].
- 167. According to the IPCC, "Climate change is a threat to human well-being and planetary health (*very high confidence*)." The IPCC stated, "Without urgent, effective, and equitable mitigation and adaptation actions, climate change increasingly threatens ecosystems, biodiversity, and the livelihoods, health and wellbeing of current and future generations (*high confidence*)." [LB 530:11-533:9; LB-43, LB-44; P143; SR-61].
  - 168. Climate change is the greatest threat to public health. [LB 536:10-537:14].
- When a trusted and powerful institution that people depend on for aspects of their well-being, for example government, is implicated in causing harm, the mental health harms are intensified. This is known as "Institutional Betrayal," and occurs when a government institution affirmatively causes the harm, or when the government institution fails to take protective, preventative, or responsive actions. Institutional Betrayal can include institutional actions such as covering up or destroying damaging information related to the harm the government institution perpetrated. [LVS 1223:2-1224:20; LVS-42].
- 170. When governments promote fossil fuels in the midst of a climate crisis and ignore or cover up climate science, as is the case with the MEPA Limitations, it causes feelings of Institutional Betrayal among children. [LVS 1217:2-22, 1223:23-1225:7].
- 171. Plaintiffs' psychological injuries are related to the MEPA Limitations. [LVS 1222:23-1223:1].

- 172. Simply treating health problems caused by air pollution or climate change after they arise is neither adequate nor acceptable to protect the physical and mental health of children. The most important interventions are those that address the underlying causes and reflect the scientific consensus that states the need to transition Montana away from extracting and burning fossil fuels. [LB 528:2-9; LVS 1225:20-1226:15].
- 173. Primary prevention, preventing exposure to climate hazards that cause disease, injury, and other harms, must be a priority in order to protect the health of these Plaintiffs. [LB 529:6-25].
- 174. Protecting the health of youth requires reaching zero emissions by 2050 and 350 ppm by the end of the century. [LVS 1227:6-10].
- 175. Prevailing in this case would give Plaintiffs hope, rather than a signal of heading towards further damage, darkness, challenges, and trauma. [LVS 1228:4-1229:3].
- 176. Action taken by Defendants to prevent further contributions to climate change will have significant health benefits to the Plaintiffs. [LB 534:25-535:9].
- 177. It is possible, and indeed already done around the world, to analyze the health impacts from GHG emissions, air pollution, and climate change when conducting environmental reviews and making decisions about whether or not to issue permits. [LB 536:2-9].

## IV. CLIMATE CHANGE IS ALREADY ADVERSELY AFFECTING MONTANA'S NATURAL ENVIRONMENT.

178. It is well understood that the climate crisis is impacting, degrading, and depleting Montana's environment and natural resources, including dangerously increasing temperatures, changing precipitation patterns, increasing droughts and aridification, increasing extreme weather events, increasing the severity and intensity of wildfires, and increasing glacial melt and loss. [JS 655:2-658:10, 659:6-660:11; *see generally* SR, CW, DF; CW-56; DF-20].

- 179. Continued anthropogenic climate change in Montana will result in hardship to every sector of the economy from recreation, to agriculture, to tourism. For example, private water supplies will be harmed. [SR 144:13-145:17; CW-52].
- 180. Montana has already warmed significantly more than the global average—experiencing about 2.7°F warming between 1950 and 2015, with additional warming since 2015. [CW 263:12-17, 263:20-264:7; CW-18, CW-19].
- 181. All parts of Montana have seen a long-term trend of increasing mean annual temperatures since 1950. Winter and spring have warmed the most [CW 267:18-268:20; CW-21; P6].
- 182. There is a scientific consensus that rising temperatures in Montana are due to rising GHG concentrations, primarily CO<sub>2</sub>. [SR 103:5-9, 117:25-118:12; CW 269:18-25].
- 183. Montana's snowpack has been decreasing and is likely to continue decreasing with warmer temperatures, as a long-term trend caused by impacts to the climate. [CW 283:11-19; CW-33, CW-35, CW-55; DF 421:12-23].
- 184. Montana's April 1, Snow Water Equivalent, which is an important metric for how much water will be available during the dry summer months in Montana, has been declining since the 1930s. [CW 284:23-286:15; CW-34].
- 185. The decline in snowpack is directly attributed to elevated temperatures due to high levels of GHG emissions. [CW 283:11-19, 288:3-10].
- 186. Warming temperatures in Montana are resulting in more precipitation falling as rain instead of snow, particularly in western Montana, resulting in reduced snowpack and shorter snowpack runoff duration in the spring and summer. Warming temperatures and rapid snowmelt

and rain-on-snow events have been a major cause of spring flooding in Montana. [CW 291:17-292:20].

- 187. Extreme spring flooding events are consistent with climate change, including more spring precipitation, which can cause flash flooding when the rain falls on snow. [SR 144:24-145:8; SR-44]. Spring flooding is expected to increase in frequency with additional climate change. [CW 291:15-292:20].
- 188. The 2018 Shields River flooding and the 2022 Yellowstone River flooding event are examples of the types of rain on snow and heavy precipitation events that will be more frequent with climate change. [CW 291:15-292:20].
- 189. Yellowstone National Park is an economic powerhouse for the State of Montana. Together, Yellowstone National Park and Glacier National Park receive a combined five million visitor days per year. [Def. Answer, Doc. 54 ¶ 163]. Yellowstone National Park was the world's first National Park and spreads into southeastern Montana. [Def. Answer, Doc. 54 ¶ 163].
- 190. Climate change is dramatically altering Glacier National Park, one of Montana's world-renowned and treasured landmarks. [DF 427:2-15; DF-17, DF-20].
- 191. Dr. Dan Fagre holds a Ph.D. from the University of California, Davis. [DF-2]. He joined the National Park Service as a research scientist in1989, before being offered the Climate Change Research Coordinator position in 1991 at Glacier National Park, Montana, as part of the nationwide United States Global Change Research Program. This position was transferred to the United States Geological Survey (USGS), where he served until his 2020 retirement, after which he has continued as Scientist Emeritus. At Glacier National Park, he helped develop a national climate change research program within the National Park Service, coordinating with other Biogeographical Area Coordinators across the breadth of national parks from Florida to Alaska.

He built a research program centered on Glacier Park as a representative mountain ecosystem, engaging faculty and scientists from Montana universities and across the U.S. [P190]. Dr. Fagre is a well-qualified expert and the Court finds his testimony informative and credible.

- 192. Glacier National Park is a major driver of the regional economy and a source of fresh water for countless communities. [Def. Answer, Doc. 54 ¶ 159; DF 404:10-406:10, 407:1-3, 408:11-25, 426:2-17; DF-13].
- 193. The glaciers in Glacier National Park were an early focus of the U.S. Geological Survey climate change research because they are excellent indicators of impacts to the climate. Located above the rest of the mountain ecosystem, glaciers respond only to climatic forcings that affect summer temperatures that melt ice and snow and winter snow accumulation (i.e., snowpack). [DF 394:15-396:1, 396:25-397:17].
- 194. Of the approximately 146 glaciers present in Glacier National Park in 1850, only 26 glaciers larger than 25 acres remained in 2015. 82% of Glacier Park's glaciers are gone and there has been a 70% loss of area of all glaciers. [DF 418:1-8, 422:25-424:4; DF-17, DF-20].
- 195. Since 1900, glaciers in Glacier Park lost 66% of their area, making Montana the largest region for glacier loss in the U.S. lower 48 since 1900. Agassiz Glacier, Grinnell Glacier, Jackson Glacier, Sperry Glacier, and Thunderbird Glacier have all experienced significant retreat. [DF 409:9-23, 410:23-415:5, 412:13-21, 415:12-416:20; P61-P64; DF-8, DF-15, DF-16, DF-18, DF-20, DF-21].
- 196. The scientific consensus is that the retreat of Glacier Park's glaciers over the past century is due to human greenhouse gas emissions (mainly CO<sub>2</sub> from fossil fuel burning). [DF 409:24-410:19, 416:21-417:15, 422:8-19, 424:5-11, 428:13-24].

- 197. The current ice retreat of Glacier Park's glaciers is in response to modern, human-caused warming of the region and has nothing to do with past ice ages, which had nothing to do with human influences. [DF 428:13-24].
- 198. Computer models have projected the loss of Glacier Park's glaciers if fossil fuel emissions continue to rise. [DF 425:9-23].
- 199. The loss of glaciers in Glacier National Park will cause local extinction of several species that can only survive in their meltwater streams. Two aquatic insects unique to northwest Montana—the meltwater stonefly (*Lednia tumana*) and glacier stonefly (*Zapada glacier*)—will go extinct from the Earth when glacier melt streams disappear. [DF 426:18-427:1; JS 685:13-686:3].
- 200. The loss of Glacier National Park's glaciers will affect the water sources of countless communities, stream and river hydrology, local economies, and the recreational opportunities of a number of Plaintiffs because they will be denied access to natural resources enjoyed by previous generations of Montanans. [DF 404:10-406:10, 407:1-3, 408:11-25, 426:2-17; DF-13].
- 201. If GHG emissions are reduced glaciers would slow their melting, eventually stabilize, and then begin to grow again. [DF 428:1-12].
- 202. Climate change is resulting in water levels in Montana's rivers and lakes to be routinely well below normal levels in summer and fall months and water temperatures are well above historical levels. [JS 686:18-687:4, 690:7-17, 692:22-25, 693:2-7; JS-25].
- 203. Dr. Jack Stanford received his Ph.D. in Freshwater Ecology at the University of Utah. [JS-2]. He is Professor Emeritus at the Flathead Lake Biological Station ("FLBS") of the University of Montana. He was the Director and Bierman Professor of Ecology at the University of Montana (1980-2016). His primary area of research is on aquatic ecosystem processes,

including influences of human activities. He has published over 220 scientific papers and books on aquatic ecosystem processes, including influences of human activities. [P194]. Dr. Stanford is a well-qualified expert and the Court finds his testimony informative and credible.

- 204. Montana encompasses part of the northern Rocky Mountain region. The northern Rocky Mountains are a headwaters region, including for the Missouri River system to the East and the Columbia River System to the West, where most of the water originates as snow. [Def. Answer, Doc. 54 ¶ 157].
- 205. Montana is a key "water tower" of the Continent. Water that drains from the Rocky Mountains feeds three of the great rivers of North America: the Columbia, the Saskatchewan, and the Missouri-Mississippi. Snow at high elevations provides 85% of the freshwater people use in Montana. [DF 405:22-406:10, 407:16-409:1; DF-13; JS 656:21-657:7].
- 206. The accumulation of winter snowpack in the mountains naturally acts as a reservoir for the hotter, drier months, gradually melting with onset of spring, and in summer providing continuous flow downstream, which is critical in the period of less precipitation and warmer temperatures. [SR 152:2-18]. Some accumulations are held in mountain glaciers which add meltwaters to the flow paths. [DF 407:16-409:1; DF-13].
- 207. Precipitation also is retained in lakes and wetlands and a large share of the runoff penetrates into the ground, feeding aquifers that store water or augment river and stream flows. [JS 655:20-24, 657:13-17, 660:12-661:7; JS-4].
- 208. Montana's river and lake ecosystems are interconnected with each other, as well as aquatic and terrestrial ecosystems beyond Montana's borders. [JS 646:2-647:2]. The interconnectivity of Montana's river and lake ecosystems includes being connected with groundwater and atmospheric waters. [JS 661:8-12; JS-4, JS-8, JS-9; P82].

- 209. The rivers of Montana are all interlinked and their flows and the quantity of materials (e.g., sediments) that they naturally transport are now, without functioning glaciers, almost wholly dependent on seasonal rain and snow; and these river networks transport and deliver the water and materials that sustain the natural and cultural (human) elements of Montana's ecosystems. [JS 661:8-664:18, 646:2-647:2; JS-4; DF-19].
- 210. Montana's water resources are critically important to these youth and all Montana citizens and to many people beyond the State's borders. Montanans cannot survive without a dependable supply of clean freshwater. The lives of future generations will also depend on the health and viability of these water resources. [JS 659:6-19; JS-25].
- 211. Anthropogenic climate change is disrupting the natural range of variation in the flow paths of Montana's river systems. Compared to the 1960s, the summer streamflow in Montana's rivers has decreased by approximately 20% and stream temperatures have increased between 1-2°C. [JS 666:15-667:20; JS-10, JS-25].
- 212. As a result of anthropogenic climate change, surface temperatures in Flathead Lake are now too warm for bull and cutthroat trout to sustain their historic populations. [JS 687:5-14].
- 213. As a result of anthropogenic climate change, Flathead River is experiencing low streamflow and a decline in cutthroat trout populations due to warm temperatures and low water flows. Bull trout populations have also declined in Flathead Lake. [JS 687:5-14].
- 214. As a result of anthropogenic climate change, the Missouri River is experiencing discharge declines, an increase in stream temperatures, fishing restrictions, and algal blooms. [JS 687:15-688:25].
- 215. As a result of anthropogenic climate change, the Clark Fork River is experiencing low streamflow and discharge declines. [CW 292:21-293:18; CW-42].

- 216. As a result of anthropogenic climate change, the Yellowstone River is experiencing discharge declines, low streamflow, increasing temperatures, fish die offs due to diseases, recordsetting floods, a decline in brown trout populations, and algal blooms. [JS 676:4-25, 689:9-690:1].
- 217. As a result of anthropogenic climate change, the Powder River is experiencing low streamflow and a decline in water quality. [JS 690:7-17].
- 218. As a result of anthropogenic climate change, the Madison River is experiencing increased temperatures, declining discharge, fishing closures, a decline in brown trout populations, algal blooms, fish die offs, increased temperatures, and river closures. [JS 692:2-10].
- 219. As a result of anthropogenic climate change, the Blackfoot River is experiencing declining discharge, increased temperatures, and river closures. [JS 692:22-25].
- 220. As a result of anthropogenic climate change, the Smith River is experiencing record low flows in June, increased temperatures, and fishing restrictions. [JS 693:2-7].
- 221. As a result of anthropogenic climate change, the Shields River is experiencing low flows and river closures. [JS 693:9-10].
- As a result of anthropogenic climate change, the Bitterroot River has experienced increased temperatures, a reduction in bull trout habitat, algal blooms, and fishing closures. [JS 693:12-22].
- 223. One impact of anthropogenic climate change to Montana's aquatic ecosystems is that runoff (spring spate) from snowmelt is days to weeks earlier than in the past. Loss of snowpack also accelerates warming and water loss owing to reduced reflection than would occur if the snowpack was sustained. [JS 670:20-671:2].
- 224. Low water levels and abnormally warm water temperatures create harmful conditions for fish and other aquatic organisms. [JS 671:3-17].

- 225. Access to boating and fishing on certain rivers and lakes in Montana has been limited, and in some instance completely foreclosed, as a result of low river flows or high water temperatures. These changes limit the ability of a number of Plaintiffs to fish and access the State's rivers and lakes for sport or recreation. [SR 152:25-153:9, 153:10-13; JS 679:7-15].
- 226. These changes to Montana's freshwater ecosystems that are the direct impacts of ongoing climate change must be reversed to protect the well-being of Montana's ecosystems, for Montana's youth, including these Plaintiffs, and future generations of Montanans. [JS 653:11-19, 659:6-19, 694:15-17; JS-25].
- 227. Wildfires resulting from climate change have caused nitrogen levels in Montana's lakes to increase. This has caused severe nutrient imbalances that threaten the plant and animal life in the lakes. [JS 683:1-684:4].
- 228. The scientific consensus is that warmer waters, which anthropogenic climate change is causing, facilitate invasions of non-native species, which in turn harm native species such as bull trout and cutthroat trout. [JS 684:9-685:3].
- 229. If GHG emissions continue to rise, impacts to the climate will further harm Montana's wildlife and fisheries, and the ability of Plaintiffs to hunt and fish. [JS 679:7-15; 687:8-14]. For example, the American pika and Snowshoe Hares are considered highly sensitive to climate change due in large part to their dependence on subalpine habitat and snow cover, which is also projected to decline. [SR-59; P72; DF 406:11-15].
- 230. The western United States, including Montana, has experienced a trend of increased drought and heat stress from climate change, which has killed trees and altered ecosystem dynamics, and this trend toward hotter and drier summers will continue in the future. [SR 106:1-18, 146:18-21, 156:2-17; CW 258:24-259:8, 283:3-10; CW-44].

- 231. Fourteen million acres of Montana forests showed disease or disturbances from pine beetle-killed tress from 2000 to 2015. [SR-56].
- 232. Droughts in Montana are more expansive and longer term which produces negative feedback in stream systems: aquifer systems become depleted owing to reduced infiltration of streamflow and rainfall and where aquifers contribute significantly to base flow maintenance in Montana streams, the outcome is even more extreme and with sustained drying. [JS 677:7-678:1].
- 233. Anthropogenic climate warming is producing a shift from snow to rain earlier in the year, and that flooding from intense but extreme, short-duration flooding is more commonly occurring today than in the past (especially in the spring); and that ultimately means that less water is retained in the drainage network. [JS 676:12-25].
- 234. Increases in the frequency, duration, and/or severity of drought and heat stress associated with climate change are fundamentally altering the composition, structure, and biogeography of forests in Montana. [SR 106:1-14]. There is already evidence of accelerating forest mortality in western forests, and this acceleration is clearly tied to increasing temperatures and plant water stress from climate change. [SR 156:2-17, 163:9-164:2].
- 235. Montana's forests are being drastically altered due to the combination of drought, pest infestations, and wildfires. [SR 156:12-157:15].
- 236. Higher temperatures and increasing drought and aridification in Montana are leading to increased severity, frequency, and extent of wildfires. Climate scientists have long known that increasing temperatures intensify drought conditions, and the combination of drier and hotter weather leads to larger, more frequent, and severe wildfires. [SR 106:1-14, 157:2-158:6].
- 237. The wildfire season in Montana is a full two months longer than it was in 1980s. [SR 159:7-13]. The lengthening of the fire season is largely due to declining mountain snowpack,

earlier spring snowmelt, decreased summer precipitation, and warmer summer temperatures leading to deficits in soil and fuel moisture—which are all due to increasing GHG emissions. [SR 106:1-14, 156:24-157:13, 159:18-160:6, 160:22-24; SR-54; CW 305:3-24; CW-47].

- 238. In the U.S., the extent of area burned each year has increased since the 1980s. According to the National Interagency Fire Center data, of the 10 years with the largest acreage burned, all have occurred since 2004, including the peak year of 2021. This period coincides with many of the warmest years on record nationwide. [SR 158:4-11; SR-52].
- 239. Wildfires in Montana are expected to become significantly worse in the coming years without immediate steps to limit impacts to the climate. [SR 106:1-24; CW 306:11-307:11; CW-49].
- 240. Unless GHG emissions are reduced, the wildfire smoke conditions in Montana will get significantly worse, with much of western Montana facing the highest risk factor. [SR 106:1-24; SR-57; CW 307:12-308:10; CW-50].
- 241. Climate instability, including rising temperatures, changing precipitation patterns, and drought conditions, create challenges and uncertainty for farmers. [CW 312:2-313:15].
- 242. Climate change affects wildlife in a variety of ways; some species will be more sensitive to impacts to the climate than others. Species may adapt, move, or go extinct. Dependence on climate-sensitive habitats like seasonal streams, wetlands and vernal pools, seeps and springs, alpine and subalpine snowfield areas, grasslands and balds, is a large driver of species sensitivity. [SR 164:5-16, 165:6-166:6].
- 243. Rising temperatures will increase the number of freeze-free days in Montana and increase in the number of days above 90°F. [CW 273:6-20, 275:18-276:7; P6; CW-24, CW-27].

- 244. In the coming decades, there will be increasing seasonal variation in Montana's precipitation, with more precipitation falling in the spring and fall and less in the winter and summer. The observed change in precipitation timing and, in particular, a decrease in precipitation during the summer months combined with increasing summer temperatures, will contribute to increasing risk of summer drought conditions in parts of Montana and more precipitation falling as rain as opposed to snow. [CW 281:4-21; CW-30, CW-35; P6, P34].
- 245. Greatly increasing temperature will offset small increases in precipitation by increasing rates of evaporation and transpiration and will make late-summer and fall drought highly likely and increasingly severe. [CW 283:3-10].
- 246. The current decline in Montana snowpack and snow accumulation is projected to continue through the 21<sup>st</sup> century. The loss of snowpack and snow accumulation is primarily driven by increasing temperatures, which are caused by anthropogenic GHG emissions. [CW 283:11-19, 284:23-285:21, 286:9-15, 287:15-288:10, 290:20-291:9; CW-35].
- 247. Spring runoff in Montana is projected to increase through the 21<sup>st</sup> century because of warmer temperatures and earlier snowmelt. Increased January-April runoff will lead to increasingly low streamflow in July-September. [CW 293:8-18].
- 248. The science is clear that there are catastrophic harms to the natural environment of Montana and the Plaintiffs and future generations of the State due to anthropogenic climate change. [SR 105:9-21, 149:15-150:7]. The degradation to Montana's environment, and the resulting harm to Plaintiffs, will get worse if Montana continues policies that have the effect of promoting and ignoring the continued use of fossil fuels. [SR 105:22-106:18, 137:10-15, 168:17-169:7, 169:19-21; CW 318:2-5, 316:17-317-14; DF 428:6-12; JS 712:8-12].

## V. CLIMATE CHANGE IS ALREADY HARMING PLAINTIFFS.

- 249. Plaintiffs have been and will continue to be harmed by the MEPA Limitations and the State's pattern and practice of approving fossil fuel activities with deliberate disregard to GHG pollution and climate change.
- 250. Plaintiff Rikki Held lives on her family's ranch 20 miles outside of Broadus, Montana. [57:16-17]. Her testimony at trial was sincere and credible. Broadus is a ranching community in Southeastern Montana, with a population of approximately 450 people in the town and approximately 2000 in Powder River County. [59:1-7].
  - a. Rikki has experienced a number of climate change-related harms to herself and her family ranch, including harms from flooding, severe storms, wildfires, and drought.
     [64:17-25; P111, P112, P16].
  - b. The Powder River runs through Rikki's ranch. [59:8-11, 64:3-16]. The ranch includes five pivot fields and pine-covered hills. [59:12-14]. Rikki and her family have raised cattle on the ranch, grow crops to feed cattle, and also have horses. [59:12-13, 60:16-20, 61:19-25].
  - c. Rikki started riding horses and herding livestock when she was four. [60:24-25-61:1]. Rikki grew up very involved in ranching activities, working with livestock, haying, and fixing fences. [60:14-61:1].
  - d. Rikki's grandparents are from Broadus and her dad grew up in Broadus. [58:17-21].
  - e. Rikki and her family run a business that rents motel rooms and guest rooms to travelers. [62:17-20]. Rikki often works for the family motel business. [62:21-24]. The primary source of Rikki's family's income is the ranch and motel business. [62:11-13].

- f. Impacts to the climate are already harming Rikki's home, family, community, income, and way of life. [64:19, 64:22-25].
- g. Rikki is often required to work outside on the ranch regardless of the temperatures or air quality. [67:3-10, 65:16-22, 67:25-68:2]. Rikki's health and well-being has been harmed by wildfires and wildfire smoke, as well as extreme heat. [65:25-66:6, 68:5-10, 69:13-23].
- h. In 2012, the Ash Creek fire burned seventy miles of power poles, causing the loss of electricity on Rikki's ranch for a month. [65:1-14]. Electricity is required to access water for both cattle and Rikki's house on the ranch, so the loss of electricity is very harmful for both cattle and Rikki's life on the ranch. [65:15-24].
- i. Climate change has impacted the snowpack on Rikki's ranch in recent years, with snow not typically lasting through the winter. [72:12-21]. Reduced winter snowpack means there is less natural water available for cattle. [72:12-14, 72:24-73:11]. As a result, the cattle have to rely on water tanks, which are far apart and expensive to install. [72:22-73:11]. With less water, there is also less grass available for the cattle to eat. [73:20-25].
- j. With less water and grasses, cattle needed to travel further for water and food, and lose weight. [72:20-25, 75:9-12]. This means the cattle are not as valuable and Rikki's and her family's profits and income have declined. [74:10-15, 75:5-12].
- k. Wildfires have closed roads around Broadus limiting the number of people that can reach Rikki's family motel business, causing lost income for Rikki and her family. [67:1-2, 67:4-15].

- 1. Rikki relies on income from the ranch and motel business. [62:11-13]. Lost income from Rikki's family's ranch or motel business affects Rikki personally. [76:9-13].
- m. Impacts to the climate have caused increased variability in water levels in the Powder River. [70:19-21]. Rikki's family relies on the river to water their livestock and their crops. [70:21-23]. Increasingly, the river levels are frighteningly low while at other times the river floods. [71:5-10].
- n. In 2017, the Powder River flooded and eroded the riverbank on Rikki's ranch, undercutting a fifty-year-old fence. [71:11-13]. Since then, continued flooding has eroded about fifty feet of riverbank, with floodwaters that nearly reach Rikki's home. [71:13-20].
- o. Rikki experiences stress and despair when thinking about how climate change impacts her own well-being, the well-being of her family, and the well-being of other Montanans. [78:1-12]. Montana is Rikki's home and seeing the way climate change is impacting Montana and her family ranch is a heavy emotional burden for Rikki. [78:1-2, 78:10-12].
- p. Winning this lawsuit would give Rikki hope for her future—the future of her ranch, the future of her State, and the future of the stable climate and healthful environment experienced by Montanans in the past. [78:13-19]. She believes that Montana needs to take responsibility for its part in the climate crisis, and this Court could help Montana take the right step in that direction. [78:19-79:2].
- q. Rikki faces economic deprivations, including barriers to keeping family wealth and property intact and decreased future economic opportunities. [62:13, 74:10-15, 75:5-12, 75:20-22, 76:9-13].

- 251. Plaintiffs Lander Busse and Badge B. are brothers, living in Kalispell, Montana. [442:16, 442:21, 1236:12-19]. Their testimony at trial was sincere and credible.
  - a. Lander and Badge enjoy hunting and fishing as an integral part of their cultural heritage and community, as well as to provide food for their family. [449:17-451:9, 453:18-454:9, 1248:9-1249:16, 1253:7-18, 1256:1-24]. Lander and Badge depend on the food they hunt and fish for as their primary source of meat and protein. [450:23-451:2, 1253:7-18].
  - b. Lander and Badge hunt with their parents and grandparents. [443:23-24]. Hunting is an important family activity. [452:19-453:4, 1249:5-16].
  - c. Lander and Badge's ability to hunt and fish, as well as their access to food for their source of protein, and as a cultural and familial tradition, is inhibited due to the climate crisis, including from extreme heat and wildfires. [451:14-452:18, 454:10-455:24, 1253:19-1255:22, 1259:1-1261:17].
  - d. Climate change has adversely impacted Lander and Badge's ability to fish by rendering certain waterways impassible by raft due to low instream levels or toowarm water temperatures, which harm fish and decrease their populations. [454:10-455:16, 1259:1-1260:6].
  - e. Lander and Badge have had their ability to fish limited or completely foreclosed due to fishery closures as a result of climate change-induced conditions in Montana's rivers. Lander and Badge have also had their access to rivers limited for other recreational activities. [1259:4-1260:6, 1260:9-19, 454:12-455:4, 455:9-16].

- f. The extreme temperatures and smoke make hunting unbearable and impossible for Lander and Badge. [452:11-18, 1253:19-1254:12, 1255:8-22]. Smoke conditions have also impacted their fishing activities. [455:22-24, 1260:9-19].
- g. Due to climate change, the wildfire smoke in Kalispell, and in other parts of Montana where Badge recreates, makes it difficult for Badge to breathe and triggers a cough, which negatively impacts his health and well-being. [447:25-448:21].
- h. In 2018, a wildfire near Lander and Badge's home forced their family to prepare to evacuate. Having to prepare to evacuate was a terrifying experience for Lander and Badge. [446:13-447:3, 1262:1-1263:19]. Badge is worried that wildfires will continue to threaten his home. [447:4-6].
- i. Lander has seasonal pollen allergies, which are worsening due to the increased pollen count and a changing climate. [1265:8-1266:20].
- j. Lander is an accomplished musician and theater performer and often performs outdoors. Climate change and wildfires have hampered his ability to perform music and theater at a high level and have negatively impacted his health and well-being. [1241:24-1242:13, 1263:25-1264:15].

- k. Badge is named after the Badger-Two Medicine, an area where he frequently recreates and fishes. [444:2-7]. Wildfires in the Badger-Two Medicine have destroyed trees and have degraded areas important to Badge and where he enjoys visiting and recreating, which has had a particularly distressing and profound emotional impact on Badge. [444:11-446:12; P114]. Badge experiences a sense of loss and distress knowing that the area in Montana he was named after is being damaged and degraded due to climate change. [446:6-446:12]. Badge feels as if a part of him were lost in the Badger Two-Medicine fire. [444:11-446:12; P114].
- 1. Badge is passionate about skiing, which he has been doing for as long as he can remember. [456:10-11, 456:18-19]. Climate change is reducing and limiting Badge's ability to participate in this important recreational activity. [457:1-10].
- m. Badge is anxious when he thinks about the future that he, and his potential children, will inherit. [457:17-25, 458:10-13].
- n. Lander and Badge care deeply about protecting Montana's environment, which is an integral part of their family traditions, culture, and identity. [458:1-458:9, 1267:8-16]. Witnessing the current impacts of the climate crisis in Montana is traumatic for both Lander and Badge. [449:2-12, 1264:16-1265:4, 1267:8-1268:15].
- o. Lander and Badge are experiencing the loss of ties to the land in Montana. [444:11-446:12, 458:1-458:9, 1260:7-1263:19].
- 252. Plaintiff Sariel Sandoval is a member of the Confederated Salish and Kootenai Tribes and is from Ronan, Montana. [617:11-13]. Her testimony at trial was sincere and credible.

- a. Sariel, her family, and community have a deep connection to the natural world, and have a unique connection to the land, the natural environment, and the seasons. [631:7-16, 637:2-638:3; MDJ-12, MDJ-13, MDJ-14, MDJ-15]. Climate change is harming Sariel's culture and tribal practices—which have been a way of life for Sariel's tribe since time-immemorial. [632:13-633:19, 634:25-635:14, 637:14-638:3; MDJ 597:9-18, 600:23-604:14, 609:23-610:10; MDJ-4, MDJ-10]. Sariel went to a Salish language immersion school called Nkwusm in Arlee. [617:14-19]. At school, Sariel was taught the native language and learned about the Salish culture. [617:9-618:7].
- b. Sariel was excited to receive her Salish name, which means "Person Who Brings the Cedar." [636:19-637:1]. Cedar has important cultural significance because it provides a connection through the land to the Creator. [636:10-18].
- c. Sariel feels a strong sense of connection to her community. She believes that carrying on her community's traditions is important because it is their way of life and reflects their connection to the land. [625:7-9, 637:2-13].
- d. Gathering and using sweet grass and bare root is important to Sariel culturally and spiritually. [629:18-23].

- e. Sariel is concerned about how climate change is impacting her cultural traditions because it affects the seasons, and her culture is very ingrained with the land and the seasons. [601:7-604:14; MDJ-12, MDJ-13, MDJ-14, MDJ-15] It also affects plants and foods her tribe needs to survive, and she is concerned that these changes will change the community itself. [637:14-638:3; MDJ 597:6-18]. Because of earlier-than-normal snowmelt and the consequent drying-up of mountain streams as a result of climate change, plants used in Salish and Kootenai medicines are becoming scarcer and more difficult for tribe members to gather. [MDJ 597:6-18, 603:16-604:14].
- f. Coyote Stories are a culturally important type of Creation Story that can only be told when there is snow on the ground. [MDJ 601:2-602:2]. Sariel is concerned because the snow is not staying on the ground as long, and she does not know what will happen to the stories when there is no more snow. [634:2-6, 634:15-635:14; see also CW-33, CW-36].
- g. Climate change is impacting Sariel's ability to partake in cultural and spiritual activities and traditions, which are central to her individual dignity. [632:13-633:19, 634:2-6, 634:15-635:14; MDJ 601:7-14]. Climate change has disrupted tribal spiritual practices and longstanding rhythms of tribal life by changing the timing of natural events like bird migrations. [MDJ 603:16-604:14].

- h. Sariel worked at Blue Bay Campground the summer after she graduated high school. Sariel lost a few weeks of work, and the resulting income, due to the nearby Finley Point fire in 2021 (also known as the Boulder 2700 Fire), which also led to the road being shut down, homes being lost, and people being evacuated. [621:24-623:1].
- Sariel is often unable to see the mountains near her home due to wildfire smoke.
   [623:2-19; P105].
- j. Berry picking is a staple cultural activity for Sariel, who enjoys doing it with her family. Some huckleberry bushes are dying or not producing fruit because of drought and Sariel has to travel higher up into the mountains to find healthy huckleberries. [632:13-633:19; P103, P104].
- k. Climate disruption has made it difficult for Sariel to learn and engage in traditional and cultural practices and customs that have been passed down for generations. [632:13-633:19, 634:2-6, 634:15-635:14]. The climate crisis has a profound emotional and psychological impact on Sariel, who experiences stress and despair about the impacts her community is facing and will face in the near future due to climate change. [637:14-638:3].
- 1. Sariel was profoundly emotionally impacted when she learned that Montana was almost at the point of no return with respect to climate change. [626:23-627:7].
- 253. Plaintiff Kian Tanner lives on his family's property in Bigfork, Montana. [767:7-8, 775:5-778:8]. His testimony at trial was sincere and credible.
  - a. Warmer winters caused by the climate crisis have led to increased insect activity, which has killed hundreds of trees on Kian's property with heightened frequency.

- [775:12-24; P101]. Kian's property has been degraded by wildfire smoke. [777:1-19; P102, P145].
- b. Kian is a passionate fly fisher and hopes he will be able to preserve this tradition and fish for the next fifty years or more. [765:1-20]. Kian has been fishing with his dad since he was about four years old. [765:9-11].
- c. The warmer water temperatures, lower oxygen levels, and declining instream flows due to climate disruption are harming Montana's rivers and fish. These climate impacts have decreased fishing opportunities for Kian as he has had to cancel fishing trips due to wildfires. [774:5-775:4]. Not being able to fish is devastating for Kian. [774:24-775:4].
- d. Kian lives near and enjoys visiting and recreating in Glacier National Park, which is a very special place for Kian. [767:4-768:5]. He is distressed he will never be able to see the natural glaciers as they have historically existed, and as other generations experienced them. [768:6-769:1].
- e. Kian enjoys downhill and cross-country skiing, which is an important activity he does with his mom, who taught him to ski. [769:2-22]. Kian cross-county skis on his family's property. [769:17-18]. Impacts to the climate have reduced his opportunities to downhill and cross-country ski. [769:23-770:6].
- f. Increased smoke in the summer has harmed Kian's ability to play soccer, fish, and otherwise recreate outside, activities which are crucial for his health and foundational to his family. [771:21-772:5, 774:5-11]. Kian's soccer practices have been cancelled due to heat and wildfire smoke. [771:25-772:2].

- g. The smoke often forces Kian to seek refuge indoors, which makes him feel very claustrophobic. [777:1-778:8].
- h. Kian's fears about impacts to the climate take an emotional toll on him and he feels a heavy burden to carry the mantel of the generation that needs to fix climate change and save the world from the climate crisis. [778:9-779:11].
- 254. Plaintiff Georgianna ("Georgi") Fischer is from Bozeman, Montana. [352:6]. Her testimony at trial was sincere and credible.
  - a. Georgi's family has lived in Montana for generations. Georgi's great grandmother, Mary "Polly" Wisner Renne, is someone that Georgi looks up to and admires because of her work to protect Montana's environment—she was a key figure in establishing protections for the Lee Metcalf Wilderness Area. [753:5, 733:2-7].
  - b. Georgi is a competitive Nordic skier, and her ability to compete and participate in Nordic skiing has been directly impacted by climate disruption. Declining winter snowpack has inhibited Georgi's ability to complete all her necessary and appropriate training and hinders her ability to continue to compete at a high level, which adversely impacts her health and mental well-being. [735:19-21].
  - c. With less snowfall in the winter, and the snow melting at rapid rates, Georgi's training season is curtailed and has overall shortened in length. In recent years there has not been enough snow to groom trails or create tracks in the snow to Nordic ski race until January, although historically tracks were created in November. The lack of snow has inhibited Georgi's ability to complete all her necessary and appropriate training and hinders her ability to continue to compete at a high level, which adversely impacts her health and mental well-being. [745:15-20, 746:19-21].

- d. Georgi has competed on the national level, including Junior National Championships, U.S. National Championships, and the 2021 NCAA competition. She trains 11 months of the year, six days a week. [726:14-738:1, 738:15-21, 741:1-4].
- e. Georgi's summer Nordic skiing training has been impacted by wildfires and wildfire smoke practices have been cancelled or curtailed due to smoke and the smoke prevents Georgi from fully breathing or training at a high intensity level. Georgi is increasingly worried about the long-term effects that the exposure to heavy wildfire smoke while training has on her health and respiratory system. Smoke from wildfires has limited Georgi's ability to train and compete in sports at a high level. Extreme heat also harms Georgi and her ability to recreate and train outdoors. The heat has caused her to feel dizzy, nauseous, generally unwell, and has caused persistent nosebleeds that led Georgi to seek medical attention. [741:7-9, 741:13-20, 742:3-12, 743:14-18, 743:21-744:11, 749:12-23].
- f. Georgi enjoys paddleboarding, rafting, backpacking, hiking, and other outdoor activities. Georgi's recreation on Montana's rivers has been impaired due to low water levels and stream flows. Georgi and her family have had to cancel river rafting trips, including one on the Smith River, due to low stream flow conditions. [746:24-747:4, 748:23-749:11].
- g. Georgi experiences feelings of despair and hopelessness as a result of the declining winter snowpack and what that trend entails for her snow-based sport. [645:15-20, 746:19-21, 750:13-751:13].

- h. A successful outcome in this lawsuit would give Georgi hope and alleviate her mental health injuries. [753:7-15].
- 255. Kathryn ("Grace") Gibson-Snyder is from Missoula, Montana. [191:2-3]. Her testimony at trial was sincere and credible.
  - a. Grace's great- great- great- grandmother arrived in Montana in 1866 and homesteaded near Virginia City. [191:19-24]. Her testimony at trial was sincere and credible.
  - a. Grace's recreation on Montana's rivers and streams has been affected due to both low water levels and flooding conditions. [206:12-207:6]. Because of the climate crisis, Grace's access to the Clark Fork River for recreational activities has been increasingly limited and impaired, thus limiting her ability to enjoy activities important to her health and family. [206:12-207:6].
  - b. Grace enjoys many outdoor activities, including long-distance biking, hiking, soccer, and kayaking. [192:2-4, 192:16].
  - c. Grace has been harmed by wildfire smoke and extreme heat; which have adversely impacted her ability to play competitive soccer and have led to fewer soccer practices, and the cancellation of games. Wildfires have impacted Grace's ability to go outside, enjoy outdoor activities, and have placed her safety, health, and well-being at risk. [199:8-201:2, 201:24-202:3].
  - d. One of Grace's environmental community education events was cancelled due to wildfire smoke. [197:20-198:10; P96].
  - e. Grace has had her hiking activities impacted by wildfire smoke. [202:16-203:16, 203:23-204:13; P95, P98].

- f. Grace experiences psychological harms, is distressed from day-to-day climate conditions, and is anxious about the climate crisis. [207:15-25, 209:2-8, 209:13-21, 210:10-14]. It is devastating for Grace to think that Montana's special landscapes, like Glacier National Park's glaciers, will not exist as they have in the past, or at all, when she is older. [204:14-205:25; P97].
- g. Grace is unable to alleviate her psychological harms unless the underlying cause, climate change, is addressed. [207:15-25, 209:2-8, 209:14-21, 210:11-14].
- h. Even though Grace is a sixth-generation Montanan and would like to continue her family's lineage and raise children in Montana, she is distressed and questions whether she can morally bring children into the world, because of her knowledge and fear of the world that her children would grow up in if climate change is not ameliorated. [208:7-22, 213:5-17].
- 256. Plaintiff Olivia Vesovich is from Missoula, Montana. [1139:16-17]. Her testimony at trial was sincere and credible.
  - a. Olivia has exercise-induced asthma and is particularly vulnerable to smoke-filled air as a result of her asthma. [1153:13-1154:20]. In smoky conditions, Olivia feels she is suffocating if she spends more than thirty minutes outdoors. [1154:14-18]. During smoky conditions, Olivia is forced to stay inside and reduce or eliminate the outdoor activities she enjoys. [1154:10-20]. Olivia has been forced to spend recent summers outside Montana due to the smoke-filled air and her asthma. [1156: 6-14].
  - b. Olivia suffers from spring pollen allergies, which force her to stay indoors and prevent her from engaging in the recreational activities she enjoys. [1156:18,

- 1157:4-11]. Olivia's spring allergies cause her eyes to swell shut and can cause eye pain for weeks at a time. [1156:18-1157:1]. Olivia's allergies have become progressively worse in recent years. [1156:18-20].
- c. Olivia is affected emotionally and psychologically by the climate crisis, and experiences bouts of depression when she thinks about the dire projections of the future. [1157:17-1158:8]. Olivia would like to have children of her own someday, but she questions whether this is even an option in a world devastated by the climate crisis. [1158:12-1159:6].
- d. Olivia experiences psychological harms and is distressed from day-to-day climate conditions and is anxious about the climate crisis. [1157:17-1158:8]. There are days when Olivia feels paralyzed by the impacts and threats of climate change and her fears that it is too late to solve the climate crisis. [1157:17-1158:8].
- e. For Olivia, climate anxiety is like an elephant sitting on her chest and it feels like a crushing weight. [1159:7-15]. This climate anxiety makes it hard for her to breathe and hurts her eyes and nose. [1159:16-25].
- f. Olivia uses art to express her climate grief. One painting she made in 2021, called Gaia, or Mother Nature, expresses the despair Olivia feels about impacts to the climate. Olivia made the painting on the brink of her sadness, and she used the art for an outlet. The painting is an exploration of her despair and the tears in the painting represent what Olivia was feeling. [1143:25-1145:8].
- g. Winning this lawsuit would give Olivia hope for a better future and for a Montana that is no longer being destroyed by climate impacts. Winning this lawsuit will help lessen Olivia's anxiety around climate change. [1161:19-1162:13].

- 257. Plaintiff Claire Vlases is from Bozeman, Montana. [871:7-8]. Her testimony at trial was sincere and credible.
  - a. Claire works as a ski instructor at Big Sky Resort, and her ability to earn money through that job is harmed by climate disruption, which is decreasing Montana's winter snowpack and, relatedly, the number of days Claire can work. [882:15-16, 883:1-4, 883:15-20]. Claire has been sent home from her job as a ski instructor without working her scheduled shift, and without pay, because of not enough snow. [883:20-884:1, 884:11-14]. Claire relies on her income as a ski instructor, so the lost income is a financial hardship for her. [883:15-884:1, 883:15-884:14, 884:15-885:6, 887:9-16].
  - b. Claire regularly visits Glacier National Park where she loves to hike. [890:8-11]. Seeing the loss of glaciers in Glacier National Park is terrifying for Claire and reduces her enjoyment of the Park. [89:14-892:2]. Claire's ability to enjoy hiking in Glacier National Park has also been diminished due to increasing wildfire smoke, which obstructs the beautiful views and is harmful to her health. [890:12-23; P107].
  - c. Claire has been harmed by the reduced snowpack in Montana and the related impacts to winter sports and tourism. [885:5-6, 887:9-16].
  - d. Claire's ability to run cross-country has been harmed by extreme heat and wildfire smoke. [889:5-12; P106]. Claire has had cross-country practices cancelled due to dangerously smoky air quality conditions. [889:9-12, 889:15-17; P106]. The heat and smoke make it difficult for Claire to train and compete in her athletic endeavors at a high level. [889:19-25].

- e. Claire's family has water rights to Bozeman Creek. [895:18-25]. Claire and her family use the water for drinking, plumbing, watering their garden, and all other water needs at their home. [895:25-896:4].
- f. Claire's water security is threatened by Montana's melting glaciers, declining snowpack, and increasing summer drought conditions, which lead to water scarcity and low water levels in Bozeman Creek. [896:21-24].
- g. In middle school, Claire raised approximately \$125,000 to have solar panels installed on her school. [875:21-877:3, 877:6-8]. The size of the solar panel installation built on her school was limited to fifty kilowatts due to state law. [878:5-8]. Without a Montana law limiting the size of solar panel installations, the school would have installed a larger solar panel system, which would have saved the school money and reduced the school's reliance on nonrenewable energy sources of energy. [878:9-897:9].
- h. As an individual born with a disability, Claire relies on the outdoors for recreational therapy to replace the physical therapy her insurance stopped providing when she was 10 years old. [892:14-893:4]. The outdoors help Claire to grow strong and her physical health continues to rely on activities like skiing, biking, hiking, and running. [893:1-19]. Claire depends on a clean and healthful environment for her physical and mental health and well-being.
- i. Climate change and Defendants' ongoing fossil fuel permitting harms Claire's mental health, causing her to feel stress, anxiety, and a sense of helplessness about the future. [897:5-21, 898:2-18].

- 258. Plaintiff Taleah Hernández is from Polson, Montana, and lives on the Flathead Indian Reservation. [713:18-23.]. Her testimony at trial was sincere and credible.
  - Taleah enjoys working with and riding horses, hiking, and paddleboarding for outdoor recreation, and all of these activities are being impacted by climate change.
     [715:8-13, 716:2].
  - b. Taleah has been forced to remain inside for extended periods of time during the summer in order to preserve her health as a result of poor air quality caused by excessive wildfire smoke. Wildfires have caused Taleah to lose electricity at her home and forced her to prepare to evacuate her home. The Boulder 2700 fire in 2021, near Finley Point on Flathead Lake, forced Taleah to cut down trees around her property for fire safety. [716:22-717:10, 717:17].
  - c. Taleah works outdoors with horses and other animals. Due to wildfire smoke creating dangerous air quality conditions, Taleah has missed days of work, lost pay, and lost opportunities to ride horses. [721:20-722:2, 722:6, 722:12-16].
  - d. Wildfires and wildfire smoke have prevented Taleah from participating in outdoor recreation activities, including hiking and paddleboarding on Flathead Lake. [723:1, 723:17-22; P155].
  - e. Changes in weather and climate patterns, including warming winter temperatures, have reduced the number of opportunities Taleah has to ice skate on Flathead Lake in the winter. [724:21-24].
  - f. Wildfires and wildfire smoke has caused Taleah physical and emotional distress. [718:8, 718:20-23, 719:11-16, 720:23-25].

- g. Taleah understands that the MEPA Limitations prevent Defendants from considering impacts to the climate when making permitting decisions and the MEPA Limitations make Taleah think Defendants are prioritizing profits over Montana's own citizens. [725:13-726:4].
- h. A successful outcome in this trial would give Taleah hope, ease her distress, and restore her faith in her state's government. [725:25-726:4, 727:21-24].
- 259. Plaintiff Eva L. is from Livingston, Montana. [215:4-5]. Her testimony at trial was sincere and credible.
  - a. Eva enjoys many outdoor activities, including backpacking, climbing, and cycling, which are central to her health and foundational to her family. [216:21-23, 217:10-12].
  - b. Eva has been harmed by wildfire smoke in Montana on numerous occasions, and Eva has suffered eye, nose, and throat irritation and headaches because of the smoky air. [233:9-234:6; P8].
  - c. Eva and her family had a family trip to Glacier National Park negatively impacted by excessive wildfire smoke, which posed risks to Eva's health and safety. [232:21-25; P8].
  - d. Eva has been harmed the impacts of extreme flooding. In 2018, flooding along the Shields River damaged a bridge, rendering impassible the primary route for Eva and her family from their home to the town of Livingston for more than a year. A temporary bridge was also washed away due to extreme flooding. Eva's family eventually decided to relocate because of this hardship because being cut off from

- town was very stressful for Eva and her family. [227:17-20, 230:3-4, 230:14-22, 231:19-232:6; P13, P35; CW-40].
- e. Eva moved to Livingston and now lives near the Yellowstone River. Eva feels a strong connection to the river and it is highly important to her mental health. In 2022, there was a major flood event along the Yellowstone River, including in Livingston. [CW-41; JS-11]. Eva helped fill sandbags to hold back the flood waters. [P108, P109]. A park near Eva's home where she frequently visits was impacted by flood waters. [P110]. Eva saw her community and close friends lose property due to flooding. [218:10-12, 221:17-20, 222:5-14, 224:19-24].
- f. The 2022 flooding in Livingston caused Eva acute emotional distress, panic, and dread. Parks and other public places she often visits have been significantly damaged, preventing her enjoyment of them. [226:19-21, 227:17-228:7].
- g. Eva's access to the Yellowstone River in summer 2016 was significantly curtailed, as a 180-mile portion of the river was closed for several weeks due to a parasite growth in cutthroat and rainbow trout perpetuated by abnormally high air temperatures and historically low river flows. Since 2016, her access to the river has been curtailed by flood events. [220:10-14, 230:17-22, 231:19-232:6].
- h. Eva has experienced forced relocation and the loss of ties to the land. [232:2-6].
- Eva has had her ability to access Montana's rivers for other recreational activities limited due to river conditions. [221:3-8].
- j. Wildfire smoke has impacted Eva's ability to hike and spend time outdoors with her family. [232:21-233:13; P8].

- k. Eva is anxious about how her family and community will be able to adapt to the devastation of public resources and infrastructure as the impacts of the climate crisis worsen. Eva is increasingly anxious about the climate change impacts she and her family are experiencing. She is distressed that the climate crisis will worsen if action is not immediately taken. [222:21-25, 234:22-24].
- A successful outcome in this lawsuit would ease Eva's anxiety and allow her to feel more secure and hopeful that she will have a healthy, safe, and secure future in the State that she loves and calls home. [235:9-12].
- 260. Plaintiff Mica K. is from Missoula, Montana. [363:14]. His testimony at trial was sincere and credible.
  - a. Rising temperatures and wildfires resulting from climate change make it difficult for Mica to recreate outdoors and participate in and enjoy the activities he loves and which are important to his health, development, and well-being. [376:1-8, 377:9-15, 378:8-11, 382:2-6; P144, P94].
  - b. Mica has been forced to spend extended periods of time indoors as a result of wildfire smoke and has lost school recess time as a result of wildfire smoke. In 2019, a forest fire started approximately one mile from Mica's home, and Mica is anxious that, as the climate crisis worsens, he may lose his family home. [376:1-8, 378:16-19, 379:8-380:8].
  - c. Wildfire smoke has impacted Mica's training as a long-distance runner. Mica is an avid runner, running his first half-marathon when he was nine. [365:13-367:23]. He runs regularly with his dad. [367:13-15; P4]. Running is a way for Mica to be in nature and relieve stress. [367:19-20, 376:13-15]. Running in smoke makes Mica

- feel sick, so he cannot run as much due to increasingly smoky summers in Missoula. [376:1-8, 376:16-19]. Smoke from wildfires has limited Mica's ability to train and compete in sports at a high level.
- d. Mica gets frustrated when he is required to stay indoors during the summer because of wildfire smoke. [376:11-12, 386:24-387:20].
- e. Mica's family now avoids camping and other outdoor activities in August and September due to wildfire smoke and its negative effect on Mica's health and safety. [378:8-11].
- f. Mica was recently diagnosed with exercise-induced asthma, which puts him at greater risk for respiratory hardship every time the air is smoky. [376:25, 377:8-15]. He was prescribed an inhaler. [377:1].
- g. Mica's favorite animal is the pika. Mica understands the pika is uniquely vulnerable to climate impacts, and its survival is in jeopardy due to climate change. [382:25-383:3].
- h. Mica's outdoor recreation activities such as enjoying the views of the glaciers in Glacier National Park are disrupted by climate change. [383:14-384:9]. Seeing the glaciers recede in Glacier National Park is depressing for Mica. [384:10-13].
- i. Climate change harms Mica's mental health, causing him to feel anxious, stressed, and depressed, and makes it hard for him to sleep at times. [384:14-385:6].
- 261. Plaintiffs Jeffrey K. and Nathaniel K. are brothers and grew up in Montana City, Montana.
  - a. Jeffrey K. has pulmonary sequestration and is uniquely susceptible to respiratory complications, such as infections. Nathaniel K. also has respiratory issues. Both

- Jeffrey and Nate, given their unique lung and health conditions, are especially vulnerable to poor air quality, such as smoke-filled air caused by wildfires. [LB 487:21-488:11, 505:4-25].
- a. The increasing length and severity of the wildfire season harms Jeffrey and Nathaniel's health, especially given their young age and pre-existing respiratory health conditions, and has forced their family to make changes in daily activities. [LB 487:21-488:11, 505:4-25].
- 262. Plaintiffs Ruby D. and Lilian D. are from Bozeman, Montana. [554:23-555:3]. Shane Doyle is Ruby and Lilian's father and legal guardian and testified on their behalf. [553:11-16]. His testimony at trial was sincere and credible.
  - a. Ruby and Lilian are of Crow descent and are members of the Crow Nation. Ruby and Lilian regularly travel to the Crow Reservation to visit family members and engage in a number of traditional cultural activities. [555:14-24, 556:8-557:17].
  - a. Ruby's Crow name is Biachagata, which means "Pretty Woman." Lilian's Crow name is Malesch, which means "Loved by Many." [555:25-556:4].
  - b. Abnormal and extreme weather conditions fostered by climate change have impacted Ruby and Lilian's ability to engage in and otherwise partake in cultural practices that are central to their spirituality and individual dignity. [559:14-561:4, 562:7-20].
  - c. Ruby and Lilian visit their family on the Crow Reservation several times a year.

    Every year Ruby and Lilian go to Crow Fair on the Crow Reservation and have attended every year of their life. Crow Fair takes place in August each year and is a large gathering to celebrate cultural activities and events. Most people, including

- Ruby and Lilian, stay in teepees. Attending Crow Fair is a highlight for Ruby and Lilian. Ruby and Lilian love dancing at Crow Fair, and enjoy the parades, rodeo, and doing family events. [555:22-24, 556:10-22, 557:14-559:4].
- d. In recent years, increasing temperatures at Crow Fair have made it hard to wear traditional regalia and participate in the cultural activities because it is dangerously hot, sometimes over 100 degrees. [559:14-561:4].
- e. Wildfire smoke has also made it difficult for Ruby and Lilian to enjoy the Crow Fair in recent years. [562:7-20].
- f. It is a huge disappointment to Ruby and Lilian when they are unable to dance or participate in other events at the Crow Fair due to heat or smoke. [561:5-21].
- g. Crow Fair used to happen at the time of year when chokecherries would be ripe, which was important because most meals eaten at Crow Fair involved chokecherries. In recent years chokecherries have become much harder to predict, and drought has meant there are less chokecherries available that sometimes are not ripe yet for the festival. [562:21-563:22].
- h. Ruby and Lilian like to pick chokecherries with their family as part of the Crow tradition. They enjoy participating in the entire process, including picking berries, processing them into syrup, and eating them. But due to drought and heat there are not as many chokecherries available and some stands that usually have berries had none. [563:23-564:25, 566:5-11, 566:25-567:24].
- Increased wildfire frequency has impacted the ability of Ruby and Lilian to participate in traditional cultural practices, such as berry picking. [562:21-563:6, 567:25-568:11].

- j. Ruby was diagnosed with asthma when she was 8 years old, and she had an acute form of pneumonia. As a result, Ruby stays inside when it is smoky, and Lilian often stays inside too. This is a disappointment for Ruby and Lilian who only get a few months of summer to enjoy being outside. [568:17-569:17].
- k. During the Bridger fire, which was just outside of Bozeman in 2020, Ruby and Lilian were worried to see a fire so close to their home and it brought up concerns about whether they were safe. [569:24-570:1, 571:1-12; P15, P100].
- 1. Climate disruption has impacted Ruby and Lilian's outdoor recreation activities, such as rafting, swimming, and floating. [573:14-574:7]. Drought has created low river conditions that have impacted Ruby and Lilian's ability to enjoy recreating on the river because it is sad when the river becomes little more than a creek. [572:4-574:7; 574:23-575:19].
- m. Ruby and Lilian believe that protecting Montana's environment and natural resources is important because in their culture taking care of the Earth is their responsibility. [576:9-20].

## VI. DEFENDANTS ARE RESPONSIBLE FOR HIGH LEVELS OF GHG EMISSIONS FROM THEIR AUTHORIZATION OF FOSSIL FUEL ACTIVITIES THAT CAUSE AND CONTRIBUTE TO THE CLIMATE CRISIS AND HARM PLAINTIFFS.

263. Ms. Anne Hedges received a B.S. in environmental policy analysis and planning from the University of California at Davis in 1988 and a Masters of Environmental Law, *magna cum laude*, from Vermont Law School in 1993. She is the Co-Director and Director of Policy and Legislative Affairs at the Montana Environmental Information Center ("MEIC"). In this role, she directs MEIC's program work, including its legislative, regulatory, policy, and legal activities. She has been working at MEIC since 1993, and her work has focused on pollution-related policy issues

in Montana, with a primary emphasis on impacts to air, water, landscapes, the climate from fossil fuels. Ms. Hedges is a well-qualified expert and the Court finds her testimony informative and credible. [AH-2].

- 264. For decades, Defendants have engaged and persisted in a long-standing pattern and practice of promoting fossil fuel activities and projects in Montana, which involves systemic authorization, permitting, encouragement, and facilitation of activities promoting fossil fuels and resulting in dangerous levels of GHG emissions. [AH 832:2-11, 836:16-8 846:3; AH-50-AH-61].
- 265. Defendants carry out their pattern and practice through many laws and aggregate actions, including the MEPA Limitations, permitting, leasing, licensing, planning for, encouraging, creating regulatory schemes and litigation in support of fossil fuel extraction, processing and transportation, and consumption. [AH 836:16-8 846:3; AH-50-AH-61; PE 932:18-933:5].
- 266. Mr. Peter Erickson received a Bachelor's degree in Geology in 1998 at Carleton College, Minnesota, as well as coursework in intermediate microeconomics and macroeconomics at the University of Washington. [PE-2]. Among other aspects of his career, Mr. Erickson worked as an environmental and climate policy and technical analyst in greenhouse gas emission accounting, most recently with the Stockholm Environment Institute, an international research institution providing, in part, technical analysis to government and NGOs on the details of climate policy and emissions accounting. Mr. Erickson's professional focus has been on fossil fuels and how to attribute greenhouse gas emissions to them and the role of policy mechanisms in reducing greenhouse gas emissions. Mr. Erickson has conducted and led research projects on behalf of numerous partners and clients, including international institutions like the United Nations Framework Convention on Climate Change and the World Bank, and domestic governments such

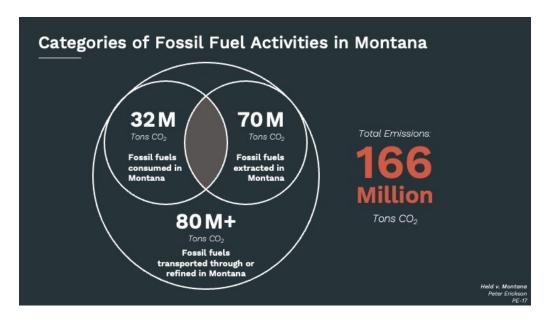
as the U.S. Environmental Protection Agency; the states of Washington and Oregon, and local governments like the City of Seattle. Mr. Erickson has authored numerous peer-reviewed studies and working papers and reports on how policies, actions, or infrastructure projects increase or decrease greenhouse gas emissions. Mr. Erickson has served on both national and international committees devoted to GHG emissions accounting: one convened by the International Council of Local Environmental Initiatives (ICLEI) to create a U.S. Community-scale GHG Emissions Accounting and Reporting Standard, as well as one convened by the Greenhouse Gas Protocol to create the Greenhouse Gas Mitigation Goals Standard. [P192]. Mr. Erickson testified about Montana's fossil fuel consumption, extraction, and infrastructure that Defendants permitted, focusing on three categories: (1) extraction of fossil fuels; (2) processing and transportation of fossil fuels; and (3) consumption of fossil fuels by end users. For each of these categories, Mr. Erickson quantified the amount of coal, oil, and gas and translated that in units of carbon dioxide (CO<sub>2</sub>) emissions released from the fuels once they are combusted. Mr. Erickson added up all of the coal, oil, and gas to determine the emissions associated with the extraction, consumption, and transportation of those fuels. In his opinion, these emissions from Montana's fossil fuel consumption, extraction, and infrastructure that Defendants permitted add up to globally significant quantities. Mr. Erickson is a well-qualified expert and the Court finds his testimony informative and credible.

267. Defendants offered the testimony of one individual, Dr. Terry Anderson, as an expert economist. Purporting to be based on data from the Energy Information Agency ("EIA"), Dr. Anderson provided extremely limited testimony in response to three questions: (1) "the total greenhouse gas emissions for the world"; (2) "the 2020 greenhouse gas consumption emissions are for the state of Montana"; and (3) "the 2022 greenhouse gas consumption emissions are for the

state of Montana." Based on the cross-examination of Dr. Anderson, including references to his expert report and Exhibit 316 (the EIA website data for Montana), and applying Rules of Evidence 608 (Evidence of character and conduct of witness) and 611 (Mode and order of interrogation and presentation; re. examination and recall; confrontation), the Court finds Dr. Anderson's testimony not credible due to the material inaccuracies of Dr. Anderson's expert report and the fact that the EIA has not published data for the 2022 greenhouse gas consumption emissions for the state of Montana.

- 268. Defendants use their legal authority to permit three types of fossil fuel-related activities: (1) extraction of fossil fuels; (2) processing and transportation of fossil fuels; and (3) consumption of fossil fuels by end users. [PE 914:12-915:3; PE-9].
- 269. Fossil fuel consumption includes any combustion, or burning, of these fuels, primarily for energy. [PE 914:18-21, 929:14-17]. Fossil fuel extraction is mining, pumping, drilling, or otherwise taking fossil fuels out of the ground for purposes of making fuels. [PE 914:12-17]. Fossil fuel processing and transportation are activities that happen between that initial extraction and the combustion by the end user, such as refining, or moving the fuels in bulk from one place to another. [PE 914:17-19; PE-11].
- 270. It is possible to calculate the amount of CO<sub>2</sub> and GHG emissions that results from fossil fuel extraction, processing and transportation, and consumption activities that are authorized by Defendants. [PE 915:13-21; P311; PE-10].
- Data indicates that in 2019, the total annual fossil fuels extracted in Montana led to about 70 million tons of CO<sub>2</sub> being released into the atmosphere once these fuels were combusted, which is higher than many other countries, including Brazil, Japan, Mexico, Spain, or the United Kingdom. [PE 922:23-923:3, 928:18-929:11, 950:13-14; PE-17].

- Data indicates that in 2019, total annual fossil fuels consumed in Montana led to about 32 million tons of CO<sub>2</sub> being released into the atmosphere, which is equivalent to amount of annual CO<sub>2</sub> emissions more than half of all countries, including Ireland, which has more than six times the population of Montana. [PE 923:5-8, 929:17-24, 950:15, 950:19-951:1; PE-17, PE-19].
- 273. Data indicates that in 2019, total annual fossil fuels transported and processed in and through Montana led to at least 80 million tons of CO<sub>2</sub> being released into the atmosphere once those fuels were combusted [PE 923:19-924:4, 950:14-15]. That is equivalent to all the GHG emissions from Columbia, which has 50 times the population of Montana. [PE 930:11-23; PE-17, PE-20].
- 274. Accounting for overlap among fossil fuels extracted, consumed, processed, and transported in Montana, the total CO<sub>2</sub> emissions due to Montana's fossil fuel-based economy is about 166 million tons CO<sub>2</sub>. [PE 924:5-18, 950:16-18; PE-18]. This is a conservative estimate and does not include all the GHG emissions, including methane, that Montana is responsible for. [PE 928:5-9; PE-17].
- 275. The 166 million tons CO<sub>2</sub> due to Montana's fossil fuel-based economy is equivalent to the emissions from Argentina (with forty-seven million residents), the Netherlands (with eighteen million residents), or Pakistan (with 248 million residents). [PE 931:22-932:9; PE-22].



- 276. In terms of per capita emissions, Montana's consumption of fossil fuels is disproportionately large and only five states have greater per capita emissions. This means Montana's emission are disproportionally large given its small population. [PE 930:19-23, 938:23-25; PE-25].
- 277. The cumulative CO<sub>2</sub> emissions from all fossil fuels extracted in Montana since 1960 is 3.7 billion metric tons of CO<sub>2</sub>. [PE 941:9-19; PE-26].
- 278. Montana is a major emitter of GHG emissions in the world in absolute terms, in per person terms, and historically. [PE 930:19-23].
- 279. Montana has six coal mines, all of which Defendants authorize: Spring Creek Mine, Rosebud Mine, Decker Mine, Absaloka, Bull Mountain, and Savage Mine. [PE 942:16-943:5]. Montana also has the nation's largest estimated recoverable coal reserves in the U.S. and Montana is a substantial exporter of coal. [AH 791:1-25; AH-7-AH-13; PE 946:1-3].
- 280. Montana's annual coal production is 34 million short tons of coal. [PE 946:5-22]. Montana's coal reserves, as of 2019, are 707 million short tons. [PE 945:21-25; PE-37].

- 281. Montana is a substantial producer of oil and gas in the United States. Defendants authorize the drilling and production of oil and gas in Montana. [PE 932:18-933:5, 949:7-15].
- 282. Montana has approximately 4,000 oil producing wells with an annual oil production of 23 million barrels. As of 2019, Montana's oil reserves were 298 million barrels. [PE 946:23-947:8; PE-36, PE-37].
- 283. Montana has approximately 5,000 gas producing wells with an annual oil production of forty-three billion cubic feet. As of 2019, Montana's gas reserves were 613 billion cubic feet. [PE 947:14-19; PE-36, PE-37].
- 284. Between 1960 and 2019 the fastest growing category of fossil fuel consumption in Montana has been gas. [PE 942:11-12].
- 285. Montana is home to four state-authorized oil refineries. [PE 948:22-24, 949:10-15]. Montana's refineries process crude oil largely from Canada and Wyoming and distribute the refined product by railroad and pipeline throughout Montana and to nearby states. [PE 948:17-949:23; PE-38].
- 286. In 2017, almost one-fifth of all U.S. natural gas imports from Canada entered the United States by pipelines that go through Montana and which are authorized by Defendants. [Def. Answer, Doc. 54 ¶ 138].
- 287. Roughly 95% of the natural gas that enters Montana passes right through the State to go to other states. [Def. Answer, Doc. 54 ¶ 138; PE 947:9-13].
- 288. Montana's land contains a significant quantity of fossil fuels yet to be extracted. [Def. Answer, Doc. 54 ¶ 139; PE 945:21-946:4, 947:16-19, 945:1-25].
- 289. Montana's GHG emissions have grown significantly since the passage of the 1972 Montana Constitution. [AH 940:15-941:2; PE-27, PE-28].

- 290. Defendants continue to approve permits and licenses for new fossil fuel activities. [AH 862:1-5; SN 1354:12-16].
- 291. Defendants have never denied a permit or license for fossil fuel activities in Montana. [AH 831:22-832:1, 846:25-847:11].
- 292. Defendants have used their legal authority to authorize, permit, and encourage fossil fuel extraction, transportation, and combustion resulting in high levels of GHG emissions and contributing to climate destabilization. [AH 831:22-832:1, 846:25-847:11, 845:14-846:3; AH-50-AH-61; PE 932:18-933:5].
- 293. In taking these affirmative acts to authorize, permit, and encourage fossil fuel extraction, since 2011 Defendants have not considered or disclosed GHG or climate change impacts in their environmental reviews because they were legally precluded from doing so. [AH 836:2-13, 845:14-846:3; AH-50-AH-61].
- 294. DEQ has used its statutory authority and discretion in a manner that has resulted in high levels of GHG emissions. [AH 831:22-832:1, 844:19-845:19; AH-50-AH-61].
- 295. DEQ issues air quality permits to facilities that emit GHG emissions. [AH 788:13-23; Def. Answer, Doc. 11 ¶ 90].
- 296. In approving surface and underground coal mining activities, DEQ has repeatedly refused to disclose the significant harms to human health and the environment from its decisions. [AH 845:14-846:3; AH-50-AH-61].
- 297. DEQ has authorized, permitted, and encouraged fossil fuel extraction, transportation, and combustion, which generate high levels of GHG emissions, contribute to the climate crisis, and harm Plaintiffs. [AH 845:14-846:24; AH-50-AH-61].

- 298. To conduct an effective environmental review to ensure compliance with the Montana Constitution for any project involving fossil fuels and GHG emissions requires Defendants to disclose and analyze the total emissions that will be added from that project to Montana's overall emissions load, and the current atmospheric concentrations of CO<sub>2</sub>, including the extraction, refining and transportation, and consumption emissions. [AH 866:22-868:19].
- 299. What happens in Montana has a real impact on fossil fuel energy systems, CO<sub>2</sub> emissions, and global warming. [PE 976:8-24; PE-40].

### VII. THE MEPA LIMITATIONS AND THEIR IMPLEMENTATION.

300. Section 75-1-201(2)(a), MCA, passed in 2011 provided in pertinent part:

(2)(a) Except as provided in subsection (2)(b), an environmental review conducted pursuant to subsection (1) may not include a review of actual or potential impacts beyond Montana's borders. It may not include actual or potential impacts that are regional, national, or global in nature.

[AH-41].

301. While this case has been pending, Judge Moses held in *MEIC v. DEQ*:

Here, the plain language of MCA 75-1-201(2)(a) precludes agency MEPA review of environmental impacts that are 'beyond Montana's borders,' but it does not absolve DEQ of its MEPA obligation to evaluate a project's environmental impacts within Montana. DEQ misinterprets the statute. They must take a hard look at the greenhouse gas effects of this project as it relates to the impacts within the Montana borders.

Order on Summary Judgment at 29:3-9, *MEIC v. DEQ*, No. DV-56-2021-0001307 (Thirteenth Dist. Ct., April 6, 2023).

- 302. Eight days after Judge Moses' ruling, HB 971 was introduced before the Montana Legislature, on April 14, 2023. HB 971 was sent to enrolling on May 1 and signed by the Governor on May 10. HB 971 clarifies § 75-1-201(2)(a), MCA to say:
  - (2)(a) Except as provided in subsection (2)(b), an environmental review conducted pursuant to subsection (1) may not include an evaluation of

- greenhouse gas emissions and corresponding impacts to the climate in the state or beyond the state's borders.
- (b) An environmental review conducted pursuant to subsection (1) may include an evaluation if:
- (i) <u>conducted jointly by</u> a state agency and a federal agency to the extent the review is required by the federal agency; <u>or</u>
- (ii) the United States congress amends the federal Clean Air Act to include carbon dioxide emissions as a regulated pollutant.
- § 75-1-201(2)(a), MCA (enacted May 10, 2023) (new language underlined). [AH-43].
- 303. On May 19, 2023, the Montana Legislature and Governor Gianforte amended various provisions of MEPA that pertain to legal challenges to MEPA environmental reviews when the Governor signed SB 557 into law. SB 557 limits redress for MEPA litigants who raise GHG or climate change issues as part of their challenge to a Montana agency's MEPA environmental review. SB 557 also limits who can challenge an agency's final decision, the scope of the challenge, and limits public participation by requiring challengers to pay a fee to compile and submit a certified record to the reviewing court. [AH 825:4-826:18; AH-45].
- 304. These three laws, collectively the "MEPA Limitations," have contributed to projects being permitted that allow an increase in the emissions of greenhouse gases. [AH 851:9-852:23; AH-51-AH-60].
- 305. Montana has known of the dangerous impacts of air pollution and climate change for at least the last thirty years. [CW 256:6-15; AH 802:13-18; AH-25, AH-26; P17, P19].
- 306. Despite knowledge of the dangers of climate change since at least the 1960s, Defendants have systemically acted to permit, lease, license, and authorize fossil fuel activities that contribute to dangerous climate disruption, while ignoring the impacts of climate change and GHG emissions. [AH 797:5-798:6, 802:13-18; AH-25, AH-26].
- 307. In 1993 the Montana Legislature passed Senate Bill 225, which enshrined Montana's State Energy Policy into law. [AH 801:9-18, 802:6-12].

- 308. Montana's government and state scientists have known about the international scientific consensus of the dangers posed by climate change since at least the 1990s when the Intergovernmental Panel on Climate Change started issuing climate assessment reports. Montana state government has also had access to the congressionally mandated national climate assessments undertaken in 2000, 2009, 2014, and 2017. [SR 139:12-140:1; AH 797:5-798:6, 802:13-18; CW 256:9-24; AH-32, AH-33, AH-34; P28, P262, P263].
- 309. In 2007, Defendants DNRC, DEQ, and the Office of the Governor were made aware of the issues concerning the impacts of climate change in Montana, including rising temperatures, accelerating warming, and reduced snowpack, and the need for Montana to reduce its GHG emissions, as a result of the 2007 Montana Climate Change Action Plan and the 2007 Montana Greenhouse Gas Inventory and Reference Case Projections 1990-2020. [CW 243:14-244:3, 256:19-24; CW-12, CW-13, CW-14; AH 806:17-807:20; AH-35, AH-36, AH-37; P2, P18].
- 310. In 2017, Defendants DNRC, DEQ, and the Office of the Governor were aware of the issues concerning the impacts of climate change in Montana as a result of the 2017 Montana Climate Assessment. [CW 243:14-244:3; AH 832:12-24; AH-49; P6].
- 311. In 2019, when Montana Governor Steve Bullock promulgated Executive Order No. 8-2019 creating the Montana Climate Solutions Council, Defendants knew that "climate change poses a serious threat to Montana's natural resources, public health, communities, and economy," and "Montanans understand that climate change is occurring and are concerned about the impacts it will have on current and future generations." [AH 832:25-833:6; AH-49; P10].
- 312. In August 2020, when the Montana Climate Solutions Council released its final report, the Montana Climate Solutions Plan ("Climate Solutions Plan"), Defendants knew the ways in which climate change was already harming Montana and its residents, through referencing rising

temperatures, early snowmelt, earlier spring runoff, flooding, changes in water availability and stream temperatures, an increase in forest mortality due to insects, and increasing wildfires. [CW 244:7-22; AH 833:7-835:10; AH-49; P36].

- 313. In August 2020, when the Montana Climate Solutions Council released the Montana Climate Solutions Plan, which included thirty-seven recommendations and strategies to reduce Montana's GHG emissions, Defendants knew of the need for Montana to rapidly reduce its reliance on fossil fuels and to eliminate nearly all GHG emissions by between 2045 and 2050. [AH 833:7-835:10; AH-49; P36].
- 314. Defendants have not implemented the thirty-seven proposed recommendations in the Climate Solutions Plan. [AH 835:8-10].
- 315. In 2021 the report Climate Change and Human Health in Montana was distributed to official in the Montana state government. [CW 245:2-246-1].
- 316. In 2011, the Montana Legislature passed SB 305, which amended the State Energy Policy to explicitly promote fossil fuels. This law reflected Defendants' past, and ongoing, policy of favoring fossil fuel development. [AH 814:2-21, 828:10-14].
- 317. Prior to 2011, Defendants were quantifying and disclosing GHG emissions and climate impacts from fossil fuel projects, including, for example, the Silver Bow Generation Project, the Roundup Power Project (Bull Mountain), and the Highwood Generating Station. [AH 808:10-19, 808:20-809:18, 809:19-810:24, 811:8-24, 813:6-23; AH-38, AH-39, AH-40; P231, P224, P232, P225, P226, P229, P237].
- 318. Since 2011, as a result of the MEPA Limitations, Defendants have been statutorily prevented from considering climate change impacts and GHG emissions when conducting environmental reviews. [AH 814:6-21, 816:17-817:14, 818:11-819:10; SN 1361:6-9; AH-42].

- 319. The MEPA Limitations explicitly prohibit state agencies from considering the impacts of climate change and GHG emissions in their environmental reviews under MEPA. [AH 814:22-815:9, 816:17-817:14, 818:11-819:10; SN 1361:6-9; AH-42].
- 320. Defendants interpret the 2011 and 2023 versions of § 75-1-201(2)(a), MCA as preventing them from evaluating GHG emissions and corresponding impacts to the climate in the state or beyond the state's borders. [AH 814:22-815:9, 816:17-817:14, 818:11-819:10; SN 1361:6-9, 1439:23-1440:3].
- 321. Pursuant to the MEPA Limitations, Defendants have deliberately ignored the dangerous impacts of the climate crisis and GHGs from fossil fuels when carrying out their authorization, permitting, encouragement, and facilitation of activities promoting fossil fuels. [AH 814:22-815:9, 816:17-817:14, 818:11-819:10; AH-51-AH-60].
- 322. The effect of the MEPA Limitations is to constrain Defendants from making fully informed decisions through their environmental analysis about the scope and scale of the impacts to the environment and Montana's children and youth when conducting environmental reviews, and constrain the authority of courts when reviewing agency permitting decisions. [AH 814:22-815:9, 816:17-817:14, 818:11-819:10, 835:18-836:10; AH-42, AH-51-AH-60].
- 323. If the MEPA Limitations are declared unconstitutional, Defendant agencies would be capable of considering GHG emissions and the impacts of projects on climate change. [AH 807:23-808:19, 821:16-25; SN 1437:4-8; P231, P224, P232, P225, P226, P229, P237].
- 324. It does not make biological or ecological sense to ignore climate change when evaluating impacts of proposed projects on aquatic ecosystems because Montana's river and lake ecosystems are interconnected with each other, as well as aquatic and terrestrial ecosystems beyond Montana's borders. Because of this interconnectivity to ecosystems both within and

beyond Montana's borders, any prohibition on the consideration of either impacts within Montana or regional impacts of climate change, is not scientifically supported. [JS 642:23-15, 646:2-647:2].

- 325. Defendants' application of the MEPA Limitations during environmental review of fossil fuel and GHG-emitting projects, prevents the availability of vital information that would allow Defendants to comply with the Montana Constitution and prevent the infringement of Plaintiffs' rights. [AH 810:13-24, 816:9-16, 820:16-821:11, 822:1-823:10; AH-51-AH-60].
- 326. Defendants authorize and certify energy projects and facilities within the State of Montana that emit substantial levels of GHG pollution, including, but not limited to, projects that burn and promote the use of fossil fuels, but pursuant to the MEPA Limitations, Defendants do not consider climate change and GHG emissions and measure those individual and cumulative emissions against the standards and restraints the Montana Constitution imposes on State conduct to protect people's rights, before authorizing and certifying energy projects and facilities. [AH 818:25-819:10, 824:8-825:3; AH-51-AH-60].
- 327. Defendants engage in a systemic pattern and practice of issuing permits, licenses, and leases that result in GHG emissions without considering how the additional GHG emissions will contribute to the climate crisis or be consistent with the standards and restraints the Montana Constitution imposes on State conduct to protect people's rights. [AH 832:2-11, 841:23-844:9, 843:1-844:5, 844:19-846:3; AH-51-AH-60].
- 328. Defendants authorize four private coal power plants to operate in the State, which generate 30% of Montana's energy production, without considering how the additional GHG emissions will contribute to the climate crisis or be consistent with the standards and restraints the Montana Constitution imposes on State conduct to protect people's rights. [AH 792:1-21].

- 329. Defendants continue to permit surface coal mining and reclamation in Montana, which results in substantial GHG emissions, without considering how the additional GHG emissions will contribute to the climate crisis or be consistent with the standards and restraints the Montana Constitution imposes on State conduct to protect people's rights. [AH 836:16-846:3; PE 934:14-15].
- 330. Defendants authorize, through licenses and leases, the exploration for and extraction of oil and gas in Montana, without considering how the additional GHG emissions will contribute to the climate crisis or be consistent with the standards and restraints the Montana Constitution imposes on State conduct to protect people's rights. [AH 793:6-18, 845:20-846:9].
- 331. Defendants have taken and continue to take affirmative actions to authorize, implement, and promote projects, activities, and plans that cause emissions of dangerous levels of GHG pollution into the atmosphere, all while ignoring the impacts of climate change and GHG emissions due to the MEPA Limitations. [AH 836:16-846:3; AH-51-AH-60; PE 932:18-933:5]. For example:
  - a. Defendants authorize and certify energy projects and facilities within the State of Montana that emit substantial levels of GHG pollution, including, but not limited to, projects that burn and promote the use of fossil fuels. [AH 836:16-846:3; PE 932:18-933:5].
  - b. DEQ approved the AM4 expansion of Rosebud Strip Mine in December 2015, a 12.1-million-ton coal mine expansion. Pursuant to the MEPA Limitations, DEQ refused to analyze how that decision would aggravate climate impacts. [AH 836:16-837:12; P259, P260, P277; AH-51].

- c. DEQ issued a MSUMRA permit to Bull Mountain Mine in January 2016, authorizing Bull Mountain Mine to produce 176 million tons of coal per year. DEQ refused, pursuant to the MEPA Limitations, to analyze how the decision would aggravate climate impacts. [AH 837:14-838:16; P243, P264; AH-52].
- d. Between 2002 and 2014, when DEQ issued twelve different permits for Signal Peak Energy to operate the Bull Mountain Mine. Since 2011, pursuant to the MEPA Limitations, DEQ refused, in its environmental assessments to consider how those GHG emissions would contribute to climate change or adversely impact Montana's environment and natural resources. [P245, P247, P256].
- e. DEQ approved the TR3 expansion of Decker Mine in 2018, allowing for strip-mining of twenty-three million tons of coal. DEQ refused, pursuant to the MEPA Limitations, to analyze how that decision would aggravate climate impacts. [P236, P238, P250, P252, P257-258].
- f. In 2020, DEQ approved revision to Spring Creek Mine, the largest coal mine in the State, allowing for recovery of additional seventy-two million tons of coal. In August 2019, DEQ refused, pursuant to the MEPA Limitations, to analyze impacts on the social cost of carbon and economic impacts from climate change in its EIS. [AH 841:23-842:20; P227, P248, P253, P255; AH-56].
- g. DEQ authorized the operation of Colstrip Steam Electric Station—which produced 13.2 million metric tons of carbon dioxide equivalent ("CO<sub>2</sub>e"), 38,015 metric tons methane, and 65,919 metric tons nitrous oxide in 2018. CO<sub>2</sub>e is a metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential (GWP). [P281, P285, P286].

- h. In 2019, when DEQ issued its Record of Decision approving Western Energy's permit application to expand coal mining at Rosebud Coal Mine Area F, where "[t]he proposed mine permit application would add 6,746 acres and approximately 70.8 million tons of recoverable coal reserves to the Rosebud Mine, extending the operational life of the mine by 8 years (at the current rate of production)." DEQ, pursuant to the MEPA Limitations, did not consider how those GHG emissions would contribute to climate change or adversely impact Montana's environment and natural resources. [AH 830:25-840:16; SN 1322:21-1323:2; P254, P277, P297; AH-54].
- i. DEQ issued the air quality permit to NorthWestern Energy for the Laurel Generating Station (now named the Yellowstone County Generating Station), a proposed gas-fired power plant. Pursuant to the MEPA Limitations, DEQ, in its environmental assessment, did not consider how those GHG emissions would contribute to climate change or adversely impact Montana's environment and natural resources. [AH 831:9-21, 844:19-845:13; P294; AH-57].
- j. In May 2022, DEQ issued its Final EIS for Rosebud Mine Area B AM5, in Colstrip, but pursuant to the MEPA Limitations, the environmental assessment did not consider how GHG emissions would contribute to climate change or adversely impact Montana's environment and natural resources. [AH 840:20-841:22; P228; AH-55].
- k. DEQ continues to issue permits for fossil fuel energy projects, including oil and gas pipelines and associated compressor stations, coal mines and coal facilities, oil and gas facilities, oil and gas leases, oil and gas drilling, petroleum refineries,

industrial facilities that burn fossil fuels, and fossil fuel power plants. Pursuant to the MEPA Limitations, DEQ does not consider how a proposed project would contribute to climate change or adversely impact Montana's environment and natural resources. [AH 845:14-846:24; PE 949:7-15, 954:2-9; P138, P224, P232, P239, P240, P241, P242, P246, P249, P251, P264, P276, P277, P278, P279, P280, P281, P282, P285-301; AH-58, AH-59, AH-60].

- l. DNRC issues permits for fossil fuel projects, including coal mines and oil and gas extraction. DNRC does not consider how GHG emissions from projects would contribute to climate change or adversely impact Montana's environment and natural resources or violate the Constitution, because of the MEPA Limitations. [P217-217; P233, P234, P235, P265-P275, P283, P284].
- 332. The Montana Legislature has taken, and continues to take action, favorable towards fossil fuels and which is designed to perpetuate and promote the State's pattern and practice of approving fossil fuel activities with deliberate disregard to GHG pollution and climate change. The Montana Legislature has taken and continues to take action hostile towards renewable energy sources. [MJ-32-MJ-38]. For example:
  - a. During the 2023 legislative session, the Montana Legislature passed SB 208, and the bill was signed into law by Governor Gianforte on May 4, 2023. [MJ-32, MJ-33].
    - SB 208 is entitled "An Act Prohibiting Local Governments from Banning or Limiting Energy Choices; Providing a Definition; Amending Sections 7-1-111 and 50-60-203, MCA; and Providing an Immediate Effective Date."

- ii. SB 208 amended § 50-60-203, MCA, to bar the Department of Labor and Industry from including in the state building code "a prohibition of or a limitation on the use of electric, natural gas, propane, or other energy source." § 50-60-203(b)(6), MCA. [MJ-33].
- iii. SB 208 also amended § 7-1-111, MCA, to prohibit local governments from exercising "any power to prohibit or impede the connection of or reconnection of an electric, natural gas, propane, or other energy or utility service provided by a public utility, municipal utility, cooperative utility, or other energy or fuel provider." § 7-1-111(26), MCA. [MJ-33].
- b. During the 2023 legislative session, the Montana Legislature passed SB 228, and the bill was signed into law by Governor Gianforte on May 4, 2023.
  - SB 228 is titled "An Act Prohibiting the Ban of Petroleum Fuel-Powered Machinery, Vehicles, Vessels, Tools, Facilities, Appliances, or Equipment; Amending Section 7-1-111, MCA; and Providing an Immediate Effective Date." [MJ-37].
  - ii. SB 228 amended § 7-1-111, MCA, to bar local governments from exercising "any power to prohibit the purchase of any fuel derived from petroleum, including but not limited to methane, propane, gasoline, and diesel fuel, or the installation or use of any vehicles, vessels, tools, or commercial and residential appliances that burn or transport petroleum fuels." [MJ-38].

- c. During the 2023 legislative session, the Montana Legislature passed HB 241, and the bill was signed into law by Governor Gianforte on May 18, 2023. [MJ-34].
  - i. HB 241 is titled "An Act Providing that the State and Local Governments Cannot Require That Buildings Be Constructed to Have Solar Panels, Batteries, or Electric Vehicle Chargers; and Amending Sections 7-1-111 and 50-60-203, MCA." [MJ-34].
  - ii. HB 241 amended § 7-1-111, MCA, to bar local governments from exercising "any power to require that buildings be constructed to have solar panels or wiring, batteries, or other equipment for solar panels or electric vehicles." § 7-1-111(26), MCA. [MJ-35].
  - iii. HB 241 also amended § 50-60-203, MCA, to prohibit the Department of Labor and Industry from including in the state building code "a requirement that buildings be constructed to have solar panels or wiring, batteries, or other equipment for solar panels or electric vehicles." § 50-60-203(5)(b), MCA. [MJ-36].
- 333. Montana's annual, historical, and cumulative GHG emissions are a result of Defendants' actions to permit and approve fossil fuel activities, in the absence of any environmental review of their impact on CO<sub>2</sub> levels in the atmosphere and climate change. [PE 932:18-933:5].
- 334. Defendants' actions cause emissions of substantial levels of GHG pollution into the atmosphere within Montana and outside its borders, contributing to climate destabilization. [SR 164:18-166:16; PE 932:18-933:5].

- 335. There has been a long-standing practice by the State of Montana to promote fossil fuels as the predominant energy source in the State and ignore the dangerous consequences to the climate system, Montana's environment and natural resources, and to Montana's youth and future generations. [AH 814:6-19, 832:2-11, 828:10-19, 855:5-20].
- 336. The 2011 and 2023 amendments to MEPA were a clear directive from the legislature to state agencies that fossil fuels were to remain a central and dominant part of Montana's energy sector and that no fossil fuel projects should be delayed or blocked because of their impact on climate change, which could no longer be considered. [AH 814:6-21, 816:1-20, 817:2-14, 818:12-819:10].
- 337. The State of Montana continues to approve projects that are responsible for significant quantities of GHG emissions, thus exacerbating the already severe climate crisis and causing further harms to Montana's environment and its citizens, especially its youth. [AH 845:14-846:2; P150].
- 338. Defendants continue to prioritize the increasing utilization, exploration, and development of Montana's fossil fuels, with deliberate disregard to GHG pollution and climate change. [AH 845:14-846:2].
- 339. Governments, including the state government of Montana, have control and influence over GHG emissions that occur both within and outside their borders. [PE 1010:10-13.]

# VIII. THE MEPA LIMITATIONS PREVENT FULL REVIEW OF THE TECHNOLOGICALLY AND ECONOMICALLY AVAILABLE ALTERNATIVES TO FOSSIL FUEL ENERGY IN MONTANA, WHICH WOULD REDRESS PLAINTIFFS' INJURIES.

340. Dr. Mark Jacobson obtained a B.S., with distinction, in Civil Engineering, a B.A. in Economics, with distinction, and a M.S. in Environmental Engineering, from Stanford University. [MJ-2]. In 1991, Dr. Jacobson obtained a M.S. in Atmospheric Sciences from UCLA;

then in 1994 a Ph.D. also in Atmospheric Sciences from UCLA. In 1994, Dr. Jacobson became an Assistant Professor in the Department of Civil & Environmental Engineering at Stanford. Since 2007, he has been a full professor in that Department. Dr. Jacobson was a co-founder and is Director of Stanford's Atmosphere/Energy Program, as well as a Senior Fellow at Stanford's Precourt Institute for Energy, and Stanford's Woods Institute for the Environment. Since 2008, Dr. Jacobson has been Director and Co-founder of The Solutions Project, an organization that utilizes the combined efforts of individuals in the fields of science, business, and culture to accelerate the transition to 100% renewable energy use in the United States. Starting in 1999, Dr. Jacobson began examining clean, renewable energy solutions. In 2015, this research culminated in the development of roadmaps to transition the all-sector energy infrastructures of each of the 50 United States to 100% clean, renewable energy by 2050, which Dr. Jacobson updated in 2022. Dr. Jacobson has published six textbooks of two editions each and over 175 peer-reviewed journal articles. Among his textbooks are 100% Clean, Renewable Energy and Storage for Everything, published by Cambridge University Press in 2020 and another book entitled, No Miracles Needed: How Today's Technology Can Save Our Climate and Clean Our Air, also published by Cambridge University Press, in 2023. Dr. Jacobson's career has focused on better understanding air pollution and global warming problems and developing large-scale clean, renewable energy solutions to those problems. Dr. Jacobson developed and applied three-dimensional atmosphere-biosphereocean computer models and solvers to simulate air pollution, weather, climate, and renewable energy. Dr. Jacobson also developed roadmaps to transition states and countries to 100% clean, renewable energy for all purposes and computer models to examine grid stability in the presence of high penetrations of renewable energy. Dr. Jacobson received the American Meteorological Society Henry G. Houghton Award in 2005 for "significant contributions to modeling aerosol chemistry and to understanding the role of soot and other carbon particles on climate"; an American Geophysical Union Ascent Award for my "dominating role in the development of models to identify the role of black carbon in climate change" in 2015; the Global Green Policy Design Award for the "design of analysis and policy framework to envision a future powered by renewable energy" in 2015; a Cozzarelli Prize from the Proceedings of the National Academy of Sciences for "outstanding scientific excellence and originality" in 2016; the Judi Friedman Lifetime Achievement Award "for a distinguished career dedicated to finding solutions to largescale air pollution and climate problems"; and was selected as "one of the world's 100 most influential people in climate policy" by Apolitical in 2019. Dr. Jacobson's individual state roadmaps were the primary scientific justifications for laws or Executive Orders in 16 U.S. states, the District of Columbia, and Puerto Rico, and laws or policies in 180 U.S. cities to transition to up to 100% clean, renewable electricity. [P191]. In this case, Dr Jacobson summarized the portion of his research related to Montana and the major conclusions and implications of his research on the feasibility of transitioning the State swiftly off of fossil fuels to clean and renewable energy in all sectors by mid-century, where all energy sectors include electricity, transportation, heating/cooling, and industry. Dr. Jacobson is a well-qualified expert and the Court finds his testimony informative and credible.

341. The MEPA Limitations lead Defendants to ignore the most efficient, healthful, and cost-effective energy sources in Montana, which is the renewable energy alternative to fossil fuels, in favor of the most polluting, least efficient, and most expensive form of energy in Montana. [MJ 1030:7-1032:24, 1035:9-23, 1069:18-1071:8, 1066:6-17, 1067:10-20; MJ-15, MJ-62, MJ-63; AH 823:15-825:3; P312].

- Non-fossil fuel-based energy systems across all sectors, including electricity, transportation, heating/cooling, and industry, are currently economically feasible and technologically available to employ in Montana now. Experts have already concluded the feasibility of, and prepared a roadmap for, the transition of Montana'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 create jobs, reduce air pollution, and save lives and costs associated with air pollution. [MJ 1030:7-1032:24, 1035:9-23, 1069:18-1071:8, 1066:6-17, 1067:10-20; P312; MJ-15, MJ-62, MJ-63].
- 343. It is technically and economically feasible for Montana to replace 80% of existing fossil fuel energy by 2030 and 100% by no later than 2050, but as early as 2035. [MJ 1072:4-23, 1100:9-1101:4; P312; MJ-62, MJ-63]. A number of countries around the world with populations far larger than Montana's relied on >95% wind, water, and sunlight ("WWS") to power their electricity sectors in 2021. [MJ-44].
- 344. In order for Montana to replace fossil fuel energy, it will need to electrify all energy sectors with existing or near-existing appliances and machines, and then to generate the electricity for all sectors with 100% WWS, namely onshore wind, utility-scale photovoltaics (PV), rooftop PV, geothermal power, and hydroelectric power. [MJ 1043:9-1045:8, 1045:15-1047:10; P312; MJ-12, MJ-15, MJ-18, MJ-19, MJ-20, MJ-29].
- 345. All-purpose Montana energy in 2050 can be met, for example, in one scenario, with 4.5 gigawatts ("GW") of onshore wind, 3 GW of rooftop PV, 2.9 GW of utility-scale PV, 0.17 GW of geothermal electricity, and 2.7 GW of hydropower (which already exists). [MJ 1057:2-1058:15; MJ-29].

- 346. Converting from fossil fuel energy to renewable energy will eliminate another \$21 billion in climate costs in 2050 to Montana and the world. Most noticeable to those in Montana, converting to wind, water, and solar energy will reduce annual total energy costs for Montanans from \$9.1 to \$2.8 billion per year, or by \$6.3 billion per year (69.6% savings). [MJ-39]. The total energy, health, plus climate cost savings, therefore, will be a combined \$29 billion per year (decreasing from \$32 to \$2.8 billion per year), or by 91%. [MJ 1061:20-1063:24; MJ-15, MJ-39, MJ-40, MJ-41, MJ-42].
- 347. Wind, water, and solar are the cheapest and most efficient form of energy. Transitioning to 100% WWS is in the economic best interest of Montana. Cost per unit of energy in a 100% WWS system in Montana would be about 15% lower than a business-as-usual case by 2050, even when including increased costs for energy storage. New wind and solar are the lowest cost new forms of electric power in the United States, on the order of about half the cost of natural gas and even cheaper compared to coal. [MJ 1045:9-1047:10, 1062:8-1063:24; MJ-20].
- 348. According to a 2018 Montana DEQ report, Understanding Energy in Montana, Montana has significant solar energy potential, comparable to many other U.S. cities. [MJ 1086:21-1087:4; P9; MJ-50].
- 349. The new footprint over land required to implement a 100% renewable energy system in Montana would be only about 0.06% of Montana's land. Utility scale solar would occupy 0.01% of Montana's land (fourteen square miles), while new wind turbines, including the land around those turbines, which could be used for agriculture, open space, or more solar panels, would occupy about 0.05% (seventy-one square miles) of Montana's land. In comparison, Montana's oil and gas wells and associated infrastructure already occupy about 304 square miles of land (0.21% of Montana land area). [MJ 1079:25-1082:3; MJ-46].

- 350. A 100% WWS developed over the next couple decades in Montana would be reliable to meet all the energy needs of Montana. There is an abundant supply of renewable energy and four ways to store renewable energy: heat storage (in water), cold storage (as ice), electricity storage (pumped hydropower, batteries, hydrogen fuel cells), and hydrogen as a form of storage (for use in long distance transportation and steel production). [MJ 1057:2-15, 1058:5-15, 1072:24-1073:7, 1076:9-1077:22, 1079:22-1082:8; MJ-15, MJ-19, MJ-45, MJ-62].
- 351. Montana's energy needs in 2050 under a 100% WWS roadmap would decline significantly (over 50%) as compared to a business-as-usual energy system due to a mix of gains in energy efficiency in vehicles and appliances, and through eliminating the significant amounts of energy required to extract, transport, and refine fossil fuels. [MJ 1045:9-1047:10; MJ-15, MJ-19, MJ-20, MJ-21, MJ-22, MJ-23, MJ-24, MJ-25, MJ-26, MJ-27, MJ-28, MJ-55].
- 352. The roadmap to WWS will keep Montana's lights on while saving money, lives, and cleaning up the air and the environment, and ultimately using less of Montana's land resources. [MJ 1061:4-1062:12, 1066:6-17, 1066:18-1067:20, 1079:22-1082:8; MJ-15, MJ-20-MJ-30, MJ-39, MJ-41, MJ-42, MJ-46, MJ-56, MJ-57, MJ-58, MJ-62].
- 353. Transitioning to 100% WWS will reduce the risk of large-scale system disruption due to large power plant outages and physical terrorism because much of the world power supply will be decentralized into more, smaller power sources. [MJ 1087:14-1091:13; MJ-54].
- 354. The current barriers to implementing the 100% renewable energy systems are neither technical nor economic. They are social and political. Such barriers are primarily a result of government policies that slow down and inhibit the transition to renewables and laws that allow for the utilization of fossil fuel development and which preclude a faster transition to a clean,

renewable energy system. [MJ 1042:15-1043:2, 1059:9-1061:3, 1100:9-1101:4, 1103:11-1104:24; MJ-15, MJ-19, MJ-20, MJ-33, MJ-35, MJ-36, MJ-38, MJ-62, MJ-63].

355. Montana has abundant renewable energy resources, which, if properly harnessed, are capable of providing more than enough of the energy needed to power all of the state's energy needs for all purposes in 2050. [MJ 1058:2-15; MJ-15, MJ-19, MJ-29, MJ-30, MJ-46, MJ-47, MJ-48, MJ-50, MJ-61, MJ-62].

# IX. THE DRAFTERS OF THE 1972 MONTANA CONSTITUTION INTENDED TO PROTECT THE RIGHTS OF YOUTH AND TO ENACT THE STRONGEST ENVIRONMENTAL RIGHTS PROVISIONS OF ANY STATE IN THE COUNTRY.

- 356. Mae Nan Ellingson, of Missoula, Montana, was a delegate to the 1972 Montana Constitutional Convention. [MNE 29:5-12]. Ms. Ellingson's testimony was informative and credible and provided useful context, including on the compilation of the records of the Constitutional Convention proceedings that Montana's courts regularly rely on. Ms. Ellingson ran for election to be a delegate to the convention on the platform of the equal rights for women, basic quality education funded by the state, and environmental protection for the state. [MNE 32:15–33:1]. Ms. Ellingson was elected to the Constitutional Convention as a delegate from Missoula County. [MNE 33:12-20].
- 357. Ms. Ellingson was one of nineteen female delegates to the Convention and was the youngest delegate at age 24, the minimum age for delegates. [MNE 37:3-5, 38:3-8].
- 358. The first "delegate proposal" advanced during the Constitutional Convention was for a constitutional provision on environmental quality, and there were four or five delegate proposals relating to environmental provisions. [MNE 39:12-23].
- 359. During Montana's 1972 Constitutional Convention, delegates placed significant emphasis on protecting natural resources and improving Montana's environment. It was the

intention of the delegates to adopt the strongest constitutional environmental provisions possible in order to protect Montana's air, water, and lands for present and future generations. [MNE 42:1-18].

- 360. Ms. Ellingson participated in the drafting of the preamble to the Constitution, which reflects the delegates love of their unique heritage through the landscape of Montana and represents the values of individual rights. [MNE 40:6-41:19].
- 361. Article IX, Section 1 of the Constitution states that "[t]he state and each person shall maintain and improve a clean and healthful environment in Montana for present and future generations." This provision came about after a long and contentious debate to strengthen the environmental article recommended by the Natural Resources Committee by including the words "clean" and "healthful." [MNE 41:20-42:18].
- As reflected in the Constitutional Convention Transcripts (March 1, 1972, Vol. V 1230), Ms. Ellingson suggested the "legislature shall provide adequate remedies" language of Article IX, Section 1 for the purpose of assuring greater protections of the current environment because she believed that if you are trying to protect the environment, you need the ability to sue or seek injunctive relief before the environmental damage is done as paying someone monetary damages after the harm is done does little good. This position was complemented by including the right to a clean and healthful environment in the Declaration of Rights in Article II of the Montana Constitution, and the decision to include the right to a clean and healthful environment as one of the unalienable rights included in the Bill of Rights passed by a vote of approximately 78 to 17. [MNE 43:1-46:21].
- 363. During the Constitutional Convention, there were concerns among the delegates over the constitutional rights for people under the age of eighteen, and Article II, Section 15 in the

Declaration of Rights was included to ensure that Montana's youth had the same fundamental rights as adults. This section was adopted with broad support. [MNE 46:24-47:24].

364. During Montana's 1972 Constitutional Convention, delegates placed significant emphasis on protecting natural resources and improving Montana's environment. It was the intention of the delegates to adopt the strongest preventative and anticipatory constitutional environmental provisions possible in order to protect Montana's air, water, and lands for present and future generations. [MNE 42:2-18].

## **CONCLUSIONS OF LAW**

- 1. To the extent that any of the foregoing Findings of Fact incorporate Conclusions of Law or the application of law to fact, they are incorporated herein as Conclusions of Law.
  - 2. The Findings of Fact support and are incorporated into the Conclusions of Law.
- 3. This Court has personal jurisdiction over the parties and subject matter jurisdiction over the issues in this case.
  - 4. The First Judicial District Court is a proper venue for this action.
- 5. The Conclusions of Law are conformed to the evidence presented at trial by both parties. The Court will address the constitutionality of SB 557, which was addressed by both parties during trial and in trial briefing. *See, e.g.*, Docs. 390, 402.

- I. THE MEPA LIMITATIONS AND DEFENDANTS' PATTERN AND PRACTICE OF APPROVING FOSSIL FUEL ACTIVITIES WITH DELIBERATE DISREGARD TO GHG POLLUTION AND CLIMATE CHANGE IS SUBJECT TO STRICT SCRUTINY.
- 6. Any statute, policy, or rule which implicates a fundamental right must be strictly scrutinized and can only survive scrutiny if the State establishes a compelling state interest and that its action is closely tailored to effectuate that interest and is the least onerous path that can be taken to achieve the State's objective. *Montana Env't Info. Ctr. v. Dep't of Env't Quality*, 1999 MT 248, ¶ 61, 296 Mont. 207, 988 P.2d 1236 ("MEIC"); *Park Cnty. Env't Council v. Montana Dep't of Env't Quality*, 2020 MT 303, ¶ 18, 402 Mont. 168, 477 P.3d 288.
- 7. The MEPA Limitations, MCA § 75-1-201(2)(a) as it was in effect from 2011-2023 and clarified by HB 971 in 2023, as well as the limitations effectuated through SB 557 in 2023, and the pattern and practice of each of the Defendants in approving fossil fuel activities with deliberate disregard to GHG pollution and climate change, as sanctioned by law, are subject to strict scrutiny because they implicate Plaintiffs' fundamental rights and rights of equal protection as a suspect class.
- 8. Equal protection claims involving fundamental rights or a suspect class are also evaluated under strict scrutiny. *In re S.L.M.*, 287 Mont. 23, 32, 951 P.2d 1365, 1371 (1997).
- 9. Montana's fundamental rights—those that are either found in the Declaration of Rights or rights "without which other constitutionally guaranteed rights would have little meaning"—are evaluated on a strict scrutiny standard. *Butte Cmty. Union v. Lewis*, 219 Mont. 426, 430, 712 P.2d 1309, 1311 (1986); *Snetsinger v. Mont. Univ. Sys.*, 2004 MT 390, ¶ 17, 325 Mont. 148, 104 P.3d 445.

### II. PLAINTIFFS HAVE PROVEN STANDING.

### A. Plaintiffs Have Proven Injury at Trial.

- 10. As described herein, Youth Plaintiffs have experienced past and ongoing injuries as a result of the conduct of each of the Defendants, including injuries to the Youth Plaintiffs' physical health, mental health, homes and property, recreational, spiritual, and aesthetic interests, tribal and cultural traditions, economic security, and happiness.
- 11. The climate system is destabilized due to fossil fuel development and use and is dangerous for Plaintiffs.
- 12. A stable climate requires atmospheric CO<sub>2</sub> concentrations of 350 ppm or less, according to the best available science.
- 13. Every additional ton of CO<sub>2</sub> emissions exacerbates Plaintiffs' injuries and risks locking in irreversible climate injuries.
- 14. Plaintiffs' injuries will grow increasingly severe and irreversible without science-based actions to address the ongoing and worsening climate crisis that make it harder to return atmospheric CO<sub>2</sub> levels from 420 ppm to below 350 ppm during the Plaintiffs' lifetimes.
- 15. Plaintiffs have proven that as children and youth, they are disproportionately harmed by fossil fuel pollution and climate impacts.
- 16. Plaintiffs have proven that their injuries are concrete, particularized, and distinguishable from the public generally.
- 17. Plaintiffs suffer and will continue to suffer injuries due to Defendants' pattern and practice of approving fossil fuel activities while ignoring climate change and GHG emissions due to the MEPA Limitations.

#### B. Plaintiffs Have Proven Causation at Trial.

- 18. There is a causal relationship between the MEPA Limitations, which carry out the fossil fuel energy program of the State of Montana, and the role of each of the Defendants in the allowance of resulting fossil fuel GHG emissions, which contribute to and exacerbate Plaintiffs' injuries.
- 19. There is a causal relationship between Defendants' pattern and practice of permitting and approving fossil fuel activities with deliberate disregard to GHG pollution and climate change, as sanctioned by the MEPA Limitations, resulting in GHG emissions over which the State has control, climate change, and Plaintiffs' proven injuries.
- 20. Each of the Defendants has the authority under the statutes by which they operate to protect Montana's environment and natural resources, protect the health and safety of Montana's youth, and alleviate and avoid climate impacts by limiting fossil fuel activities that occur in Montana when the MEPA analysis shows that those activities are resulting in harm that is violative of the Montana Constitution.
- 21. Montana's contributions to GHG emissions can be measured incrementally and cumulatively both in terms of immediate local effects and by mixing in the atmosphere and contributing to global climate change and an already destabilized climate system.
- 22. Montana's GHG contributions are not *de minimis* but are nationally and globally significant. Montana's GHG emissions cause and contribute to climate change and Plaintiffs' injuries and reduce the opportunity to alleviate Plaintiffs' injuries.

## C. Plaintiffs Have Proven Redressability at Trial.

- 23. The MEPA Limitations on their face sanction the continuation of fossil fuel activities that cause climate change and foster Defendants' deliberate disregard of GHGs and climate change. This deliberate disregard and perpetuation of fossil fuel energy has especially harmful effects on children and youth who are already living with the dangers of climate change and will experience these harms more acutely and for much longer than adults. Eliminating the deliberate indifference and sanction of law that keeps fossil fuels in place will provide the opportunity for an energy transition that will benefit these youth in the multitude of the ways described above and by the unrefuted testimony in this case from Plaintiffs' experts.
- 24. Defendants can alleviate the harmful environmental effects of Montana's fossil fuel activities through the lawful exercise of their authority if they were allowed to consider GHG emissions and climate change during MEPA review, which would provide the clear information needed to conform their decision-making to the best science and their constitutional duties and constraints, and give them the necessary information to deny permits for fossil fuel activities when inconsistent with protecting Plaintiffs' constitutional rights.
- 25. Montana's land contains a significant quantity of fossil fuels yet to be extracted. Defendants' pattern and practice is to permit every application to extract and develop fossil fuels with deliberate disregard for GHG emissions and climate change and the constitutional standard required to protect the climate system and Plaintiffs' constitutional rights.
- 26. A declaration of the constitutional parameters of Defendants' conduct in this time of climate crisis will ensure Defendants are not infringing on the rights of Plaintiffs when implementing state laws and constitutional obligations.

- 27. A declaration that Plaintiffs' constitutional rights are currently breached because the climate system is destabilized, will provide meaningful redress because Defendants will conform their conduct to avoiding further breach of rights and remedying the current breach.
- A reduction in Montana's GHG emissions that results from a declaration that Montana's MEPA Limitations, and Defendants' pattern and practice of permitting and approving fossil fuel activities with deliberate disregard to GHG pollution and climate change, are unconstitutional would provide partial redress of Plaintiffs' injuries because the amount of additional GHG emissions emitted into the climate system today and in the coming decade will dictate the long-term severity of the heating and the severity of Plaintiffs' injuries.
- 29. It is not too late to prevent harm and degradation to Montana's environment and natural resources and injuries to these Plaintiffs. Montana's environment and natural resources can be protected and restored if governments, including the State of Montana, do their part to help stabilize the climate system by transitioning away from fossil fuel energy.
- 30. There can be immediate redress for Plaintiffs' psychological injuries with declaratory relief. Declaratory relief will immediately alleviate a portion of Plaintiffs' psychological injuries by making it clear that their existing constitutional injuries and anxiety of worsening climate change were heard by the judiciary and redressed as allowed by law. Declaratory relief will help restore Plaintiffs' confidence in the functioning of their democracy and demonstrate to them that there is recourse for government conduct that violates their constitutional rights while making clear Defendants are not above the law.

31. Injunctive relief requiring Defendants to fully evaluate the environmental and human health harm in their pattern and practice of decision-making over the fossil fuel energy system to ensure that they comply with the constitutional standard declared will also help provide redress for Plaintiffs' psychological injuries because Plaintiffs will then know that their government is taking meaningful, science-based action to respond to the dangers posed by the climate crisis and making fully informed decisions prior to undertaking fossil fuel permitting activities.

### III. DEFENDANTS HAVE VIOLATED MONTANA'S CONSTITUTION.

32. At the outset, this Court notes the Montana Supreme Court's instruction:

We conclude, based on the eloquent record of the Montana Constitutional Convention that to give effect to the rights guaranteed by Article II, Section 3 and Article IX, Section 1 of the Montana Constitution they must be read together and consideration given to all of the provisions of Article IX, Section 1 as well as the preamble to the Montana Constitution. In doing so, we conclude that the delegates' intention was to provide language and protections which are both anticipatory and preventative. The delegates did not intend to merely prohibit that degree of environmental degradation which can be conclusively linked to ill health or physical endangerment. Our constitution does not require that dead fish float on the surface of our state's rivers and streams before its farsighted environmental protections can be invoked. The delegates repeatedly emphasized that the rights provided for in subparagraph (1) of Article IX, Section 1 was linked to the legislature's obligation in subparagraph (3) to provide adequate remedies for degradation of the environmental life support system and to prevent unreasonable degradation of natural resources.

## MEIC, ¶ 77.

- 33. The Preamble to Montana's Constitution states: "We the people of Montana grateful to God for the quiet beauty of our state, the grandeur of our mountains, the vastness of our rolling plains, and desiring to improve the quality of life, equality of opportunity and to secure the blessings of liberty for this and future generations do ordain and establish this constitution."
- 34. The purpose of Montana's Constitution is to benefit both present and future generations of Montanans.

- A. MEPA Limitations and Defendants Pattern and Practice Violate Plaintiffs' Right to a Clean and Healthful Environment Mont. Const. Art. II, §§ 3, 15; Art. IX, § 1.
- 35. Montana's Constitution provides: "All persons are born free and have certain inalienable rights. They include the right to a clean and healthful environment . . . ." Mont. Const. art. II, § 3. Consistent with the provision of these rights and responsibilities, the Montana Constitution further provides: "The state and each person shall maintain and improve a clean and healthful environment in Montana for present and future generations." Mont. Const. art. IX, § 1(1).
- 36. Article II, § 3 and Article IX, § 1 are to be read in conjunction, along with the Preamble to Montana's Constitution. *MEIC*, ¶¶ 65, 77.
- 37. The right to a clean and healthful environment is a fundamental right protected by Article II, § 3 and Article IX, § 1(1) of Montana's Constitution. *MEIC*, ¶ 64.
- 38. Montana's children under age eighteen, have a fundamental right to a clean and healthful environment. Mont. Const. art. II, § 15. The right to a clean and healthful environment is intended to protect Montana's children and future generations.
- During Montana's 1972 Constitutional Convention, delegates placed significant emphasis on protecting natural resources and improving Montana's environment. It was the intention of the delegates to adopt the strongest constitutional environmental provisions possible in order to protect Montana's air, water, and lands for present and future generations. The Montana Supreme Court has recognized that "it was agreed by both sides of the debate that it was the convention's intention to adopt whatever the convention could agree was the stronger language." *MEIC*, ¶ 75 (citing Convention Transcripts, Vol. IV at 1209, Mar. 1, 1972). The Montana Supreme Court has repeatedly found that the Framers intended the state constitution contain "the strongest environmental protection provision found in any state constitution." *Park Cnty.*, ¶ 61.

- 40. The Constitutional Framers "did not intend to merely prohibit that degree of environmental degradation which can be conclusively linked to ill health or physical endangerment." *MEIC*, ¶ 77. As Delegate Foster noted: "[I]f we put in the Constitution that the only line of defense is a healthful environment and that I have to show, in fact, that my health is being damaged in order to find some relief, then we've lost the battle." *MEIC*, ¶ 74 (citing Convention Transcripts, Vol. V at 1243-44, Mar. 1, 1972).
- 41. The right to a clean and healthful environment language in Montana's Constitution is "forward-looking and preventative language" which "clearly indicates that Montanans have a right not only to reactive measures after a constitutionally-proscribed environmental harm has occurred, but to be free of its occurrence in the first place." *Park Cnty.*, ¶ 62.
- 42. The right to a clean and healthful environment requires enhancement of Montana's environment, as compared to 1972. According to the Constitutional Delegates, "our intention was to permit no degradation from the present environment and affirmatively require enhancement of what we have now." MEIC, ¶ 69 (quoting Convention Transcripts, Vol. IV at 1205, Mar. 1, 1972) (emphasis in original).
- 43. Montanans' right to a clean and healthful environment is complemented by an affirmative duty upon their government to take active steps to realize this right. Article IX, § 1, Subsections 1 and 2 of the Montana Constitution command that the Legislature "shall provide for the administration and enforcement" of measures to meet the State's obligation to "maintain and improve" the environment. Critically, Subsection 3 explicitly directs the Legislature to "provide adequate remedies to prevent unreasonable depletion and degradation of natural resources." Mont. Const. art. IX, § 1(3); *Park Cnty.*, ¶ 63.

- 44. The obligations of the Legislature found in Article IX, § 1 include providing "adequate remedies for the protection of the environmental life support system from degradation."
- 45. According to Delegate McNeil, "the term 'environmental life support system' is all-encompassing, including but not limited to air, water, and land; and whatever interpretation is afforded this phrase by the Legislature and courts, there is no question that it *cannot be degraded*." *MEIC*, ¶ 67 (citing Convention Transcripts, Vol. IV at 1201, Mar. 1, 1972) (emphasis in original).
- Montana's constitutional right to a clean and healthful environment prohibits environmental degradation that causes ill health or physical endangerment and unreasonable depletion or degradation of Montana' natural resources for this and future generations: "Our conclusions in *MEIC I* are consistent with the constitutional text's unambiguous reliance on preventative measures to ensure that Montanans' inalienable right to a 'clean and healthful environment' is as evident in the air, water, and soil of Montana as in its law books. Article IX, Section 1, of the Montana Constitution describes the environmental rights of 'future generations,' while requiring 'protection' of the environmental life support system 'from degradation' and 'prevent[ion of] unreasonable depletion and degradation' of the state's natural resources. This forward-looking and preventative language clearly indicates that Montanans have a right not only to reactive measures after a constitutionally-proscribed environmental harm has occurred, but to be free of its occurrence in the first place." *Park Cnty.*, ¶ 62.
- 47. Based on the plain language of the implicated constitutional provisions, the intent of the Framers, and Montana Supreme Court precedent, a stable climate system is included in the "clean and healthful environment" and "environmental life support system." Mont. Const. art. II, § 3; art. IX, § 1.

- 48. A stable climate system is one that is free from dangerous levels of anthropogenic CO<sub>2</sub> emissions.
- 49. It is uncontroverted that the best scientific indicia of a stable climate system is when measured atmospheric CO<sub>2</sub> levels are 350 ppm or less. An atmospheric concentration of CO<sub>2</sub> above 350 ppm constitutes a destabilized climate system and a dangerous level of CO<sub>2</sub> pollution.
- 50. Montana's climate system, environment, and natural resources are unconstitutionally destabilized, degraded, and depleted due to the current atmospheric concentration of CO<sub>2</sub> above 350 ppm.
- The right to a clean and healthful environment allows plaintiffs to obtain equitable relief before harm occurs. According to the Supreme Court: "When considering which remedies are 'adequate' in this context, we note that equitable relief, unlike monetary damages, can avert harms that would have otherwise arisen. It follows that equitable relief must play a role in the constitutional directive to ensure remedies that are adequate to prevent the potential degradation that could infringe upon the environmental rights of present and future generations. We are not alone in this conclusion. As Delegate Mae Nan Robinson pointed out during the 1972 Constitutional Convention: if you're really trying to protect the environment, you'd better have something whereby you can sue or seek injunctive relief before the environmental damage has been done; it does very little good to pay someone monetary damages because the air has been polluted or because the stream has been polluted if you can't change the condition of the environment once it has been destroyed. *MEIC I*, ¶ 71." *Park Cnty.*, ¶ 64.
- 52. "The essential purpose of MEPA is to aid in the agency decision-making process otherwise provided by law by informing the agency and the interested public of environmental

impacts that will likely result from agency actions or decisions." *Bitterrooters for Planning, Inc.*, v. Mont. Dep't of Env't Quality, 2017 MT 222, ¶ 18, 388 Mont. 453, 401 P.3d 712.

- 53. "MEPA is an essential aspect of the State's efforts to meet its constitutional obligations." *Park Cnty.*, ¶ 89; § 75-1-102, MCA.
- 54. The stated policy of MEPA makes clear that the State should use "all practicable means" "so that the state may: (a) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations; (b) ensure for all Montanans safe, healthful, productive, and aesthetically and culturally pleasing surroundings; (c) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences . . . ." § 75-1-103, MCA.
- 55. The State of Montana has and continues to implement its pattern and practice of approving projects that are responsible for significant quantities of GHG emissions, thus exacerbating the already severe climate crisis and causing further harms to Montana's environment and its citizens, especially its youth.
- 56. Defendants are failing to meet their affirmative duty to protect Plaintiffs' right to a clean and healthful environment, including their right to a stable climate system.
- 57. The MEPA Limitations are aptly described as "limitations" because they categorically limit what the agencies, officials, employees, and judiciary tasked with protecting Montana's clean and healthful environment can consider. The legislature has unconstitutionally consolidated power over Montana's energy system, fossil fuel activities, GHGs, and climate change in one branch of government—the legislature and the industry applicants who seek to develop and use fossil fuels, precluding the public from active participation, precluding the executive branch from carrying out their duties under the Constitution, and precluding the judiciary

from its vital role as a check on the unconstitutional conduct of the other two branches. On their face, the MEPA Limitations conflict with the very purpose of MEPA, which is to aid the State in meeting its constitutional obligation to prevent degradation by "informing the agency and the interested public of environmental impacts that will likely result" from State actions. *Bitterrooters* ¶ 18; § 75-1-102(1), MCA ("The legislature, mindful of its constitutional obligations under Article II, section 3, and Article IX of the Montana constitution, has enacted the Montana Environmental Policy Act . . . [to] provide for the adequate review of state actions in order to ensure that: (a) environmental attributes are fully considered . . . .").

- 58. The plain language of the MEPA Limitations bars the agencies from considering GHG emissions and climate impacts for any project or proposal, even to assess whether the project complies with the Montana Constitution.
- 59. The MEPA Limitations are unconstitutionally contributing to the depletion and degradation of Montana's environment and natural resources and causing and contributing to the dangerous destabilization of the climate system and harm to the Plaintiffs. Defendants' past and ongoing actions deprive Plaintiffs of their constitutionally guaranteed rights under Montana Constitution, Article II, Section 3, and Article IX, Section 1.
- 60. By excluding consideration of climate change, GHG emissions, and how additional GHG emissions will contribute to the climate crisis or be consistent with the standards and restraints in the Montana Constitution, and preventing judicial remedies therefore, the MEPA Limitations violate Plaintiffs' right to a clean and healthful environment, including Plaintiffs' right to a stable climate system, and are therefore unconstitutional on their face.
- 61. Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to their contribution of GHGs and climate change violates Plaintiffs' right to a clean and

healthful environment, including Plaintiffs' right to a stable climate system, and is therefore unconstitutional.

- B. MEPA Limitations and Defendants' Pattern and Practice Violate Plaintiffs' Rights Under the Public Trust Doctrine Mont. Const. Art. IX, §§ 1, 3(3), Art. II, §§ 3, 15.
- 62. Under Article IX, Section 3(3) of Montana's Constitution, "All surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided by law." Montana sits at the top of the water tower, which encompasses these public trust resources. The Montana Supreme Court has recognized this provision as an underpinning of the Public Trust Doctrine for water rights, including atmospheric waters, under the Montana Constitution. *Galt v. Montana*, 225 Mont. 142, 731 P.2d 912, 914-15 (1987); *see also, Mont. Trout Unlimited v. Beaverhead Water Co.*, 2011 MT 151, ¶¶ 29, 30, 361 Mont. 77, 255 P.3d 179.
- 63. Article IX, Section 1(3) mandates that, "The legislature shall provide adequate remedies for the protection of the environmental life support system from degradation and provide adequate remedies to prevent unreasonable depletion and degradation of natural resources."
- 64. The nature of the environmental rights and responsibilities provided for by Articles II and IX cannot be interpreted separately and are applied in tandem. Thus, state action that implicates either will be strictly scrutinized. Articles II and IX, taken together with Montana's common law, provide a compelling basis for the Courts' recognition of the Public Trust Doctrine over the atmosphere in Montana.
- 65. Montana's children under age eighteen, have a fundamental right to Montana's public trust resources. Mont. Const. art. II, § 15.
- 66. The rights of present and future generations of Montanans, as beneficiaries under the Public Trust Doctrine, are an attribute of sovereignty that predate Montana's Constitution, are

secured and complemented by the Montana Constitution and common law, and they cannot be abrogated.

- 67. Montana's Public Trust Resources include essential natural resources that are of vital public concern to the citizens of Montana, including the atmosphere, air, water, fish and wildlife, wetlands, public lands, submerged lands, and the banks of waters to the high-water mark. A stable climate system is an essential trust resource protected by the Public Trust Doctrine.
- 68. The atmosphere is indistinguishably interrelated with water and there is always water in the atmosphere. Harm to the atmosphere negatively affects Montana's water tower, waters across the state, fish and wildlife, wetlands, and public lands.
- 69. Public Trust rights include the rights of present and future generations to access, use, and enjoy these essential resources that are protected by Montana's Public Trust Doctrine. The public's interest in using and accessing such vital natural resources includes the rights of navigation, fishing, hunting, commerce, and recreational uses.
- 70. The Public Trust Doctrine imposes an affirmative obligation on the State of Montana and each Defendant as trustee, to maintain control, protect, preserve, and prevent substantial impairment to and waste of Public Trust Resources for the benefit of all Montanans, including Plaintiffs and future generations of Montanans. Each Defendant, as trustee, also has an obligation to refrain from acting in a manner that abdicates the protection and preservation of Public Trust Resources.
- 71. The Public Trust Doctrine imposes an affirmative duty on the State of Montana and each Defendant to administer and manage Public Trust Resources, including the atmosphere, with loyalty to and in the interest of trust beneficiaries, including Plaintiffs as well as all present and future generations of Montanans.

- 72. Defendants, as trustees, have a duty of impartiality prohibiting them from favoring one class or generation of trust beneficiaries over another in the management of Public Trust Resources.
- 73. An atmospheric concentration of CO<sub>2</sub> above 350 ppm constitutes substantial impairment to Montana's public trust resources. *See, e.g., In re Hawai'i Elec. Light Co., Inc.,* 152 Haw. 352, 371 (2023) (Wilson, J., concurring).
- 74. Montana's public trust resources are unconstitutionally impaired due to the current atmospheric concentration of CO<sub>2</sub> above 350 ppm.
- 75. The MEPA Limitations unconstitutionally cause the substantial impairment to, and waste of, Montana's public trust resources, including the atmosphere, a stable climate system, the water tower, waters of Montana, fish and wildlife, and Montana's public lands.
- 76. Defendants, through the MEPA Limitations, have abdicated control over and alienated substantial portions and capacities of public trust resources without accounting for the substantial detriment caused, thereby authorizing private parties to in essence treat our atmosphere as a dump for the resulting carbon emissions to the detriment of Plaintiffs and future generations of Montanans.
- 77. The MEPA Limitations prejudice the public trust rights and interests of Plaintiffs and future generations of beneficiaries in violation of Defendants' duties of loyalty, impartiality, and prudence.
- 78. Defendants engage in a pattern and practice of approving fossil fuel projects that are responsible for significant quantities of GHG emissions with deliberate disregard to their contribution of GHGs and climate change, thus exacerbating the already severe climate crisis and causing further harms to Montana's public trust resources and the beneficial uses of those

resources by its citizens, especially its youth. Defendants are thereby failing to meet their affirmative duty to protect Montana's public trust resources for the benefit of Plaintiffs and future generations of Montanans.

- 79. Defendants, by and through the MEPA Limitations and their pattern and practice of permitting fossil fuel activities, have breached their affirmative duty to protect and prevent substantial impairment to all essential natural public trust resources, for present and future generations under Article IX, Section 1(1) of the Montana Constitution.
- 80. By excluding consideration of climate change, GHG emissions, and how additional GHG emissions will contribute to the climate crisis or be consistent with the standards and restraints in the Montana Constitution, and preventing judicial remedies therefore, the MEPA Limitations violate Montana's Public Trust Doctrine, and are therefore unconstitutional on their face.
- 81. Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to their contribution of GHGs and climate change violate Montana's Public Trust Doctrine, and is therefore unconstitutional.

# C. MEPA Limitations and Defendants' Pattern and Practice Violate Plaintiffs' Right of Equal Protection – Mont. Const. Art. II, §§ 4, 15.

- 83. Per Article II, Sections 4 and 15, Montana's youth and children under the age of 18, have a right not to be denied the equal protection of the laws. *In re S.L.M.*, 287 Mont. at 34-35, 951 P.2d at 1372-73 (citing Convention Transcripts, Vol. II at 635–36, Mar. 1, 1972).
- 84. The principal purpose of the equal protection clause is to ensure that citizens are not subject to discriminatory state action. *Powell v. State Comp. Ins. Fund*, 2000 MT 321, ¶ 22, 302 Mont. 518, 15 P.3d 877; *Mont. Cannabis Indus. Ass'n v. Montana*, 2016 MT 44, ¶ 15, 382 Mont. 256, 368 P.3d 1131.

- 85. The three-step process to analyzing an equal protection claim is: (1) identify the classes involved and determine if they are similarly situated; (2) determine the appropriate level of scrutiny to apply to the challenged legislation; and (3) apply the appropriate level of scrutiny to the challenged statute. *Gazelka v. St. Peter's Hosp.*, 2018 MT 152, ¶ 15, 392 Mont. 1, 420 P.3d 528; *Goble v. Mont. State Fund*, 2014 MT 99, ¶ 28, 374 Mont. 453, 325 P.3d 1211.
- 86. The classes involved in this case are children (under 18), youth (age 18-25), and adults (over 25). "[T]he Montana Constitution specifically compares the rights of children with those of adults." *In re C.H.*, 210 Mont. 184, 202, 683 P.2d 931, 940 (1984).
- 87. Children and youth are similarly situated as adults because "they are equivalent in all relevant respects other than the factor constituting the alleged discrimination." *Goble*, ¶ 29. Children, youth, and adults similarly live on the land, breathe the air, and depend on the waters, the climate system, the natural environment, and public trust resources of Montana for their basic survival and individual dignity. The discriminating factor is that the MEPA Limitations and Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to GHG pollution and climate change, as sanctioned by law, substantially burden children and youth with a lifetime of hardship due to their developing bodies and minds, activities which are outside children's and youths' control and cannot be redressed by their own actions. Adults, whose bodies and brains are fully developed and have greater tools and resilience, will not experience the same lifetime burden of physical, psychological, and spiritual harm (otherwise known as "Adverse Childhood Experiences"), will not be exposed to the adverse climate impacts at the same frequency and duration as children and youth, and will not live with the results of the state law and conduct as long as children and youth.

- While age has been deemed not a suspect class, see, e.g., Arneson v. Montana by & Through Dep't of Admin., Teachers' Ret. Div., 262 Mont. 269, 273, 864 P.2d 1245, 1248 (1993); In re Wood, 236 Mont. 118, 125, 768 P.2d 1370, 1375 (1989), Montana's courts have never explicitly ruled on whether children and youth are a suspect class in matters where government conduct knowingly burdens them with a lifetime of hardship; a burden not similarly placed on adults.
- 89. "A suspect class is one 'saddled with such disabilities, or subjected to such a history of purposeful unequal treatment, or relegated to such a position of political powerlessness as to command extraordinary protection from the majoritarian political process." *In re C.H.*, 210 Mont. at 198, 683 P.2d at 938 (citing *San Antonio Sch. Dist. v. Rodriguez*, 411 U.S. 1, 28 (1973) (holding "youthful contemners" who have been deemed delinquent are not a suspect class compared to "youths in need of supervision").
- Other rights, even the most basic, are illusory if the right to vote is undermined." *Larson v. Montana*, 2019 MT 28, ¶ 81, 394 Mont. 167, 434 P.3d 241 (McKinnon, L., dissenting) (citations omitted). Children are similarly situated as adults in being dependent on a stable climate system and in being subjected to the MEPA Limitations and Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to GHG pollution and climate change, as sanctioned by law, decisions over which they have no political power, making any discrimination against them especially invidious.

- 91. Children and youth faced with climate crisis are saddled with special disabilities and relegated to a position of political powerlessness that requires extraordinary protection from the majoritarian political process that continues to enact laws like the MEPA Limitations and engage in pattern and practices of approving fossil fuel activities with deliberate disregard to GHG pollution and climate change, as sanctioned by law, that damage the life-sustaining climate system on which children and youth depend.
- 92. The Montana Supreme Court has recognized that "society's duty to the child could not be confined by the concept of justice alone," but that the State had a special duty to provide care and solicitude to children. *In re C.H.*, 210 Mont. at 189-90, 205, 683 P.2d at 934 (the record showed the child benefitted from the court's involvement where disparate treatment was in the interest of protecting the youth). The Montana Supreme Court has also recognized special burdens that inure to the lack of full adulthood status in our youth. *Mont. Democratic Party v. Jacobsen*, 2022 MT 184, ¶¶ 32-33, 410 Mont. 114, 518 P.3d 58 (young voters with student identification denied voting rights were burdened in their exercise of their right to vote).
- 93. "The [United States] Supreme Court has recognized that the interests of minors and adults are quantitatively different because of the particular vulnerability of children, their inability to make critical decisions in an informed, mature manner, and the importance of the parental role in child rearing. *See Bellotti v. Baird*, 443 U.S. 622(1979)[] (*reh. den.*, 444 U.S. 887 [(1979)])." *In re C.H.*, 210 Mont. at 203, 683 P.2d at 941.
- 94. These children and youth are entitled to suspect class status based on their physiological, psychological, longevity, dependency, and political powerlessness differences from adults who are similarly situated in Montana's environment and climate system. As a result, strict scrutiny applies.

- 95. Children and youth today have the exceptional disability of being born into and living their entire lives in a destabilized climate system where atmospheric concentrations of CO<sub>2</sub> are above the safe level of 350 ppm and rising, which constitutes an infringement of the Youth Plaintiffs' rights to equal protection of the laws.
- 96. The MEPA Limitations and the State's pattern and practice of approving fossil fuel activities with deliberate disregard to GHG pollution and climate change, as sanctioned by law, worsen an already destabilized climate system and thus infringe the Youth Plaintiffs' right to equal protection of the laws.
- 97. The MEPA Limitations and Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to GHG pollution and climate change, as sanctioned by law, discriminate against Plaintiffs as members of the protected class of children and youth and is not narrowly tailored to serve a compelling state interest.
- 98. While the MEPA Limitations are neutral on their face with respect to children and youth, they violate their rights of equal protection because, in effect, they establish "a device designed to impose different burdens on different classes of persons": here children and youth born into an existing climate crisis versus generations of adults who have not suffered the burdens of a lifetime of hardship in childhood and will not live as long with the consequences of their voting and the laws and pattern and practices of their government. *Cf. Montana v. Spina*, 1999 MT 113, ¶85, 294 Mont. 367, 982 P.2d 421.
- 99. Even if Plaintiffs are not deemed members of a suspect class, they are entitled to strict scrutiny of their equal protection claims because the discrimination is to rights that are fundamental under Montana's Constitution. Thus, the evidence at trial supports a finding that each of the Defendants have violated the equal protection clause, as informed by the juvenile rights

clause, for discriminating with respect to fundamental rights. *In re S.L.M.*, 287 Mont. at 34, 39, 951 P.2d at 1372, 1375 (applying strict scrutiny and finding equal protection and juvenile rights violations regarding discrimination as to physical liberty).

- 100. By excluding consideration of climate change, GHG emissions, and how additional GHG emissions will contribute to the climate crisis or be consistent with the standards and restraints in the Montana Constitution, the MEPA Limitations violate Plaintiffs' right of equal protection, and are therefore unconstitutional on their face.
- 101. Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to their contribution of GHGs and climate change violate Plaintiffs' right of equal protection, and is therefore unconstitutional.
  - D. MEPA Limitations and Defendants' Pattern and Practice Violate Plaintiffs' Fundamental Right to Individual Dignity Mont. Const. Art. II, §§ 4, 15.
- 106. "The dignity of the human being is inviolable." Mont. Const. art. II, § 4. A violation of the right to human dignity has been recognized as a stand-alone right. Mont. Const. art. II, § 4; Walker v. Montana, 2003 MT 134, ¶¶ 72-75, 316 Mont. 103, 68 P.3d 872; Baxter v. Montana, 2009 MT 449, ¶ 74, 354 Mont. 234, 224 P.3d 1211 (Nelson, J., concurring). The right to individual dignity preserved under Art. II, § 4, known as the Dignity Clause, is a fundamental right. *Id*.
- 107. The Dignity Clause "commands that the intrinsic worth and the basic humanity of persons may not be violated." Walker, ¶ 82.
- 108. Government conduct violates an individual's right to dignity when it deprives an individual of their intrinsic worth and basic humanity; causes mental illness; causes physical harm; deprives one of the basic necessities for human existence; or deprives an individual of the right to freely and meaningfully practice their cultural and spiritual beliefs. *See* Matthew O. Clifford &

- Thomas P. Huff, Some Thoughts on the Meaning and Scope of the Montana Constitution's "Dignity" Clause with Possible Applications, 61 Mont. L. Rev. 301, 321, n.92 (2000).
- One's physical and mental health is a vital component of one's dignity. Where State conduct affects the health and safety, and therefore dignity, of a vulnerable population, there must be an evidentiary showing that agents of the State subjected plaintiffs "to a substantial risk of serious harm to [their] health or safety and (2) that [state] officials 'acted with deliberate indifference to [their] health and safety' through a conscious disregard of that risk." *Disability Rts. Mont. v. Mont. Jud. Dists. 1-22*, No. OP 20-0189, 2020 WL 1867123, at \*3 (Mont. Apr. 14, 2020) (citing *Wilson v. State*, 2010 MT 278, ¶¶ 30-32, 358 Mont. 438, 249 P.3d 28; *Walker*, ¶¶ 73-76).
- Defendants' concomitant pattern and practice of approving fossil fuel activities with deliberate disregard to GHG pollution and climate change, as sanctioned by law, subjected and continues to subject Plaintiffs to serious harm to their health and safety, with deliberate indifference to the actual harm being suffered and the increased risk of worsening harm from actions by each of the State Defendants. The MEPA Limitations and conduct infringe Plaintiffs' fundamental right to individual dignity by harming their physical and mental health and safety.
- 111. The MEPA Limitations explicit language that, "an evaluation of greenhouse gas emissions and corresponding impacts to the climate in the state or beyond the state's borders," and the testimony of Anne Hedges, Chris Dorrington, Director of Montana DEQ and Sonja Nowakowski, Administrator of the Air, Energy and Mining Division for the Montana DEQ, demonstrate the deliberate indifference and conscious disregard of the risk by each of the State Defendants.

- 112. "Article II, Section 4, requires that people have an equal right to form and to follow their own values in profoundly spiritual matters." *Armstrong v. State*, 1999 MT 261, ¶ 72, 296 Mont. 361, 989 P.2d 364. "Respect for the dignity of each individual—a fundamental right, protected by Article II, Section 4 of the Montana Constitution—demands that people have for themselves the moral right and moral responsibility to confront the most fundamental questions about the meaning and value of their own lives and the intrinsic value of life in general, answering to their own consciences and convictions." *Id.* This is a vital element of the fundamental right to individual human dignity.
- 113. The MEPA Limitations and the pattern and practice of each Defendant agency in approving fossil fuel activities with deliberate disregard to GHG pollution and climate change, as sanctioned by law, demean the basic dignity of Plaintiffs by infringing on their ability to freely and meaningfully practice their cultural and spiritual beliefs.
- Indigenous Youth Plaintiffs like Sariel, Ruby, and Lillian, form and follow their spiritual beliefs and practices by learning from their Elders in the traditional methods of oral tradition and deep connection with the circle of life and all of their human and non-human relatives. Montana's warming temperatures, lack of snow, drought, fires, and floods are altering the very foundations of the spiritual heritage and traditions of these Indigenous Youth Plaintiffs from time immemorial. In both ignoring fossil fuel GHGs and climate change, all the while blindly permitting fossil fuel activities to continue, and even increase, which exacerbates the conditions harming the spiritual beliefs and practices of these youth, Defendants infringe upon Plaintiffs' fundamental right to individual dignity.
- 115. Youth Plaintiffs like Rikki, Grace, Georgi, Lander, Badge, and Kian whose families have lived on the land in Montana for generations and engage in cultural practices of fishing and

hunting, and winter recreating, and find spiritual meaning and value in these ways of living with the natural environment of Montana, also experience infringement to their individual dignity. When the heat decreases snowpack and causes early runoff that leaves rivers dry in summer and skies smoky from fires during hunting seasons, these extreme weather events change not only the ability of humans to thrive outside, but also wildlife, as well as the ability of these Youth Plaintiffs to find the meaning and value in their own lives and live by the convictions of their families and their heritage. As a result, the right of Plaintiffs to human dignity is violated, causing significant harm to mental health and well-being, and thus infringements to their fundamental rights to individual dignity.

- 116. By excluding consideration of climate change, GHG emissions, and how additional GHG emissions will contribute to the climate crisis or be consistent with the standards and restraints in the Montana Constitution, the MEPA Limitations violate Plaintiffs' right of individual dignity, and are therefore unconstitutional on their face.
- 117. Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to their contribution of GHGs and climate change violate Plaintiffs' right of individual dignity, and is therefore unconstitutional.
  - E. MEPA Limitations and Defendants' Pattern and Practice Violate Plaintiffs' Fundamental Right to Physical Liberty -- Mont. Const. Pmbl., Art. II, §§ 3, 4, 17.
- Reading the Preamble and Article II, Sections 3, 4, and 17 together, the Montana Constitution protects physical liberty as a fundamental right "without which other constitutionally guaranteed rights would have little meaning." *In re C.H.*, 210 Mont. at 201, 683 P.2d at 940. All Youth Plaintiffs hold this fundamental right to physical liberty.

- 119. The physical liberty rights of children under the age of eighteen are, at minimum, equal to adult rights and are only limited when exceptions are necessary for children's own protection, such as in the instance of extra care and rehabilitation by the state. *In re C.H.*, 210 Mont. at 202-03, 683 P.2d at 940-41.
- 120. The MEPA Limitations and Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to GHG pollution and climate change, as sanctioned by law, are not designed, nor do they in effect provide extra care and rehabilitation of youth by the State and, thus, do not fall under the exception of providing special protection for children. The laws and state conduct thereunder serve the opposite purpose of specially burdening, rather than protecting, children.
- 121. The MEPA Limitations and Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to GHG pollution and climate change, as sanctioned by law, strip Youth Plaintiffs of their physical liberty by contributing to local air pollution harms and increasing the global concentration of atmospheric CO<sub>2</sub> above levels that are deemed safe for Youth Plaintiffs' bodies, due to the increased temperatures, wildfires, and smoke conditions, which impair physical health, limit physical activity and freedom outdoors, eliminate physical opportunities enjoyed by the Youth Plaintiffs, shorten longevity, and harm mental health.
- 122. The substantial diminishment of physical liberty exemplified by the testimony of Plaintiffs Claire, Grace, Mica, Kian, Georgi, Rikki, Badge, and other Youth Plaintiffs and their experts more than establish the infringement of the fundamental right to physical liberty.
- 123. By excluding consideration of climate change, GHG emissions, and how additional GHG emissions will contribute to the climate crisis or be consistent with the standards and

restraints in the Montana Constitution, the MEPA Limitations violate Plaintiffs' right to physical liberty, and are therefore unconstitutional on their face.

- 124. Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to their contribution of GHGs and climate change violate Plaintiffs' right to physical liberty, and is therefore unconstitutional.
  - F. MEPA Limitations and Defendants' Pattern and Practice Violate Plaintiffs' Right to Seek Safety, Health, and Happiness Mont. Const. Art. II, §§ 3, 15, 17.
- 125. Article II, Section 3 of Montana's Constitution guarantees the rights to seek safety, health, and happiness in all lawful ways to all persons. Article II, Section 17 provides: "[n]o person shall be deprived of life, liberty, or property without due process of law."
- 126. Montana's children under age eighteen, have a fundamental right to seek safety, health, happiness, and a stable climate system. Mont. Const. art. II, § 15.
- 127. The right to a stable climate system is included in the right to safety, health, and happiness. A stable climate system is one that is free from dangerous levels of anthropogenic CO<sub>2</sub> emissions and atmospheric CO<sub>2</sub> concentrations of 350 ppm or less.
- 128. Plaintiffs' rights to safety, health, happiness, and a stable climate system, are unconstitutionally infringed due to the current atmospheric concentration of CO<sub>2</sub> above 350 ppm.
- 129. The MEPA Limitations deprive Plaintiffs of their rights to seek safety, health, happiness, and a stable climate system because it exposes these vulnerable children to physical injury and disease, as well as serious psychological, social, and spiritual harm and trauma; interferes with their capacity for growth and development; interferes with their pursuit of happiness in Montana's beautiful nature, and threatens their personal security and family life, all in violation of Plaintiffs' rights under Article II, Section 3, and Section 17.

- 130. Defendants have engaged in a pattern and practice and continue to act affirmatively to place Plaintiffs in a position of foreseeable danger, with deliberate indifference to their safety, health, happiness, and a stable climate system.
- 131. The MEPA Limitations and Defendants' ongoing pattern and practice to permit fossil fuel activities place Plaintiffs in a position of danger, violating their rights to seek safety, health, happiness, and a stable climate system.
- 132. By excluding consideration of climate change, GHG emissions, and how additional GHG emissions will contribute to the climate crisis or be consistent with the standards and restraints in the Montana Constitution, the MEPA Limitations violate Plaintiffs' right to seek safety, health, happiness, and a stable climate system, and are therefore unconstitutional on their face.
- 133. Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to their contribution of GHGs and climate change violate Plaintiffs' right to safety, health, happiness, and a stable climate system, and is therefore unconstitutional.

## G. The MEPA Limitations Do Not Pass Strict Scrutiny.

- 134. As the MEPA Limitations infringe on fundamental rights, the MEPA Limitations must pass strict scrutiny. *Mont. Cannabis Indus. Ass'n v. Montana*, 2012 MT 201, ¶ 16, 366 Mont. 224, 286 P.3d 1161 ("*Mont. Cannabis Indus Ass'n* (2012)"); see also Kloss v. Edward D. Jones & Co., 2002 MT 129, ¶ 52, 310 Mont. 123, 54 P.3d 1.
- 135. Under strict scrutiny, "the government must show that the law is narrowly tailored to serve a compelling government interest." *Mont. Cannabis Indus. Ass'n* (2012), ¶ 16.
- 136. Each of the Defendants failed to show that any of the MEPA Limitations serve a compelling governmental interest.

- 137. Not one of the Defendants put forward any evidence of a compelling governmental interest for any of the MEPA Limitations.
- 138. Undisputed testimony established that each of the Defendants can evaluate "greenhouse gas emissions and corresponding impacts to the climate in the state or beyond the state's borders" when evaluating fossil fuel activities. Indeed, Defendants have performed such evaluations in the past.
- 139. Undisputed testimony established that clean renewable energy is technically feasible and economically beneficial in Montana to power 100% of Montana's energy needs for all purposes and can be fully achieved before 2050.
- 140. Assuming, arguendo, there were a compelling state interest, each of the MEPA Limitations is not narrowly tailored to meet the interest of the State.
- 141. The MEPA Limitations are inconsistent with the "essential purpose of MEPA . . . to aid in the agency decision-making process otherwise provided by law by informing the agency and the interested public of environmental impacts that will likely result from agency actions or decisions." *Bitterrooters*, ¶ 18.
- 142. Each of the MEPA Limitations, as enacted, neither serves a compelling state interest nor is narrowly tailored and, thus, fails strict scrutiny.
  - H. Defendants' Pattern and Practice of Approving Fossil Fuel Activities With Deliberate Disregard to GHG Emissions and Corresponding Impacts to the Climate in Montana or Beyond the State's Borders, as Allowed by the MEPA Limitations, Do Not Pass Strict Scrutiny.
- 143. The conduct of each of the Defendants that is part of the pattern and practice of approving fossil fuel activities with deliberate disregard to GHG emissions and corresponding impacts to the climate in the State or beyond the State's borders, as allowed by the MEPA

Limitations, infringes on fundamental rights, and such conduct must pass strict scrutiny. *Mont. Cannabis Indus. Ass'n* (2012), ¶ 16; *see also Kloss*, ¶ 52.

- 144. Under strict scrutiny, "the government must show that the law is narrowly tailored to serve a compelling government interest." *Mont. Cannabis Indus. Ass* 'n (2012), ¶ 16.
- 145. Each of the Defendants failed to show that Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to GHG emissions and corresponding impacts to the climate in Montana or beyond the State's borders serves a compelling governmental interest.
- 146. Not one of the Defendants put forward any evidence of a compelling governmental interest for Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to GHG emissions and corresponding impacts to the climate in Montana or beyond the State's borders.
- 147. Undisputed testimony established that clean renewable energy is technically feasible and economically beneficial in Montana to power 100% of Montana's energy needs for all purposes and can be fully achieved before 2050.
- Permitting statutes give Defendants ample discretion to deny permits for fossil fuel activities. *See, e.g.,* §§ 75-2- 203-204, MCA (discretion under Clean Air Act of Montana to prohibit facilities that cause air pollution); § 75-2-211(2)(a), MCA (DEQ to provide rules governing suspension or revocation of air quality permits); § 75-2-218(2), MCA (DEQ has discretion to deny air quality permits); § 75-2-217(1), MCA (DEQ to provide rules governing suspension or revocation of operating permits); § 75-20-301, MCA (DEQ can only approve permits for Major Facility Siting Act facilities after considering numerous discretionary factors, including environmental impacts and public health, welfare, and safety); § 77-3-301, MCA (state

lands "may" be leased for coal if "in the best interests of the state"); § 77-3-401, MCA (state lands "may" be leased for oil and gas if consistent with the Constitution); § 82-4-102(3)(a), MCA (stating purpose of surface and underground mining and reclamation laws to vest DEQ with rulemaking authority to "either approve or disapprove" new strip mines or new underground mines); § 82-4-227, MCA (DEQ has wide discretion to refuse mining permits).

- 149. Defendants must either: 1) have discretion to deny permits for fossil fuel activities when the activities would result in unconstitutional levels of GHG emissions, unconstitutional degradation and depletion of Montana's environment and natural resources, or infringement of the constitutional rights of Montana's children and youth; or 2) the permitting statutes themselves must be unconstitutional.
- 150. Courts should avoid constitutional issues whenever possible. *Park Cnty.*, ¶ 54. Under the doctrine of constitutional avoidance, this Court clarifies that Defendants do have discretion to deny permits for fossil fuel activities that would result in unconstitutional levels of GHG emissions, unconstitutional degradation and depletion of Montana's environment and natural resources, or infringement of the constitutional rights of Montana's children and youth.
- 151. Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to GHG emissions and corresponding impacts to the climate in Montana or beyond the State's borders is not narrowly tailored and, thus, fails strict scrutiny.

### **ORDER**

- 1. Based upon the foregoing Findings of Fact and Conclusions of Law the Court determines and declares that:
  - 2. The Youth Plaintiffs have standing to bring the claims addressed herein.

- 3. Montana's GHG emissions have been proven to be fairly traceable to the conduct of each of the Defendants.
- 4. Montana's GHG emissions and have been proven to be a substantial factor in causing climate impacts to Montana's environment and harm and injury to the Youth Plaintiffs.
- 5. This judgment will influence the conduct of each of the Defendants, including the State, and alleviate the Youth Plaintiffs' injuries and contribute to the prevention of further injury.
- 6. By excluding an evaluation of GHG emissions and corresponding impacts to the climate in Montana or beyond Montana's borders, as well as how additional GHG emissions will contribute to the climate crisis or be consistent with the standards and restraints in the Montana Constitution, the MEPA Limitations violate Youth Plaintiffs' right to a clean and healthful environment, which includes Youth Plaintiffs' right to a stable climate system, and are therefore unconstitutional on their face.
- 7. Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to their contribution of GHGs and climate change violates Youth Plaintiffs' right to a clean and healthful environment, which includes Youth Plaintiffs' right to a stable climate system, and is therefore declared unconstitutional.
- 8. By excluding an evaluation of GHG emissions and corresponding impacts to the climate in Montana or beyond Montana's borders, as well as how additional GHG emissions will contribute to the climate crisis or be consistent with the standards and restraints in the Montana Constitution, the MEPA Limitations violate Montana's Public Trust Doctrine, and are therefore unconstitutional on their face.

- 9. Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to their contribution of GHGs and climate change violates Montana's Public Trust Doctrine, and is therefore declared unconstitutional.
- 10. By excluding an evaluation of GHG emissions and corresponding impacts to the climate in Montana or beyond Montana's borders, as well as how additional GHG emissions will contribute to the climate crisis or be consistent with the standards and restraints in the Montana Constitution, the MEPA Limitations violate Youth Plaintiffs' right of equal protection, and are therefore declared unconstitutional on their face.
- 11. Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to their contribution of GHGs and climate change violates Youth Plaintiffs' right of equal protection, and is therefore declared unconstitutional.
- 12. By excluding an evaluation of GHG emissions and corresponding impacts to the climate in Montana or beyond Montana's borders, as well as how additional GHG emissions will contribute to the climate crisis or be consistent with the standards and restraints in the Montana Constitution, the MEPA Limitations violate Youth Plaintiffs' right to individual dignity, and are therefore declared unconstitutional on their face.
- 13. Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to their contribution of GHGs and climate change violates Youth Plaintiffs' right to individual dignity, and is therefore declared unconstitutional.
- 14. By excluding an evaluation of GHG emissions and corresponding impacts to the climate in Montana or beyond Montana's borders, as well as how additional GHG emissions will contribute to the climate crisis or be consistent with the standards and restraints in the Montana

Constitution, the MEPA Limitations violate Youth Plaintiffs' right to physical liberty, and are therefore declared unconstitutional on their face.

- 15. Defendants' pattern and practice of approving fossil fuel activities with deliberate disregard to their contribution of GHGs and climate change violates Youth Plaintiffs' right to physical liberty, and is therefore declared unconstitutional.
- 16. By excluding an evaluation of GHG emissions and corresponding impacts to the climate in Montana or beyond Montana's borders, as well as how additional GHG emissions will contribute to the climate crisis or be consistent with the standards and restraints in the Montana Constitution, the MEPA Limitations violate Youth Plaintiffs' right to seek safety, health, happiness, and a stable climate system, and are therefore declared unconstitutional on their face.
- 17. Plaintiffs have a fundamental constitutional right to a stable climate system, without which other constitutionally guaranteed rights would have little meaning.
  - 18. A stable climate system has atmospheric CO<sub>2</sub> concentration of 350 ppm or less.
- 19. The 2011 version of § 75-1-201(2)(a), MCA, is hereby declared unconstitutional and is permanently enjoined.
- 20. The 2023 version of § 75-1-201(2)(a), MCA, enacted into law by HB 971, is hereby declared unconstitutional and is permanently enjoined.
- 21. The amendments to § 75-1-201, MCA, enacted into law by SB 557 from the 2023 legislative session, is hereby declared unconstitutional and is permanently enjoined.
- 22. In addition to the findings, conclusions, and declarations set forth above, injunctive relief is appropriate, prohibiting Defendants from acting in accordance with the statutes and patterns and practices herein declared unconstitutional, and requiring Defendants to fully evaluate the environmental and human health harm of their decisions over Montana's fossil fuel energy

system to ensure that these decisions comply with the above-described constitutional rights, obligations, and standards.

- 23. Judgment is hereby found in favor of the Plaintiffs as prevailing party.
- 24. The Youth Plaintiffs requested an award of reasonable attorneys' fees and costs. (Doc. 1 at 104.). Pursuant to Rule 54 (d), Mont. R. Civ. P., Youth Plaintiffs shall submit their motion for fees and costs and documentation in support of their request for fees and costs, within 14 days of the date of this Order. Defendants shall have 14 days thereafter to respond, and shall have the opportunity to request a hearing pursuant to the provisions of Rule 43 (c), Mont. R. Civ. P. The Court reserves jurisdiction to issue its final judgment to include the issue of attorneys' fees and costs.

DATED this 5th day of July, 2023.

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#### **CERTIFICATE OF SERVICE**

I certify that a true and correct copy of the foregoing was delivered by email to the following on July 5th, 2023:

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