

Ignoring Climate Change Is Not an Option

Last year outranked 2023 as [the hottest year ever recorded](#) since record-keeping began in 1850. Likely, scientists say, it was [the hottest in 125,000 years](#).

And seven days into 2025, wildfires are feasting on dry vegetation scalded by nine months without rain and pushed by 100 mile-an-hour winds. The conflagration has forced 150,000 Americans to evacuate their homes and businesses in the second most populated city in the United States. From January 7 to 9, an area the size of Manhattan vanished in flames, along with 29 people, and 16,000 homes and businesses. Estimates put [the losses as high as \\$300 billion](#).

One wildland fire expert said what we're seeing in L.A. was "the fire equivalent of a Category 5 hurricane."

As the frequency of such multi-billion-dollar storms increases, [climate change has raced past the point where it costs more to pay for the damage wrought by rising temperatures than would take to build a clean energy system](#). And the scorching of the earth is just getting started.

Thankfully, Montana made it through 2024 without such an event, although memory is short if we forget the Yellowstone flood three springs ago that cost an estimated \$1 billion in damage and repair from Mammoth Hot Springs in Yellowstone National Park all the way to Billings. We are not immune to tragic winter fires, either, as the December 1 fire in 2021 that burned 10,000 acres and many homes and businesses in Denton, Montana.

In the 1980s the U.S. averaged three billion-dollar disasters a year, and we spent \$22 billion (inflation adjusted) to repair and rebuild. [We saw 27 weather disasters in 2024](#) – a disaster every three weeks – that cumulatively cost our society \$183 billion. We saw five hurricanes, one of which, Helene (Category 4), packed enough wallop that it tracked inland hundreds of miles and dumped an "atmospheric river" in the mountains of North Carolina. Who's next?

It was only 10 years ago that world leaders signed an accord in Paris to limit global warming to 1.5 Celsius (2.7 Fahrenheit). That would have required cutting greenhouse gases (GHGs) by 40 percent by 2030 and nearly 100 percent by 2050. Last year, global GHG emissions were the highest ever recorded, surpassing 420 parts-per-million CO₂ in our atmosphere. [So we're running a bit behind](#).

As one scientist put it, [if we move the target from 1.5 C to 2 C](#), we'll soon see the "difference between a world that has coral reefs and Arctic sea ice and one that does not." We will see a world where tens of millions of people will be exposed to life-threatening heat domes, water shortages, and extreme flooding.

Thirty years ago, we could have stayed within the safe range of carbon dioxide (CO₂) in our atmosphere – 350 parts-per-million – if we began slowly tapering our burning of fossil fuels.

Megafires are those that burn more than 100,000 acres. The first megafire to grab national attention was the Yellowstone Fire in 1988, which burned a third of the Park, or 800,000 acres. It wasn't an anomaly. As one veteran firefighter, Andrew Norman, told his local newspaper recently, ["We always joked that everybody who lived through '88 that we lived through a once-in-a-lifetime experience, and now a lot of us have had quite a few other once-in-a-lifetime experiences since then."](#)

Two recent reports shed light on the future of Montana's two largest economic drivers, agriculture and the recreation industry. Power Consulting – a father-and-son team that includes retired University of Montana economics chair, Tom Power, and his son, Donovan, a geologist and former Olympian – used data from international, national, and Montana climate assessments to conclude that, without drastic cuts in fossil fuel emissions, Montana will see a 6-degree Fahrenheit increase in temperature by mid-century.

They wrote their study, ["Economic Impact of Climate Change on Montana Agriculture,"](#) for Farm Connect Montana and published it last November. Montana's winters and spring will see more moisture, two more inches a year, which is good news for our arid state. But warmer, rainy springs will steal the snowpack used for irrigation in the late summer. Summers will be drier, arrive earlier, and stay later. There will be an increase in 90-degree-plus days.

As a result, Montana's major crops – wheat, barley, and hay – will decline by 20 percent by mid-century, with a loss of \$95 million and 5,000 jobs. Rangeland cattle sales will also drop by 20 percent with a loss of \$86 million and 4,514 jobs. [Farmers are worried.](#)

[An earlier study the Powers' team did for the Montana Wildlife Federation](#) in September 2023 looked at outdoor recreation. They concluded the expected temperature increase of 6 F by mid-century would cause Montana to lose 8,800 outdoor recreation jobs and \$263 million in labor earnings. The fishing predictions were particularly alarming.

Native bull trout need cold water to survive, and fishermen seldom find them in waters warmer than 59 to 64 degrees F. One 2022 comprehensive study of Montana fishing in the magazine *Science Advances* cited by the Powers' team said this about Montana's fishing:

"The northern Rocky Mountains in Montana (USA) support some of North America's most popular trout fisheries, valued at more than \$750 million year representing more than 20 percent of the spending by tourism in the state. This economic value is primarily driven by nonresident fishers who spend, on average, \$690 fisher-day compared to \$90 fisher-day by resident fishers. However, the cold-water fisheries that support this substantial tourism industry may be at risk as this region warmed at twice the global average rate over the past century, contributing to warmer

water temperatures, lower summer streamflows, and increasing frequency and severity of drought events.”

This study goes on to project a cold-water fish population decline of 35 percent, with prized Westslope Cutthroat declining by 65 percent. Looking ahead, “hoot owl” stream closures due to lower flows, warmer water, and further fish declines, will concentrate more fishermen on the few remaining cold streams. The Powers’ team concluded that recreational fishing stands to lose 30 percent of its revenue, \$60 million, and 1,900 jobs.

[Montana Fish, Wildlife and Parks estimates that hunting generates \\$366 million a year and employs 3,300 people.](#) But the report says hunting will decline 20 to 25 percent by mid-century, losing 495 jobs and almost \$15 million in labor earnings annually, if climate change is allowed to continue unabated.

By mid-century, Montana’s ski resorts will have to cope with one-month less ski-able days due to warmer, rainy weather. Visiting skiers with disposable incomes may choose higher elevation resorts in Utah and Colorado rather than spend their money here. Consequently, Montana’s skiing industry will decline 19 percent by mid-century, shedding 1,000 jobs and \$35 million in Labor income.

Power Consulting’s 2023 report estimates the impact of wildfires on Montana’s tourism, which represents 10 percent of all Montana employment. In 2021, 12.5 million visitors to Montana spent \$5.2 billion. But will smoke from larger, more intense, more frequent wildfires make Montana a less desirable destination? The consultants think visitations to Yellowstone and Glacier will drop by 15 percent by mid-century, costing 1,600 Montanans jobs and \$44 million in labor income.

In the meantime, 30 industrial-scale wind and solar projects have paid 19 Montana counties over \$57 million in property taxes over the past five years.

It’s clear we ignore the growing economic impacts of climate change and the benefits of carbon-free energy at our own peril.