POLITICS CATCHES UP WITH CLIMATE CHANGE

Finally, the federal climate watchdogs got it right. The just-released U.S. National Climate Assessment avoids pie-in-the-sky abstractions like "saving the planet before it's too late" and instead concentrates on regional changes affecting our lives today.

This regional approach is tacit proof that climate politics have finally caught up with climate science.

During the last half century, the international scientific community has reached virtually unanimous consensus that Earth's average temperature will keep rising, and that human beings are directly responsible for the change. The argument is settled. Meanwhile, the international political community has failed to deliver a meaningful global climate treaty despite decades of lip service and international climate summits. Why the contrast?

Because scientific fundamentals are independent of place, whereas political fundamentals begin with a sense of place. To atmospheric chemists in Belgium, Iran, Israel, Malaysia, Nigeria, North Korea and the United States, the atmosphere is a cost-free commons that behaves the same everywhere. Theirs is a top-down world view. In contrast, voters and leaders in those same countries see the world from the bottom up, from sovereign land to shared sky, from private property to guarded national borders.

The regional emphasis of the Climate Assessment strikes at just the right spatial scale to be effective. Instead of 50 states, there are eight regions. Facing their respective oceans are the northeast, southeast, southwest and northwest regions. Within the center are the Great Plains and the Midwest. Alaska and Hawaii are the outliers. Units any smaller would be claimed by state politicians. Larger ones would be climatically meaningless.

The regional emphasis will also help us use the word "climate" correctly in popular media-speak. Deferring to my Oxford English Dictionary, the word "climate" is emphatically regional. Originally, it referred to the latitudinal belts of earth's surface between the equator and poles. During the last few centuries climate geographers have subdivided these belts into discrete regions of similar prevailing atmospheric conditions. Italy and California, for example, have a Mediterranean climate. Saskatoon and Siberia have a continental climate. Connecticut's climate is humid temperate, and far less predictable than previous examples.

By definition, there is no such thing as a global climate, and therefore no such thing as global climate change. What's changing is the globally averaged surface temperature, rising in lock step with higher concentrations of atmospheric carbon, rising in lock step with fossil fuel consumption. Humans have effectively turned up the thermostat in a house of many rooms. Each responds differently because each is a different distance from the central heat of the equator, each has a different mix of materials (land, water, forest, snow) and each is bathed by a different combination of circulating winds and oceanic currents.

Within the house we call the United States, the northeastern room is warming faster than the others. Most models now predict a 6 to 10 degree rise in average temperature by century's end. Already, it's become more moist and cloudier. Downpours are heavier. In fact, our region leads the others with respect to the increase in extreme precipitation during storms, defined as the heaviest 1 percent of events. From 1958 to 2012, heavy precipitation events increased by 71 percent, faster than for any other region. And though summer droughts and water supplies are now critical issues, we're lucky relative to other regions.
In the nation's southwest room it's getting much hotter and drier. Water supply and wildfire are urgent problems. The southeast is girding up against hurricane deluges and parching droughts. Northwestern skies are clearing, even as rainfall intensities increase. In the nation's midsection, tornado alley has become a tornado superhighway.

Overriding these regional differences are coast-to-coast commonalities. Weird weather is the new normal. Record-breaking temperatures, rainfalls and snowfalls are less newsworthy. Summers are longer and hotter. Winters are shorter and warmer. Heat waves and droughts are lasting longer.

Finally, the U.S. National Assessment is focused less on climate changes per se than on their downstream effects: human health, sea level, ecology, agriculture, economy, recreation and potable water. These are the things that will nudge U.S. voters in the right direction on national climate policy.