

# Post-Climate Change | Wildfire Resilient Design

STUDIO **VARA**  
ARCHITECTURE, URBANISM + DESIGN

# WILDFIRE RESILIENCE DESIGN FRAMEWORK

## COMPONENTS OF RISK:

**HAZARD**

**EXPOSURE**

**VULNERABILITY**

**INTELLIGENCE**

# There Is No Climate Haven. We All Live in Florida Now.

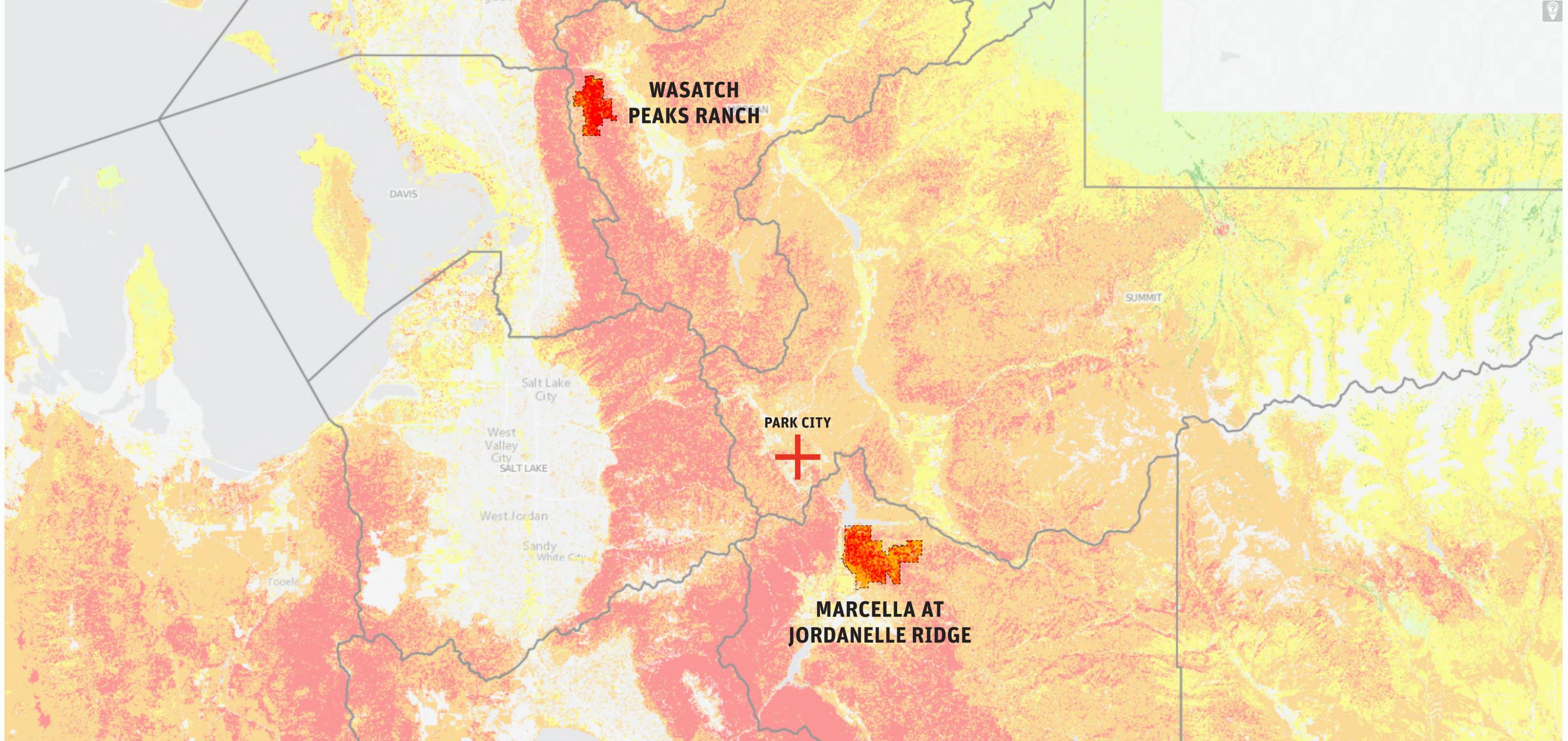
Oct. 7, 2024



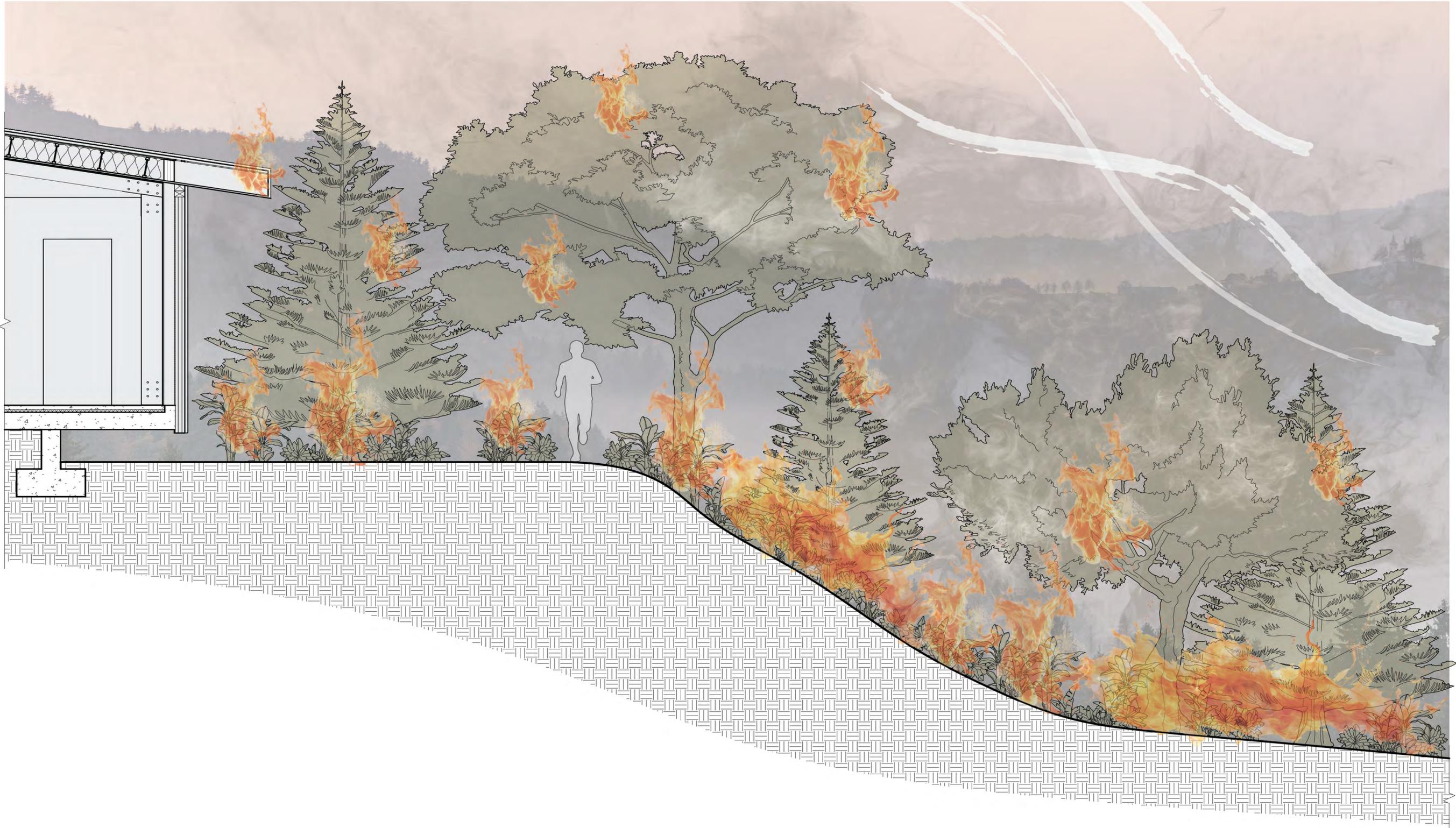
Loren Elliott for The New York Times

There is almost nowhere in the country that is without some risk of natural disaster  
(the sun is always out)

# HAZARD



# EXPOSURE



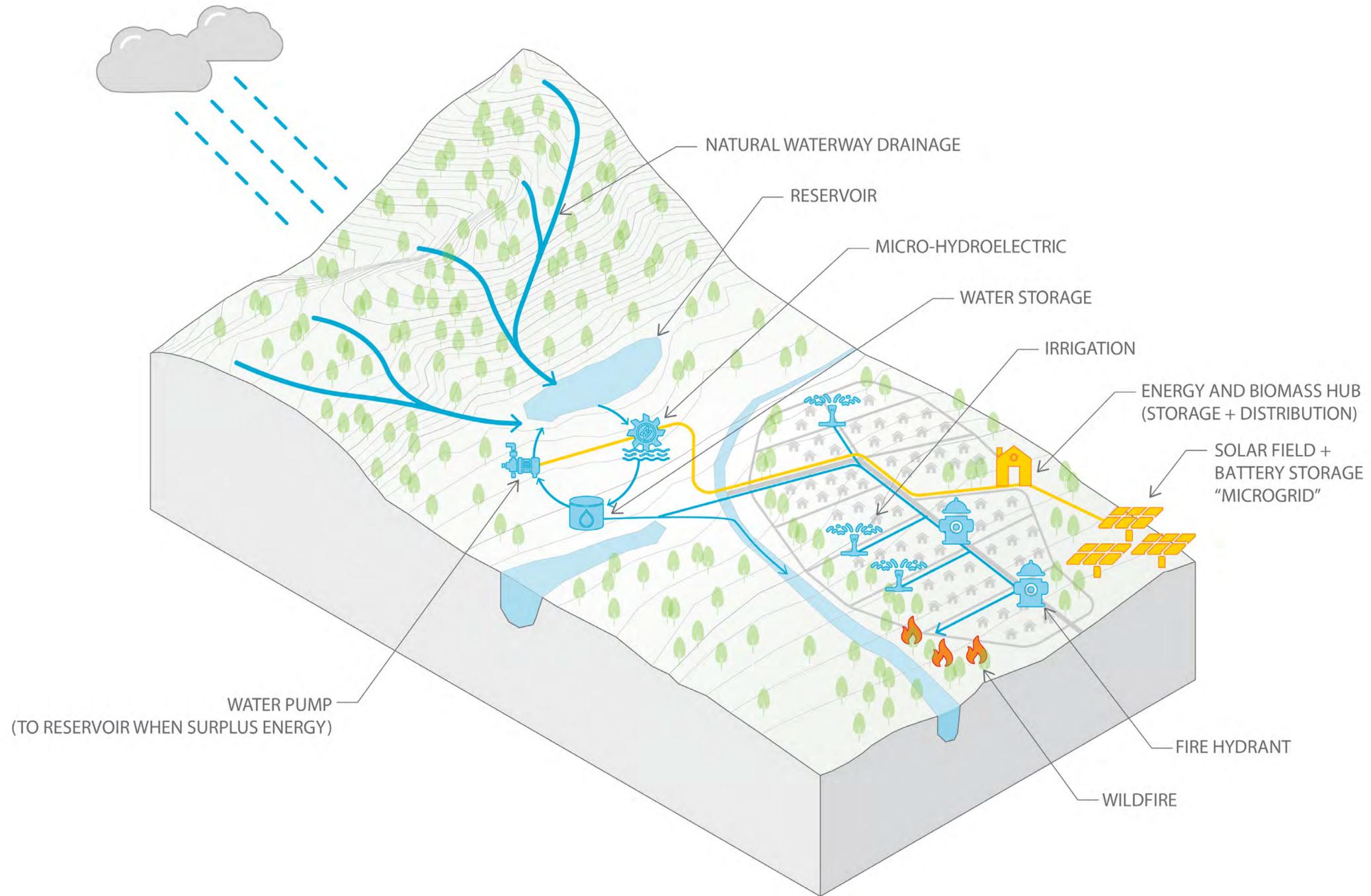
Exposure at the site scale based on orientation, slope, vegetation, and prevailing winds

# EXPOSURE



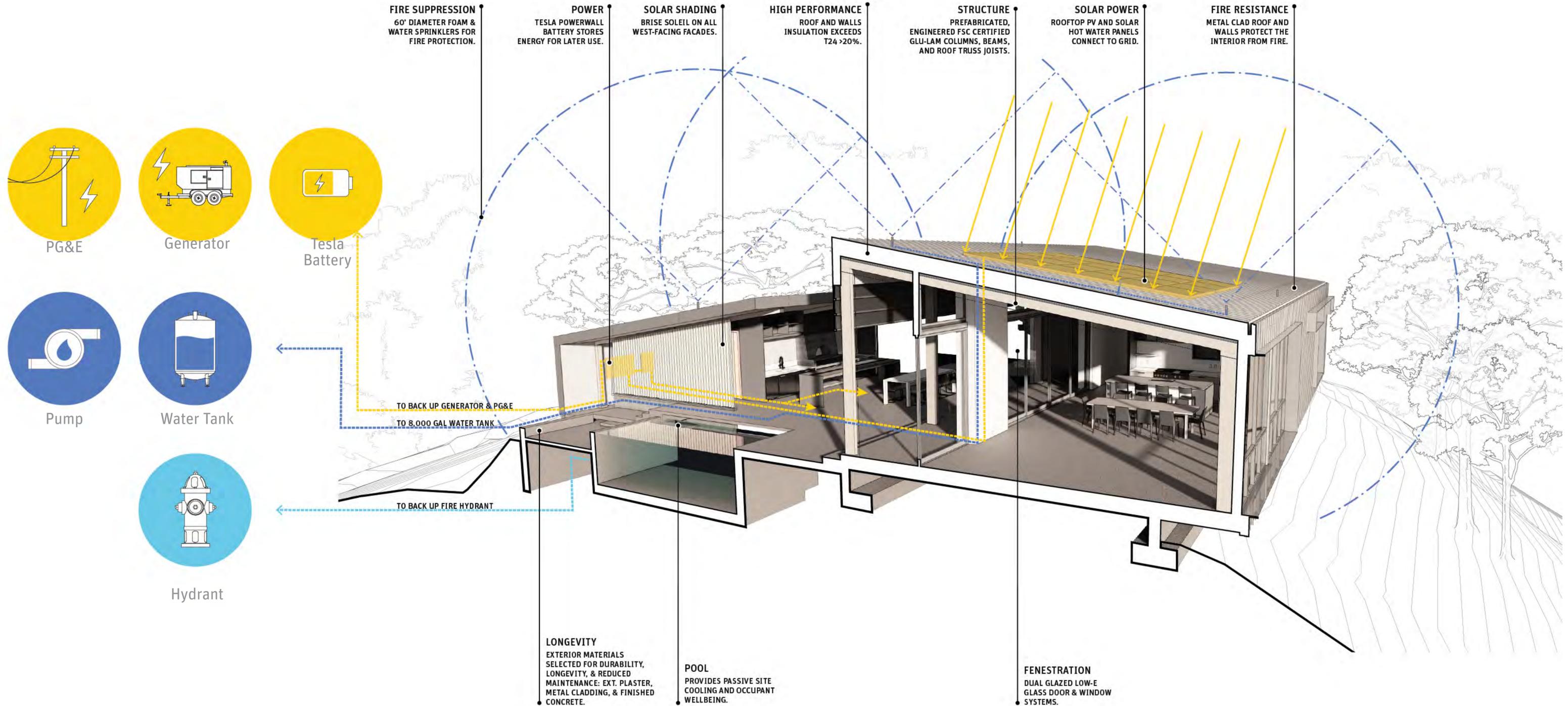
Exposure at the community scale is complicated by overlapping spheres of influence in a high density Structure Separation Distance (SSD)

# VULNERABILITY



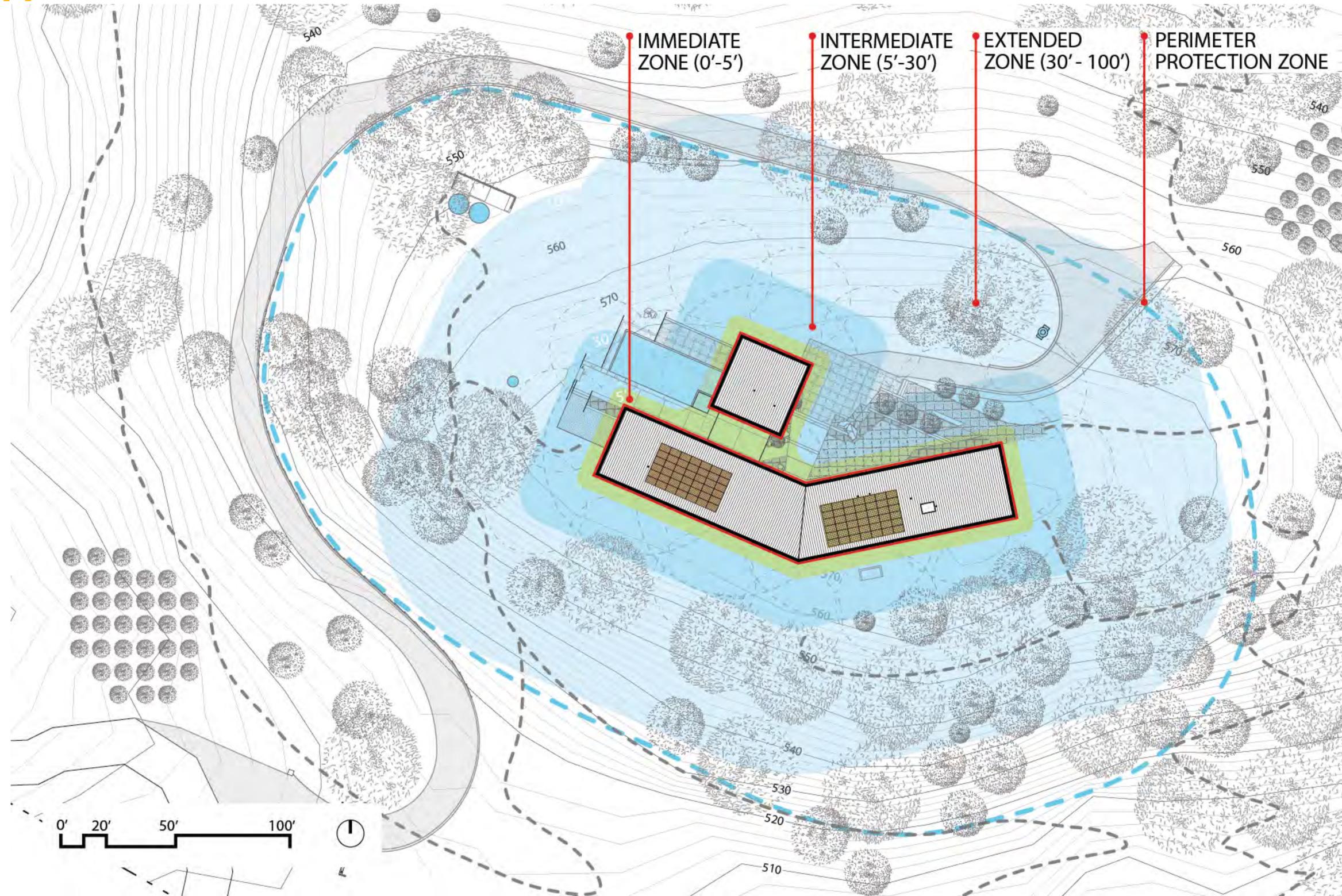
Vulnerability at the community scale can be mitigated through smart land use planning + redundant and resilient infrastructure and clear understanding of the fire pathway

# VULNERABILITY



Vulnerability at the site and building scale is also mitigated through redundant and resilient infrastructure

# VULNERABILITY



## 4. Eliminating combustibile landscape and home hardening materials + techniques in the immediate zone

# VULNERABILITY



Integrating wildfire resilience into the design process early results in projects that are not just resilient, but beautiful

# VULNERABILITY



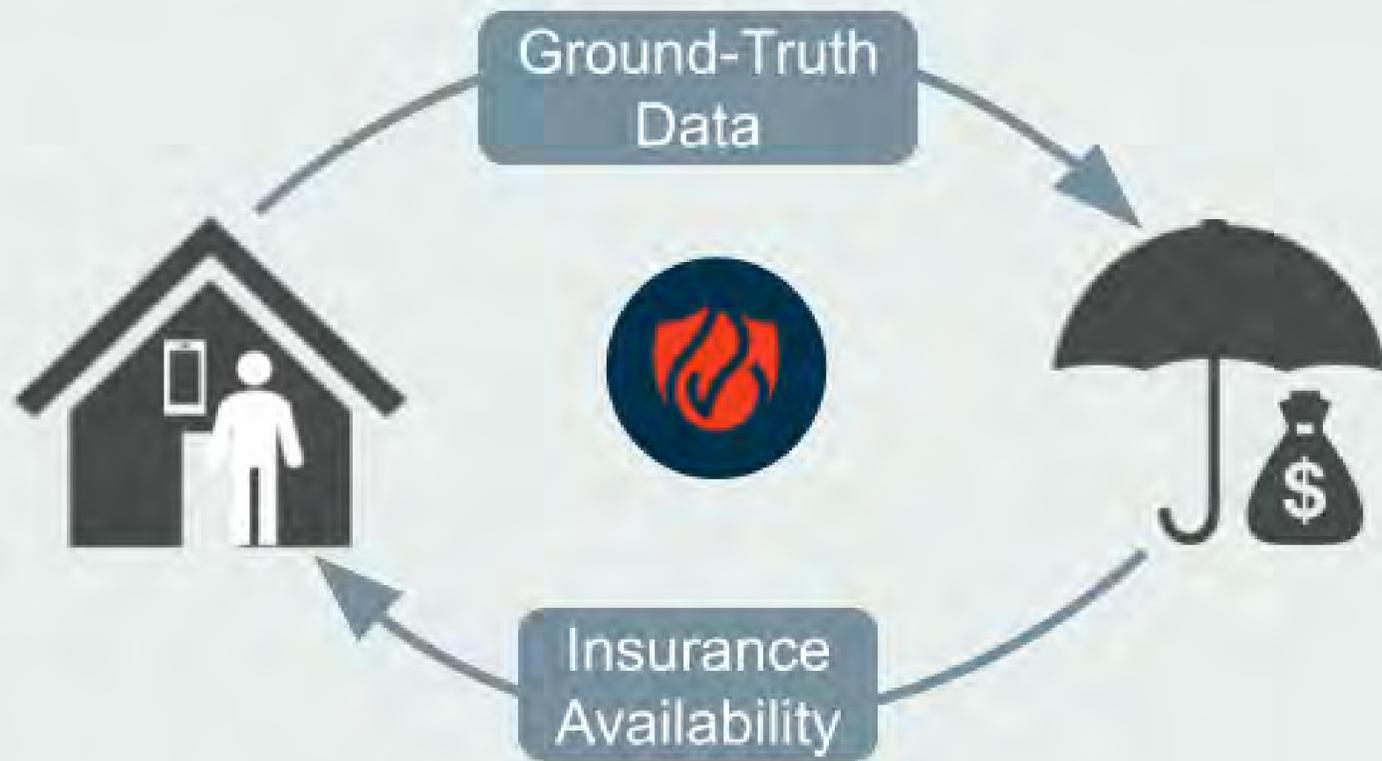
 **FRONTLINE**®  
WILDFIRE DEFENSE

All of these passive wildfire defense measures are enhanced by active systems like Frontline

SOLUTION

# FireBreak Scalably Fills Data Gaps...

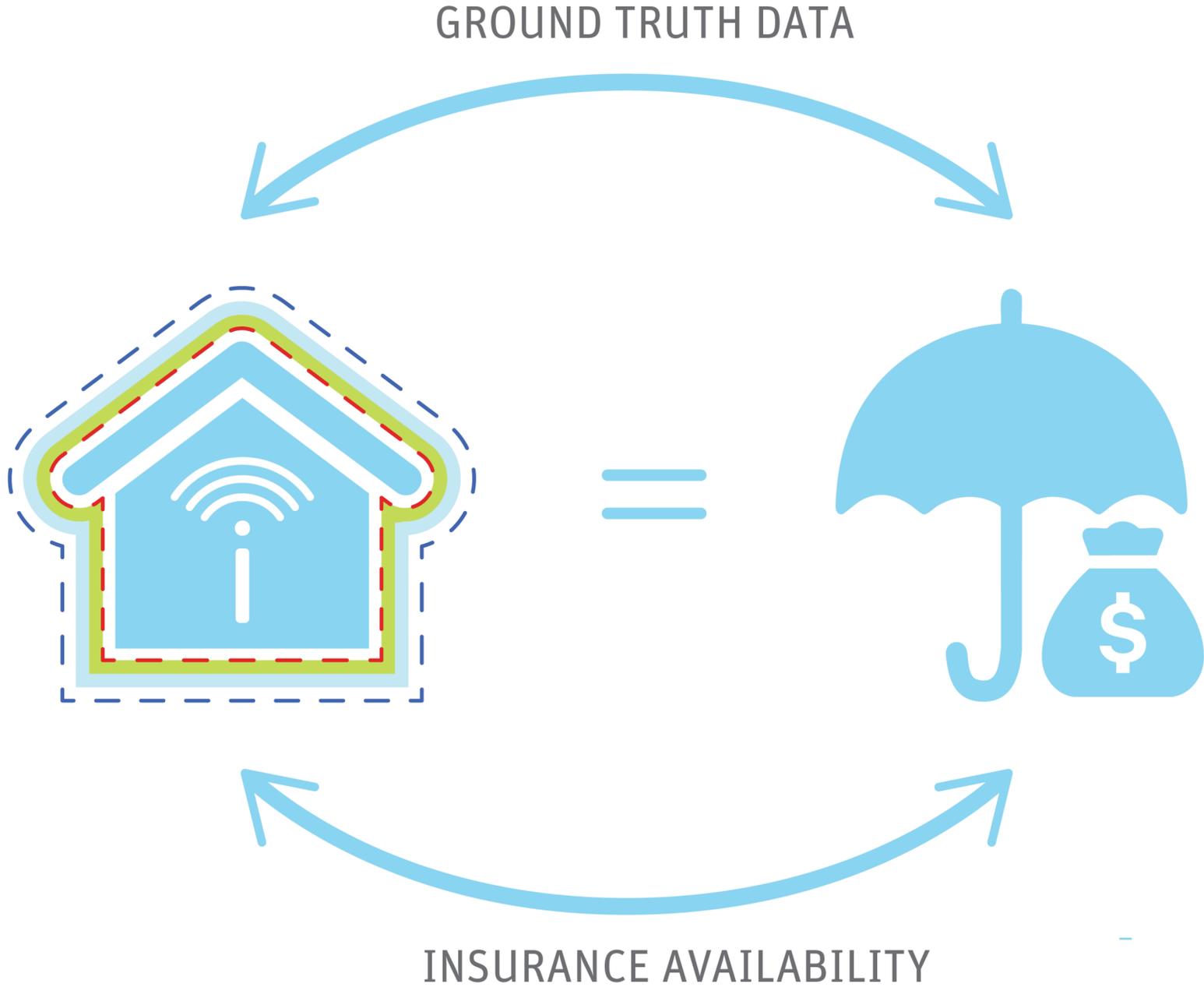
## ...so Insurers Can Cover Mitigated Homes.



*"miracle house" - 2023 Lahaina fire*



Innovations in the insurance industry are increasingly adopting and relying on this kind of ground-truth data



In this way, ground-verified information around home hardening and wildfire mitigation translates directly into a property’s insurability (information opens the umbrella)

Feasibility / Due Diligence

HAZARD



SD / DD

EXPOSURE



DD / CD / CA

VULNERABILITY



Post-Occupancy

INTELLIGENCE



# Resources



Studio VARA  
3130 20th St. Suite 275  
San Francisco, CA 94110  
[studiovara.com](http://studiovara.com)

Check out Studio VARA's  
YouTube videos:

**AMERICA BY DESIGN FEATURE  
FIRE COUNTRY LOOKOUT**



**WILDFIRE RESILIENT DESIGN  
PANEL DISCUSSION**



**Frontline Wildfire Defense**  
PO Box 10586  
Jackson, WY 83002  
(888) 510-1175  
[frontlinewildfire.com](http://frontlinewildfire.com)



**FireBreak**  
Truckee, California  
[firebreakrisk.com](http://firebreakrisk.com)



**Green Shield**  
159 N Sangamon St, Suite  
200 Chicago, IL 60607  
[greenshieldrisk.com](http://greenshieldrisk.com)



Studio VARA has worked with or has been developing relationships with vendors that we can bring to the table to help our clients build these measures into their properties and obtain insurance