COVID-19 and Climate Change
In the Inland Northwest

We know a time lag often exists between infection and the appearance of symptoms that can lead to death in the COVID-19 pandemic. Less obvious is the time lag of climate change.

While overt symptoms of climate change have been largely invisible for decades, the science has been clear for half a century. Our use of fossil fuels over time has today taken us into a zone of maximum risk. Symptoms are appearing, some much earlier than expected. Now we have 8-12 years to eliminate our carbon emissions before becoming locked into an irreversible catastrophe. Estimates project hundreds of millions of deaths and a massive disruption of life as we know it.

With COVID-19, development of a vaccine is likely to render the pandemic relatively short-lived. The cure for climate change requires an immediate and sustained reduction of human-caused atmospheric carbon. Without that cure, climate change will last for centuries. Humans will probably adapt, but there will be no recovery.

Recent peer-reviewed studies outline these risks in stark terms. This is what the best available science is telling us beyond any reasonable doubt. Data from the National Oceanic and Atmospheric Administration give us a pretty good understanding of what we can expect across the Inland Northwest. For example:

- Throughout Northern Idaho and Eastern Washington, expect a 72% decrease in average annual snowpack above 5,000 feet, with serious ramifications for the region's economic and cultural mainstays of agriculture, power generation, fish, and forestry.
- Winter precipitation is forecasted to increase by about two inches on average, but as rain rather than snow. This moisture will run off instead of recharging soil and aquifers as a snowpack does.
- Summers will tend to be longer, hotter, and drier.
- Springs will generally come earlier and be shorter.
- Much of the annual precipitation will occur as heavy rain in the fall.
- Extreme weather such as heat waves, droughts, floods, and storms will be more frequent.
- Weather in general will become more variable, chaotic, with more erratic patterns of seasonal change.

Some of these symptoms are already here. Over the last century average summertime temperatures in the Inland Northwest increased by more than four degrees Fahrenheit. In the last 25 years, fire seasons have lengthened by 47 days. Smoke from wildfires has led to an increase in respiratory illnesses.

Snowpack has decreased and early melting is more frequent. In the last ten years peak streamflow associated with snowmelt has come earlier. Since 1970, temperatures of most wildland streams have increased by about 1-2 degrees F. Closures due to fish die-offs and poor returns in the Snake River and major tributaries are now common.

Ever since Bacon formalized the scientific method in 1620, scientists have maintained a moral obligation to warn societies about risks to health, safety, and welfare, and to minimize those risks. Recently more than 11,000 scientists warned that we face a catastrophic climate emergency with long-term consequences not only for us, but for generations of our descendants (Google "World Scientists' Warning of a Climate Emergency").

So, what can we do now? How do we get to 100% clean energy? Individually as well as collectively, we must replace carbon-based energy with clean renewable energy in the next several years. Like COVID-19, where the only solution right now is social distancing, the only solution for climate change is to eliminate carbon emissions.

We need a clear plan we can all follow. To avoid getting drawn out and stalled at state and national levels, we should begin with our city and county governments where each one of us can interact with elected representatives. The plan's framework will need to be adopted at the local level and strongly supported by citizens and businesses. Let's enact these plans and get them in place sooner than later. A start would be to have our local governments pass resolutions of support for the Carbon Dividend Act (H.R. 763), being led by Citizens' Climate Lobby.

About 94 million Americans live in approximately 150 U.S. cities that have used the Sierra Club's "Ready for 100% Clean Energy" process to develop plans and make progress toward clean energy. This program provides a template and examples of how so many cities accomplished this goal. Most of our communities have the talent, capability, and understanding of science to get it done. This is our moment.

Michael Jennings
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Among other things, Michael Jennings uses global-to-local climate data to help land managers understand how ecosystems are expected to respond to climate change in the coming decades.

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