

Wildfire damage in Clearlake, Lake County California. Credit: Miranda H Mockrin, USDA Forest Service

**FACT SHEET** 

## Rebuilding and Resilience After Wildfire

As wildfires become more frequent and destructive, communities face the difficult process of recovery and rebuilding. Recovery is not only about replacing what was lost; it's an opportunity to design communities that are more resilient to future fire.

This factsheet highlights research on recovery, rebuilding patterns, and community adaptation after major wildfires, offering insights to support safer decision-making in the wildland-urban interface (WUI) and increase resilience to future wildfires.

The Rebuild Cycle: What the Data Shows

Although timelines vary, data suggest that most homes are eventually rebuilt. For example, one study found that after

28 major California wildfires (1970–2013), 94% of destroyed homes were rebuilt within 13–25 years. New construction also continues post-fire— in fact, new construction outpaced rebuilding after 75 of 106 fires investigated by Alexandre et al. (2015), from 2000-2010.

**Considerations for Rebuilding** 

For residents who lost their homes in a wildfire, rebuilding and recovery are often likened to a 'second disaster'. At the community or local government level, managing wildfire recovery is challenging, laborintensive, and requires additional resources.

Other factors influencing recovery speed include:

- Conflicts between stakeholder goals
- → Location and extent of losses
- Grant, economic, and regulatory complexity
- Population size, community capacity, and rebuilding resources
- Availability of outside support organizations

Wildfire damage in Clearlake, Lake County California.
Credit: Miranda H Mockrin, USDA Forest Service

RESTRICTED ENTRY

UNLAWFUL TO ENTER OR REMAIN ON ANY PARCEL WITHIN DESIGNATED AREAS EXCEPT PARCEL OWNER AREAS EXCEPT PARCEL

Policy Response: A Missed Opportunity?

After a disaster, most local governments are facing numerous challenges in housing and community recovery. Against this backdrop, it can be challenging to also consider long-term investments in resilience and risk reduction. That's why performing this work before disaster strikes can help improve wildfire outcomes.

That said, wildfire disasters can create a temporary "window of opportunity" for policy change, and for the sake of future resilience, communities should act quickly to support resilient rebuilding. Some ways to do this include:

- Reviewing the overlap between land-use policy and rebuilding
- Integrating home hardening practices and permitting processes with other building standards



## Moving Forward: Recommendations for Resilience

Most wildfire losses occur in the WUI.
Prioritizing people-centered recovery
means prioritizing place-centered
recovery, because people live where they live for a
reason. Following these recommendations can help
improve future outcomes after catastrophic wildfires.

- Invest in community organizations, homeowners, and rental agencies where levels of trust and connection tend to be higher.
- Proactively work to align conflicting goals in state and local policies
- Track and monitor long-term recovery outcomes
- Tailor outreach and resources to the local context

## Conclusion

Rebuilding after wildfire is inevitable.
Resilient rebuilding is a choice.
Wildfires create a rare inflection point:
communities can either rebuild in ways
that maintain existing risk or act boldly to
reduce it. Success depends on planning, leadership,
and the willingness to use recovery as a moment for
meaningful change.

- Consider how wildfire recovery can accommodate other risk reduction and sustainability goals
- Develop a joint local/county resource guide with step-by-step recovery processes
- Build a long-term recovery framework and identify which agency is best positioned to manage recovery funds

## Dig deeper into the science behind this summary on FireScience.gov.

- 1. Adamczyk, B. Long term disaster recovery: Recommendations for the public sector (73 pp.). University of Oregon. <a href="https://hdl.handle.net/1794/30346">https://hdl.handle.net/1794/30346</a>
- Mockrin, M. H. *Trial by Fire: Community Adaptation and Rebuilding after Catastrophic Wildfire* (Final Report No. 14-2-01-6). Joint Fire Science Program.
- 3. Mockrin, M. H. Does wildfire open a policy window?
  Local government and community adaptation after fire
  in the United States. <a href="https://doi.org/10.1007/s00267-018-1030-9">https://doi.org/10.1007/s00267-018-1030-9</a>
- 4. Mockrin, M. H., Fishler, H. K., Kramer, H. A., Radeloff, V. C., & Stewart, S. I. (2022). A tale of two fires: Retreat and rebound a decade after wildfires in California and South Carolina. *Society & Natural Resources*, 1–21. https://doi.org/10.1080/08941920.2022.2081895
- 5. Schmidt, A. Long-term tracking of recovery of built infrastructure after wildfires with deep network topologies. Neural Computing and Applications. https://doi.org/10.1007/s00521-025-11003-0



The **Joint Fire Science Program (JFSP)** provides research funding, exchange, and communication for science associated with wildland fire, fuels, and fire-impacted ecosystems to dynamically respond to the emerging needs of fire managers, practitioners, and policymakers.