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Utah Division of Forestry, Fire & State Lands

Fire Loss Prevention in the Wildland-Urban Interface



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Division of Forestry, Fire & State Lands



Who Are We?

- 1 of 9 divisions and 2 offices within the Department of Natural Resources
- 3 distinct programs



Forestry



Fire

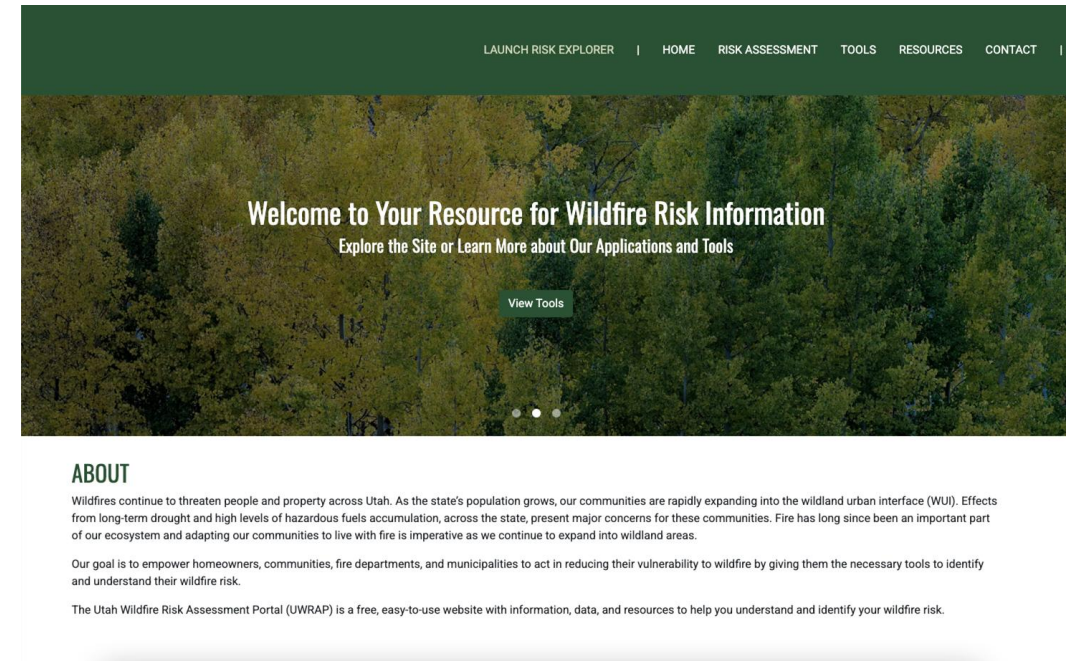


State Lands



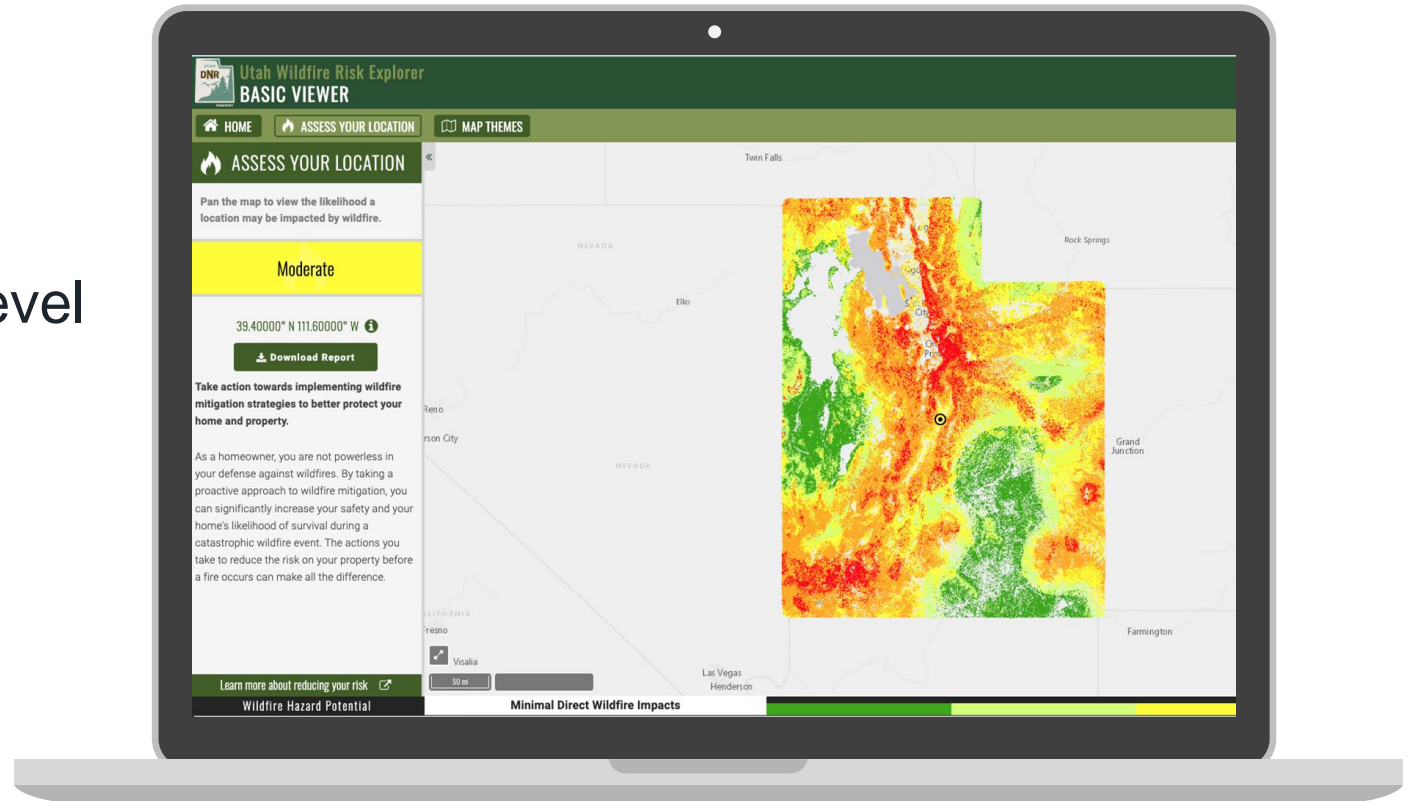
Utah Wildfire Risk Assessment Portal

- Utah Wildfire Risk Assessment Portal
 - Started in 2012 & updated in 2022
 - wildfirerisk.utah.gov
- The goal is to empower homeowners, communities, fire departments and municipalities to identify, understand, and reduce their wildfire risk
- UWRAP is free to use with information, resources and data.



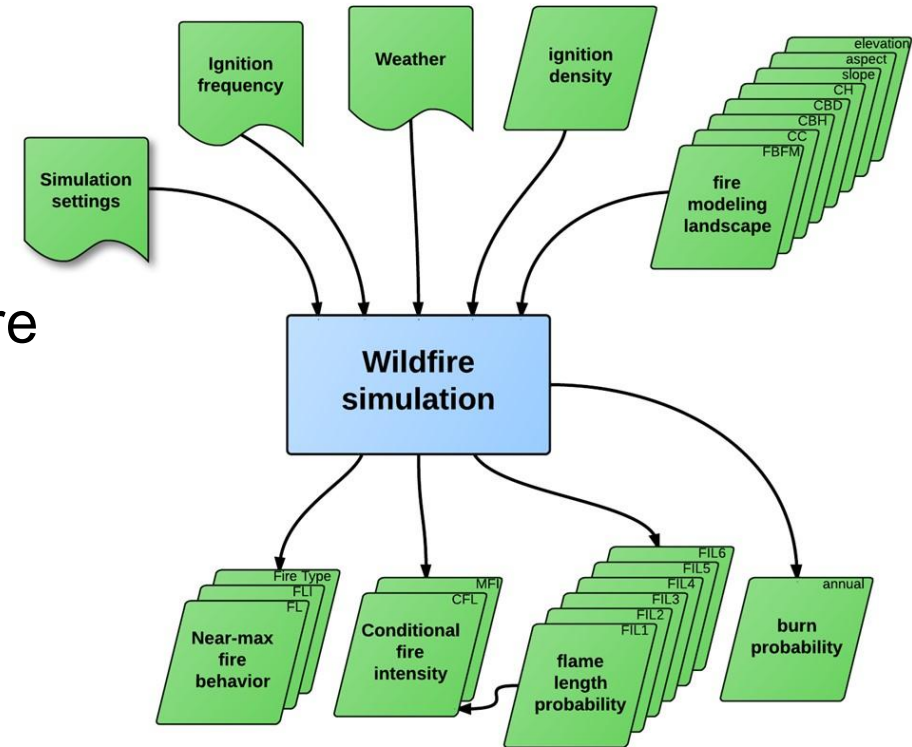
Utah Wildfire Risk Assessment Portal

- Utah Wildfire Risk Explorer
 - The basic viewer allows individuals to enter and address and see their risk level
 - Very High
 - High
 - Moderate
 - Low
 - Very Low



How Do We Assess Risk?

- We build a fuelscape that accurately reflects vegetation types and their characteristics
- Map out historic fires and burn probability to determine the likelihood of fires occurring and where they would occur
- From those datasets we are able to determine
 - Flame Length
 - Rate of Spread
 - Suppression Difficulty
 - Wildfire Hazard Potential
 - Structure Exposure Scores



Recent Legislation Addressing RISK

- Recent focus during the legislative sessions have had impact on wildland-urban interface (WUI) and wildfire policy.
 - HB 437 (2024)
 - Tasked FFSL to define a WUI boundary
 - HB 48 (2025)
 - Placed a level of responsibility on home/landowners that live in the WUI to reduce their wildfire risk/addressed lot assessments, fees and insurance requirements



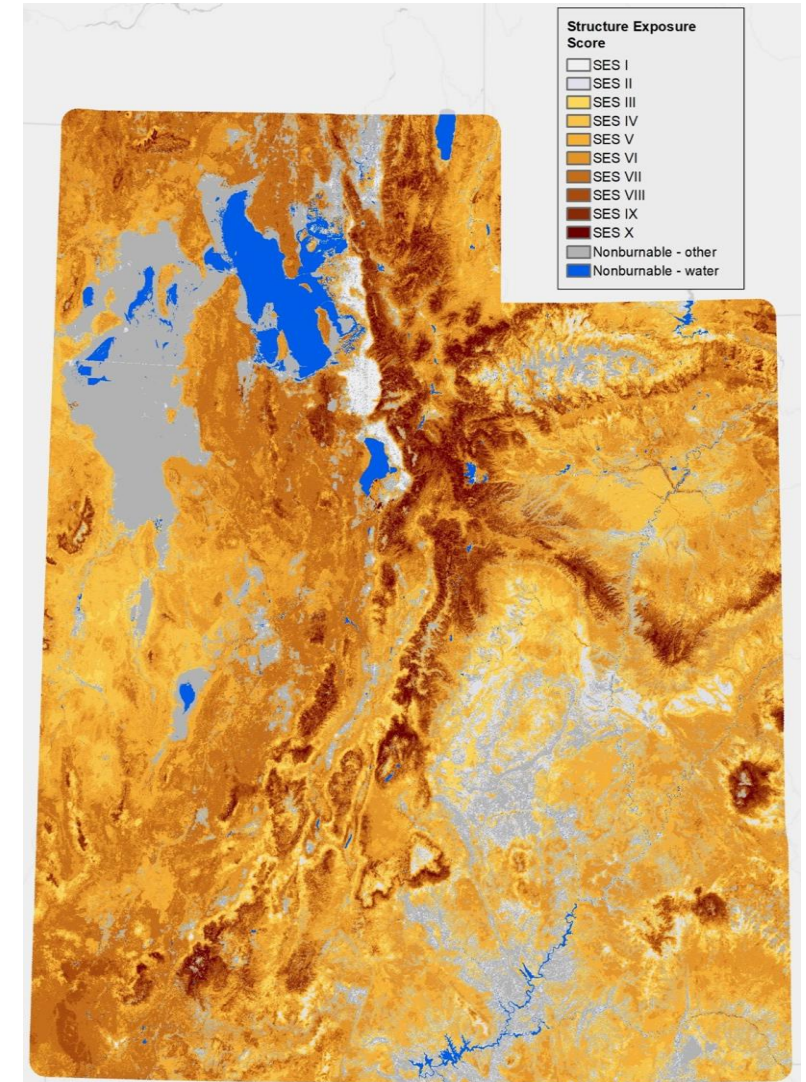
HB 437 Overview

- 2024 General Session
 - Sponsored by Rep. Casey Snyder
- Tasked FFSL with analyzing the “High Risk” Layer of UWRAP
 - The assessment focused on the risk to dwellings within the wildland-urban interface (WUI)
 - A data set was created that depicted potential hazards called a Structure Exposure Score (SES)



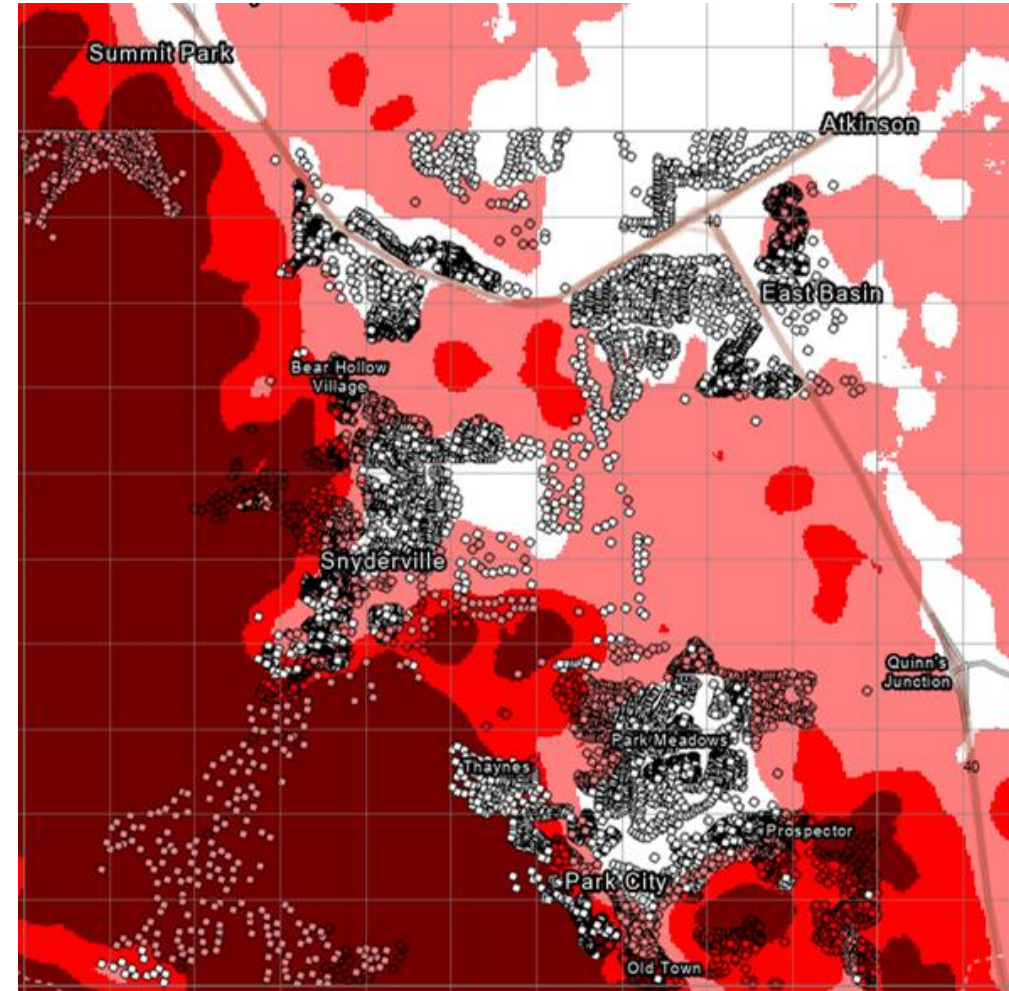
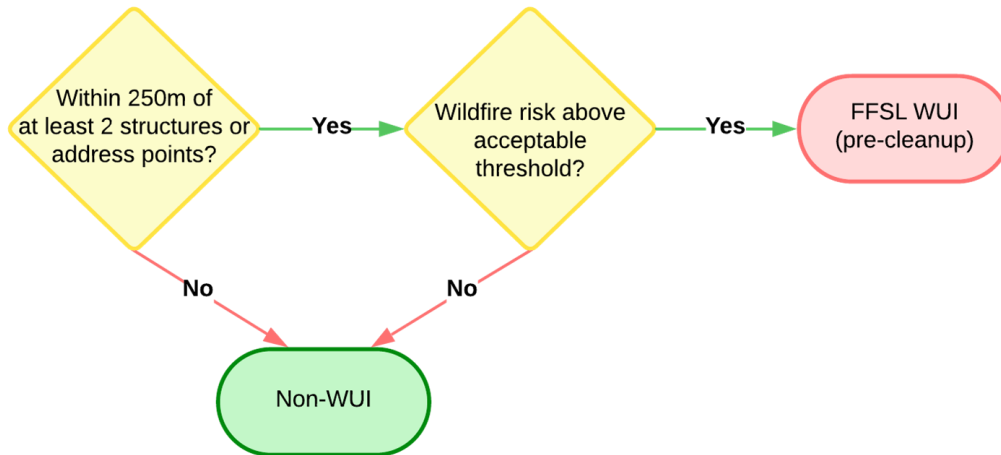
HB 437 Study

- SES combines fire likelihood, fire intensity, and ember load data
 - 10 classification based on these data sets
 - SES I = low hazard
 - SES X = high hazard
- Able to define a WUI boundary by combining SES with an actual address point
 - If two address points were within 250 meters of each other and had an SES of V or higher, it was classified as WUI.



HB 437 Findings

- Through this analysis FFSL determined that in 2024 the total number of homes is:
 - SES V+: 337,986 homes
 - SES VI+: 202,994 homes
 - SES VII+: 80,675 homes



HB 437-Study Recommendations

Future Data Advancements

Risk-Based Pricing

- Integrating SES into your risk assessment models, may create more precise and data-driven pricing structures for policies.
 - Properties with a higher wildfire risk can be charged premiums that reflect that risk, while those in lower-risk areas may benefit from lower costs.



HB 437 Study Recommendations

Future Data Advancements Cont.

Improved Accuracy

- The SES provides a better understanding of wildfire regarding exposure and susceptibility
- This data-driven approach can reduce uncertainty and help inform areas or properties with high risks.



HB 437 Study Recommendations

Future Data Advancement Cont.

Risk Mitigation Strategies

- SES data can be used to educate policyholders on reducing wildfire exposure.
- For instance, they may recommend clearing vegetation around properties or installing fire-resistant materials, potentially reducing both the insured risk and long-term claim payouts.



HB 437 Study Recommendations

Future Data Advancement Cont.

Reduced Financial Losses

- With better risk assessments, we can minimize the financial impacts of wildfires
 - Insurers may adjust their portfolios and coverage strategies based on the risk models.
 - SES may support more strategic risk diversification, ensuring that insurers are not overexposed to catastrophic wildfire events in high-risk areas.
 - The awareness of risk allows homeowners to be informed about reducing fuels around home and home hardening techniques.



HB 48

- Introduced and passed during the 2025 legislative session
 - Sponsored by Rep. Casey Snider
- Addresses wildfire risks associated with properties in the Wildland Urban Interface (WUI).
 - Establishes a High-Risk WUI boundary to be used by insurers
 - The bill mandates counties to assess fees for high-risk WUI properties based on triage scale
 - Hopes to increase mitigation efforts and awareness aimed at reducing wildfire hazards.
 - FFSL is tasked with conducting assessments on structures that fall within the High-Risk WUI area.



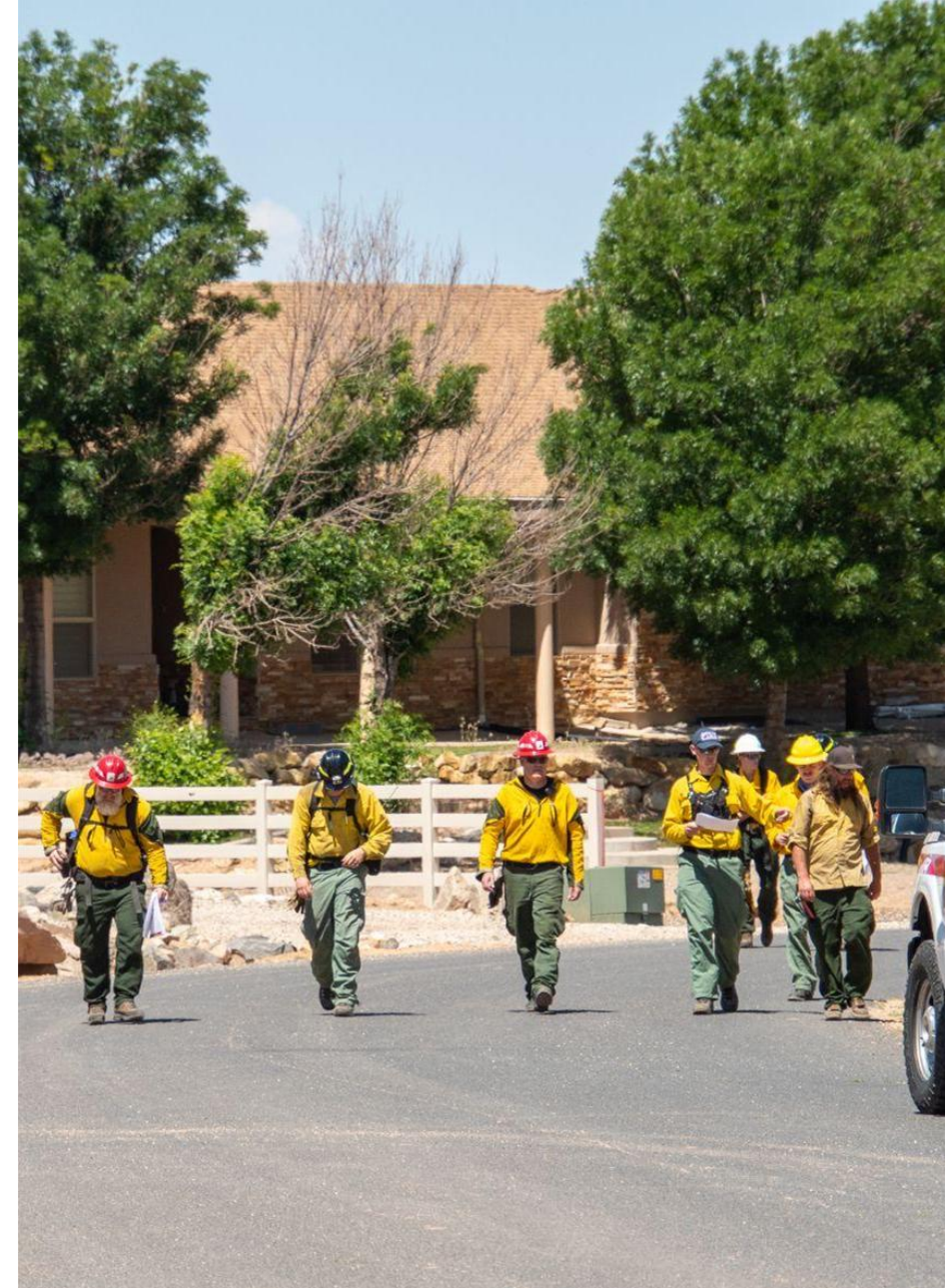
HB 48

- What prompted the introduction of HB 48?
 - The increasing frequency and severity of wildfires in Utah have highlighted the need for proactive measures to protect communities and property.
 - The loss of insurance to property owners
 - The requests for lot assessments by property owners
 - By implementing fees for high-risk WUI properties, the state aims to generate awareness around wildfire mitigation and safety initiatives coupled with insurance coverage



HB 48

- How will HB 48 impact homeowners in high-risk areas?
 - Homeowners in designated High-Risk WUI areas will be subject to the property assessments (fee)
 - These fees are intended to increase awareness, increase mitigation projects that enhance property safety and reduce wildfire risks and potentially lower insurance costs and increase insurance retainability



Utah WUI Code

- Utah's WUI code was last updated in 2006
 - Enforcement of the WUI Code is not a state level function
 - The current code assigns enforcement to a "Local Code Official"
 - In the WUI code this function is separate from a building official who enforces building code.



Work in the WUI

- FFSL is currently working with counties and communities to mitigate wildfire risk
- Utilizing AI cameras to help with early fire detection
- Ongoing projects happening across the state
 - Proactive fuels work around communities has the ability to reduce risk and protect communities
 - [Central, Utah](#)



The image shows the before and after of a proactive fuels project outside of Central, Utah. The top image was taken in 2013 and the bottom taken in 2019. This fuels project protected the town of Central during the 2025 Central Fire





Thank you.

