MARIN WILDFIRE PREVENTION AUTHORITY

Vegetation Treatment References

Surface fuel treatments are proven by studies to:

- have a large and substantial effect on fire behavior, including reductions in canopy volume scorch, scorch height, and reductions in flame length
- reduce wildfire severity within treated areas by over 60 percent on average

Refer below for citations regarding effectiveness of treatments as well as changes to forest structure, composition, and ecosystems that has affected the density and types of vegetation present.

Case Studies of Vegetation Treatment Effectiveness in Reducing Wildfire Severity

Various CALFIRE case studies:

- https://calfire.app.box.com/s/o6tfbmsd4eh6h7lgw8kzq8rgf2ffd4wj

USFS 2021 Caldor Fire case study:

- https://www.fs.usda.gov/about-agency/features/caldor-fire-defending-lake-tahoe-basin#:~:text=On%20Aug.,down%20to%20the%20forest%20floor

Case studies include but are not limited to:

- 2025 Eaton Fire – Firefighters contained spot fire and established control in an area due to the Mount Wilson Prescribed Fire Project conducted in 2020
- 2024 Park Fire – Firefighters were able to hold a flank of the rapidly growing fire due to the Loafer Creek LLC Vegetation Management Program with prescribed burns conducted in 2021 and as recently as 2023
- 2021 Caldor Fire – Mechanical thinning and prescribed burn treatments conducted around the Christmas Valley community reduced fire intensity, enabling firefighters to save approximately 600 homes.

Effectiveness of Vegetation Treatments

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