

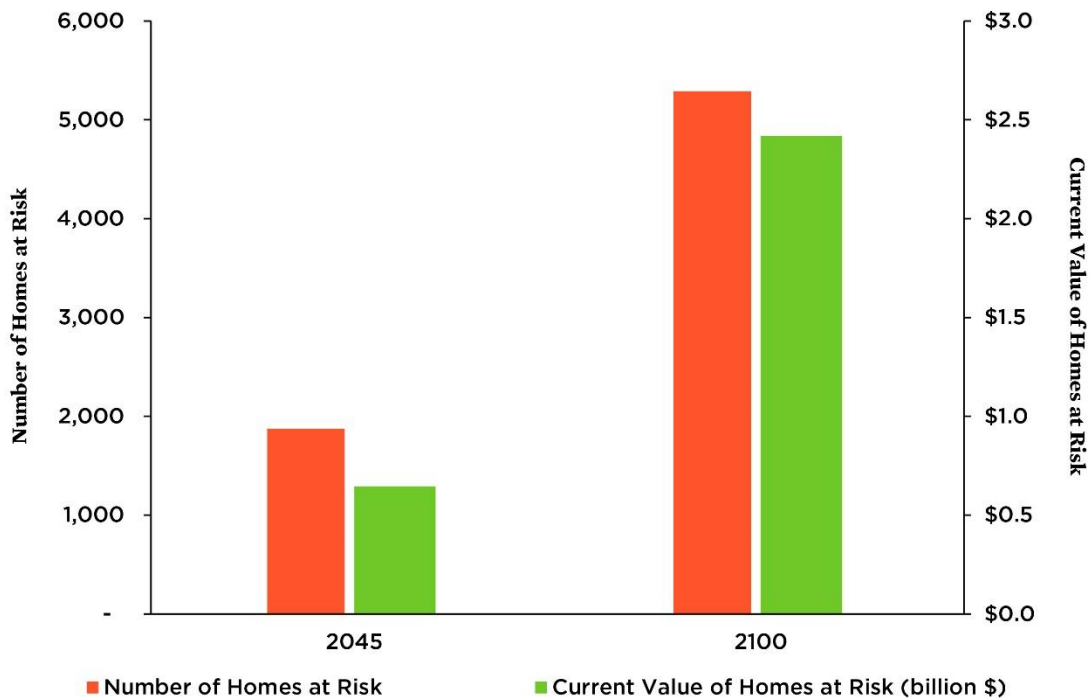
Underwater in New Hampshire's 1st Congressional District

Rising Seas, Chronic Floods, and the Implications for Coastal Real Estate

As sea levels rise, the frequent flooding of homes, businesses, and roads will render many coastal properties effectively unlivable and make many neighborhoods—even whole communities—financially unattractive and potentially unviable. Using scientific projections for chronic, disruptive flooding (defined as experiencing at least 26 floods per year) in coastal

regions in the coming decades, and data provided by the online real estate company Zillow, the Union of Concerned Scientists (UCS) has estimated the total number and value of residential and commercial properties at risk of chronic flooding over the next 30 to 70 years, and their contribution to the community tax base.

FIGURE 1. Increasing Risk to Real Estate in New Hampshire's 1st Congressional District



Under a high sea level rise scenario, by 2045, roughly 1,900 existing homes worth a collective \$645.3 million today are at risk of being chronically flooded. By the end of the century, about 5,300 residential properties valued at \$2.4 billion today are at risk.

Under a low sea level rise scenario, which could play out if countries rapidly cut their emissions in line and meet the Paris Agreement goal of capping warming below 2 degrees Celsius, roughly 65% of the homes at risk this century could be spared.

DATA SOURCES: DAHL ET AL 2018; ZILLOW 2017.

* Data provided by third parties through the Zillow Transaction and Assessment Dataset (ZTRAX). More information on accessing the data can be found at <http://www.zillow.com/ztrax>. The results and opinions presented in this report are those of the Union of Concerned Scientists and do not reflect the position of Zillow Group. See full disclaimer at www.ucsusa.org/underwater.

Economic Implications of Coastal Property Devaluation

Nationally, with a high sea level rise scenario, more than 300,000 of today's homes and commercial properties on the coasts of the lower 48 states are at risk of chronic, disruptive flooding within the next 30 years. By the end of the century, nearly 2.5 million homes and commercial properties—collectively valued at \$1.07 trillion today—would be at risk.

Yet property values in most coastal real estate markets do not currently reflect this risk. In the coming decades, owners and investors in coastal properties in areas at risk of chronic inundation may find themselves saddled with and surrounded by properties whose values sink lower and lower.

Whether a property market crashes or property values steadily decline as chronic flooding worsens, individual property owners, real estate developers, banks, taxpayers, and insurers are poised to sustain large collective losses. Shrinking property tax bases would limit the ability of cities and towns to provide essential services and infrastructure, and property tax rates may rise to compensate for devalued properties. Low-income and otherwise disadvantaged communities will be among those most heavily affected by chronic flooding and its accompanying financial losses. And unlike widespread housing market adjustments of the past, where property values eventually rebounded in most markets, coastal properties chronically inundated by rising seas will only go further underwater.

Our Challenge—and Our Choices

Coastal flood risks are often masked by short-sighted policies, market incentives, and public and private investments that fail to account for sea level rise. National and local action is needed to limit the economic consequences of coastal flooding.

The nation should implement policies to cut carbon emissions, invest in clean energy solutions, and re-orient policy and market incentives to help limit flood risks while ensuring equitable outcomes and fostering new opportunities on safer ground.

Congress and the administration should:

- Reauthorize and reform the National Flood Insurance Program to fund updated flood risk maps that include projected sea level rise; phase in insurance rates that accurately reflect flood risk; include affordability provisions for lower-income households; and provide more funding for flood mitigation measures including home buyouts.
- Ensure that federal disaster and pre-disaster aid programs provide incentives and resources to help communities plan and build in a more resilient way
- Develop national guidelines and standards for uniform flood risk disclosure in real estate transactions
- Require federal agencies to implement flood-ready standards for taxpayer-funded infrastructure
- Protect funding for climate science and clean energy programs in agency budgets

State and local policymakers should:

- Communicate flood risks to coastal communities
- Implement protective zoning regulations and building codes
- Invest in robust coastal adaptation measures

Financial sector actors should:

- Implement best practices and standards for flood risk-related financial disclosure
- Invest in data, tools, and methods to evaluate near- and medium-term flood risks and communicate those risks to their clients
- Provide financial incentives for communities to build coastal resilience and make lower-risk development choices

Our choices today can help limit the looming risks of chronic flooding to coastal property.

Union of Concerned Scientists

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NATIONAL HEADQUARTERS

Two Brattle Square
Cambridge, MA 02138-3780
Phone: (617) 547-5552
Fax: (617) 864-9405

WASHINGTON, DC, OFFICE

1825 K St. NW, Suite 800
Washington, DC 20006-1232
Phone: (202) 223-6133
Fax: (202) 223-6162

WEST COAST OFFICE

2397 Shattuck Ave., Suite 203
Berkeley, CA 94704-1567
Phone: (510) 843-1872
Fax: (510) 843-3785

MIDWEST OFFICE

One N. LaSalle St., Suite 1904
Chicago, IL 60602-4064
Phone: (312) 578-1750
Fax: (312) 578-1751