



## Forest Plan Revision Timber–Wildland Urban Interface FAQs

### How do the lands suitable for timber production in the draft forest plan overlap with the wildland urban interface?

Almost 50 percent of the lands suitable for timber production overlap with the wildland urban interface. Active vegetation management in these areas can directly mitigate wildfire risk.

### A deeper dive into the research: but why should we do wildfire risk mitigation *beyond* the wildland urban interface?

Excerpted from [“Adapting western North American forests to climate change and wildfires: 10 common questions”](#) on the Smokey Wire blog. Included the caption: “...Yesterday there was [a story of a California wildfire](#) traveling up to 8 miles in a single day.”

“A question often asked by land managers is where to locate fuel treatments to maximize their advantage while minimizing adverse impacts...The 2003 Healthy Forests Restoration Act (HFRA, US Congress 2003)...specified that >50% of fuel reduction funding be spent on projects within the Wildland Urban Interface (WUI) and it reduced environmental review within 1.5 miles of at-risk communities. The significant increase in homes lost and suppression dollars spent in the WUI in subsequent years ([Mell et al. 2010](#)) has catalyzed extensive research on the WUI... ([Radeloff et al. 2018](#)). Subsequent studies demonstrating fuel treatment effectiveness in the WUI ([Safford et al. 2009](#), [Kennedy and Johnson 2014](#)) and spatial methods for optimizing WUI fuel treatments ([Bar Massada et al. 2011](#), [Syphard et al. 2012](#)) could be taken to suggest that most fuel reduction should be implemented in the WUI to protect homes and lives.

**However, prioritizing the WUI-only for fuel reduction treatments is often too narrow in scope to address broader landscape-scale objectives.** For example, [Schoennagel et al. \(2009\)](#) found that more than two-thirds of the area within a 2.5 km radius of at-risk communities was privately owned and unavailable for federally-funded fuel treatments. This finding partly elucidates why most hazard reduction fuel treatments are implemented outside of HFRA-designation. Fuel

treatments on federal lands near communities may also be significantly more difficult, expensive and risky to

implement, while air quality regulations and associated risks create disincentives to treating near homes... **Further, there is increasing evidence that treating fuels across larger spatial extents in strategically planned wildland locations, rather than immediately adjacent to WUI, can indirectly reduce risk to communities** ([Smith et al. 2016](#), [Bowman et al. 2020](#)). Benefits of this strategy include increased initial attack and short-term suppression effectiveness, reduced crown fire potential and ember production, reduced smoke impacts to communities, and increased forest resilience ([Ager et al. 2010](#), [Stevens et al. 2016](#))...

**...Treatments in watersheds that are distant from the WUI and protect municipal and agricultural water supplies are critical to minimizing high-severity fire impacts that can jeopardize clean water delivery** ([Bladon 2018](#), [Hallema et al. 2018](#)). [Fact: Nearly all of the GMUG’s watersheds are municipal watersheds.] For example, post-fire erosion and debris flows may cause more detrimental and longer term impacts to watersheds than the wildfires themselves ([Jones et al. 2018](#), [Kolden and Henson 2019](#)).

Finally, treated areas outside the WUI can serve as defensible positions for fire suppression personnel that can be used to establish control lines or allow for more flexible suppression strategies, freeing up resources to protect WUI infrastructure or forests in another area ([Thompson et al. 2017](#)), or can support rapid and organized evacuation when they are implemented along evacuation routes ([Kolden and Henson 2019](#)). **Across complex landscapes, it is more effective in the long term to prioritize fuel treatments that maximize benefits across large areas and over long time frames, rather than constrain them to the WUI.”**

### Why does the forest plan focus so much on timber? Aren’t other resources important?

- The forest plan addresses the varied resources, ecosystem services and multiple uses across our landscape. Recreation management was one of the

primary drivers of the plan development and mapping of alternatives, and more plan direction is devoted to this than any other resource. Wildlife is a close second in terms of sheer amount of direction.

- While timber direction is integral to forest management, so is direction for all of the other resources that contribute to our forests' ecological integrity and to our communities' economies.

The GMUG planning team has sought to provide a range of alternatives consistent with public and cooperating agency feedback received over the past four years. We invite the public to review the draft plan and provide comments. The current public comment period began Aug. 13 and will close Nov. 12. Comments may be submitted at

[http://www.fs.usda.gov/goto/gmug/forestplan\\_comments](http://www.fs.usda.gov/goto/gmug/forestplan_comments)

For more information, visit

<http://www.fs.usda.gov/goto/DraftForestPlan> or contact the planning team at [SM.FS.gmugplanning@usda.gov](mailto:SM.FS.gmugplanning@usda.gov).

## Sources Cited

Ager et al. 2010. A comparison of landscape fuel treatment strategies to mitigate wildland fire risk in the urban interface and preserve old forest structure. *Forest Ecology and Management* 259:1556–1570.

Bar Massada et al. Allocating fuel breaks to optimally protect structures in the wildland–urban interface. *International Journal of Wildland Fire* 20:59.

Bladon, K. D. 2018. Rethinking wildfires and forest watersheds. *Science* 359:1001-1002.

Bowman et al. 2020. Vegetation fires in the Anthropocene. *Nature Reviews Earth & Environment* 1: 505-515.

Hallema et al. 2018. Burned forests impact water supplies. *Nature Communications* 9:1307.

Hessburg et al. 2020. The 1994 eastside screens large-tree harvest limit: review of science relevant to forest planning 25 years later. Gen. Tech. Rep. PNW-GTR-990. US Forest Service, Portland, Oregon, USA.

Hurteau, M., and M. North. 2009. Fuel treatment effects on tree-based forest carbon storage and emissions under modeled wildfire scenarios. *Frontiers in Ecology and the Environment* 7:409-414.

Jones et al. 2018. Declining old-forest species as a legacy of large trees lost. *Diversity and Distributions* 24:341–351.

Kennedy, M. C., and M. C. Johnson. 2014. Fuel treatment prescriptions alter spatial patterns of fire severity around the wildland–urban interface during the Wallow Fire, Arizona, USA. *Forest Ecology and Management* 318:122–132.

Kolden, C. A., and T. J. Brown. 2010. Beyond wildfire: perspectives of climate, managed fire and policy in the USA. *International Journal of Wildland Fire* 19:364–373.

Kolden, C. A., and C. Henson. 2019. A socio-ecological approach to mitigating wildfire vulnerability in the wildland urban interface: a case study from the 2017 Thomas Fire. *Fire* 2:9.

Mell et al. 2010. The wildland – urban interface fire problem - current approaches and research needs. *International Journal of Wildland Fire* 19:238-251.

Radeloff et al. 2018. Rapid growth of the U.S. wildland-urban interface raises wildfire risk. *Proceedings of the National Academy of Sciences* 115:3314–3319.

Safford et al. 2009. Effects of fuel treatments on fire severity in an area of wildland–urban interface, Angora Fire, Lake Tahoe Basin, California. *Forest Ecology and Management* 258:773–787.

Schoennagel et al. 2009. Implementation of National Fire Plan treatments near the wildland-urban interface in the western United States. *Proceedings of the National Academy of Sciences* 106:10706–10711.

Schultz et al. 2019. Policy barriers and opportunities for prescribed fire application in the western United States. *International Journal of Wildland Fire* 28:874.

Smith et al. 2016. The science of fireescapes: achieving fire-resilient communities. *BioScience* 66:130–146.

Stevens et al. 2016. Evaluating potential trade-offs among fuel treatment strategies in mixed-conifer forests of the Sierra Nevada. *Ecosphere* 7:e01445.

Syphard et al. 2012. Housing arrangement and location determine the likelihood of housing loss due to wildfire. *PLOS ONE* 7:e33954.

Thompson, et al. 2017. Fuel accumulation in a high-frequency boreal wildfire regime: from wetland to upland. *Canadian Journal of Forest Research* 47:957–964.