



Using the Wildfire Risk to Communities Website



HEADWATERS
ECONOMICS



Today: Using WRC



BACKGROUND
INFO



AUDIENCES
& USES

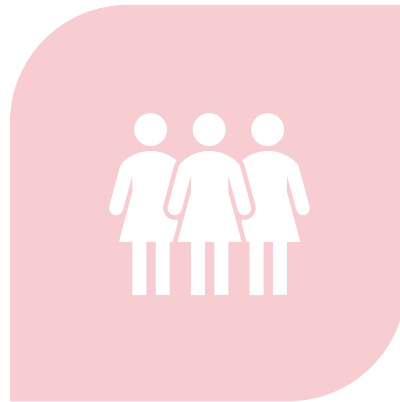


LIVE DEMO

Today: Using WRC



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LIVE DEMO



A website with interactive data and maps to help communities understand, explore, and reduce wildfire risk.

- Directed by Congress in 2018 Consolidated Appropriations Act
- Nationwide maps & data with consistent methods.
- Searchable by community, county, state.
- Published April 2020 at www.wildfirerisk.org



**Builds on data and science
from previous efforts.**

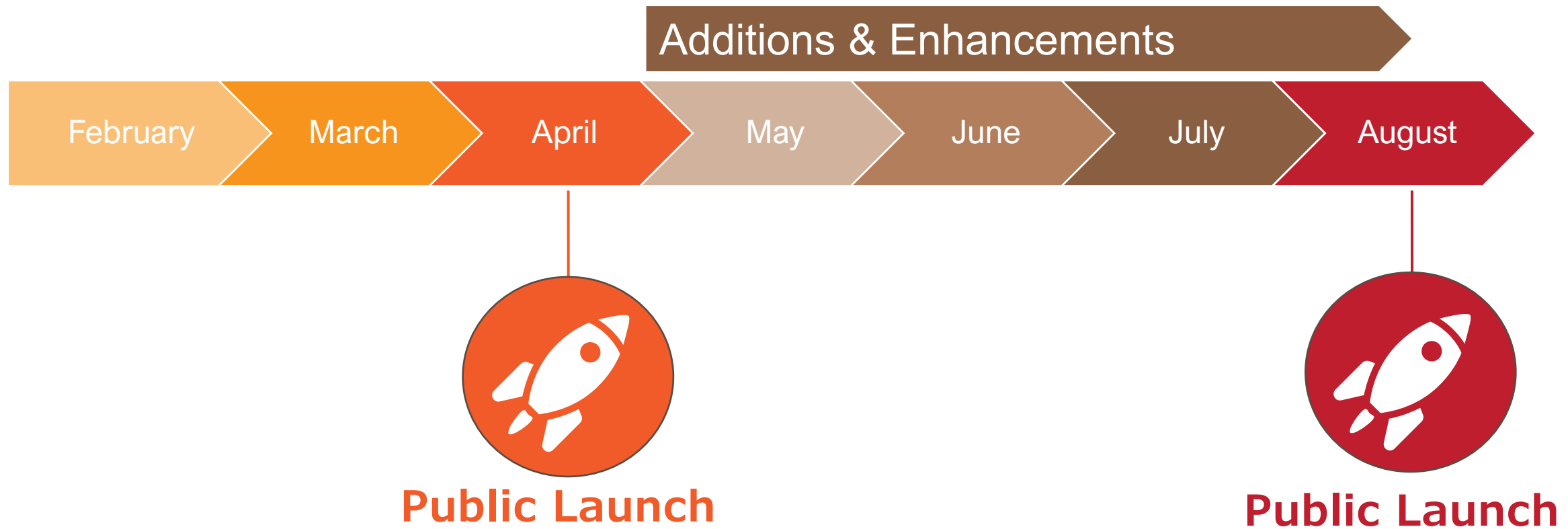
PURPOSE & USES

For communities to learn about relative risk profile, nature and effects of wildfire risk, and actions to mitigate risk.

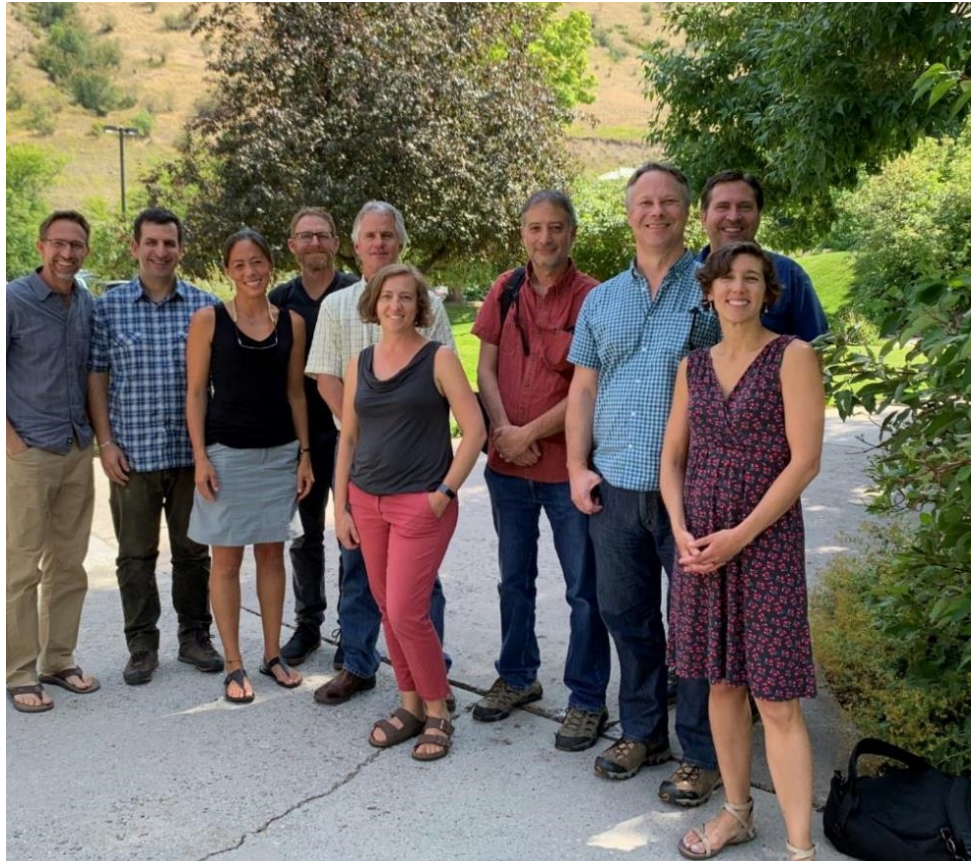
- Prioritize mitigation efforts in state or county
- Identify communities where localized efforts needed
- Find resources to mitigate risk



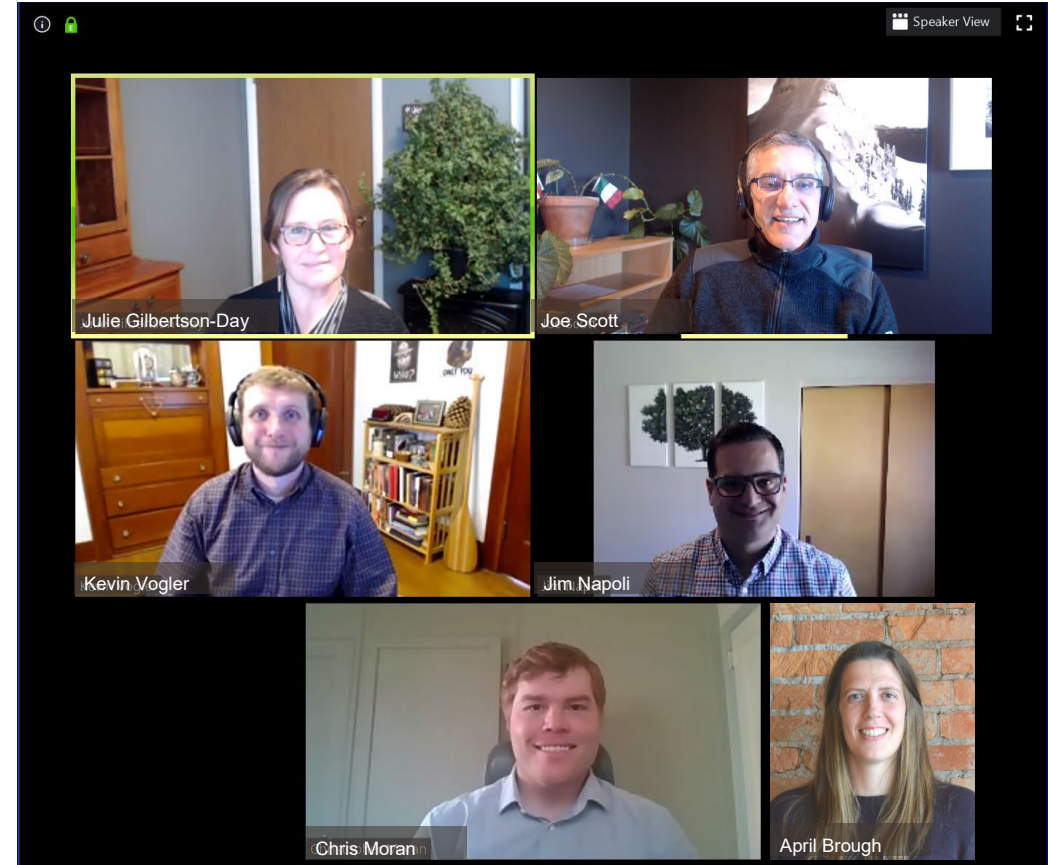
TIMELINE: 2020



THE TEAM



- Washington Office Fire & Aviation
- Rocky Mountain Research Station





Nationally consistent data and risk metrics

Available nationwide: communities, counties, states

Grounded in the best available science

Easy to use and includes resources for action

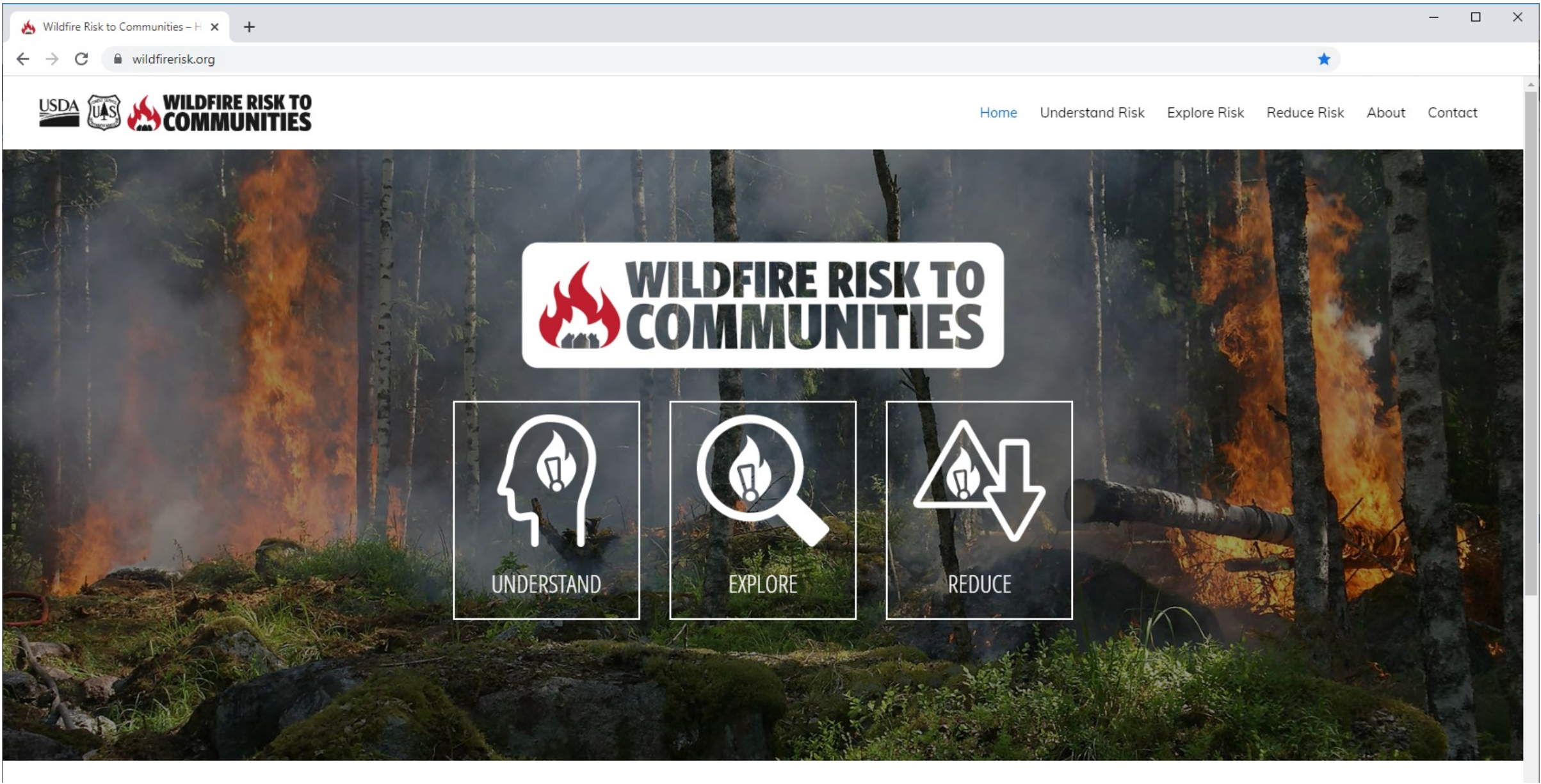


Not fine-scale: for comparing among rather than within

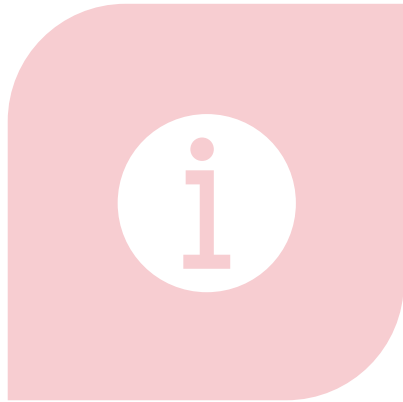
Not locally calibrated

Not predictive, does not include climate projections

Not a replacement for other assessments



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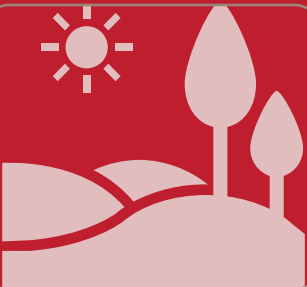
Focus on homes

- Derived from population data



Assumes generalized susceptibility

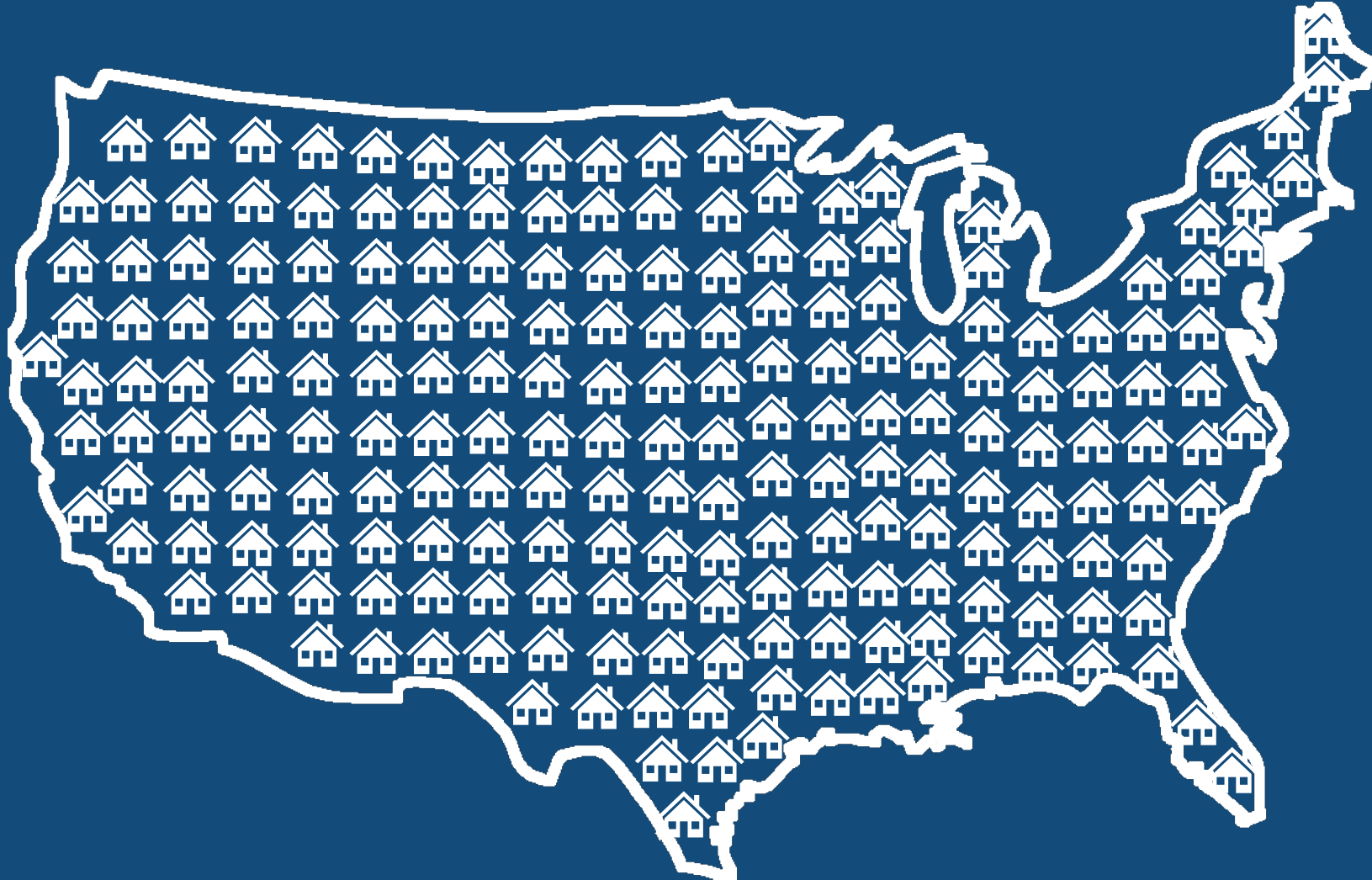
- Homes damaged by intensity



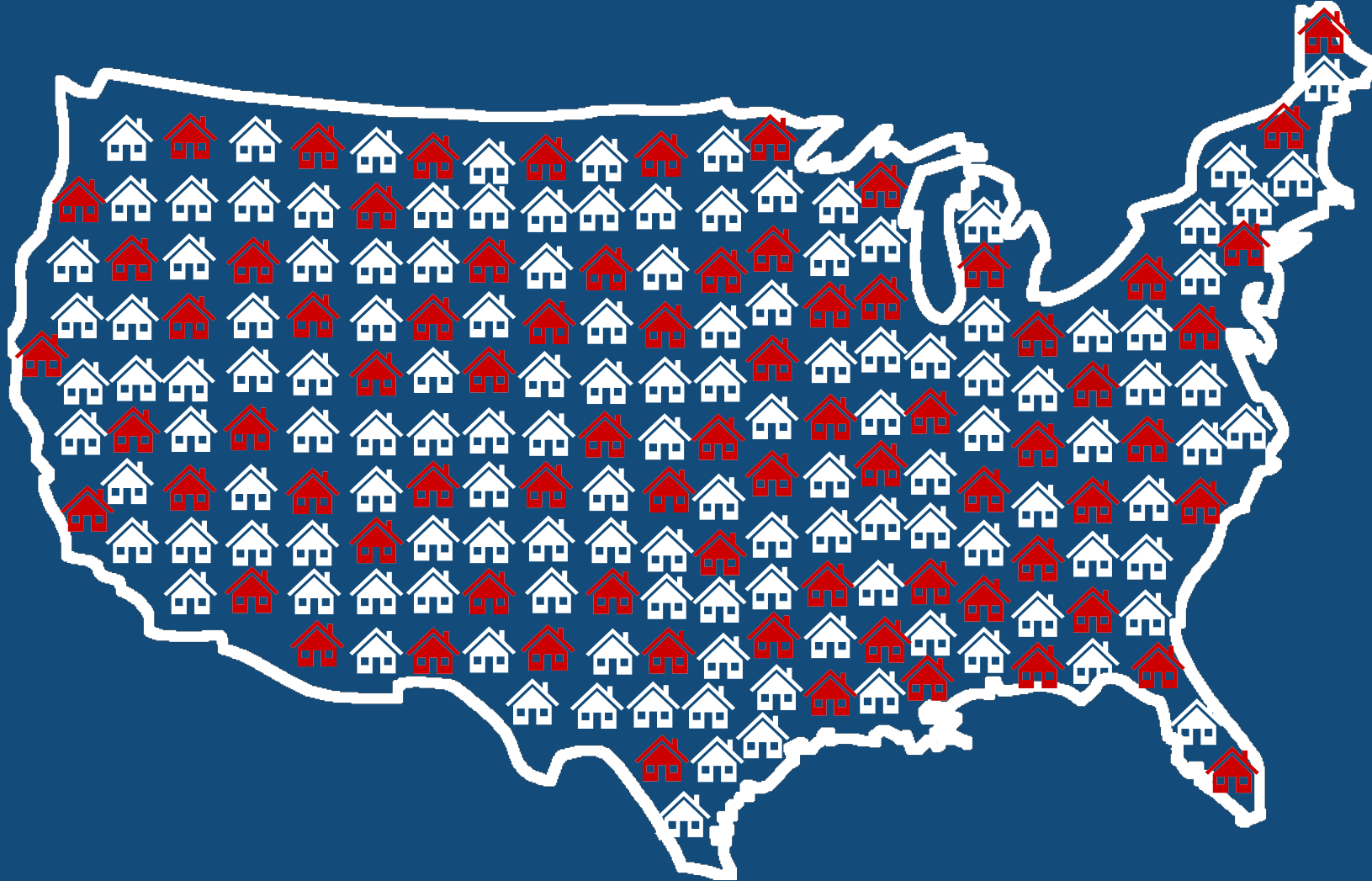
Other values not considered

- E.g., response, operations, watershed health, infrastructure

In the U.S....



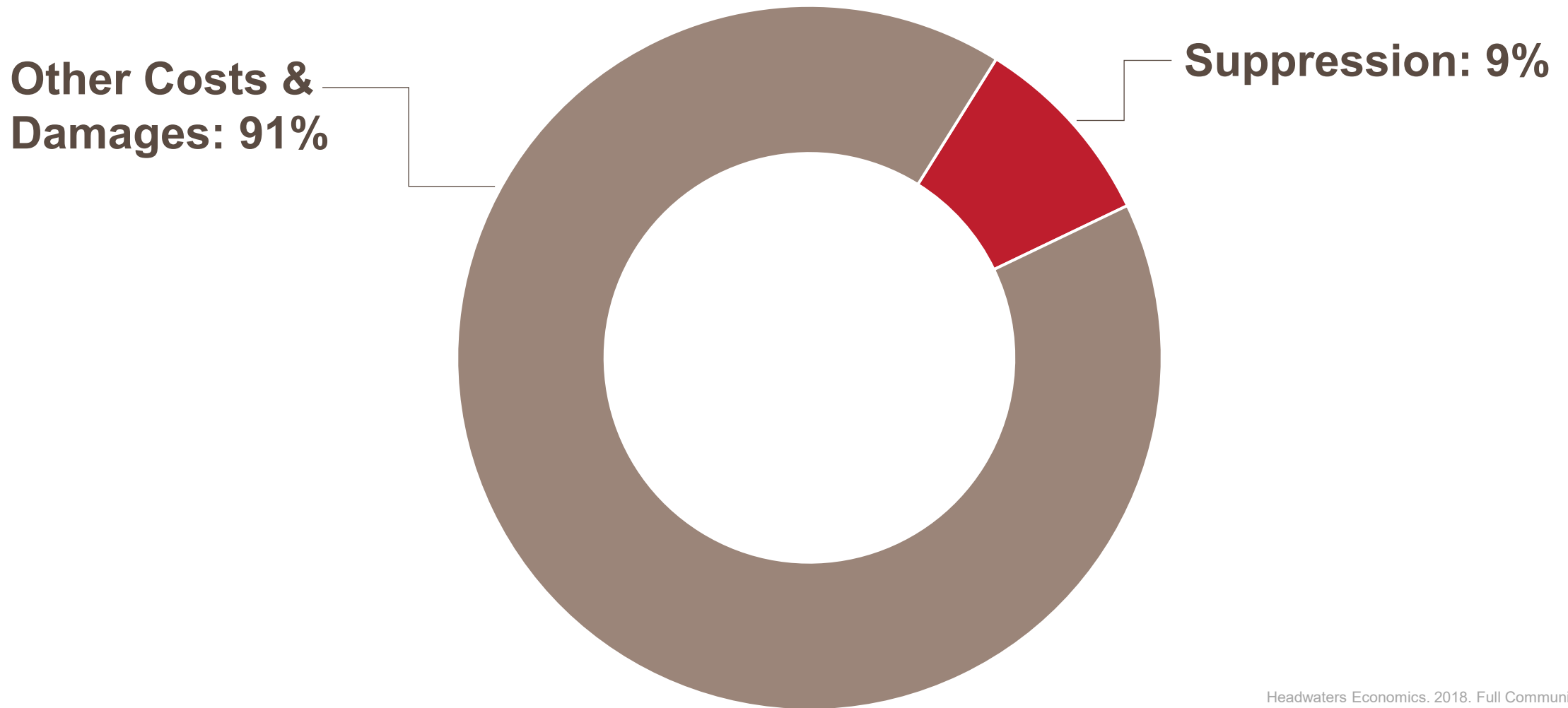
...one in three homes is in the WUI.



An aerial photograph showing a vast residential area that has been almost completely destroyed by a wildfire. The landscape is covered in ash and charred remains of houses and trees. A few roads and some intact structures are visible, providing a stark contrast to the surrounding devastation. A semi-transparent dark grey rectangular box is centered over the image, containing white text.

\$3 Billion
per year average federal fire suppression costs

Suppression is only 9% of disaster costs



Headwaters Economics. 2018. Full Community Costs of Wildfire.
<https://headwaterseconomics.org/wildfire/homes-risk/full-community-costs-of-wildfire/>



TOOLS TO REDUCE RISK



**HOME
IGNITION ZONE**



**HOME
HARDENING**



**LAND USE
PLANNING**



**WILDFIRE
PREPAREDNESS**



**COMMUNITY
HEALTH**



**WILDFIRE
PREVENTION**



**WILDFIRE
RESPONSE**



**FUEL
TREATMENTS**



**POST-FIRE
RECOVERY**



LAND USE PLANNERS



FIRE MANAGERS



ELECTED OFFICIALS

User Profile: Land Use Planner

Community plans
and codes?

New developments?

Resources for our
team?





User Profile: Local Fire Chief

Where is wildfire
most likely?

What are most effective
mitigation efforts?

Where will we have
ember impact?



FIRE MANAGERS

Education tools?



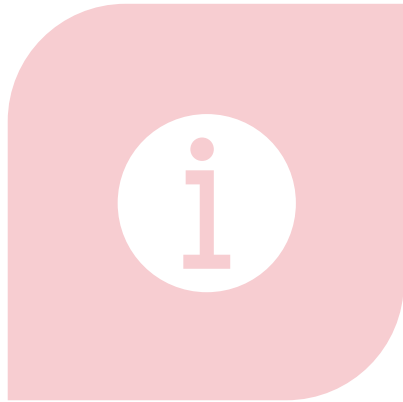
Wenatchee Sleepy Hollow Fire, 2015 (Photo: Wenatchee Valley Firefighters Facebook page)

User Profile: Elected Officials

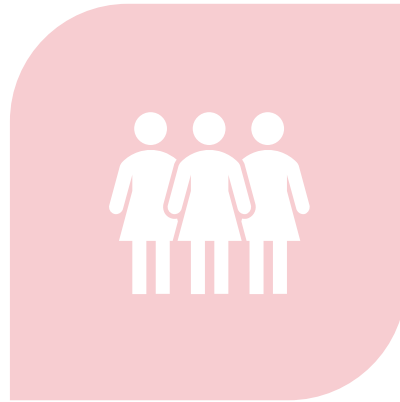




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Questions? Thank You!



**WILDFIRE RISK TO
COMMUNITIES**

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wildfirerisk.org

MAPS & DATA INCLUDED:



Interactive Webpages

April



Risk to Homes



Wildfire Likelihood



Exposure Type



Vulnerable Populations



For Download (GIS, tabular)

April

- Risk to Homes
- Wildfire Likelihood
- Exposure Type
- Conditional Flame Length
- Flame Length Exceedance Probability 4 ft
- Flame Length Exceedance Probability 8 ft
- Conditional Risk to Homes
- Wildfire Hazard Potential

August

- Housing Unit Density
- Expected Annual Housing Unit Exposure
- Annual Housing Unit Risk

TBD

- Annual Source of Housing Unit Exposure
- Conditional Source of Housing Unit Exposure