

3rd PLACE

Legislators of the State of Idaho,

Lately, our nation has been hearing quite a lot about the raging wildfires across California and the destruction from Hurricanes Harvey, Irma, and Maria. Recently released statistics show the alarmingly rapid rise of global land temperatures and water levels. All these disasters may seem unrelated to each other, but they are all produced by the same cause: climate change. With a threat that seems as though it could ultimately destroy life on our earth, it would make sense that people could easily reach a consensus to put a stop to it. However, this doesn't seem to be the case in our country. In fact, our state of Idaho has taken a step backwards on this issue by deciding to remove climate change from the Idaho State Science Standards for public schools. As the subject has become more controversial due to partisan politics over the years, facts and evidence have become secondary to loyalty to ideology. It is vital that we continue to teach the real causes and effects of climate change to the future adults of America. Their education is key to finding ways to avoid the severe consequences of climate change.

Climate change, being the effect of greenhouse gases such as carbon dioxide, methane, and chlorofluorocarbons (CFC's) trapping harmful rays from the sun within our earth's atmosphere, is creating an enormous rise of global temperatures. This rise in global temperatures is leading to frequent droughts, wildfires, and tropical storms. Sea levels have also risen as the heat trapped in our atmosphere melts glaciers and polar ice caps while simultaneously expanding the water in our oceans by a process known as thermal expansion. This is all happening at a rate faster than ever before. The National Aeronautics and Space Administration (NASA) reports,

“Not only was 2016 the warmest year on record, but eight of the 12 months that make up the year — from January through September, with the exception of June — were the warmest on record for those respective months.” If these patterns continue, we will see ecosystems collapse. In an article entitled *Acidic oceans and warm rivers that kill Idaho’s salmon might be norm in 50 years* by Rocky Barker from the Idaho Statesman, he writes about the effect climate change has had on salmon in our area lately. He mentions that 2015’s “extraordinary combination of overheated river water and low flows killed hundreds of thousands of returning sockeye salmon, devastating a run that had rebounded from near-extinction.”

Houses, especially in coastal cities, will also be destroyed along with livelihoods lost. In a recent paper published by researchers from the University of Florida, they found that from 2011 to 2015, the sea level along the American coastline south of Cape Hatteras rose at a rate six times faster than the long-term rate of global increase. This puts large coastal cities like Miami in real danger of potential floods and destruction. Meanwhile, Hurricane Harvey alone has put an estimated 30,000 Texans in need of temporary shelter. This is obviously a serious issue that we need to combat, and it is critical that our citizenry understand where these greenhouse gases are coming from and how we can reduce the emission of them.

When talking about the sources of greenhouse gases, it is important to break them down into two categories: natural sources and anthropogenic (human-made) sources. Both sources contribute to climate change, but when we compare the overall impacts of natural emissions such as volcanoes to anthropogenic emissions like those from the burning of fossil fuels, humans end

up doing a lot more damage to the earth. According to the National Oceanic and Atmospheric Administration (NOAA), "Human activities emit 60 or more times the amount of carbon dioxide released by volcanoes each year." To put that into perspective, while volcanoes emit less than a billion metric tons of carbon dioxide annually, we as humans have emitted a whole 40 billion metric tons just in 2015. The rate at which we are releasing carbon dioxide into the atmosphere has also been dramatically increasing over the last century. We have now reached a point where our attention and action is needed more than ever to save our planet from destruction.

There are many ways we can start resolving this issue. Investing more in renewable resources and designing more fuel-efficient vehicles is a start, but ultimately the change we want to see in the world lies entirely in the hands of our future generations. Students ought to know the causes, consequences, and solutions to climate change, and they can't if it is not being taught in their schools. Scientifically, the controversy that surrounds the issue is resolved, and we shouldn't let politics get in the way of the truth. We are building a world that our children will inherit, and soon they'll be doing the same for their children. If we want to provide a world where they can thrive and prosper, it is crucial that we undo the steps we've recently taken as a state and begin to move forward. I trust that as representatives of the great state of Idaho and its citizens, you'll do the right thing and take legitimate consideration towards my plea.

Sincerely,

Criss Ward

Works Cited

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