

**U.S. House of Representatives  
Committee on Natural Resources  
Hearing on H.R. 5435, the American Public Lands and Waters Climate Solution  
Act**

**Testimony of Caroline Gleich  
Professional Ski Mountaineer, Adventurer and Climate Activist  
Founder, Big Mountain Dreams Foundation  
Member, Protect Our Winters**

**February 26, 2020**

When I was 13 years old, I went to rehab. I was severely depressed and I struggled with anxiety. I turned to drugs and alcohol to self-medicate. I didn't think I'd live until I was 30. I'm 34 now. Today, I can say with confidence that the outdoors saved me.

Chairman Grijalva, Ranking Member Bishop, and Members of the Committee, thank you for inviting me to talk about the urgent threat of climate change. My name is Caroline Gleich. I am a professional ski mountaineer, adventure athlete, and climate activist from Park City, UT. I am here today as a part of the \$887 billion dollar outdoor industry, which supports 7.6 million American jobs (including mine)<sup>1</sup> to testify in support of H.R. 5435, the American Public Lands and Waters Climate Solution Act.

When I was 18, I began pursuing a childhood dream of becoming a professional skier and outdoor adventure athlete. A decade and a half later, I'm able to make my living as a pro skier, climbing up mountains to ski down, working with sponsors and media to tell stories through photos, videos, and writing. I've been on the cover of magazines including Powder, Ski, and Backcountry. I've skied in Warren Miller films. In 2017, I became the first woman to ski a collection of the steepest and most technical backcountry ski runs in the Wasatch Mountain Range in Utah called the Chuting Gallery, which was documented in a short-film called "Follow Through." And last May, I climbed Mt. Everest, seven weeks after fully tearing my anterior cruciate ligament, or ACL, one of the four major stabilizing ligaments in the knee.

---

<sup>1</sup> <https://outdoorindustry.org/advocacy/>

In my career, I've climbed and skied hundreds of mountains all over the world, in the Alps, Andes, Himalayas, Canadian Rockies, and the Alaska Range. I have seen some of the most remote glaciers and stunning alpine areas in the world.

My goal with my career is to inspire people to get outside, live a healthy active lifestyle, and protect the places where we love to play. In building my career in the mountains, I've always used my platform as an athlete to speak about social and environmental issues. In 2010, I was at a pivotal moment in my career. I had to decide whether to pursue academics after finishing my undergraduate degree at the University of Utah or pursue a career as a professional skier and focus on my sport.

During my last undergraduate semester, I did a political internship for Governor Gary Herbert's Environmental Adviser, Ted Wilson, at the Utah State Capitol. I learned a great deal about Utah's energy policy, and I learned how much of Utah's energy production came from coal and fossil fuels. I was astounded that with Utah's abundance of sunshine and wind, the Governor's ten-year energy plan didn't embrace more renewable energy production. At the end of the semester, I wrote a paper critiquing the Governor's Energy Policy that was published in the Hinckley Journal.

As I grew up through my late teens and early twenties, I learned to manage my anxiety and depression through skiing and climbing on public lands. These pursuits have given my life purpose and meaning. My livelihood and health depend on access to protected public lands and a stable climate.

Right now, both are at risk.

Climate change is not a thing of the future—it's happening now. Having spent my lifetime exploring mountain environments, I've experienced warming winters and a diminishing snowpack. As an alpinist, I spend a lot of time climbing glaciers and ice. I've been on expeditions where I sit in my tent and listen to the constant, deafening sound of icefall around me. Increased temperatures are melting away both my sport and my livelihood.

In my home in Park City, UT, I've seen unseasonal rain events in January and February. Our historically light, fluffy powder is changing as temperatures warm to the extent that our state's slogan—the Greatest Snow on Earth—may no longer hold true. The average amount of snow in the West has

dropped by 41% since the early 1980s, and the snow season has shrunk by 34 days<sup>2</sup>. Projections indicate that by 2090, Park City will lose all of its snowpack.<sup>3</sup>

Low-snow years have a negative impact on jobs and the economy, costing our country more than \$1 billion and 17,400 jobs compared to an average season<sup>4</sup>. In Park City alone, economic modeling shows that the projected decrease in snowpack is estimated to result in \$120 million in lost output by 2030<sup>5</sup>. More American jobs (695,900) come from spending on snow sports than from the extractive industries (627,900)<sup>6</sup>.

Last spring, I went to the Himalayas in Tibet to attempt to climb Mt. Everest, a lifelong goal that I spent a decade training for. You might have seen pictures of the crowds on Everest this year. What the headlines didn't mention is the role climate change played. Research shows that a warming Arctic creates a smaller temperature gradient that affects the jet stream, which normally creates a 7-10 day window for climbers to summit<sup>7</sup>. This year, the window was only two days long. With the congestion, by the end of the stretch, eleven climbers lost their lives.

In the Himalayas, air temperatures have already risen by two degrees Fahrenheit since the start of the 20<sup>th</sup> century<sup>8</sup> causing permafrost and glaciers to melt, which then affects the drinking water of 800 million people<sup>9</sup>.

To make matters worse, as glaciers melt, sea levels rise.

We know that burning fossil fuels has increased the concentration of atmospheric carbon dioxide, causing our climate to change<sup>10</sup>. Taking action on climate and protecting public lands is a much bigger issue than my personal happiness. It's well established that burning fossil fuels releases pollutants that lead to respiratory disorders, stroke, asthma, missed days at work and school, and premature death.

---

<sup>2</sup> <https://www.sciencedaily.com/releases/2018/12/181212093320.htm>

<sup>3</sup> <https://www.nrdc.org/sites/default/files/climate-impacts-winter-tourism-report.pdf>

<sup>4</sup> <https://gzg764m8l73gtwxg366onn13-wpengine.netdna-ssl.com/wp-content/themes/pow/img/POW-2018-economic-report.pdf>

<sup>5</sup> <http://www.parkcitygreen.org/Community/Community-Footprint/SOS-ClimateStudy.aspx>

<sup>6</sup> [https://outdoorindustry.org/wp-content/uploads/2017/04/OIA\\_RecEconomy\\_FINAL\\_Single.pdf](https://outdoorindustry.org/wp-content/uploads/2017/04/OIA_RecEconomy_FINAL_Single.pdf)

<sup>7</sup> <https://www.nationalgeographic.com/environment/weather/reference/jet-stream/>

<sup>8</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3352921/>

<sup>9</sup> [https://www.nature.com/articles/s41586-019-1240-1.epdf?referrer\\_access\\_token=AX7JLWpIdSHK9NI0-GIGLtRgN0jAjWel9jnR3ZoTv0NYNeas1Y6jkcFWY1O41-z3Uq060cO\\_-2HJwlv3VRbVT6\\_eMJfcJJmaUCRBmRkvDPH8E391wJrb447sb8G2997zhSegcTNYf3N6ZT96-U6hJH-6\\_hg7cCYJI9ZouRpM9c9OdeWXX6ZKzjODfXP7BxqhLsRP2613v1OLRUeYHFIts6PkTnvX3Rf7YIYP5RFs-CwGi8HP5ZH-O2XknSnuJFJDpjovkMMZuigO5c\\_W1rXUI9R8IHUZso7fWmavCB74Gc%3D&tracking\\_referrer=www.sciencenews.org](https://www.nature.com/articles/s41586-019-1240-1.epdf?referrer_access_token=AX7JLWpIdSHK9NI0-GIGLtRgN0jAjWel9jnR3ZoTv0NYNeas1Y6jkcFWY1O41-z3Uq060cO_-2HJwlv3VRbVT6_eMJfcJJmaUCRBmRkvDPH8E391wJrb447sb8G2997zhSegcTNYf3N6ZT96-U6hJH-6_hg7cCYJI9ZouRpM9c9OdeWXX6ZKzjODfXP7BxqhLsRP2613v1OLRUeYHFIts6PkTnvX3Rf7YIYP5RFs-CwGi8HP5ZH-O2XknSnuJFJDpjovkMMZuigO5c_W1rXUI9R8IHUZso7fWmavCB74Gc%3D&tracking_referrer=www.sciencenews.org)

<sup>10</sup> <https://climate.nasa.gov/causes/>

There is also evidence that poor air-quality created by burning fossil fuels is related to autism and Alzheimer's<sup>11</sup>.

Of particular concern to me, as a woman of child-bearing age, is the link between exposure to air pollution and miscarriage. A recent study conducted in Salt Lake City, UT, found that raised levels of nitrogen dioxide pollution, produced from burning fossil fuels, increased the risk of losing a pregnancy by 16%<sup>12</sup>. We need to do everything we can to protect our children during each stage of life. Not surprisingly, spending time in natural spaces reduces the risk of preterm birth<sup>13</sup> while also improving quality of life and mental health.

According to the American Psychiatric Association, 48% of Americans believe climate change is already harming our mental health<sup>14</sup>. 40 million adults in the U.S. are suffering from anxiety disorders<sup>15</sup> and one in six Americans take a psychiatric drug, with antidepressants being the most common<sup>16</sup>. Exposure to air pollution is linked to worsening of psychiatric disorders in children, especially disorders related to anxiety and depression<sup>17</sup>—disorders like the ones I struggled with as a kid.

As psychiatric disorders spike, so does the rate of suicide. Suicide is now the leading cause of death for Utahans aged 10-17<sup>18</sup>.

Our public lands are a crucial part of our nation's healthcare plan. They are where we go to restore and revitalize ourselves. They create resilience and studies show that simply being in nature can help lower depression, anxiety, and inflammation<sup>19</sup>. Public lands shouldn't be places where we extract fossil fuels that then pollute our air, water, and soil. They should be places where we go to feel alive, connected, and free. For too long, the costs of fossil fuels have been externalized and the public has had to pay the price.

Our public lands need to be a part of the solution, not a source of the problem. H.R. 5435 ensures that our public lands and waters reduce the effects of climate change with clear steps to set binding

---

<sup>11</sup> <https://www.hsph.harvard.edu/c-change/subtopics/fossil-fuels-health/>

<sup>12</sup> <https://www.theguardian.com/environment/2019/jan/11/air-pollution-as-bad-as-smoking-in-increasing-risk-of-miscarriage>

<sup>13</sup> <https://www.sciencedaily.com/releases/2018/07/180706102842.htm>

<sup>14</sup> <https://www.psychiatry.org/patients-families/climate-change-and-mental-health-connections/affects-on-mental-health>

<sup>15</sup> <https://adaa.org/understanding-anxiety>

<sup>16</sup> <https://www.scientificamerican.com/article/1-in-6-americans-takes-a-psychiatric-drug/>

<sup>17</sup> <https://www.sciencedaily.com/releases/2019/09/190925075731.htm>

<sup>18</sup> <https://health.utah.gov/vipp/pdf/Suicide/youth-suicide-factsheet-12-14.pdf>

<sup>19</sup> <https://www.health.harvard.edu/mind-and-mood/sour-mood-getting-you-down-get-back-to-nature>

emissions reductions goals. It gives land managers tools to proactively plan for how they will reach these goals. I appreciate that H.R. 5435 includes a pause on new federal fossil fuel leasing to allow the Department of the Interior to develop a comprehensive emission reduction strategy.

I first became aware of the link between public lands and climate change at a federal hearing about coal leasing on public lands in 2016. I was shocked to learn that 40% of coal in the US comes from public lands<sup>20</sup>, leasing them for pennies on the dollar. Meanwhile, the true costs were externalized to the public, who then had to deal with the health risks.

At that hearing, I met Brandon and Mike, two young men from Carbon County, Utah who, like their fathers and grandfathers, made their living as coal miners. Whenever I speak at a hearing, I enjoy hearing all the different perspectives on an issue. As we chatted during a break, they were fascinated to hear about my job as a skier. We had a wonderful exchange and at the end, they told me that they did not like working in the mines. It was dangerous, and they admitted they would take jobs installing rooftop solar if they were available.

Because of that exchange, I am especially supportive of the bill's provisions to give special funding to fossil fuel-dependent regions to be used for reclamation and restoration of land and water, transition assistance, worker retraining, and other purposes.

Transitioning to a clean energy economy doesn't just create jobs. It improves public health. And with 80% of voters saying that healthcare is the most important issue for their vote,<sup>21</sup> it's time we stop and ask ourselves what's really making us sick in the first place.

We have a tendency as a society to compartmentalize public lands, climate change, and health into separate boxes, but the truth is, they are all related. Living close to nature has wide-ranging health benefits and creating better access to nature will create stronger, wealthier communities<sup>22</sup>. Humans need land to roam, clean air to breathe, and safe water to drink. When we become disconnected from nature, we become depressed.

As someone who depends on America's public lands for my career and health, I'm grateful for the opportunity to share my story of finding hope through the outdoors. Supporting H.R. 5435 will ensure our treasured wild places do not contribute to the worsening of our climate, and in turn, our health.

---

<sup>20</sup> <https://www.nytimes.com/2017/08/06/us/politics/under-trump-coal-mining-gets-new-life-on-us-lands.html>

<sup>21</sup> <https://news.gallup.com/poll/244367/top-issues-voters-healthcare-economy-immigration.aspx>

<sup>22</sup> <https://www.sciencedaily.com/releases/2018/07/180706102842.htm>

Clean air, clean water, and access to the outdoors are basic human rights. It's time we do everything we can to ensure more Americans have access to them, and our public lands are the place to start.

As an adult, I learned how to live without being dependent on drugs and alcohol by finding healing in nature and a life outdoors. Instead of reaching for a pill or a drink, I have now developed healthier coping strategies. Just like I learned to combat my addiction, so too can our country learn to thrive without our dangerous dependence on fossil fuels.