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Attorneys for Plaintiffs

MONTANA FIRST JUDICIAL DISTRICT COURT LEWIS AND CLARK COUNTY

RIKKI HELD, et al.,	Cause No. CDV-2020-307
Plaintiffs,	Hon. Kathy Seeley
ν.	
STATE OF MONTANA, et al.,	PLAINTIFFS' REBUTTAL EXPERT DISCLOSURES
Defendants.	

COMES NOW Plaintiffs Rikki Held, *et al.*, by counsel, pursuant to the Court's Modified Scheduling Order (Doc. 145), entered June 15, 2022, and pursuant to Rule 26 M.R.Civ.P., provide the following rebuttal expert witness disclosures in response to Defendants' Expert Witness Disclosure filed October 31, 2022 (Doc. 227) (and supplemented on November 22, 2022), and the expert reports of Dr. Judith Curry (dated October 27, 2022, supplemented November 22, 2022) and Dr. Terry L. Anderson (dated October 28, 2022). Plaintiffs reserve the right to amend these rebuttal expert witness disclosures and/or provide additional disclosures of expected opinion testimony and/or rebuttal testimony once discovery is completed and as may be required or allowed by the Court's Modified Scheduling Order.

Plaintiffs may call any or all of the following witnesses at trial to offer rebuttal expert witness testimony.

REBUTTAL EXPERT WITNESSES

1. Dr. Steven Running, Ph.D., M.S.
College of Forestry & Conservation, University of Montana
Numerical Terradynamic Simulation Group

32 Campus Dr. Missoula, MT 59812

The subject matter and substance of the facts and opinions to which Dr. Running is expected to offer rebuttal testimony, and a summary of the grounds for Dr. Running's opinions, are contained in his rebuttal report and referenced literature, attached as **Exhibit A**, and his expert report, referenced literature, list of publications, and curriculum vitae filed with this Court on September 30, 2022. Dr. Running jointly authored his rebuttal report with Dr. Whitlock. Dr. Running's rebuttal opinions are based on his education, training, experience in the field of global ecosystem monitoring, and his review of the pleadings and Defendants' expert disclosures. Dr. Running's rebuttal opinions are to a reasonable degree of scientific certainty.

Dr. Running, with Dr. Whitlock as co-author of the rebuttal expert report, may provide rebuttal expert testimony explaining, among other things, that: (a) Dr. Curry's expert report cherry-picks data and ignores long-term climate trends with respect to temperature, precipitation, snow accumulation and snowmelt, stream runoff, and wildfires in Montana; (b) Dr. Curry's attempts to dispute long-term climate trends by relying on individual years with extreme weather events is not how climate scientists properly evaluate long-term climate trends; (c) Dr. Curry's and Dr. Anderson's conclusions that Montana's greenhouse gas emissions are insignificant and do not contribute to increasingly frequent and severe climate impacts in Montana are inconsistent with the overwhelming scientific evidence that each ton of additional greenhouse gas emissions contributes to climate impacts, as well as the evidence documenting such impacts on Montana's terrestrial ecosystems and communities.

2. Dr. Cathy L. Whitlock, Ph.D., M.S. Earth Sciences, Montana State University Montana Institute on Ecosystems

Leon Johnson Hall, Bozeman, MT 59715

The subject matter and substance of the facts and opinions to which Dr. Whitlock is expected to offer rebuttal testimony, and a summary of the grounds for Dr. Whitlock's opinions, are contained in her rebuttal report and referenced literature, attached as **Exhibit A**, and her expert report, referenced literature, list of publications, and curriculum vitae filed with this Court on September 30, 2022. Dr. Whitlock jointly authored her rebuttal report with Dr. Running. Dr. Whitlock's opinions are based on her education, training, experience in the field of paleoecology and climate change, and her review of the pleadings and Defendants' expert disclosures. Dr. Whitlock's rebuttal opinions are to a reasonable degree of scientific certainty.

Dr. Whitlock, with Dr. Running as co-author of the rebuttal expert report, may provide rebuttal expert testimony explaining, among other things, that: (a) Dr. Curry's expert report cherry-picks data and ignores long-term climate trends with respect to temperature, precipitation, snow accumulation and snowmelt, stream runoff, and wildfires in Montana; (b) Dr. Curry's attempts to dispute long-term climate trends by relying on individual years with extreme weather events is not how climate scientists properly evaluate long-term climate trends; (c) Dr. Curry's and Dr. Anderson's conclusions that Montana's greenhouse gas emissions are insignificant and do not contribute to increasingly frequent and severe climate impacts in Montana are inconsistent with the overwhelming scientific evidence that each ton of additional greenhouse gas emissions contributes to climate impacts, as well as the evidence documenting climate impacts on Montana's terrestrial ecosystems and communities.

3. Dr. Daniel B. Fagre, Ph.D., M.S.
United States Geological Survey
Northern Rocky Mountain Science Center

Glacier National Park, West Glacier, MT 59936

The subject matter and substance of the facts and opinions to which Dr. Fagre is expected to offer rebuttal testimony, and a summary of the grounds for Dr. Fagre's opinions, are contained in his rebuttal report and referenced literature, attached as **Exhibit B**, and his expert report, referenced literature, and curriculum vitae filed with this Court on September 30, 2022. Dr. Fagre's opinions are based on his education, training, experience in the field of hydroclimate and glaciers, and his review of the pleadings and Defendants' expert disclosures. Dr. Fagre's opinions are to a reasonable degree of scientific certainty.

Dr. Fagre may provide expert testimony on the retreat of glaciers in the last few decades, including the glaciers of Glacier National Park, as a result of human-caused global warming. Dr.

Fagre's rebuttal report describes how Dr. Curry's opinions on glacier loss in Montana are inconsistent with the scientific literature, which shows unequivocally that anthropogenic climate change—and not natural variability—is causing Montana's glaciers to recede, with many glaciers already lost completely. Dr. Fagre's rebuttal report provides expert testimony as to the deficiencies in Dr. Curry's report concerning the rate of glacier loss and notes that Dr. Curry's report ignores recent scientific papers described in Dr. Fagre's September 30, 2022 expert report that conclude melting mountain glaciers are categorical evidence of anthropogenic climate change and which project the complete loss of glaciers in the Northern Rocky Mountains, including in Glacier National Park, unless global warming is drastically limited.

4. Peter Erickson Stockholm Environment Institute

1402 3rd Ave #900, Seattle, WA 98101

The subject matter and substance of the facts and opinions to which Mr. Erickson is expected to offer rebuttal testimony, and a summary of the grounds for Mr. Erickson's opinions, are contained in his rebuttal report and referenced literature, attached as **Exhibit C**, and his expert report, list of publications, and curriculum vitae filed with this Court on September 30, 2022. Mr. Erickson's opinions are based on his education, training, experience in the field of greenhouse gas emissions quantification, abatement and policy analysis, and his review of the pleadings and Defendants' expert disclosures. Mr. Erickson's opinions are to a reasonable degree of certainty.

Mr. Erickson may provide expert testimony on fossil fuel consumption, extraction, and infrastructure in Montana, according to three categories of activities: extraction of fossil fuels; processing and transportation of fossil fuels; and consumption of fossil fuels by end users. Mr. Erickson's rebuttal report provides expert testimony addressing misinterpretations and errors put

forth by Dr. Curry and Dr. Anderson in their expert reports—namely, that Montana's greenhouse gas emissions are not nationally or globally significant. Mr. Erickson's rebuttal report provides expert testimony that Dr. Curry and Dr. Anderson ignore the scientific opinions of the Intergovernmental Panel on Climate Change that every ton of carbon dioxide emissions adds to global warming, increasing the frequency and severity of climate impacts.

5. Dr. Richard Barrett, Ph.D., M.A. University of Montana

Agnes Ave., Missoula, MT

The subject matter and substance of the facts and opinions to which Dr. Barrett is expected to offer rebuttal testimony, and a summary of the grounds for Dr. Barrett's opinions, are contained in his rebuttal report and referenced literature, attached as **Exhibit D**, and his expert report, referenced literature, and resume filed with this Court on September 30, 2022. Dr. Barrett's opinions are based on his education, training, experience in the field of economics, and his review of the pleadings and Defendants' expert disclosures. Dr. Barrett's opinions are to a reasonable degree of certainty in the field of economics.

Dr. Barrett may provide expert testimony on how Montana's use of fossil fuel-based energy resources and certain economic activities are not economically beneficial to Montana's state economy. Dr. Barrett's rebuttal report provides expert testimony that specifically refutes Dr. Anderson's expert report, and which supports Dr. Barrett's testimony in his expert report, showing that the current and future social costs of producing and consuming additional fossil fuels outweigh the net private economic gains from such production. Dr. Barrett's rebuttal report provides expert testimony identifying errors in Dr. Anderson's critique of Dr. Barrett's benefit-cost analysis.

6. Dr. Mark Jacobson, Ph.D., M.S., M.S. Atmosphere/Energy Program, Stanford University

473 Via Ortega, Room 397 Stanford, CA 94305, USA

The subject matter and substance of the facts and opinions to which Dr. Jacobson is

expected to offer rebuttal testimony, and a summary of the grounds for Dr. Jacobson's opinions,

are contained in his rebuttal report and referenced literature, attached as Exhibit E, and his expert

report, list of publications, and resume filed with this Court on September 30, 2022. Dr. Jacobson's

opinions are based on his education, training, experience in the field of civil and environmental

engineering, and his review of the pleadings and Defendants' expert disclosures. Dr. Jacobson's

opinions are to a reasonable degree of scientific certainty.

Dr. Jacobson may provide expert testimony on the feasibility of transitioning the State of

Montana to 100% clean, renewable energy in all energy sectors by mid-century, including the

energy sectors of electricity, transportation, heating/cooling, and industry. Dr. Jacobson's rebuttal

report provides expert testimony identifying flaws in Dr. Curry's argument that Montana cannot

meet 100% of its energy needs from renewable energy systems. Dr. Jacobson's rebuttal report

provides expert testimony that fossil fuels create energy insecurity whereas wind, water, and solar

energy systems increase grid reliability and increase energy security.

7. Dr. Lori Byron, M.D., M.S., FAAP SCL Health, St, Vincent Healthcare

P.O. Box 1972

75 Highway 308

Red Lodge, MT 59068

The subject matter and substance of the facts and opinions to which Dr. Lori Byron is

expected to offer rebuttal testimony, and a summary of the grounds for Dr. Lori Byron's opinions,

are contained in her rebuttal report and referenced literature, attached as Exhibit F, and her expert

PLAINTIFFS' REBUTTAL EXPERT DISCLOSURES

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report, referenced literature, list of publications, and curriculum vitae filed with this Court on September 30, 2022. Dr. Lori Byron jointly authored her rebuttal report, and her September 30, 2022 expert report, with Dr. Robert Byron. Dr. Lori Byron's opinions are based on her education, training, experience as a pediatrician, her review of the pleadings and Defendants' expert disclosures, and conversations with certain Plaintiffs. Dr. Lori Byron's opinions are to a reasonable degree of medical certainty.

Dr. Lori Byron may provide expert testimony addressing Dr. Curry's and Dr. Anderson's lack of qualifications to opine on the physical and mental health impacts of climate change, the various errors and faulty health-related conclusions in Dr. Curry's and Dr. Anderson's respective expert reports, and how reducing fossil fuel use now will have immediate health benefits.

8. Dr. Robert Byron, M.D., MPH, FACP

P.O. Box 1972 75 Highway 308 Red Lodge, MT 59068

The subject matter and substance of the facts and opinions to which Dr. Robert Byron is expected to offer rebuttal testimony, and a summary of the grounds for Dr. Robert Byron's opinions, are contained in his rebuttal report and referenced literature, attached as **Exhibit F**, and his expert report, referenced literature, list of publications, and curriculum vitae filed with this Court on September 30, 2022. Dr. Robert Byron jointly authored his rebuttal report, and his September 30, 2022 expert report, with Dr. Lori Byron. Dr. Robert Byron's opinions are based on his education, training, experience as a pediatrician, his review of the pleadings and Defendants' expert disclosures, and conversations with certain Plaintiffs. Dr. Robert Byron's opinions are to a reasonable degree of medical certainty.

Dr. Robert Byron may provide expert testimony addressing Dr. Curry's and Dr. Anderson's

lack of qualifications to opine on the physical and mental health impacts of climate change, the

various errors and faulty health-related conclusions in Dr. Curry's and Dr. Anderson's respective

expert reports, and how reducing fossil fuel use now will have immediate health benefits.

9. Dr. Lise Van Susteren, M.D.

General and Forensic Psychiatry, Private Practice

1609 Connecticut Ave. NW, Suite 300,

Washington, DC 20009

The subject matter and substance of the facts and opinions to which Dr. Van Susteren is

expected to offer rebuttal testimony, and a summary of the grounds for Dr. Van Susteren's

opinions, are contained in her rebuttal report and referenced literature, attached as Exhibit G, and

her expert report, referenced literature, list of publications, and curriculum vitae filed with this

Court on September 30, 2022. Dr. Van Susteren's opinions are based on her education, training,

experience as a forensic psychiatrist, her review of the pleadings and Defendants' expert

disclosures, and conversations with certain Plaintiffs. Dr. Van Susteren's opinions are to a

reasonable degree of medical certainty.

Dr. Van Susteren may provide rebuttal expert testimony explaining that Dr. Curry lacks

the proper education, training, or credentials to provide expert testimony on mental health and

children's mental health issues. Dr. Van Susteren's rebuttal report provides expert testimony that

Dr. Curry does not and cannot refute the scientific consensus establishing youth mental health

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harms from climate change.

10. Mark Haggerty

Senior Fellow, Center for American Progress

217 South 6th Ave

Bozeman, MT 59715

PLAINTIFFS' REBUTTAL EXPERT DISCLOSURES

The subject matter and substance of the facts and opinions to which Mr. Haggerty is expected to offer rebuttal testimony, and a summary for the grounds of Mr. Haggerty's opinions, are contained in his rebuttal report, referenced literature, and curriculum vitae, attached as **Exhibit H**. Mr. Haggerty's opinions are based on his education, training, experience as researcher, policy analyst, and economist in academic and not for profit environments, and his review of the pleadings and Defendants' expert disclosures. Mr. Haggerty's opinions are to a reasonable degree of certainty in his profession of policy analysis and economics.

Mr. Haggerty may provide expert testimony on the effect of Montana's energy policy on Montana's economy and how Montana's over-reliance on fossil fuel revenue is an unsound fiscal policy. Mr. Haggerty's rebuttal report provides expert testimony refuting conclusions in Dr. Anderson's expert report that Montana's energy policies provide an overall benefit to Montana's citizens. Mr. Haggerty's rebuttal report provides expert testimony that there are several non-fossil fuel pathways to provide for energy to meet Montana's consumer needs and for the government to generate sufficient revenue to fund basic services.

11. Kevin E. Trenberth, Sc.D,

Distinguished Scholar, National Center for Atmospheric Research and Honorary Academic in the Department of Physics, Auckland University in Auckland, New Zealand

127A Churchill Road, Rothesay Bay, Auckland, New Zealand

The subject matter and substance of the facts and opinions to which Dr. Trenberth is expected to offer rebuttal testimony, and a summary of the grounds of Dr. Trenberth's opinions, are contained in his rebuttal report, referenced literature, and curriculum vitae, attached as **Exhibit** I. Dr. Trenberth's opinions are based on his education, training, experience in the field of climate science, geophysics, and global-scale climate dynamics, his review of the pleadings and

Defendants' expert disclosures, and his long-standing knowledge of Dr. Curry and the variability of her analyses and opinions. Dr. Trenberth's opinions are to a reasonable degree of scientific certainty.

Dr. Trenberth will provide expert testimony demonstrating it is scientifically inaccurate for Dr. Curry to claim that extreme weather and climate conditions in Montana reflect natural weather and climate variability, rather than fossil-fuel driven climate change. Dr. Trenberth's rebuttal report provides expert testimony on how anthropogenic effects, largely from the burning of fossil fuels since 1970, are responsible for changes in extreme weather and climate conditions. Dr. Trenberth's rebuttal report responds to Dr. Curry's errors concerning weather and climate variability, future global climate projections, and opines that Montana's greenhouse gas emissions do matter.

DATED this 30th day of November, 2022.

/s/ Barbara Chillcott
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Attorneys for Plaintiffs

CERTIFICATE OF SERVICE

I certify that a true and correct copy of the foregoing was delivered by email to the following on November 30, 2022:

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/s/ Barbara Chillcott
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