*(This post is part of a series on the issue of climate change and insurance that my colleague Sean Hecht and I are writing, inspired by a symposium that the law schools co-organized with the California Department of Insurance earlier this year. You can find more information on the symposium **here**.)*

The autumn of 2019 is bringing fresh evidence of the damage and disruption California has begun and will continue to suffer due to climate change. In response to the devastating **2017** and **2018** wildfires, California's electric utilities have been preemptively **cutting off power** to hundreds of thousands of customers around the state for days at a time—and still, unavoidably and tragically, **major fires** have struck Sonoma County, Los Angeles, and elsewhere.

Wildfire and power shutoffs are just part of California's "**new abnormal**" of climate risks such as flood, sea-level rise, extreme heat, and drought that will unfold with growing frequency (and interactivity) in coming years and decades. It has **long been clear** that insurance will play an integral role in helping Californians recover from these events, and that new risks will present **systemic challenges** to the insurance sector itself. Bodies ranging from the **California Department of Insurance** and the United Nations' **Principles for Sustainable Insurance** to CLEE's new **Climate Risk Initiative** have begun to commit resources to understanding and addressing these risks.

Insurers' unique role in assessing and managing risk can also help align environmental and financial incentives to proactively boost resilience and mitigate climate risks. In some cases, like **policies** mandating insurance renewal or premium discounts for properties that undertake defensible-space measures, this alignment is fairly self-evident. But new, innovative insurance applications may build alternative paths to supporting investment in resilient infrastructure and reducing local climate impacts.

These innovations, sometimes referred to as nature-based solutions, could take a number of different forms. The basic concept involves an insurance policy that pays out after the occurrence of a specific climate-related event, with built-in mechanisms—such as rules directing payout funds to resilience measures—designed to drive proactive, risk-mitigating investments.

A leading example of this model is the **Coastal Zone Management Trust**, an industry-government-nonprofit pilot project based in the Mexican State of Quintana Roo. Three key features define the region: it is home to a beachfront tourism

industry that drives the economy; it is highly vulnerable to hurricanes and storm events (which will only worsen with climate change); and it is protected by a major coral reef that limits storm surges and coastal erosion.

The trust, which is funded through local tourism tax revenue, is used to pay for reef maintenance activities and to purchase a “parametric” insurance policy. The policy pays out when a specific parameter (a category 4 or 5 hurricane) is triggered, regardless of the level of damage caused, with funds paid to support immediate reef recovery actions. This structure allows the local businesses and government to make an affordable upfront investment and the insurer to offer a financially viable product, both aligned toward proactive risk mitigation and immediate availability of recovery funds. The result, potentially, is greater financial certainty and enhanced incentives for resilience in face of the uncertain and growing risks posed by climate change.

If this model proves sustainable, it could provide similar benefits in California, for example by supporting investments in coastal wetlands to protect against storm surge and sea level rise in the Bay Area. Even more innovative applications could support cooling infrastructure and urban forestation to protect against **urban extreme heat events** and advanced vegetation management to limit wildfire in forested areas. At a July **symposium** that CLEE and UCLA Law organized with CDI and the UN, insurers and policymakers discussed further insurance-based approaches ranging from policy premium reductions to mitigation projects based on multi-jurisdictional cooperation and cross-subsidized insurance.

Senate Bill 30, authored by then-senator (and current Insurance Commissioner) Ricardo Lara, created a **working group** to assess and recommend insurance and financial mechanisms to transfer risk, promote investment in natural infrastructure, and reduce climate risks, including communal and regional approaches. The group’s findings will inform potential next steps, but further policy research, stakeholder outreach, and insurer buy-in will be needed to develop these solutions. Key issues include the dollar valuation of public health impacts, the efficacy of various nature-based solutions, and insurers’ ability to model evolving weather events. While the complex dynamics of climate risks such as wildfire and urban heat events challenge the traditional roles of insurance, innovative approaches could provide a new pathway to resilience.