Having 20/20 vision about climate change in 2020



BUY PHOTO

STORM:::8/30/11::The intersection of Ashworth Ave. and Charles St. in the Lords Point section of Stonington flooded Tuesday, August 30, 2011. (Dana Jensen/The Day)

Published December 29. 2019 12:01AM

By Judy Benson

Homonyms spawn countless puns and some of the most amusing turns of phrase in modern culture. Think of Baloo the bear singing "Bare Necessities" in the Disney version of "Jungle Book."

Now though, the New Year presents an opportunity to consider a homonym as a motivating message. Just as the number "20/20" is the measure of optimal vision, the year 2020 can be about setting an intention for keeping clear sighted about what climate change means now and in the future, and how best to respond. One of my Sea Grant colleagues in Alaska said recently that residents there don't have to be convinced of the reality of climate change, because melting permafrost, flooding coastal villages and altered fisheries there are everyday realities. They are readily engaging in projects to adapt. Neither can we in Connecticut afford the luxury of willful blindness.

Already coastal roads from Greenwich to Stonington are experiencing "sunny day flooding" at high tides, storm drains are overwhelmed with frequent heavy rains, and warming waters in Long Island Sound are reordering the marine ecosystem. This March, municipal officials from around the state will gather for the seventh climate adaptation workshop co-sponsored by **Connecticut Sea Grant** in as many years. This time, the topic – requested by previous attendees – will be shoreline retreat. It's a highly sensitive but necessary conversation for the many cities and towns with shoreline neighborhoods increasingly vulnerable to rising seas and intensifying storms. Figuring out if, where and how to structure fair and orderly buy-out programs is one of the many daunting challenges that's better to face now than after the next natural disaster.

Managing shoreline retreat is just one of the many climate change conundrums involving the intersection of the coastal economy with the environment. Decades of fossil fuel emissions are changing the chemistry of the atmosphere, the ocean and the land, setting off a cascade of impacts moving with momentum that can't be stopped immediately, and not ever without confronting the truth. One of those truths is accepting what we don't know, and working to understand it.

That's the case with the acidification of our coastal areas. It's the more complicated cousin of the better known phenomenon of ocean acidification turning offshore waters into hostile environments for coral reef survival, among other effects. But the changes there are following a more predicable path. Not so in coastal areas like the Long Island Sound estuary. Variable inputs of freshwater from rivers, nutrients and pollution from land and warming temperatures are combining with increasing carbon dioxide levels to change local water chemistry in erratic ways that threaten coastal economies. In some areas elsewhere in the North Atlantic region, commercial shellfish farmers are adding buffering agents to the seawater in their hatcheries where young shellfish are grown. Without it, the larvae can't develop their shells properly.

But the exact combinations of mechanisms causing this to happen in one area and not in another as little as 10 miles away remains unknown. Nor can we predict where it will happen next. Connecticut Sea Grant, working with the New England Coastal Acidification Network, has been working to further the science and will be communicating findings to industry, policymakers and the public in 2020, a continuation of work begun in 2018.

But working on the hard problems of climate change isn't just for the scientists and their colleagues in groups like Sea Grant. Consider the words of the Rev. Margaret Bullitt-Jonas, who shared the panel with Connecticut Sea Grant's Juliana Barrett and others at a forum last October titled, "Reality, Hope and Action in an Age of Climate Change" at St. James Episcopal Church in New London. In her recent book of Advent readings, she writes, "However we participate in healing creation, all of us are needed. Everyone has a part to play."

Consider, too, the words of the wonderful writer Wendell Berry. In an essay about a sustainably managed Pennsylvania forest as metaphor for the kind of reordering needed in our collective and individual relationships with our home planet, he writes: "To say that the good care of the forest, as of all the world's places, depends upon love is, sure enough, to define a difficulty. But not an impossibility. The impossibility is that humans would ever take good care of anything that they don't love. And we can take courage from the knowledge that millions of Americans once loved their vegetable gardens, cared well for them, and kept them dependably productive — and that a good many still do."

With love, clear vision and resolve to play our part, 2020 can be a better year for us and the Earth.

Judy Benson is the communications coordinator at Connecticut Sea Grant, a partnership of the University of Connecticut and the National Oceanic and Atmospheric Association that is one of 34 Sea Grant programs nationwide. She can be reached at: judy.benson@uconn.edu.