

With the White House and the Environmental Protection Agency now in the hands of climate deniers, there is a lot of misinformation being issued from the Trump administration about climate change. Thus, it's important to be able to separate climate change myths from reality.

BOTTOM LINE

It's real.

We need to act now to stop the worst outcomes.

We don't have time to wait.

Myth There's no consensus on whether global warming is actually happening.

About **97 percent of climate scientists agree** that human-made global warming is happening. "In the scientific field of climate studies — which is informed by many different disciplines — the consensus is demonstrated by the number of scientists who have stopped arguing about what is causing climate change — and that's nearly all of them," according to Skeptical Science, a website dedicated to explaining the science of global warming.

Myth Even if climate change is happening, there is an honest debate going on about how serious it is.

The **overwhelming majority of honest scientists** are up against a corporate-funded climate change denial machine. In fact, as has been recently revealed, companies like Exxon have known about both the existence and the costs of global warming and have purposely concealed that knowledge from the public. Even worse, bad agents in the corporate world such as Koch Industries have been spending millions of dollars to fund groups backing climate denial for decades.

Myth Climate models are full of questionable assumptions that make them fit with data collected in today's climate. We don't know if those same assumptions can be made in a world with increased carbon dioxide.

Reality Models have successfully reproduced global temperatures since 1900, by land, in the air and the oceans. Models are simply a way to take our best understanding of how the natural world works and predict trends on the basis of that scientific knowledge. They are based on fundamental physics and chemistry and have quite accurately predicted warming temperatures, melting ice, and rising sea levels.

Myth Don't worry, it's not that bad. Some have pointed to human history as evidence that warm periods are good for people, while the cold, unstable stints have been catastrophic.

Reality Climate scientists say any positives are far outweighed by the negative impacts of global warming on agriculture, human health, the economy, and the environment. For instance, according to one 2007 study, a warming planet may mean an increased growing season in Greenland; but it also means water shortages, more frequent and more intense wildfires, expanding deserts, increasing global poverty, and human health costs. In 2017, scientists have discovered that huge portions of some of the world's most important ocean reefs are now dead, threatening the food supply for hundreds of millions of people. And this is only one example of dangerous things that are happening NOW.

