SOTHA Owners Meeting

August 28t, 2025

Minutes

Sallie Shatz's Home

Social from 5-6pm. 6pm meeting start.

-Presentations by Angie Davlyn from Roaring Fork Valley Wildfire Collaborative https://www.rfvwildfire.org/

-what they do, who they are.

-the work of Dr. Hussam Mahmoud.

-grants- likely no funding. This round of grants deadline is August 31st.

-tax incentives are sunsetting this year.

-pass through fund. If all members of SOTHA donate on a volunteer basis to cover HOA wildfire mitigation work, all the funds will come to the HOA via payment to wildfire mitigation contractor for work done. If not everyone pitches in and it becomes a special assessment, we lose this opportunity to have wildfire mitigation work done and recive a tax credit.

-Presentation by Hal Harman on the science of mitigation in consideration for our HOA. Presentation attached. Roads have been done to the extent that was safe in Stage 1 Fire Restrictions, proposal of further work in the HOA this year was presented with the science behind it. Board will vote to approve that plan.

-Meeting called to order 7:20 pm

-Quorum established- 24 parcels

Attending in person (7 parcels)

Sallie Shatz

Hal Hartman

Stewart Holmes

Kevin Michelson

David and Karen Berkey

Mark Regan

Eric Hansen

Kaja Lundevall (Jessica was on Zoom)

Attending via Zoom- (7 parcels)

Jessica Lundevall

Krista Eddy and Joe Freeman

Riccardo Abate

Lisa Pankoski Walker and John Walker

Dana Pingatore

Ross Pingatore

Dave Eckelberger

Proxies- (10 parcles)

Matt and Kelly Larson (Sallie Shatz)

Francois Nehama and Michelle Mutrux (Sallie Shatz)

Marc and Jane Sparks (Mark Regan)

Lisa Gutner (Hal Hartman)

Clare and Steve Shane (David Berkey)

Susan Holiday (Stewart Holmes)

Tim and Tracy Parkes (Sallie Shatz)

Melissa and Rick Muller (Stewart Holmes)

Emily and Hawley Smith (Stewart Holmes)

Philip Baker and Susanna Beier (Silvia Porres)

-Meeting minutes motioned and approved

-Treasurer's report- Was not available, will be sent out to HOA members when it is available and then attached to this report.

-Road maintenance report by Hal Hartman, we will continue to add recycled asphalt to the road as needed.

-Snowplowing report by Hal Hartman, we have 3 years left on our 5-year contract. Master Maintenance were here 34 times plowing. We continue to be happy with their work.

-Roadside edge grass/weed cutting was absorbed into wildfire mitigation this year.

2025 board voted on and approved.

Sallie Shatz

Hal Hartman

David Berkey

Riccardo Abate

Stewart Holmes

Kevin Michelson

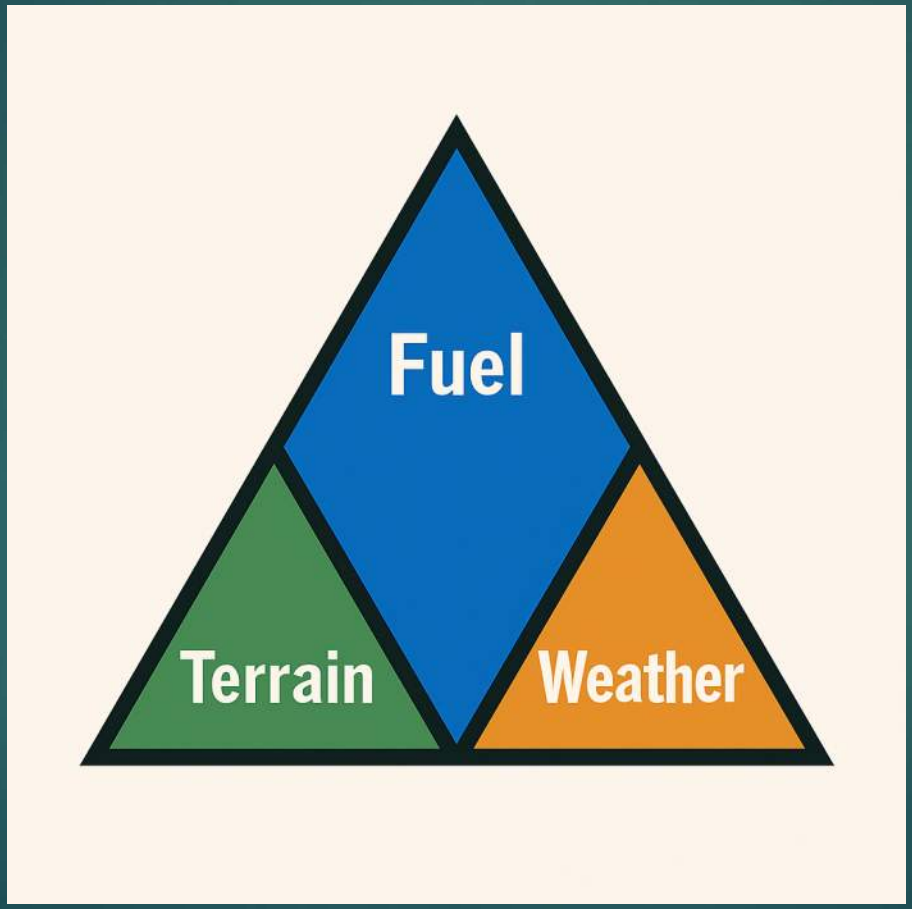
Ross Pingatore

-Upper Shield O rd road expensed confirmed to be, by bylaws the responsibility of the HOA and will be maintained as all roads.

Motion to adjourn approved.

Meeting ended at 8:20pm

Applying Encounter Probability to Wildfire Risk Assessment



Objective

Introduce encounter probability and risk as key metrics in assessing the likelihood and intensity of wildfire

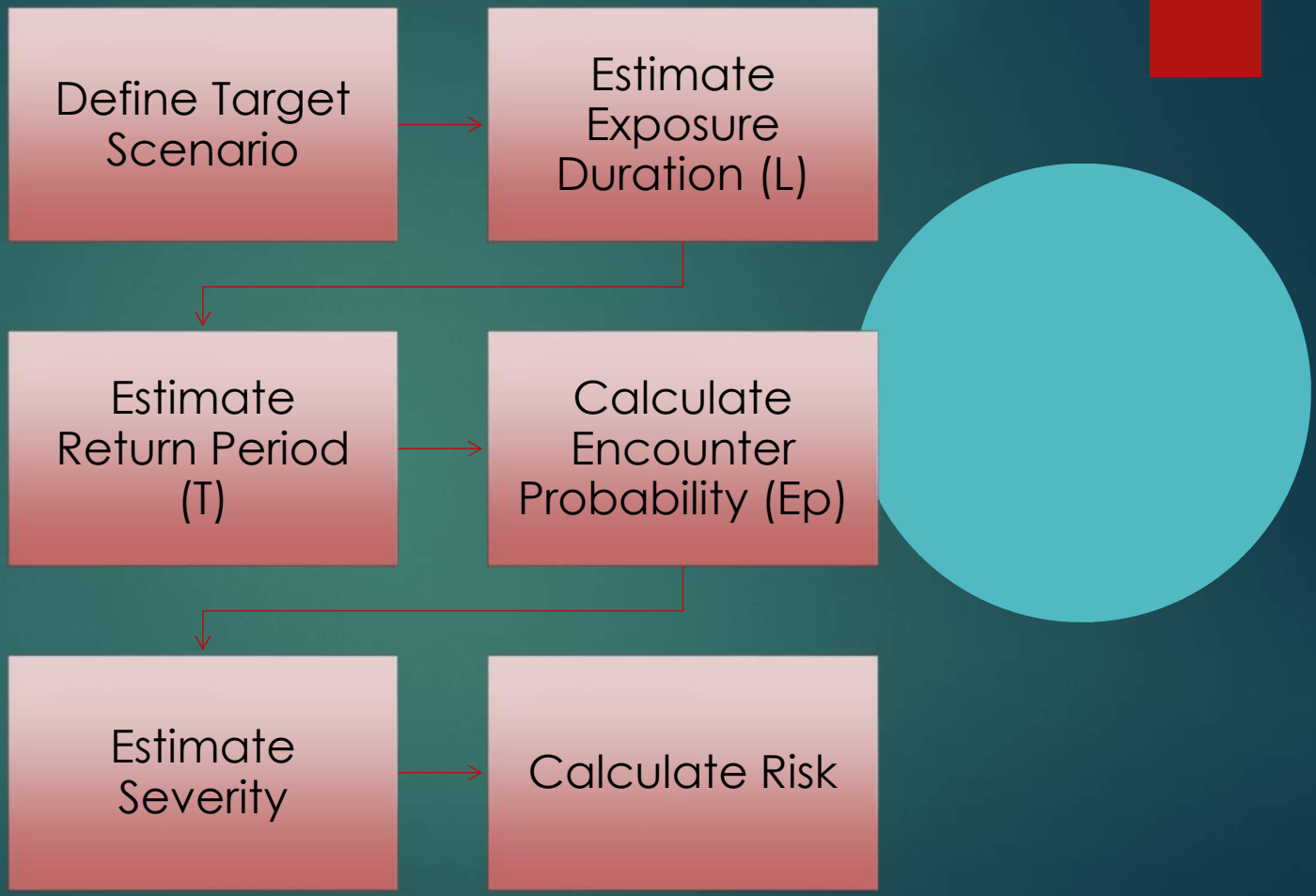
Key Information Sources

- 2023 Pitkin County Wildfire Protection Plan
- Pitkin County Geographical Information System (GIS)
- Wildfire Risk Viewer – Colorado State Forest Service
- Roaring Fork Valley Wildfire Collaborative
- Local Wildfire Authorities and Experts

Key Equations

$$Ep = 1 - e^{-\frac{L}{T}}$$

$$Risk = Ep\ x\ C$$

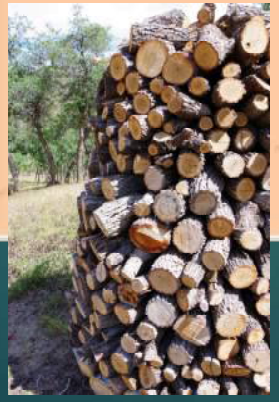

Define Target Scenario
Estimate Exposure Duration (L)
Estimate Return Period (T)
Calculate Encounter Probability (Ep)
Estimate Severity
Calculate Risk

Scenario: What is the wildfire probability and wildfire intensity at 186 Old Pond Way?

Step 1: Find wildfire return period T

- Lookup burn probabilities on GIS sources
- Consult with local wildfire authorities and experts
- Conduct tree ring analysis

- Wildfire return period from GIS: 1:100y
- Wildfire return period from analysis of annual growth rings in trees at a 90% confidence interval: 70y – 125y
- Wildfire return period from expert opinion: 1:80y
- Wildfire return period, all sources, 1:93y



Calculate Ep

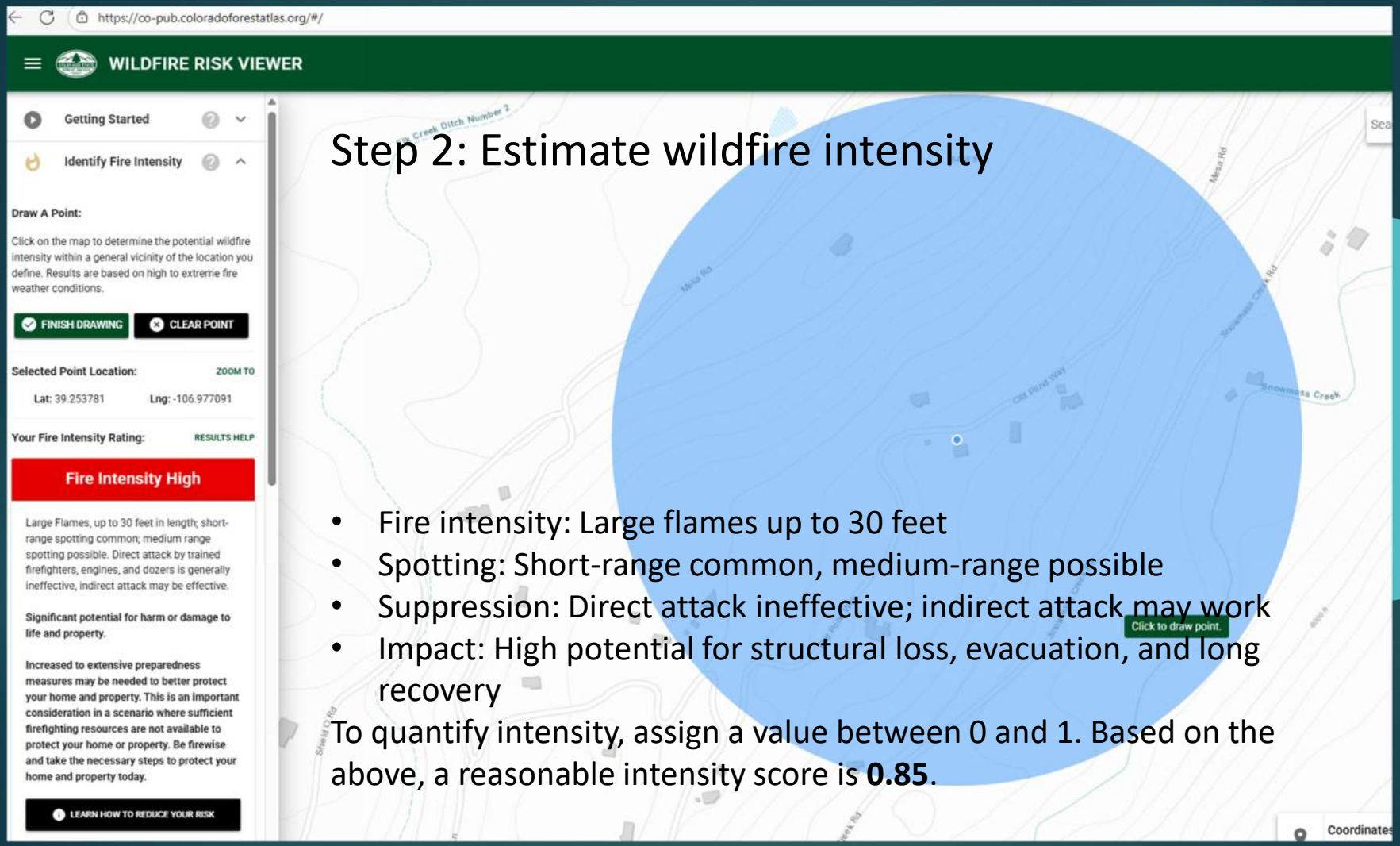
$$Ep = 1 - e^{-\frac{L}{T}}$$

L = 20 years

T = 93 years

The probability of a wildfire striking 186 Old Pond Way within the next 20 years is 0.19 or about 1:5

Step 2: Estimate wildfire intensity



- Fire intensity: Large flames up to 30 feet
- Spotting: Short-range common, medium-range possible
- Suppression: Direct attack ineffective; indirect attack may work
- Impact: High potential for structural loss, evacuation, and long recovery

To quantify intensity, assign a value between 0 and 1. Based on the above, a reasonable intensity score is **0.85**.

Calculate Risk

$$Risk = Probability \times Intensity = 0.19 \text{ x } 0.85 = 0.16$$

This score reflects a moderate probability but high intensity scenario. It's a strong signal for mitigation planning to reduce lifetime exposure, improve survivability and minimize long recovery.

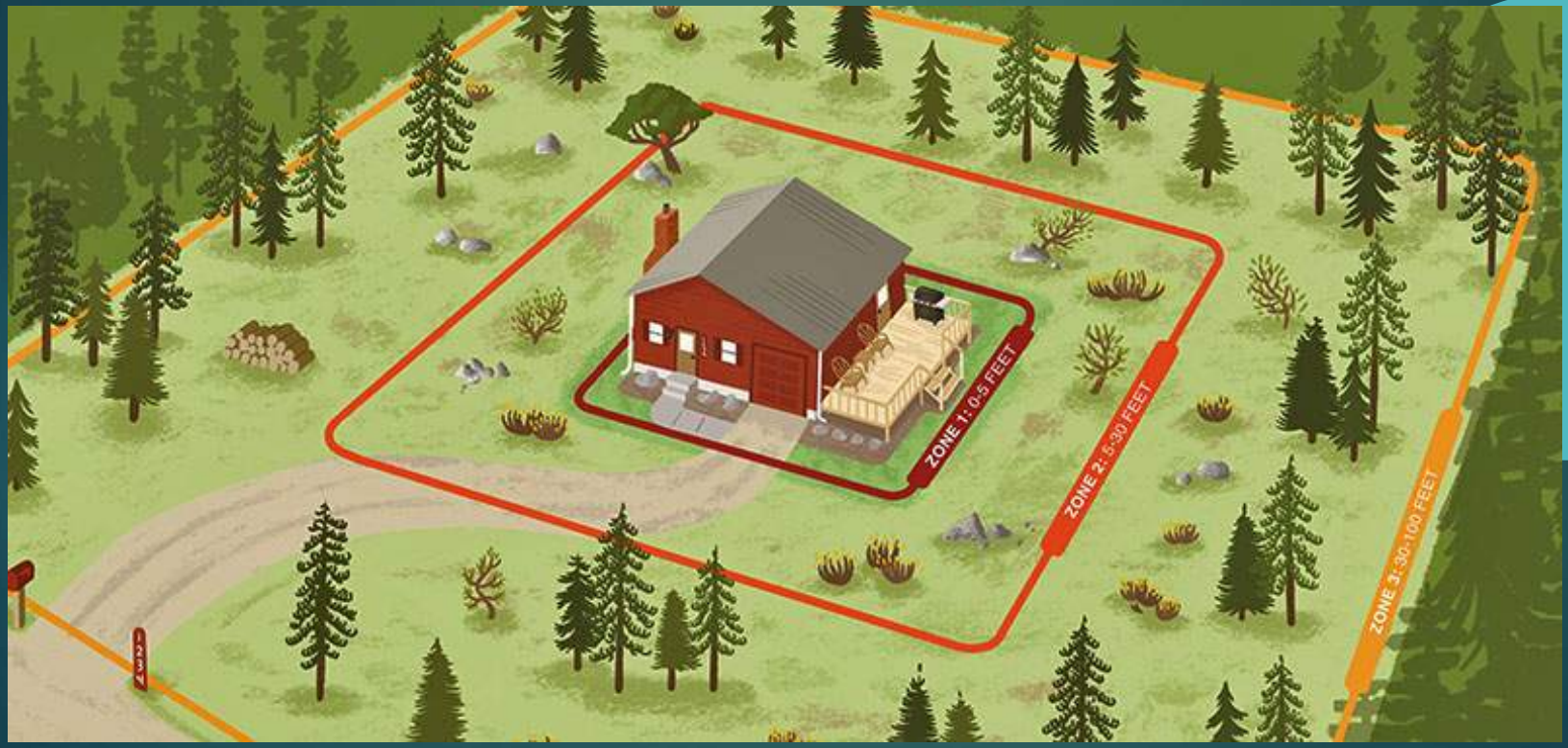
Wildfire Mitigation Cost–Benefit Lookup Table (Home Value: $1,000,000)

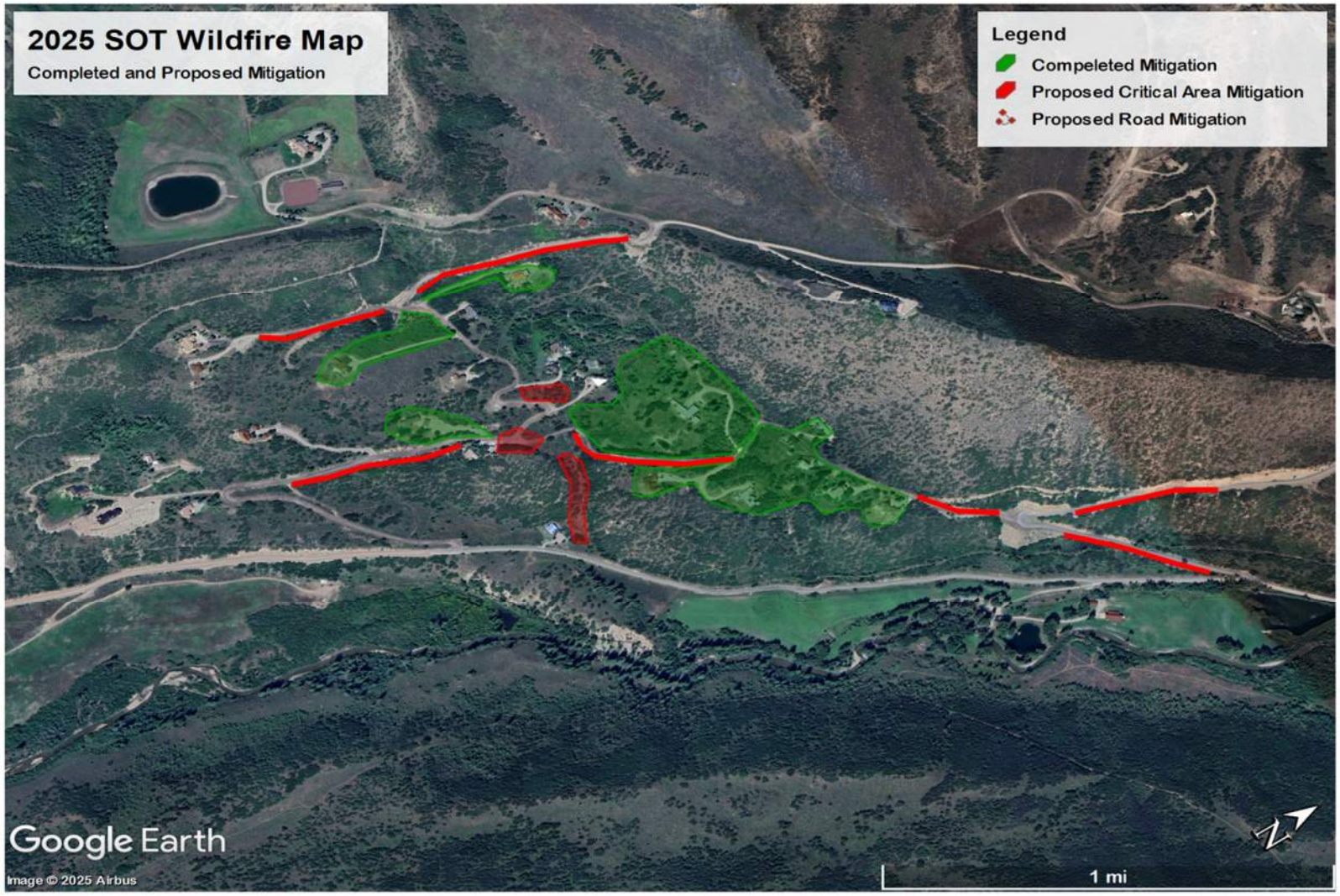
Mitigation Strategy	Annual Cost	Risk Reduction	New Loss Probability	Expected Loss	Annualized Loss	Net Benefit
No Mitigation (Baseline)	$0	0%	0.20	$200,000	$10,000	—
Basic Defensible Space	$5,000	50%	0.10	$100,000	$5,000	$0
Enhanced Ember Hardening	$10,000	75%	0.05	$50,000	$2,500	-$7,500
Full Structural Retrofit	$15,000	90%	0.02	$20,000	$1,000	-$14,000

- **Annualized Loss** = Expected loss divided over a 20-year horizon
- **Net Benefit** = Annualized savings minus mitigation cost
- At $1M home value, **basic defensible space breaks even**, while higher-cost strategies may need co-benefits (e.g. insurance discounts, community grants) to justify the spend
- Consider layering low-cost, high-impact actions for best ROI

THE HOME IGNITION ZONE, A guide to preparing your home for wildfire and creating defensible space. Colorado State Forest Service

~85% survival with both Class A roof and defensible space.




2025 SOT Wildfire Map
Completed and Proposed Mitigation
Legend
Compeleted Mitigation
Proposed Critical Area Mitigation
Proposed Road Mitigation
Google Earth
Image © 2025 Airbus
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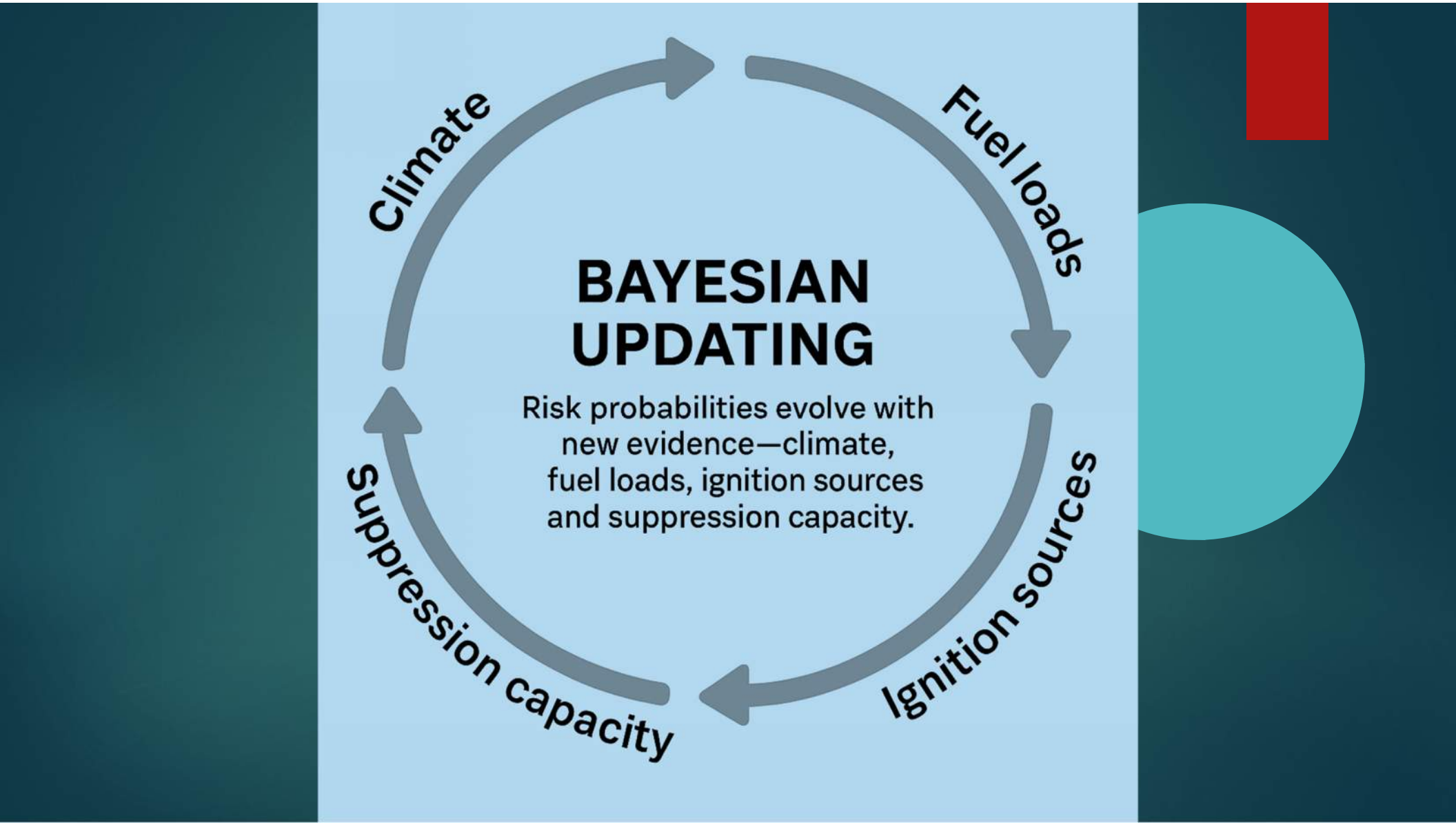
Climate
Fuel loads
Ignition sources
Suppression capacity
BAYESIAN UPDATING
Risk probabilities evolve with new evidence—climate, fuel loads, ignition sources and suppression capacity.