Rutland Herald & Barre-Montpelier Times-Argus Published: December 23, 2017

http://www.rutlandherald.com/articles/the-weather-listens-to-no-man/

The weather listens to no man

Alan Betts (http://alanbetts.com/writings)

The impact of accelerating climate change this year has been sobering. High temperatures and drought produced record fires in the western US, and the 2017 Atlantic hurricane season was devastating. Preliminary damage estimates are approaching \$400 billion, twice as much as the 2005 hurricane season.

Yet, ten days before Hurricane Harvey hit Texas, wreaking havoc and causing widespread flooding, the President signed an executive order revoking a set of regulations that would have made federally funded infrastructure less vulnerable to flooding. As a result much of the federal money sent to Texas to rebuild may be wasted on construction that will not protect against rising sea level and the increasing severity of storms.

Washington is facing many irreconcilable conflicts. This is not surprising because the weather doesn't listen to political denial. Just paying for these weather disasters is getting harder, as Congress tries to cut corporate taxes, rather than introduce an escalating fossil carbon tax to pay for the immense damage that lies ahead.

Ironically the background work of the federal government continues. The first volume of the Fourth National Climate Assessment was released on schedule in November (science2017.globalchange.gov/), as mandated by Congress 20 years ago. This excellent report is an authoritative assessment of the science of climate change, dealing with all aspects that affect the United States. It is a joint effort of all the government agencies along with university researchers, and it is lengthy and very thorough (470 pages). It is an essential document for regional planning. Everything it says flatly contradicts the climate change denial of the executive branch, which was powerless to prevent its publication. Our dysfunctional administration in Washington will now try to figure out how to obstruct the publication of the second volume of this report. Scott Pruitt, EPA administrator, has suggested a red team/blue team debate as a review mechanism for the science, with a hostile red team of climate science critics, selected mostly by the fossil fuel industry and the Heritage Institute. The clear intent is to turn a critical issue for the future of the US and the planet into political theater to spread doubt and confusion. This in turn will lead to more tragedies in the future.

At the November climate change talks in Bonn (COP 23), the official US delegation looked pathetic as it tried to promote the coal industry. The US is now the only country in the world trying to withdrawn from the 2015 Paris agreement, which we helped draft. Meanwhile Bloomberg, the former Mayor of New York City, and California Gov. Jerry Brown presented the opposite message under the banner of America's Pledge, an initiative to mobilize states, cities, and companies to comply with the US commitment to cut carbon dioxide emissions in the Paris agreement. So far 20 states and more than 50 cities and 1,400 businesses have signed.

Unfortunately it is already clear that the Paris agreement needs to be strengthened, if the world is to meet its climate goal of limiting the rise of global mean temperature to less than 2C (3.8F). After a plateau that lasted three years, the global emissions of CO2 appear to be rising again, when we actually need a 3% fall each year for many decades.

At home here in Pittsford Vermont, we are enjoying the last of the Brussel sprouts and kale, which I harvested before the first big snowstorm. My winter spinach is doing well under glass, and the rye cover crop is now covered with snow. There is much we can do to store more carbon in the soil. This benefits the climate, and at the same time the organic matter stores more water in the soil, which in turn reduces runoff, and gives crops greater resilience against drought. We need to understand what is happening on a global scale, but it is critical for our children to develop the resilience of our local agriculture.