### **CHAPTER 38**

## THE CATASTROPHIC RISKS OF IGNORING THE "NEW NORMAL" CLIMATE

# **↓ "WHEN YOU FIRST HEAR OF THE NEW**LAW ABOUT GLOBAL WARMING AND SEALEVEL RISE THAT JUST WENT INTO EFFECT IN NORTH CAROLINA, IT'S HARD NOT TO JUST LAUGH AT THE LUNACY. BUT IT IS QUITE SERIOUS."¹

- "... the proposed bill is 'exactly like saying, do not predict tomorrow's weather based on radar images of a hurricane swirling offshore, moving west towards us with 60-mph winds and ten inches of rain. Predict the weather based on the last two weeks of fair weather with gentle breezes towards the east. Don't use radar and barometers; use the Farmer's Almanac and what grandpa remembers."<sup>2</sup>
- The North Carolina law will have no effect upon the universal laws of physics, chemistry, and biology: glaciers will melt, water will expand when heated, and storms will increase in intensity and frequency.

## **EXCLUDING SCIENTIFIC EVIDENCE ON SEA LEVEL RISE CAN ADVERSELY AFFECT HUMAN SECURITY AS WELL AS AFFECTING ECONOMIC RISKS.**

### Sea level rise

- will result in refugees from areas inundated by sea level rise.
- will have long-term adverse effects upon coastal housing prices.
- will have immediate adverse effects upon coastal ecosystems.
- will increase the probability of flooding in large coastal cities as well as smaller municipalities.
- will affect that part of the human economy based on recreation.

### HUMANITY'S PRESENT PRACTICES ARE UNSUSTAINABLE AT BOTH NATIONAL AND GLOBAL LEVELS.

- Most humans have been conditioned to think in terms of national security.
- **⑤** However, climate change is clearly a matter of global security.
- **Solution** Global security requires nurturing the present Biosphere.
- Intergenerational ethics requires a strong focus on global security over long periods of time.

### **TWO EXAMPLES FOLLOW OF ISSUES AFFECTING BOTH NATIONAL AND GLOBAL SECURITY.**

"A reactor at the Millstone nuclear plant in Waterford, Conn., has shut down because of something that its 1960s designers never anticipated: the water in Long Island Sound was too warm to cool it."3

"Under the reactor's safety rules, the cooling water can be no higher that 75 degrees [F] . . . the water's temperature soared to 76.7 degrees [F], prompting the operator, Dominion Power, to order the shutdown of the 880-megawatt reactor."

A warming world with increased water shortages is the "new normal."

In some cases, cooler water may be available in deeper water but, in a warming world, this water will get warmer eventually.

\*At least 117 boys were being born for every 100 girls at the beginning of this century in China."4

"The country's last population census in 2000 revealed an increase of 750 million over half a century — more than a doubling." <sup>4</sup> These "new normals" are not sustainable and will probably result in antisocial behaviors, including violence.

"The imbalances [male-female] are greatest in poorer, rural areas, and because women from this background will be able to 'marry up,' it is mostly the poorest men who will find themselves with no marriage prospects." <sup>4</sup>

"The Chinese government has expressed explicit concerns about the dangers for society and security." <sup>4</sup> However, if action fails to follow concerns, China and the rest of humanity will suffer grievously.

## THE PRESENT BIOSPHERE INCLUDES ALL LIFE ON EARTH — IT IS SERIOUSLY ENDANGERED BY HUMAN ACTIVITIES AND WILL COLLAPSE IF "BUSINESS AS USUAL" CONTINUES, INCLUDING WILDLIFE TRAFFICKING.

- The present Biosphere constitutes both Earth's life support system and the source of renewable resources, so endangering it by greed for short-term profit for a few individuals is beyond belief.
- "... unlike the past, traffickers are no longer guaranteed safe passage, ... undercover officers [are] monitoring corrupt ones [officials] and smugglers trying to outwit them all."<sup>5</sup>
- "... well over 300 elephants are thought to have been killed" in Cameroon early in 2012, "... wiping out a significant portion of the country's elephant population."
- Many of the species being wiped out took millions of years to evolve. Protecting the common good requires that this destruction be stopped.

### **■ "THERE IS SOMETHING FUNDAMENTALLY**WRONG IN TREATING THE EARTH AS IF IT WERE A BUSINESS IN LIQUIDATION."<sup>7</sup>

- Commodification of the Biosphere as presently practiced is unsustainable.
- Financial globalization has ensured increased access to all ecological and species components of the Biosphere and increased the destruction of natural systems.
- **S** Both commodification of natural systems and financial globalization have adversely affected the remnants of intergenerational ethics.
- How ironic that the human economic system, which is a subset of the Biosphere, will cause, if business as usual continues, the present Biosphere to collapse.
- The present economic system is unsustainable.

## THE OCEANS ARE THE LARGEST (ABOUT 71%) COMPONENT OF THE PRESENT BIOSPHERE, AND HUMANITY'S RELATIONSHIP WITH THE OCEANS IS AN INDICATOR OF THE PROSPECTS FOR SURVIVAL OF CIVILIZATION AND HOMO SAPIENS.

- \*... the Ocean Health Index... Is the first broad, quantitative assessment of the critical relationships between the ocean and people, framed in terms of the many benefits we derive from the ocean, instead of simply assuming any human presence is negative, it asks what our impacts mean for the things we care about."8
- Humanity has not even begun to develop a sustainable relationship with the largest global commons, the ocean(s). This connection must be made in the early part of the 21<sup>st</sup> century.
- This sustainable relationship should begin with restoration to the ocean's previous mildly alkaline condition. Major reduction at once of anthropogenic carbon dioxide emissions will probably be essential to this goal.

### ■ UNTIL HUMANITY ACCEPTS MORE HUMANE WAYS TO CONTROL HUMAN POPULATION GROWTH THAN MISERY, STARVATION, DISEASE, AND DEATH, A QUALITY LIFE WILL NOT BE ATTAINABLE FOR ALL HUMANS.

- Improving technology is only a temporary "solution" if exponential growth continues on a finite planet.
- "To a large extent, refusal to recognize that continued population growth is a serious threat to the future of civilization can be blamed on the failure of educational systems to bridge key parts of the culture gap, the growing chasm between what we each know as individuals and all of the knowledge society possesses corporately."9
- Population growth and per capita resource consumption are major factors in biospheric degradation.
- Humanity must accept that resources are increasingly scarce and more expensive to acquire.
- Exponential population growth on a finite planet is already a major crisis.

### THE "NEW NORMAL" CLIMATE HAS ALREADY ARRIVED AND IS FAR LESS BENIGN THAN THE "OLD NORMAL" DESPITE TWO WORLD WARS AND A GLOBAL DEPRESSION IN THE OLD NORMAL.

- Clugston<sup>10</sup> suggests that austerity will be the "new normal."
- \* Austerity is defined as "harsh, strict, severe, without luxury." (Webster's Dictionary Harper Collins)
- At present, at least 1 billion people would embrace austerity as an improvement.
- Failure to take actions on greenhouse gas emissions, exponential human population growth, and ecological overshoot suggests that present generations will probably experience a "new abnormal."
- However, the World Bank's Compound Annual Growth Rate in Global Material Living Standard (per capita GDP) Improvement has decreased from 2.01% (1960-2000) to 1.66% (2000-2008) to 0.40% (2008-2011).
- Failure to take actions on greenhouse gas emissions, exponential human population growth, and ecological overshoot suggests that present generations will probably experience a "new abnormal."

## # "RECENT RESEARCH INDICATES THAT THE CLIMATE IN COMING DECADES AND CENTURIES WILL BE LARGELY DETERMINED BY HUMAN ACTIVITIES."11

- \*Failure to take meaningful actions to reduce global emissions [greenhouse gases] is a particularly serious decision."11
- Since global changes are likely to be irreversible, a series of "new normals" will almost certainly be in place unless forcing factors (e.g., greenhouse gas emissions, exponential population growth) are eliminated or markedly reduced.
- If humanity fails to accept the present "new normal," how will it fare with the series of "new normals" that are inevitable if the nine interactive global crises<sup>12,13</sup> continue to worsen?

**Acknowledgments.** I am indebted to Darla Donald for transcribing the handwritten draft and for editorial assistance in preparation for publication and to Paul Ehrlich, Paula Kullberg, and Karen Cairns for calling useful references to my attention.

### References

- <sup>1</sup>Defend-Science-Email. 2012. North Carolina bans scientific predictions of sea-level rise. 9Aug http://www.sfecologie.org/ecodiff/2012/08/10/petition-defend-science-email/.
- <sup>2</sup>Huler, S. 2012. NC considers making sea level rise illegal. Scientific American 30May http://blogs.scientificamerican.com/plugged-in/2012/05/30/nc-makes-sea-level-rise-illegal/.
- <sup>3</sup>Wald, M. L. 2012. Heat shuts down coastal reactor. New York Times 13Aug http://green.blogs.nytimes.com/2012/08/13/heat-shuts-down-a-coastal-reactor/.
- <sup>4</sup>Ball, P. 2008. Where have all the flowers gone? *Nature* 454:374-375.
- <sup>5</sup>Grey, D. D. 2012. Wildlife traffickers profit by rampant corruption, lax tax laws in Asia. Associated Press 15Aug http://news.yahoo.com/wildlife-traffickers-profit-rampant-corruption-lax-laws-asia-084022748.html.
- <sup>6</sup>Wassner, B. 2012. Mourning the elephants. New York Times 10Aug http://green.blogs.nytimes.com/2012/08/10/mourning-the-elephants/.
- <sup>7</sup>Daly, H. 2012 as quoted in D. Korton, A plea for Rio + 20: don't commodify. Yes Magazine 24Apr http://www.yesmagazine.org/blogs/david-korten/a-plea-for-rio-20-dont-commodify-nature.
- <sup>8</sup>Halpern, B. S., C. Longo, D. Hardy, K. L. McLeod, J. F. Samhouri, and 28 others. 2012. An index to assess the health and benefits of the global ocean. *Nature* 488:615–620.
- <sup>9</sup>Ehrlich, A. H. and P. R. Ehrlich. 2012. Pollyannas of population growth: fooled by culture gap. 1Sep Population Press http://populationpress.org/.
- <sup>10</sup>Clugston, C. Unpublished manuscript. Austerity our new normal. http://www.countercurrents.org/clugston190812.pdf.
- <sup>11</sup>Somerville, R. C. J. 2012. Climate change, irreversibility, and urgency. Bulletin of the Atomic Scientists. 13Aug http://www.thebulletin.org/web-edition/features/climate-change-irreversibility-and-urgency.
- <sup>12</sup>Cairns, J., Jr. 2010. Threats to the biosphere: eight interactive global crises. *Journal of Cosmology* 8:1906-1915.
- <sup>13</sup>Cairns, J., Jr. 2012. The ninth threat to the biosphere: human thought processes. Supercourse Legacy Lecture. National Academy of sciences Members' Lectures. http://www.pitt.edu/~super1/lecture/lec46811/index.htm.