

# Environmental disasters seen and unseen

**Rick Holmes, Gatehouse News Service, 6-1-10**

There's one good thing about the environmental disaster in the Gulf: At least we aren't arguing about whether it's a problem or a hoax. There are no oil spill deniers keeping government from acting. No one's arguing that stopping the flow from BP's busted pipe would cost too much or hurt the economy.

A certain clarity comes from being able to watch 12,000 barrels a day spew into the Gulf on a live video feed. The conversation starts with "what do we do about it?" instead of "is it really a threat?"

"If only carbon dioxide was pink and you could see it in the air," Gary Yohe told me Thursday.

Yohe was calling from Washington, where he has been trying to draw some attention to new reports from the National Academy of Sciences, which was charged by Congress in 2008 with collecting the best research on climate change.

Those reports deserve attention (you can read them at [www.americasclimatechoices.org](http://www.americasclimatechoices.org)). The first updates climate research since the last assessment of the Intergovernmental Panel on Climate Change (IPCC), which relied on data from 2006 and earlier. It confirms conclusions that have been reached, tested and reconfirmed over decades: The Earth is warming, in significant part because of human activity, principally deforestation and the emission of greenhouse gases from power plants and motor vehicles.

New data leads to new projections. The last IPCC report, which Yohe helped write, did not incorporate data on accelerated melting of the Greenland ice cap, he said. That melting is now better understood and accepted. So the earlier estimate of a global rise in sea levels of between one and two feet by the end of this century has been revised. Now scientists predict sea levels will rise 3 to 5 feet by 2100.

A second report outlines policies to limit the magnitude of climate change, mainly by putting a price on carbon emissions. A third report goes where the IPCC and the environmental lobby have hesitated to explore: How should we start adapting to the impacts of climate change it's too late to stop.

"It's not giving up on the problem," said Yohe, an economics professor at Wesleyan who helped write the adaptation report. "It's recognizing that adaptation must be part of the solution."

Some adaptation is already taking place, without the fanfare that accompanies debates among scientists and politicians. The Pentagon is working climate change scenarios, from increased weather volatility to resource wars, into its planning. Insurance companies have stopped covering some coastal areas. Dupont has decided it will build no new facilities that would be threatened by rising sea levels. New York Mayor Michael Bloomberg has told his department heads to factor in climate change when planning for public health, infrastructure and other investments.

Adaptation may be as simple as understanding that when you're putting in new stormwater pipes, you should make them a size or two larger, because climate change will produce longer, heavier rainstorms, Yohe said.

But while experts like Yohe provide data to build a scientific consensus and shift to practical approaches to climate change impacts, public opinion is shifting the other direction. Polls in America, Britain and Germany

show people are increasingly skeptical about whether global warming exists or whether human activity causes it.

People are still talking about last year's "climategate" mini-scandal, in which some e-mails from scientists exposed their pettiness and a few errors - "15 mistakes out of 2,500 pages of text," that Yohe said undermined the reputation of the Nobel Prize-winning IPCC. That's a political/scientific scuffle, not new data that should change anyone's mind about what's happening to the Earth.

Declarations from the National Academy of Scientists, the nation's leading scientific body, should turn the public debate on climate change, but it's hard to get coverage for reports that confirm what has already been said especially given the media's preferences for arguments that pit establishment scientists against contrarians denouncing climate change as a hoax. It's especially hard when everyone's fixated on heavy crude spurting from a deepwater pipe.

The BP disaster offers a couple of lessons about climate change. First, there's the obvious: If we were weaning ourselves away from carbon-based fuels, BP wouldn't be drilling for oil a mile below the Gulf's surface, at great risk and great expense.

Second, the Gulf oil spill is a lesson in risk management and worst-case scenarios. Thousands of oil wells have been drilled in the Gulf without explosions and uncontrollable spills, but responsible parties must know what the risks are, act to minimize them and be prepared to respond if they happen.

Where the popular debate over global climate change has gone wrong is in its oversimplification by the media, the political class and special interests. It has become an either/or proposition: Either climate change is a man-made disaster or it's a minor natural fluctuation. Either it's a threat to life as we know it, or it's an overhyped hoax. In the stalemate that results, no action is taken.

The way out of this box is to think in terms of probabilities and risk management. No real scientist is 100 percent certain of anything; they are all trained skeptics. So when I argue with climate change skeptics, I ask, what if the climate scientists are right? What if, without meaningful steps to reduce carbon emissions, rising global temperatures will bring floods and drought, war and famine, species extinction and incalculable destruction of property?

If there is a chance the scientists are right, how big a chance: 90 percent? 50 percent? 20 percent? Is there no chance whatsoever that none of their warnings will come true?

Yohe, who often debates climate change skeptics, said he got one leader on the other side to agree there was a 5 percent chance the climate change consensus was right. Yohe considered that a victory, because responsible people prepare for disaster even if there's only a 5 percent chance it will happen.

If there's a 5 percent chance of a tornado hitting your home, you set up a safe spot in the basement where you can huddle when the wind roars. You put aside some canned goods, batteries and bottled water if there's a 5 percent chance of a blizzard, set tougher building standards if there's a 5 percent chance of an earthquake.

The truth is, there is more than a 5 percent chance the climate change warnings are justified by the evidence. Yohe has been working on this since 1982, and has watched the picture get more clear as each new piece of data came in.

Yohe sees the impact in the coastal villages of Alaska, which are having to be relocated because the permafrost

is melting and the ice no longer protects the coast. He sees it in the recent heat waves that have killed thousands of people in Europe and elsewhere. It's getting hotter earlier, too.

We'd all be better off if the climate change debate became a climate change discussion, focused on facts, probabilities and practical responses. Doomsday predictions on one side and head-in-the-sand denials on the other aren't changing minds and they aren't moving toward solutions.