



Dr. Alan K. Betts

Ongoing Flooding of Our Landscape

My article in the October edition of *Green Energy Times* discussed the takeover of the climate system by Mother Nature to save living species on the planet. I contrasted this with frequent flooding of our landscape to weaken capitalist enterprises that are destroying so much for profit. This is very difficult for us, humanity, to grasp since we are not well-connected to the world of nature. I hope some of you (I will use you to refer to all of us) sat with the natural world till she communicated with you, because then the Creator can help your intuitive understanding and connections. I hope also that some of you studied the four keys for understanding the living Earth in human terms, because we have to face the real world and not remain lost



July 2023 flood damage in West Point, NY. (Courtesy image)

in our destructive past. Transferring this real knowledge to the next generation is critical.

The past few months will have shown you all how much our forecasting ability has slipped away into a new world of floods and coastal storms with this different agenda.

Readers in all of New England have had a summer of rainstorms. Parts of northern Vermont had a historic eight to 10 inches of rain on July 9-10 when a large moisture

plume came off the warm Atlantic. This caused catastrophic flooding damage as two months' worth of rain fell in two days on already wet ground. Many rivers hit major flood stage, approaching or exceeding the flood level from tropical storm Irene in 2011. This was a helpful reference for Vermonters for both preparation and recovery.

A slow-moving band of thunderstorms on August 3 slowed down over the Middlebury area and dumped more than six inches of rain in three hours, a typical month's worth. This led to flash floods and major road damage to Routes 125 and 116.

A storm stopped over Leominster, MA, northwest of Boston on September 11 for almost five hours, dropping around 10 inches of rain that caused extensive

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flooding damage. Storms continued in Massachusetts, and then on September 15, Hurricane Lee passed offshore up the northeast coast as a massive weakening storm bringing coastal wind and large waves. Lee then brought major rainfall to eastern Maine on September 16.

Tropical storm Ophelia came ashore in North Carolina on September 23 and moved north up the coast. It dumped a historic eight inches of rain on NYC on September 29, flooding the city including the subway system, causing immense damage.

Our warm months in Vermont ended with a sharp transition. October 28 was warm and sunny for the Saturday Rutland Halloween Parade; but October 29 and 30 were 25 degrees colder with rainy weather, followed by a week with several morning frosts.

On a planetary scale severe storms give a quite stunning global picture. We are moving into a new world.

Mexico was struck by the worst storm ever from the Pacific Ocean, when Hurricane Otis spun up very rapidly in just 12 hours, stunning both modelers and forecasters. It made landfall early on October 25 near Acapulco as a Category 5 hurricane with 165 mph winds and higher gusts. The hurricane left catastrophic devastation, flooding streets, wiping out power and communications, and destroy-



*Hurricane edges towards North Carolina.
(ABI imagery from NOAA's GOES-16 Satellite)*

ing or damaging as many as a 200,000 buildings and 60,000 businesses. Acapulco's oceanfront high-rises were built to withstand the region's powerful earthquakes, but weren't designed to handle anything close to Otis's 165 mph winds. Rescue efforts are struggling to help and resupply the community more than a week later, and total casualties

onshore and at sea are still hard to assess.

On October 26, Cyclone Lola struck the islands of Vanuatu in the southwest Pacific Ocean as a category 4 storm, which was the strongest October cyclone on record in that basin. The islands were cut off with severe damage.

Far away in the Arabian Sea, Cyclone Tej built up to a strong Category 3 storm, one of the strongest on record there. While Tej weakened, it still made landfall as a strong tropical storm, a rarity in recent historical records for eastern Yemen. Seventeen inches of rain was recorded in the city of Al Ghaydah, which is over eight times its average annual rainfall of only two inches. This led to massive flooding in eastern Yemen and far southwestern Oman on October 24-25.

The other side of India, 275,000 people were forced to flee as Cyclone Hamoon, a category 2 storm struck south-eastern Bangladesh on October 24.

The Atlantic was by contrast relatively quiet. Hurricane Tammy was a category 2 storm, heading for Bermuda, but then it weakened, stopped moving and faded away.

The UK found itself besieged by a mid-latitude storm Babet. Rivers overflowed their banks in North Yorkshire, the Midlands, and in the southwest, causing major flooding. Residents returned home to scenes of devastation, with their homes damaged by the destructive power of the floods. I am watching because we are planning to visit my 86-yr-old step-mother, but the hotel we had booked was so badly flooded that it will be closed for six months. After Babet came a second storm named Ciarán bringing even stronger winds, heavy rain and flooding to both southern England and north-western France, cutting off power to more than a million people. This storm moved on into Italy bringing eight inches of rain in three hours to a region just east of Florence and went on to flood much of Italy. In Mother Nature's world this may be because the Pope was unable last week to face the power evils of the Catholic Church that are still destroying life on Earth, seventeen hundred years after they were imposed by the Roman Emperor Constantine.

When asked what to expect for the coming winter, I just smile. A few years ago, we have had some warm temperatures and my grandchildren were able to dig under my rye grass cover crop in January, and even February one year. I am planting my rye cover crop as usual, but the rapid shift of extremes as the global

jet stream shifts into new high-amplitude four-wave modes around the Earth, at a time of El Nino in the ocean and near solar maximum, limits our forecasting ability. A large amplitude powerful wave this Halloween spanning the whole US brought freezing temperatures and some snow to many of the central states. Downstream across the Atlantic this strong wave helped drive storm Ciarán.

So much is going on globally on Mother Nature's agenda, like the fast melting of Antarctica, where the ocean circulation is shifting in ways we do not understand or measure. We are also oblivious as a society to the reality that on larger scales, solar flares are under her control and our satellite and communication infrastructure is vulnerable.

The central issue is whether humanity is willing to join the rest of the species on Earth and communicate directly with the Creation, so that she can help us. Or whether our society will remain locked in the criminal destruction of most of life on Earth to maximize profits for a few thousand individuals and businesses. Given the corrupt disintegration of the U.S. political system, it may be quite a while before Mother Nature's flooding wakes us up.

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