Summary of the issue:
If we want to protect communities from damages resulting from wildfire, the most effective way to do so is by hardening homes and structures to reduce structural flammability. The other commonly proposed method for preventing damage to communities during wildfires is preventive forest thinning, which is largely ineffective, may increase fires severity, and often wastes money, time, and people-power. As the fire season continues to lengthen as a result of the climate crisis[1] and misguided, overzealous fire suppression, it is imperative that we increase resources to our communities to become more fire resilient. Home hardening is the most effective and cost-efficient way to do so.[2]

Home hardening works:
- Protecting homes from ignition from flying embers is a very effective way to protect residential structures. Many public institutions and insurers provide guides detailing the most effective ways to make a home more fire resilient.
- Research shows that working from the home out - including hardening the home structures themselves - is the most effective way to protect structural damage during fires. [3, 4, 5]
- "Fire hardening makes the community more resistant to the spread of wildfire. Slowing down a fire, may create more time and opportunity for emergency responders to protect life and property from a fire." [6]

Why its counterpart, forest thinning, doesn't help protect communities from wildfire:
- The main factor in determining a fire's severity is weather, especially fuel aridity (not density) and wind. The fuel profile of a forest is incidental to the impacts from high winds.
  - Logging forests leads to decreased carbon sequestration capability from the forest [10, 11] which then leads to a worsening of the climate crisis, which would then lead to worsening fires from more arid forests.[1] Therefore, logging actually creates the problem it's supposedly solving when used in forest thinning.
- Thinning a forest can actually make wildfire behavior more intense by opening up the canopy, thus drying the fuel and increasing wind speed.
  - "In all seven sites, combined mortality was higher in thinned than in unthinned units. In six of seven sites, fire-induced mortality was higher in thinned than in unthinned units." [7]
  - "We found forests with higher levels of protection [from logging] had lower severity values even though they are generally identified as having the highest overall levels of biomass and fuel loading" [8]
  - "Using published data regarding the percent basal area mortality for each commercial thinning unit that burned in the Antelope fire, combined with percent basal area mortality due to the fire itself from post-fire satellite imagery, it was found that commercial thinning was associated with significantly higher overall tree mortality levels (cumulative severity)." [9]
- You cannot predict where a fire will take place, such that even if thinning were an effective method for reducing wildfire risk, it's very unlikely that you'd successfully place thinning efforts in an area that encounters fire prior to the thinned area growing back, thereby making the thinning useless.

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2. https://www.nrdc.org/bio/rita-frost/using-community-hardening-and-forest-resiliency-mitigate-wildfire-harm
3. https://99percentinvisible.org/episode/built-to-burn/
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