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As the oceans rise, insurance rates rise faster - by Thomas House

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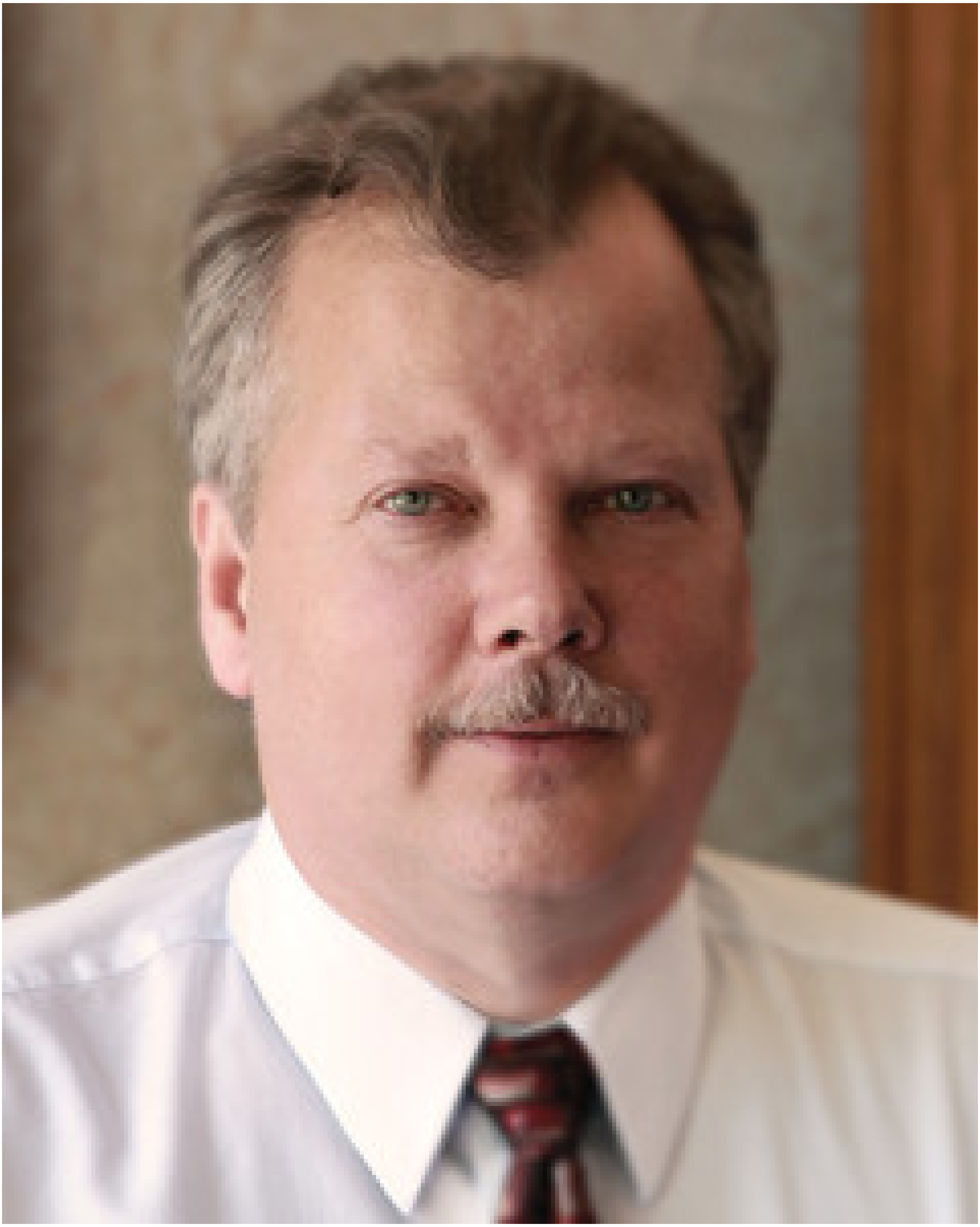

Thomas House

Regardless of where one considers the increased carbon in the atmosphere comes, the physics doesn’t care. As experimentally demonstrated by the mid-1800s, carbon dioxide stores heat by absorbing the infrared light that would normally escape the atmosphere. (Hold your hand over hot asphalt on a sunny summer day; the heat you feel is infrared light.)

The oceans store excess carbon dioxide and since 1990, at prodigious rates. This makes the oceans warmer, and warm things generally expand. Water is one of them.

You might also remember the Second Law of Thermodynamics, in which equilibrium is achieved by heat migrating to cooler regions, and warmer oceans will transfer excess energy first to cooler water, then to cooler air. This transfer of energy is what spins up more powerful storms.

On average, this search for equilibrium results in thermal transfers that warm what would normally be cooler areas.

Class dismissed.

The physics is correlated to home value…and insurance rates
In a study conducted by Insurify, 46% of homeowners feel the value of their home has already been affected by climate change, even in markets where home values are currently still appreciating.

But what do insurance companies think?

In one appreciating market, homeowner insurance is almost $8,000 per year on average - some as high as $12,000 (a thousand per month).

That is, if you can get commercial insurance. Many homeowners are reduced to ‘self insuring’ or a state-run program - and even that program is going up 11.5%

OK, Florida is not New England, but do regard the bellwether.

Last year it was a very serious drought, this year inundation, and the hottest year on record. This is your earth science class having escaped the laboratory and is now in the wild.

The physical chemistry of all this is known, regardless of whether that carbon dioxide is coming from a tailpipe or a deep sea vent.

Take this year’s deluge in New England and consider what a homeowner’s policy doesn’t cover. Flood insurance.

That of course is ‘weather’ not climate, but rising oceans are physics because warming water expands, and comes on shore, currently in the form of strong storm surges.

Massachusetts, in fact, is the state with the highest amount of home value at risk over the next 20 years due to sea level rise. That’s right...not Florida!

The Motley Fool reports just under 7,000 homes with an aggregate value of $4 billion - against a tax base of less than 1/10th of a percent. By the end of the century, insurance company forecasts those numbers to be 1100% higher - an order of magnitude

And insurance companies don’t gamble. They hedge. With your money.

Due to riverine flooding, Vermont’s numbers are quite similar.

The risk to developers

One threat to developers is that insurance companies consider properties to be overvalued.

The market may agree that one of your investments is worth the half million dollars you are getting on your unit at any given location - but if something happens, your claim will settle for a lot less than whatever the market says.

And remember, flood insurance is an extra cost which will in many areas severely limit the locations where you can build (scarcity means higher cost) or require you to build to a increased tolerance (which again means higher cost).

Insurance companies take statistical risk - but what they think that is will be hedged (meaning, wait for it...higher cost).

Developers will arbitrage the difference, one supposes, and pass whatever cost they can onto their buyers or tenants. You might come out ahead. Maybe.

The risk to municipalities

The Washington Post, citing a report authored by the Federal Reserve and the Environmental Defense Fund, notes that municipalities rely heavily on property taxes which are themselves based on home valuations.

Flood (and fire) risk are a threat to their budgets - and to the services these municipalities provide, not least of which includes education, police, fire, snow removal, and filling potholes.

Areas acquiring a designation as flood-prone or at other environmental risk may lose value - or be declared uninhabitable, something already happening elsewhere.

Along the coast, that may mean areas subject to “managed retreat”, which are high-valuation properties, but not high enough to justify salvation at taxpayer expense if the mayor or town manager expects another term in office.

New England and Appalachia, according to this report, are the areas at the highest risk due to extreme precipitation and sea level rise.

Insurance companies don't like to gamble
We bet you don't either.

So these are assessments to consider before you decide to push your chips toward the middle of the table.

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