

22 October 2021

The Honorable Joe Manchin  
306 Hart Senate Office Building  
Washington, D.C. 20510

Dear Senator Manchin:

On behalf of the American Geophysical Union (AGU) and our community of 130,000 worldwide in the Earth and space sciences, I am writing to urge you to support legislative provisions that will help to curtail the devastating impacts of climate change, globally, in the U.S., and in your home state of West Virginia.

AGU's scientists have long documented the evidence of climate change, and its increasingly disruptive impacts from flooding, droughts, and wildfire to loss of cherished landscapes, to growing public health threats from heat, infectious disease, and displacement from homes.

West Virginia has not been spared from these effects. The state was hit by record heat and a drought emergency in 2019, yet, as recent research by the [First Street Foundation](#) points out, West Virginia's infrastructure is at more of a risk of flooding than any other state's, in many cases driven by extreme rain events. AGU's 2019 report on the danger to communities of flooding, [Surging Waters](#), makes the connection to climate change: "warmer air can hold more moisture, and...with more moisture in the atmosphere, precipitation events become more intense."

Unfortunately, the situation will only get worse in the coming years— at least not without prompt action to reduce emissions from fossil fuels and deforestation.

As you consider the costs of policy proposals to limit climate change, please consider that those may ultimately be dwarfed by the costs of inaction. As emissions continue to rise, so too will the economic harm to your state, from the damage costs associated with natural disasters, to lost crops, livestock, and productive forests.

The good news is that you can still make the choice to protect West Virginia and the world. [AGU's climate change position statement](#) states that limiting this harm will require a substantial transition to carbon-neutral energy sources, more carbon-efficient land use and agriculture practices, and removal of carbon dioxide from the atmosphere, along with better approaches to help us adapt to the adverse impacts we are already experiencing. Fortunately, as the statement says, "Done smartly, those actions can yield

significant economic and social benefits, including better human health and well-being, employment opportunities, more sustainably used resources and conserved biodiversity.”

Many of the needed actions are in the climate provisions of the bills up for your consideration in the Senate right now. AGU asks that you not let this opportunity pass; please support these climate policies. If we can be of any assistance to you, please don't hesitate to contact our VP of Science Policy and Government Relations, Lexi Shultz, at [ashultz@agu.org](mailto:ashultz@agu.org). Thank you for your consideration.

With best wishes,

Randy Fiser  
CEO and Executive Director  
American Geophysical Union