

Mitigation That Matters

Where treatment changes outcomes

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WUI

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Experience informs the model

1985

Arborist work begins

1988

Yellowstone fires

21 years

Santa Fe Fire Department
Retired as Captain

MTM development since 2016

Models guide the questions. Field experience tests the assumptions.

13-layer modeling, tested on the ground

Connected conditions

Weather, fuels, terrain and structures show how exposure connects.

Experienced observation

Field checks test the model against actual conditions and treatment feasibility.

Local response capability shapes mitigation priorities.

Homes, communities, historic landscapes, evacuation routes and working forests

The measure is changed wildfire risk

Work completed

Acres treated

Homes assessed or hardened

Dollars spent and hours worked

Change demonstrated

Lower expected structure exposure

Interrupted fire pathways

Safer response and evacuation options

Treating 12 of 100 homes does not establish a 12% reduction in risk.

Where fire moves and intervention matters

Pathways, swaths and pods

Map connected movement and areas that need coordinated work.

Nodes, funnels and points of entry

Locate critical connections and where fire can enter the community.

Evaluate fuels, embers and structure-to-structure exposure together.

Mitigation That Matters

01 See the Path

Map likely fire movement and exposure.

02 Find the Node

Locate critical connections and intervention points.

03 Break the Run

Apply strategic interventions that interrupt the pathway.

04 Prove the Outcome

Measure and field-validate whether wildfire risk changed.

Mitigation priorities reflect response reality

Volunteer, career or combination

Available staffing and apparatus
Access and water supply
Response time and mutual aid

Safe operating locations
Evacuation and responder access
Feasible, maintainable interventions

Priority: where the work can reduce exposure and improve response options.

Prove the Outcome

- 1 Establish a baseline
- 2 Predict expected wildfire outcomes
- 3 Apply strategic interventions
- 4 Repeat measurements
- 5 Compare results with predicted consequences
- 6 **Field-validate whether mitigation actually changed wildfire risk**

One community can test the method

3–5 critical nodes

Agree on priorities with the local fire department.
Measure conditions before and after strategic intervention.
Compare expected consequences and field evidence.
Assign maintenance and repeat the assessment.

Evidence to report: changed exposure, response options and residual risk.

Which New Mexico community should go first?

The goal is a demonstrated change in wildfire risk.

See the Path Find the Node

Break the Run Prove the Outcome