

STORM WARNINGS

Vol. 1, Issue 3: April 2012

Environment, ecology and climate change



R. Michael Conley
Founder

The *Storm Warnings* newsletter is part of a larger initiative by its founder, R. Michael Conley, to carry the message to others.

"The message is frightfully simple: We are heading into a perfect storm that will forever change our lives, and we need to act on it while there is still time," said Conley.

Under the overall umbrella of his company, Weathering the Storm LLC, its mission to awaken and engage people - providing information and resources to help them weather the storm - is carried out in a number of ways.

Earth's capacity to sustain its inhabitants is being compromised by the ravages of climate change, dwindling natural resources, and a global population explosion. It's a ticking time bomb; its consequences not well understood by the public. In this issue, owner and publisher, R. Michael Conley, will discuss the broader implications of climate change from an unusual perspective.

Weathering the Storm

WTS: Why is the threat of climate change so difficult to understand or embrace?

Conley: It's an optics problem, I suspect. It's hard to feel threatened by something we can't see, touch or feel. Its incremental, stealth-like progress hides its lethality; unlike oil, there are no price-at-the-pump scoreboards to highlight its status. Some see it as an abstract, futuristic challenge that may never occur. Others feel it's an unproven theory; a job killer if acted upon, or even a hoax. Its arcane language and metrics are confusing, and a steady bombardment of misinformation obfuscates the threat it poses. Is it any wonder folks are confused or indifferent?

WTS: Assuming it is a threat, how can we make it more understandable?

Conley: Our normal reaction is to bomb the public with scientific data they don't understand and that might be a mistake. For example, a carbon build-up level of 3-4 ppm per annum is a startling statistic to climate followers, but means little to John Q. Public. We're simply not connecting with folks at a gut level and the message is falling on deaf ears. Without a conceptual framework that connects climate change to our personal lives, the threat is often ignored or denied.

WTS: What might this conceptual framework look like?

Conley: I suppose it could take many forms, but one that resonates with me is to think of our planet as a self-regulating macro version of the human body. In this metaphor, I would compare Earth to the human body; the atmosphere to our human immune system, and climate change to a chronic disease similar to high blood pressure. By humanizing the connection, it's easier to understand the moving

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"The *Storm Warnings* newsletter, which provides an in-depth look each month at a specific topic, is one way we hope to awaken and engage people, but we encourage folks to log in to our web-site for a full menu of offerings and services," Conley said.

(www.weatheringthestorm.net)

The website will provide further details on other initiatives. Among them:

1. Lethal Trajectories – Conley's futurist novel on what it will be like to live through a perfect storm crisis
2. *Weathering the Storm Guide* – A guide on how to prepare for the storm
3. Weathering the Storm Seminars – In-depth seminars that are now available
4. Blog, links, other resources, and the Storm Warnings newsletter.

About the Founder: Mike Conley is the Founder of Weathering the Storm LLC, and currently serves as Chairman and CEO of the Conley Family Foundation. As a former Fortune 500 business executive, author, lecturer, and public policy activist, Conley has written

parts and harmful effects of trifling with their fragile mechanisms.

WTS: Would you start by explaining the high blood pressure metaphor?

Conley: Sure. High blood pressure, like climate change, acts in an insidious manner. It pounds away at our heart, cardiovascular system and other organs – often undetected – for years until it reaches critical mass and triggers a stroke, heart attack or worse. By the time we respond, the damage is done and the best we can possibly hope to do is manage the disease. Climate change acts in a similar fashion. Let me explain:

Think of Earth's "organs" as its oceans and hydrologic systems, physical resources, eco-systems, and the self-regulating atmospheric apparatus that sustains life. These organs are being unmercifully pounded by climate change, the insatiable demands of an exploding population, and human practices that damage its life-giving capacity. This insidious trifecta – like high blood pressure – is doing its damage just beneath our radar screens, but the symptoms are starting to show.

WTS: Could you comment on Earth's "self-regulating" atmospheric apparatus?

Conley: I can almost feel it as I recall the hauntingly beautiful "Earthrise" photo taken by the Apollo 8 astronauts circling the moon on Christmas Eve, 1968. Seeing our colorful and vulnerable planet against the black backdrop of the universe, I could visualize Earth's fragile nature and the razor-thin atmosphere that prevented it from becoming a bleak and lifeless planet. As our protective shield against deadly cosmic rays, the atmosphere that has regulated and cleansed our life-giving climate throughout the history of mankind is now at risk.

A compromised atmosphere, like a damaged immune system, is less able to regulate the temperature – or quell a "fever," if you will. As the fever escalates, the body weakens; and as the body weakens the fever rises in a vicious circle. In the vernacular of climate change, this spiral is called a *feedback loop*. Left unchecked, the atmosphere will reach a *tipping point* where its self-regulating capacity is compromised beyond repair.

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and spoken frequently on topics related to the perfect storm. He graduated from the University of Minnesota, after serving in the United States Navy, and later completed a post-graduate program at Stanford University. He is also active on several boards and advisory groups.

WTS: Slow down. What do you mean by *feedback loops* and *tipping points*?

Conley: There are several feedback loops in play: For example, as Polar ice melts, Earth's capacity to reflect sunlight back into space – called albedo – diminishes. With more solar energy absorbed by the oceans, the warming effect causes even more ice to melt in a vicious circle. Another example: As frozen tundra melts, releasing enormous amounts of methane, the temperatures rise. In turn, more tundra is melted and more methane is sent into the atmosphere. They are among several feedback loops that could push the rate of climate change beyond anything projected in today's computer models. In effect, we're playing games with a loaded gun.

The idea of a tipping point suggests a limit to what the atmosphere can absorb without permanently damaging its ability to effectively self-regulate itself. The precise threshold is unknown, but climate scientists think we are approaching that point of no return.

WTS: Let's back up. What's your evidence to even suggest climate change is occurring?

Conley: I'll resist the temptation to bombard you with data and merely say the information is available, abundant, measureable and incontrovertible. The steady rise in temperature – incrementally slow by our standards, but warp speed in geologic terms – is as bothersome to me as the totality of the climate change assault on our planet.

Look around. It's everywhere. The accelerated growth of greenhouse gases are well documented, and global temperatures are on the rise. Ocean acidity levels are growing with the absorption of an increasing level of CO₂, and its deleterious impact on life-giving coral reefs is pronounced. Over 95% of the world's alpine glaciers – excluding Antarctica – are in retreat. Ice melts are occurring on Greenland and the Arctic at unprecedented rates, and permafrost melts – with concomitant releases of methane gas – are intensifying. Bizarre weather patterns, multi-regional droughts and the eradication of eco-systems are but a few of the observable by-products of climate change. The evidence is overwhelming; we're in trouble.

WTS: Some think climate change is a cyclical phenomenon. What say you?

Conley: Taken over a spread of 10,000 years or so, I might agree that it's cyclical, but it's all happening too rapidly to fall within a normal geologic timeframe. It's even exceeding the speed of our eco-systems ability to absorb it. One other problem: With an exploding global population of over seven billion people competing for scarce resources, there is little margin for error. This could be the *black swan* event of all time, but it's trivialized by some as nothing more than a "business as usual" cyclical phenomenon.

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WTS: If the evidence is so unmistakable, why is the scientific community so divided on climate change?

Conley: The scientific community is not as divided as some might suggest. In fact, a 2009 Gallup poll taken of climate scientists – as opposed to scientists from all fields – revealed that 97% of those surveyed believed climate change was occurring and that it was largely anthropogenic (man-made) in nature. This is probably as close to unanimity as you'll ever get in the scientific community, and it's coming from the experts.

Back to my metaphor: If you went to the Mayo Clinic and found that 97 out of 100 specialists diagnosed you as having a specific illness, would you delay life-saving treatment until the other three confirmed it? Probably not, yet some suggest we do exactly that until "the evidence is all in" – comparable to the cry heard about tobacco warnings years ago. If you need further corroboration of climate change, you need only check with the National Academy of Science and most other prestigious scientific bodies. Our military and intelligence agencies are also deeply concerned and cite climate change as a significant global risk and a "threat multiplier" of destabilizing proportions.

WTS: What would you say to climate change skeptics?

Conley: I'd say it's important to question all data and sources. My concern is that we not let dogma replace data or ideology replace science as a determinant of the facts. In this regard, it's important that the credentials and funding of spokespersons or think tanks making pronouncements on climate change – either way – be questioned.

I'm also concerned that we not get overly-fixated on the minutiae and lose track of what the totality of the data is telling us – a practice akin to rearranging the proverbial deck chairs on the Titanic. Bottom line: Regardless of one's thinking on the validity of climate change, what's not to like about the economic advantages of using clean energy wisely or being good stewards of the planet on which we live?

WTS: To switch gears, many think efforts to get at climate change by reducing GHG (greenhouse gas) emissions is a job-killer and bad for the economy. Your response?

Conley: I would strongly disagree on at least two counts: First, the downstream cost of unchecked climate change will be catastrophically high compared to preemptive investments made now; second, an aggressive mitigation program could be stimulative and trigger exciting new engines of growth and job creation throughout the economy.

We're paying a price now for climate change. For example, the insurance and reinsurance markets have been clobbered by climate-induced disasters. Try buying a homeowners' policy on Cape Cod or other coastal areas if you don't believe me. As climate change intensifies, the agricultural losses, water

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shortages, forest fires, rising coastal waters, storm damage and health related problems will exert a fearful economic and social price. Its destabilizing impact on world order will also have serious national security and cost implications.

Conversely, the economic savings from using clean energy wisely – thus reducing GHG emissions – are well documented. Cost savings and job creation opportunities from building retrofits alone could be enormous. Distribution companies, such as Fed Ex, have improved their bottom line by using energy-saving vehicles and planes. Sustainability is more than a buzz word for Wal-Mart, Target and their suppliers. Why do they do it? It's not rocket science; they know that energy conservation and sustainability efforts make good business sense.

Now, here's the rub: Wall Street and our political process is geared toward short term results in the form of quarterly earnings or winning the next election. In this equation, the temporary investment of dollars or political capital needed to accelerate clean energy and climate initiatives outweigh the longer term advantages such activities would produce. Sad but true; there's precious little strategic thinking in what we're doing and younger generations will pay a fearsome price for our lack of foresight.

WTS: How should climate change factor into public policy?

Conley: It has to be factored in as a critical component in any solutions dealing with energy, the economy and our rising expectations. In seeking optimal solutions that blend together these divergent forces, perfection can become the enemy of progress – particularly when well-meaning folks from any one spectrum or ideology dig in and refuse to compromise. That said, I am concerned that environmental considerations not be steam-rolled by our current fixation on energy and economic problems.

Above all, climate change is a global problem requiring a global response. Our tendency to approach global challenges wearing zero-sum game blinders that suggest one side can only win at the expense of the other is a prescription for disaster. Perhaps we should revisit the Apollo 8 sunrise picture to see Earth in its totality – as a vulnerable and fragile planet alone in a hostile universe – and not as a hodgepodge of nations fighting for market share of dwindling resources.

As a nation, we have had neither the political will nor a strategic plan to *comprehensively* address climate change, energy, economics and personal behaviors. We look at everything on an ad hoc, short-term basis and squander our resources as a result. Perhaps it will take an ecological disaster of Pearl Harbor proportions – like devastating water shortages or massive crop failures and famines – to awaken and mobilize us into constructive action, but why does it have to come to this?

WTS: Was there any one event in your life that triggered your engagement in climate change?

Conley: Yes there was. As a private pilot, I learned that a gallon of gasoline produced twenty pounds of CO₂. I did a little calculation and found that in flying my airplane, I burned about 1500 gallons of

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high octane aviation gas annually. This translated into 30,000 pounds of CO₂ – a greenhouse gas that would remain in the atmosphere for a century or two. In my epiphany, I realized that while I enjoyed flying, I was passing on the environmental IOU to my grandkids and their grandkids. I no longer fly as a private pilot and though I miss it, I know it's the right thing for me to do. We all come to our own personal moment of truth and this was mine.

WTS: What can we do as individuals to make a difference?

Conley: It's more than I can cover here, but I would invite readers to go to my website, www.weatheringthestorm.net and download my free *Weathering the Storm* Guide. It provides a blueprint for addressing climate change, economics, and energy issues at a personal level. For now, let me sum up this interview with three key thoughts:

- 1) Climate change is not an abstract concept – it's happening now,
- 2) The implications for mankind are staggering, and
- 3) You can make a difference. Download my guide and get involved.