

A Conundrum For Affluent Property Owners: Does It Make Sense To Build A Higher Home In A Neighborhood That Faces Chronic Flooding?

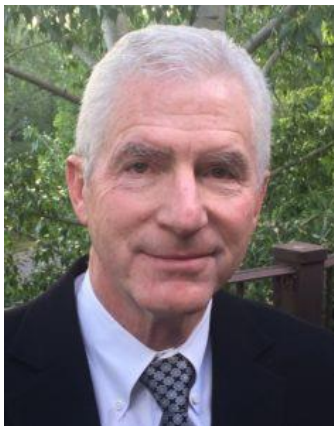
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A month ago, I was approached by a homeowner in a well-known, but not to be disclosed, neighborhood in South Florida. This is a low-lying, waterfront neighborhood of million-dollar homes, all with docks and bulkheads and pleasure boats moored alongside. Just about paradise.

In this neighborhood, there are 20 homes that range in value from \$2 million to \$10 million. So, let's say that the tax valuation of all of the homes is approximately \$100 million.

The homeowner who contacted me wanted advice. He and his wife planned to buy a vacant lot next door, tear down their home and build a bigger home spanning both properties. But, they are knowledgeable people and follow the news about climate change and sea-level rise.

They were concerned. In the eastern part of the neighborhood, they told me, there is already king tide flooding on sunny days in the fall, when the sea water overtops the bulkheads and rests in the roads.



Albert Slap

Their question: "Should we invest in the empty lot, tear down our existing home and build a new home at a higher elevation off the ground?" And, if they did, what elevation should the architect make the first floor?"

Seems like a question with a simple answer and, yet, it isn't.

Coastal Risk's modeling at the property showed that the client's home and property and the vacant lot were both at a significantly higher elevation than those of the neighbors. So, the tidal flooding isn't a current problem.

Modeling of climate change-induced, sea-level rise into the future, however, showed that the street just outside their property would begin to suffer king tide flooding in 2034 and it would become much more severe in 2049 and beyond.

The couple are in their early 50s with children still at home. They love their property and the South Florida lifestyle. They said they wanted to leave the property to their children and grandchildren.

Coastal Risk modeling also demonstrated that by "razing and raising," they could build at an elevation that would escape the worst effects of hurricanes. In a nutshell, it was possible for such a wealthy client to build a waterfront house that would be somewhat like an armored castle while the rest of the neighborhood slowly sinks below the waves.

What to do?

Just to confirm that the Coastal Risk modeling was correct, the client asked us to set up a call with a knowledgeable engineer at the local government offices. The engineer ran the government's models, which confirmed that the neighborhood roadways were already experiencing king tide flooding and it would only get worse.

The client then asked the engineer, somewhat incredulously, "So, what's the city going to do for us?" And, [here comes the Minsky Moment](#) (a Minsky Moment is when an asset's price suddenly collapses after a long period of growth.)

The engineer said that the neighborhood was not in the city's capital improvement plan to get any — repeat, any — major help for the flooding. No road raising, like in Miami Beach. No pumps like in Miami Beach. No enlarging of the storm sewers, like in Miami Beach.

"Ruh-roh," as Scoobie Doo likes to say.

What does it mean to be the owners of a multi-million dollar elevated home in a neighborhood where property values around them will be dropping precipitously, as sea levels rise? Now, the homeowner (and hundreds of thousands of similarly situated property owners in the U.S.) is confronted with complicated options.

- Do they sell now and buy at a location less prone to flooding?
- Do they continue with their plan and build a new home at the highest elevation allowed by building codes?

- How do they factor into their decision the almost certainty that the “downslope homes” will be in great distress, first by sea water more frequently in the roads and then more frequently in the owners’ yards?
- Do they organize the neighborhood and go to the city council and demand that flooding in their neighborhood be addressed with capital improvements? Would that even be effective and for how long?
- How will the reality of the worsening king tide flooding affect bank loan financing in the neighborhood, the availability of homeowners and flood insurance, and local tax assessments?
- How will the local government deal with a hit to its budget from millions of dollars in property tax revenues lost under the waves of Florida’s Intracoastal Waterway?
- And, how many times will this situation be repeated up and down the coastline of the United States and around the world?

Ruh-roh, indeed.

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