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<http://www.rutlandherald.com/articles/climate-change-is-on-a-roll/>

Climate Change is on a roll

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Vermont has seen a warm summer, but rainfall in Pittsford has been high enough that we have had a large vegetable crop, as well as far too many weeds!

Near-stationary waves in the jet stream produced record July temperatures in regions around globe, particularly in western US and Canada and across Europe. This is the face of climate change. Stationary high pressure regions produce long periods of warm dry weather with little cloud cover, so temperatures creep up and humidity falls. This sets the stage for drought that damages crops, and for the forest fires that have been burning across many regions.

California has had especially devastating fires. On July 26, a full-fledged firestorm in Redding, California, produced the strongest tornadic firestorm winds ever recorded, with winds over 140mph - as powerful as an F3 tornado. Between July 27 and September 1, the Mendocino fire complex burnt 459,000 acres, far larger than any other fire in modern state history. The smoke from these massive fires produced severe air pollution.

The summer climate off the coast of southern California is typically associated with a cold ocean and low clouds; but this summer, ocean temps reached 79F. People swarmed to the beaches and tropical marine life moved north into the region. In a bitter contrast, beaches in Florida were empty as a result of massive die-offs of marine life coming from the toxic red tide growing in the ocean along 130 miles of Florida's south-west coast. Inland in Florida, blue-green algae, which grow in warmer water that has been polluted by the runoff of nitrogen and phosphorous fertilizers, have poisoned rivers and lakes. These are the same cyanobacteria that are affecting Vermont's lakes, as we too are reluctant to manage our runoff from urban and rural landscapes.

The extremes of climate and the pollution of our waters are all indicators of society's reluctance to manage our waste-streams for the good of our children and all life on Earth. This is both our personal responsibility and the responsibility of government, but now short-term financial interests are taking precedence over smart long-term planning.

One dismal example is that the EPA is planning to roll back auto efficiency standards which were set to rise to an average of 54 mpg for passenger vehicles by the model year of 2025. The deceitful logic is convoluted. They are claiming that more efficient cars must be more costly, so people won't buy them; and older cars are less safe, so more will die in accidents. The fact that more efficient cars save money by burning less gasoline, which also reduces on-going climate change, is totally ignored, because the EPA has been told to ignore it.

This is deliberate cruelty to our children who will have to live with accelerating climate extremes, if we continue to burn all the fossil fuels this century. We can build much more efficient cars today that reduce gasoline consumption by 80%, which cost no more to build and cost much less to maintain. In addition, computer assistance and collision avoidance radar does make them safer to drive.

Let me give an example from our own experience. We were amazed that our plug-in Prius Prime has averaged 136 mpg on the first 21000 miles with no compromises. Its all-electric range is only 30 miles, but this is enough that local travel in Rutland County is mostly all electric. For long trips, this car quickly reverts to gas-electric hybrid mode, with a range of 600 miles on a tank of gasoline, because of its remarkable efficiency. Last month we toured the Canadian Atlantic provinces. We drove 2100 miles in two weeks, plugging in overnight on most days, and we averaged 82 mpg, far more than the 2025 standards. This is the most efficient car on the market, because of the tightly integrated electrical power, and the recharging when braking and going downhill. Most manufacturers will of course build them anyway for the much smarter global market; but the EPA wants to limit the availability of fuel efficient cars in the US to prop up the oil industry.

If you are reading this early on Saturday morning, September 8, there is still time to join today's educational walks and bike rides starting at 9:00 AM from the Vermont Farmers Food Center in Rutland that are part of the Peoples Climate Movement. The theme is Climate, Jobs and Justice.

CalFire firefighter Jake Hainey, left, and engineer Anna Mathiasen watch as a wildfire burns near Oroville, Calif., earlier this summer. AP PHOTO

