

Rebuild to Fail or Rebuild to Adapt: How CRA Lending Can Guide Climate Change Disaster Response

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Disaster recovery drives climate change adaptation in the U.S. at present. While there is planning for climate change adaptation going on in major urban areas,¹ the actual work of designing, planning, and managing climate adaptive infrastructure takes place primarily after disasters. The question this article tries to address is whether disaster-driven climate change adaptation implementation—as opposed to planning—really addresses the needs of climate change adaptation. Beyond this concern, this article looks at a wildfire risk mitigation plans as a model for promoting adaptive reconstruction after climate change-related natural disasters. This approach represents a middle ground between disaster recovery and long-term risk associated with climate change.

This articles uses the California wildfires of 2017 and 2018 as case studies. In California, we like to say that we have four seasons: fire, flood, earthquake, and drought. One of those “seasons,” fire, has recently caused great loss of property, as well as loss of human life. The California wildfires of 2017 and 2018 collectively destroyed over 34,000 structures, and the loss of at least 138 lives.² Of the 20 most destructive fires known in California history, eight occurred in 2017 and 2018.³ These fires are seen by California public safety officials as being at least partially the result of climate change.⁴ Losses from the 2018 fires alone are projected by CoreLogic, an insurance industry risk management consultancy, to range between \$15 and \$19 billion.⁵ As former California Governor Jerry Brown noted “[m]anaging all the forests everywhere we can does not stop climate change—and those that deny that are definitely contributing to the tragedy, the chickens are coming home to roost. This is real here.”⁶ Our

1 Examples include: Rebuild by Design, available at <http://www.rebuildbydesign.org> and Resilient by Design: Bay Area Challenge, available at <http://www.resilientbayarea.org>.

2 CalFire. “Top 20 Most Destructive Wildfires” (2018), available at http://www.fire.ca.gov/communications/downloads/fact_sheets/Top20_Destruction.pdf.

3 Ibid.

4 Kasler, D. “California wildfires will grow 77 percent as climate warms. Should forests be thinned?” *Sacramento Bee* (August 4, 2018).

5 CoreLogic. “The Camp and Woolsey Wildfires in California Cause Devastating Losses Between \$15 Billion and \$19 Billion According to CoreLogic” (November 27, 2018), available at <https://www.corelogic.com/news/the-camp-and-woolsey-wildfires-in-california-cause-devastating-losses-between-15-billion-and-19-billion-according-to-corelogic.aspx>.

6 Marinucci, C. and Hart, A. “Gov. Brown, fire-besieged California hit back at Trump over blame tweet,” *Politico* (November 11, 2018), available at <https://www.politico.com/story/2018/11/11/california-disaster-declaration-fires-trump-983168>.

nation has robust systems to support rebuilding and recovery: private sector casualty insurance, the Federal Emergency Management Agency (FEMA),⁷ and bank lending. Let's consider the issues with each of these sources of funding for rebuilding after the California wildfires.

Insurance as a Catalyst

Many homeowners do not carry sufficient flood or fire insurance to rebuild to their prior condition after a disaster.⁸ Even if they did, their insurance coverage is generally not enough to provide for the increased incremental costs of climate change adaptation. Buildings and communities as a whole need to be rebuilt to a standard beyond the conditions prior to the disaster if they are going to be adaptive to climate change in the future. The way the limits on casualty policies work at this time, they only rarely will cover the increased costs of true climate change adaptation, let alone full rebuilding costs.⁹ This is particularly true for what public safety professionals are calling the Wildland Urban Interface (WUI).

The biggest obstacle for homeowners rebuilding to expanded climate change adaptation standards is the concept of “replacement cost” in their homeowner’s insurance policy. Replacement cost is generally defined in homeowner’s policies by a specific quantitative limit. In addition, most policies limit rebuilding funding to the pre-existing conditions. Some policies provide for funding to meet current building codes where the cost of current building code requirements exceed the pre-existing conditions.

Homeowners do not as a rule of thumb update their coverage limits to provide adequate funding for rebuilding to new building code requirements. The State of California recently adopted legislation requiring insurance providers to at least notify their policyholders of the need to review and update their coverage limits.¹⁰ This is no guarantee, however, that the policyholders will actually choose to pay a higher premium in order to have adequate coverage.¹¹ Moreover, a significant portion of the costs for WUI fire risk mitigation are

7 While FEMA acknowledges the need for climate change adaptation planning, their policies do not allow them to fund infrastructure for adaptation if the infrastructure exceeds “pre-existing conditions.” Consequently, since it is likely that climate change adaptation will require upgrades to existing infrastructure, FEMA is de facto very limited in its ability to fund climate change adaptation for disaster recovery. Federal Emergency Management Agency. “FEMA Climate Change Adaptation Policy Statement” (November 1, 2011), available at https://www.fema.gov/media-library-data/20130726-1919-25045-6267/signed_climate_change_policy_statement.pdf; Federal Emergency Management Agency. “Public Assistance is For Infrastructure Recovery” (February 20, 2013), available at <https://www.fema.gov/news-release/2013/02/20/public-assistance-infrastructure-recovery>.

8 Nash, M.W. “How Wildfires Are Making Some California Homes Uninsurable,” *The New York Times* (November 20, 2018), available at <https://www.nytimes.com/2018/11/20/business/california-fires-insurance.html>.

9 Gill, L.E. “Last Year’s Wine Country Fires in California Leave Homeowners Struggling,” *The Insurance Journal* (August 29, 2018), available at <https://www.insurancejournal.com/news/west/2018/08/29/499484.htm>.

10 Office of Governor Edmund G. Brown, Jr. “Press Release: Governor Brown Signs Legislation to Strengthen Wildfire Prevention and Recovery” (September 21, 2018).

11 South, G. “Wildfire insurance out of reach for many Californians who need it,” *Inman News* (January 9, 2018), available at <https://www.inman.com/2018/01/09/wildfire-insurance-out-of-reach-for-many-californians-who-need-it/>.

“off-site”—meaning that the fire risk mitigation is not specific to the parcel owned by a particular homeowner.¹² Fire risk mitigation is also done at a community and regional level in the form of brush clearing, controlled burns and other wildland “maintenance.” The cost for these off-site improvements needed to mitigate WUI fire risk are not covered by homeowner’s insurance policies.

While current building codes in portions of California officially designated as high risk WUI areas mandate a higher level of fire resistance in new construction,¹³ homeowners must have purchased extra insurance coverage to pay for such additional costs for a replacement home after a disaster. Equally as important, there are no mandates in California requiring existing WUI homeowners to upgrade their homes to meet current WUI building code requirements for new construction. Consequently, if WUI fire risk mitigation really demands enforcement of an expanded building code, there is only limited funding available from the insurance industry for that purpose. Is the problem more fundamentally rooted in land use controls, rather than building codes?

While it may appear that this article is criticizing the insurance industry, this is not the intent. As noted above, estimated losses from just the 2018 California wildfires may be as great as \$19 billion.¹⁴ According to the California Department of Insurance, in 2017, total premiums collected for homeowner’s multi-peril insurance were \$7.8 billion against losses of \$15.4 billion.¹⁵ The wildfire losses in California may not be sustainable by the insurance industry at current premium levels. To give credence to this concern, the California Department of Insurance recently took over Merced Property & Casualty, with assets of about \$23 million, but expected to have as much as \$64 million in claims from the Camp Fire in Paradise, CA.¹⁶ The California Department of Insurance reports also that the rate of non-renewal of homeowner’s policies in California has increased significantly since 2010.¹⁷ The California Department of Insurance also notes that 60 percent of these terminations have occurred in ZIP Codes within the state’s high-fire risk zones.¹⁸

If the insurance industry decides that providing insurance in California’s WUI high and very high fire risk areas is not a good business decision, up to one million homeowners

12 CalFire. “Fuels Treatment” (2019), available at http://calfire.ca.gov/resource_mgt/resource_mgt_EPRP_FuelsTreatment.

13 CalFire. “California’s Wildland-Urban Interface Code Information” (2019), available at http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_codes.

14 Corelogic. “The Camp and Woolsey Wildfires” (November 27, 2018).

15 California Department of Insurance. “2017 California P&C Premium and Loss Distribution” (2018), available at <http://www.insurance.ca.gov/01-consumers/120-company/04-mrktshare/2017/upload/PrmLssDist2017.pdf>.

16 Koren, J.R. “Insurer Merced went belly up after Camp fire. Here’s what policyholders need to know,” *Los Angeles Times* (December 4, 2018), available at <https://www.latimes.com/business/la-fi-merced-insurance-customers-20181204-story.html>.

17 California Department of Insurance. “The Availability and Affordability of Coverage for Wildfire Loss in Residential Property Insurance in the Wildland-Urban Interface and Other High-Risk Areas of California: CDI Summary and Proposed Solutions” (2018), available at <http://www.insurance.ca.gov/0400-news/0100-press-releases/2018/upload/nr002-2018AvailabilityandAffordabilityofWildfireCoverage.pdf>.

18 Ibid.

could be impacted.¹⁹ The state does provide a backup program, called Fair Access to Insurance Requirements (FAIR) for homeowners who cannot otherwise obtain the minimal insurance required by their mortgage lenders. At present, the state's FAIR program covers about 127,000 homes, 84,000 of which are in Los Angeles County.²⁰ FAIR coverage in portions of the state that are dominated by WUI is thin. For example, in Butte County, where over 18,000 structures were lost in the Camp Fire, FAIR provides coverage for just 415 homes.²¹

The FAIR program is funded by private sector insurers under a state mandate. However, these FAIR insurers are pushing back against the program in the aftermath of the recent wildfires. The California Department of Insurance issued a cease and desist order against the FAIR insurers on December, 2017 after FAIR insurers suspended writing new policies as a result of the huge losses in the North Bay Fires.²²

California now faces an awful paradox as a result of the recent climate change-related wild-fire disasters—at the same time that homeowner's insurance is inadequate to fund rebuilding to the resilience required by climate change, the state's insurance providers may not be able to sustain coverage at the current inadequate levels. This may indirectly lead to adaptation in land use planning, but the interim costs to households and communities is high.

Rethinking the Role of FEMA

FEMA guidelines limit FEMA funding for rebuilding to restoring facilities to their prior condition.²³ Consequently, FEMA functions de facto like the insurance industry. FEMA funds rebuilding, but from the perspective of climate change adaptation, FEMA funds rebuilding to fail. One example of this is the past use of plastic pipe for storm drains in the area devastated by the Tubbs and Atlas fires in 2017. The intensity of the fire was such that many plastic storm drain pipes melted. Consequently, the soil over the storm drains collapsed into the resulting void, and the melted plastic released toxic chemicals into drainage channels that feed to surface water streams. Despite this indication that concrete or other more fire-resistant materials for storm drains should be used instead of plastic for reconstruction, FEMA will only fund plastic pipe for rebuilding.

The reconstruction of infrastructure is crucial for the rebuilding of fire-devastated neighborhoods. Basic utilities must be available to a parcel before any lender will fund a construction loan for rebuilding of a home. FEMA has been the primary funding source for the rebuilding of utilities after natural disasters in the U.S. However, if FEMA will only fund rebuilt infrastructure to the standards existing before the disaster we are, again, rebuilding to fail. This practice has received the most attention in flood and hurricane prone areas of the U.S.

19 Ibid.

20 California Department of Insurance. "California FAIR Plan Exposure by County" (2018), available at <https://www.cfpnet.com/wp-content/uploads/2018/11/Exposure-by-County-9-30-18.pdf>.

21 Ibid.

22 California Department of Insurance. "FAIR plan ordered to cease and desist" (2017).

23 Federal Emergency Management Agency (FEMA). "Public Assistance is For Infrastructure Recovery" (February 20, 2013).

With respect to WUI fire risk mitigation, utility undergrounding and the use of fire-resistant storm drain pipe are two adaptive utility practices that should be considered. Unless they were pre-existing conditions, neither will be funded by FEMA.

Follow the Leader

Bank lending indirectly follows the patterns and limits set by insurers and FEMA. Banks lend to property that can obtain the appropriate casualty or flood insurance. Bank loans are secured by liens on specific parcels. Current practice then is to lend to insurable parcels owned by borrowers with adequate credit. However, successful climate change adaptation measures for WUI fire risk are not exclusively parcel specific. As noted above, WUI fire risk mitigation also needs to be at a neighborhood or community scale. Consequently, lending to rebuild a community devastated by a climate change disaster to a new, more adaptive, standard is not consistent with current bank lending protocols. As noted above, banks will lend where insurance is available. Consequently, as has been noted by many, if the federal flood insurance program promotes rebuilding in flood prone areas, the banks will continue to lend to those areas. That amounts to bank lending to rebuild to fail.

Fire risk in California is a different case. As noted previously, the state's insurers are accelerating the rate of fire insurance termination, particularly in the WUI. This is adversely impacting the ability of fire devastated areas to rebuild.²⁴ While the insurance industry may not be capable of funding climate change adaptation in disaster areas, it may be de facto leading the way into managed retreat in those areas. If insurance is not available to borrowers wanting to rebuild, the insurance industry has de facto mandated managed retreat. The only mitigation to this risk of a "backdoor" approach to managed retreat in California's WUI is the extent to which the state's FAIR program can be scaled up. Judging from California's Department of Insurance December 2017 cease and desist order, the insurance industry is likely to push back against such a scaling-up.

Finding Inspiration in the "Boulder Plan"

The county of Boulder, CO started a program called "Wildfire Partners" in 2013 to assist homeowners in mitigating wildfire risk to their homes to a level that would enable them to retain their fire insurance.²⁵ The program comprises: (i) a review by a fire safety professional of both the structure and the parcel; (ii) recommendations for fire risk mitigation; (iii) referrals to potential contractors; and (iv) a certificate that will actually result in fire insurance. As noted on the Wildfire Partners website:²⁶

24 Nash, M.W. "How Wildfires Are Making Some California Homes Uninsurable" (November 20, 2018); Staff Report. "Ruin, recovery and reform: Tracking progress one year after the Wine Country firestorm," *San Francisco Chronicle* (October 6, 2018), available at <https://www.sfchronicle.com/bayarea/article/Ruin-recovery-and-reform-Tracking-progress-one-13284796.php>.

25 Wildfire Partners (2018), available at <http://www.wildfirepartners.org/our-program/>; CBS Denver. "Program Offers Wildfire Mitigation for Homeowners in High Risk Areas" (July 16, 2018).

26 Wildfire Partners (2018).

After you (or your forestry contractor) successfully complete your Mitigation To Do List, we will return for your final inspection. After passing the inspection, you will receive your certificate and letter that you can send to your insurance company. Allstate and USAA Insurance recognize this certificate as proof of proper mitigation. State Farm recognizes this certificate for renewal business. We are not aware of any insurance company who has denied coverage for a Wildfire Partners certified home. The certificate is transferable and can be uploaded to your MLS listing to help you sell your home (the new owner just needs to participate in a free educational site visit).

In order to set up a program that can affirmatively result in fire insurance for WUI homeowners, the county worked directly with insurance providers. As shown by the quote above, three major insurers, Allstate, USAA, and State Farm participated in the program. The program also has a pre-certified list of contractors who can do both home retrofit and forestry work for a parcel owner.

The provision of fire insurance is crucial for rebuilding. Boulder County Wildfire Partners program shows how fire insurance can be turned from an obstacle to rebuilding into a mechanism for delivering climate change adaptation benefits to a community. The “Boulder Plan” serves as a model for how to promote adaptive rebuilding after a climate-change-related natural disaster.

How Bank Lending Can Address Climate Adaptation

We believe that bank lending guidelines, including the Community Reinvestment Act (CRA), need to address climate change adaptation. Whether through the insurance industry, FEMA, or banks, our funding systems for disaster recovery need to adapt to climate change too. Here are some ideas:

- (i) *Say “no” to lending in disaster recovery areas where there are no provisions to mitigate the risk of climate change through comprehensive adaptation.* Rebuilding to fail has been tolerated by the NFIP program for decades. Public policy advocates normally are trying to get banks to say “yes” more often. That notion is core to CRA. Given the scale of climate change-related disaster our nation is facing, rebuilding to fail can no longer be tolerated. We simply cannot afford it.
- (ii) *Say “yes” to expanded lending in disaster recovery areas sufficient to fund climate change adaptation (e.g., the Boulder Plan).* This means not just lending for rebuilding on a parcel by parcel basis, but lending to make sure the rebuilt neighborhood or community will have climate change adaptation features that significantly reduce future disaster risk. Lending protocols for this purpose need to be also community specific, as opposed to just parcel specific.

- (iii) *Coordinate with the insurers and FEMA on a complete funding package for community rebuilding.* If sufficient climate change adaptation features are incorporated into the rebuilding process, the insurers will continue to write coverage. This is particularly important for fire disaster recovery, where the private sector is the prime carrier. This also means that FEMA funding limits needs to be changed to fund climate change adaptation measures above and beyond restoring the prior condition of facilities. This means bringing FEMA guidelines into an overall “Boulder Plan” framework.
- (iv) *Lend for managed retreat.* Perhaps the most politically explosive issue with climate change adaptation is the question of managed retreat. What if vulnerable communities just need to be relocated? Excellent work by the state of Louisiana in the bayou country shows that managed retreat works best if the entire community is relocated and reconstructed, as opposed to just compensating individual property owners in some way for their loss.²⁷ How can banks lend in a way that supports the relocation and reconstruction of entire communities?

Moving Forward: The “Disaster Recovery Act”

The CRA is intended to promote bank lending in disadvantaged or otherwise distressed communities. What if we had a “Disaster Recovery Act” (DRA) to promote adaptive rebuilding to go with the CRA? The DRA could address the lending issues for climate change disaster recovery listed above, as well as others that experienced bank managers no doubt would identify. In other words, mandate that disaster-impacted communities do the equivalent of the “Boulder Plan” to make sure that both insurance and lending is available for rebuilding. The DRA should include compatible mandates for FEMA to fund rebuilding of infrastructure to a resilient climate change adaptive level, but on the condition that there is an integrated plan that brings both insurers and lenders into the process. Equally important, the goal of such a collaborative effort is that insurers commit to continuing to provide coverage on the condition that the plan for a disaster impacted community is actually implemented. There is urgency to address these challenges. Climate change is real. Climate change is now, and we are paying for it now. Our national system for funding disaster recovery needs to change to truly address climate change adaptation.

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²⁷ Stein, M.I. “How to Save a Town from Rising Waters,” *CityLab* (January 24, 2018), available at <https://www.citylab.com/environment/2018/01/how-to-save-a-town-from-rising-waters/547646/>.