Catastrophic Wildfire And Landslide Losses: Trends and Resolutions

Presented by:

Dennis Timoney, SDRMA

Kevin D. Hansen, Esq.

Nicholas H. Rasmussen, Esq.

Introduction

Wildfires, often followed by powerful debris flows, are significant in their complexity, potential for damage, and notoriety. Attendees will learn about the unique coverage issues involved, such as the efficient proximate cause doctrine, and how to investigate causation. Complex issues of proper valuation will also be discussed as well as how to competently investigate these claims. Being able to recognize coverage and adjustment issues is an important part of having the confidence to handle such claims competently

I. Overview: Wildfires Near Urban Areas

- "It's the 'expanding bull's eye' effect," said geographer Stephen M. Strader of Villanova University, who tracks population growth in high-risk areas. "Cities are moving into regions where there were no people before. People and wildfires are coming together more often"
- His analysis, published in the scientific journal, Natural Hazards, found a 1,000 percent increase in the number of western U.S. homes at risk from wildfire over the past 50 years – from about 607,000 in 1940 to 6.7 million in 2010

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I. Overview: Wildfires Near Urban Areas

- There have always been wildfires in California
- The Camp Fire (2018) was the deadliest and most destructive wildfire in the state's history. 153,336 acres burned and 18,804 buildings destroyed
- The Tubbs Fire (2017) was, at the time, the most destructive wildfire in the state's history. 38,607 acres burned and 5,643 buildings destroyed
- The severity and frequency of fires in California have become worse

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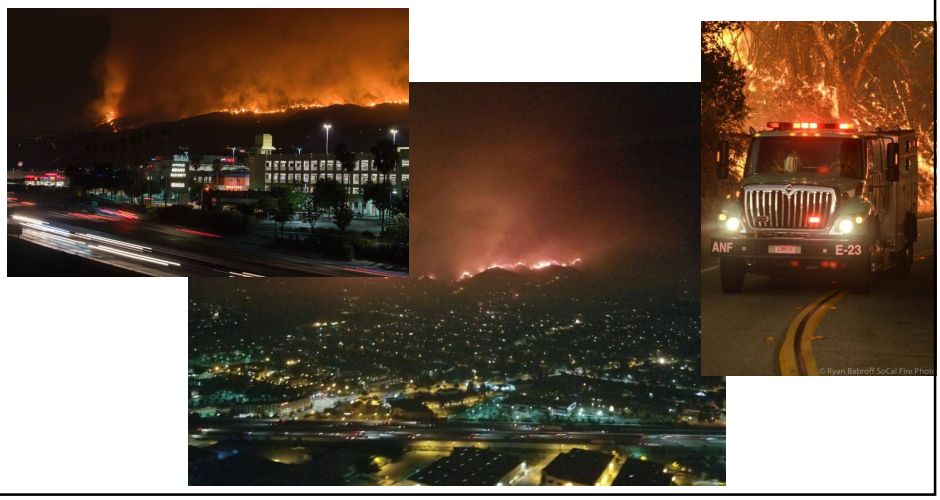
I. Overview: Wildfires Near Urban Areas



I. Overview: Wildfires Near Urban Areas

- Immediate Considerations in Risk Analysis
  - Weather conditions
    - Drought
- Models now being established pertaining to wildfire losses (in the past these models were used for earthquake and hurricane losses) to limit maximum exposure to a loss due to a brush fire by zip code

II. Technical Issues Arising From Wildfires and Slopes

- **Fires affect hydrologic processes**
- Chemical changes to soil along the ground surface are a particularly important effect of wildland fires. Wildland fires cause an increase in soil temperature as a result of heat transfer from the combustion of surface fuel and smoldering combustion of shallow organics in the soil. When organic material burns at high intensity, hydrophobic (water repellent) soils are created

II. Technical Issues Arising From Wildfires and Slopes

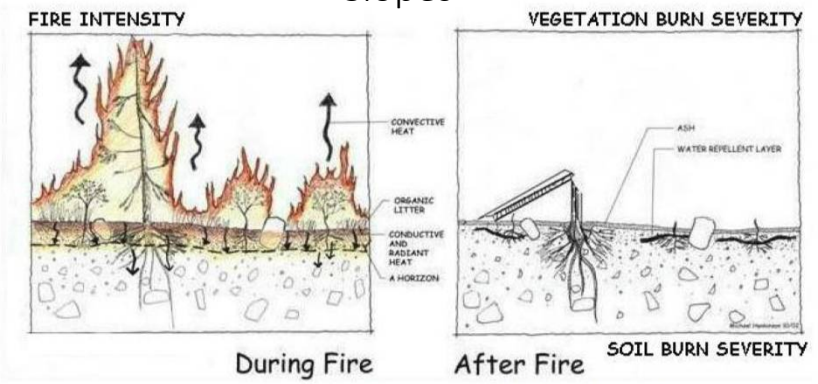


Figure A. "Intensity" refers to the burning period of the fire. "Severity" refers to the after-effects. By referring to the BAER soil effects map as a "soil burn severity" map, clarification as to the focus makes it less confusing to all users of the information[2]. Graphic modified from Mike Hankinson, National Park Service.

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II. Technical Issues Arising From Wildfires and Slopes

- **Fires affect hydrologic processes**

- During high intensity fire combustion, the hydrophobic organic compounds in the burned material often vaporize, and some of the vaporized compounds move down into the soil. When the vapors reach a soil depth where the temperature is low enough, the hydrophobic compounds condense and coat the soil particles at that depth—generally 0.25 to 2 inches (0.5 to 5 cm) below the surface and frequently only in a thin (< 1 mm) layer at the immediate soil surface

II. Technical Issues Arising From Wildfires and Slopes

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II. Technical Issues Arising From Wildfires and Slopes

- **Rainstorm effects on fire burned areas**
- During a post-wildland fire rainstorm, a number of fire-related mechanisms combine to increase runoff, peak flows, erosion, and debris production from burned watersheds. The presence of water repellency in the soil acts to limit water infiltration and accentuate runoff and erosion from affected slopes during rainfall events
- Soil burn severity is used as an indicator of water repellency (hydrophobicity), such that soils with medium to high soil burn severity have the most water repellency and produce the most erosion and debris

II. Technical Issues Arising From Wildfires and Slopes

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II. Technical Issues Arising From Wildfires and Slopes

- **Rainstorm effects on fire burned areas**
- Debris-flow initiation in burned areas often results from progressive sediment bulking processes, rainfall flowing over the ground surface on hillslopes gradually entrains material, ultimately transforming sediment-laden surface water flow to debris flow
- The consistency of flowing debris is similar to a slurry, often with the consistency of concrete, in masses from a few hundred cubic yards to hundreds of thousands of cubic yards of saturated material

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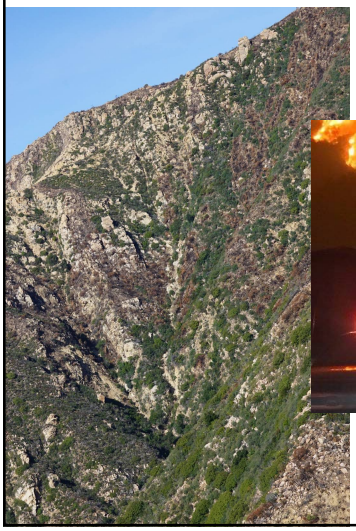
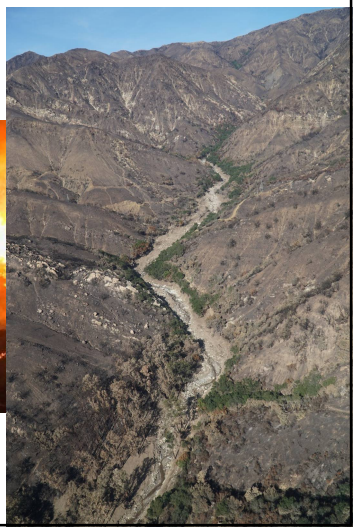
II. Technical Issues Arising From Wildfires and Slopes





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II. Technical Issues Arising From Wildfires and Slopes

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- **Long term effects of wildland fires and associated risks**
- The window for debris flows to occur after a wildland fire can be as long as 3-5 years

III. Coverage Issues Arising From Wildfires

- **Underinsurance**
- Nationwide, insurance services firm SMB estimates significant underinsurance (68% of homeowners)
- The problem is worse after a major wildfire, where costs to repair and rebuild damaged or destroyed structures can spike dramatically

III. Coverage Issues Arising From Wildfires

- **Underinsurance**
- "Demand Surge": a process by which, as a result of widespread destruction of property, needs for architects, contractors, laborers, and building materials outstrip local resources, leading to dramatically increased prices (sometimes also called "loss amplification")

III. Coverage Issues Arising From Wildfires

- **Underinsurance**
- Risks such as "demand surge" are compounded by the fact that many policyholders assume that automatic inflation adjustments to policy limits suffice to keep up with inflation (not necessarily) and increasing costs of code- and standard-compliance

III. Coverage Issues Arising From Wildfires

- When are Losses Covered?
- Fire is a covered cause of loss
- However, most policies and memoranda of coverage preclude coverage for earth movement, landslide, mudflow, subsidence, mudslide, etc.

III. Coverage Issues Arising From Wildfires

- "Efficient Proximate Cause"
- May apply where *both* a "covered" cause of loss and non-covered causes result in a loss.
- Ins. Code § 530 (coverage if covered peril is proximate cause)

III. Coverage Issues Arising From Wildfires

- *Sabella v. Wisler* (1963) 59 Cal.2d 21, 31-32; *Garvey v. State Farm Fire & Cas. Co.* (1989) 48 Cal.3d 395, 402-404; *Howell v. State Farm Fire & Cas. Co.* (1990) 218 Cal.App.3d 1446, 1457 ("In our view, Insurance Code section 530, as interpreted by *Sabella* and its progeny, requires a property insurer to provide coverage whenever an insured perils is the 'efficient proximate cause' of the loss.") (disapproved of on other grounds in *Reid v. Google, Inc.* (2010) 50 Cal.4th 512, 527)

III. Coverage Issues Arising From Wildfires

- What is "Efficient Proximate Cause"?
- As defined in *Sabella*, the "efficient proximate cause" is that cause which "sets others in motion" and is "the predominating or moving efficient cause"
- Put another way, the "efficient proximate cause" of a loss is *that original cause which resulted in the subsequent cause of loss*

III. Coverage Issues Arising From Wildfires

- What is "Efficient Proximate Cause"?
- In *Sabella,* a home was negligently constructed (a covered cause of loss in the applicable policy) on un-compacted fill
- Because of the un-compacted fill, and/or improper sealing of the line, a sewer line cracked (surprise!)
- Leakage from the sewer line ultimately led to significant settling, shift, and cracking of the foundation and home

III. Coverage Issues Arising From Wildfires

- What is "Efficient Proximate Cause"?
- The policy applicable to the loss expressly excluded coverage for "settling, cracking, shrinkage, or expansion of … foundations, walls, floors, …"
- But the California Supreme Court concluded that ***but for*** the negligent construction of the home, none of resulting, non-covered causes of loss would have occurred: so coverage was available

III. Coverage Issues Arising From Wildfires

- What is "Efficient Proximate Cause"?
- In *Howell v. State Farm Fire & Cas. Co.* (1990) 218 Cal.App.3d 1446, wildfire burned much of the 17-acre slope on which the insured property was situated
- After heavy rains during the winter, a major landslide occurred, damaging the property

III. Coverage Issues Arising From Wildfires

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III. Coverage Issues Arising From Wildfires

- What is "Efficient Proximate Cause"?

- Expert testimony established that the slope had previously sustained much heavier rains without failing
- Expert testimony also concluded that "although water was the slide's actuating mechanism, resistance to failure was severely impaired by destruction of the area's natural biotechnical slope protection . . . . The destruction of the vegetation and rooting at the surface [resulting from the fire]caused a[n] adverse modification to the hydrologic regime in the soil"

III. Coverage Issues Arising From Wildfires

- What is "Efficient Proximate Cause"?

- The expert opined that "but for" the hydrological changes to the slope's soil as a result of the fire, "the slope failure … probably would not have occurred"
- This was sufficient evidence to create a triable issue of fact whether the fire—a covered cause of loss—was the "efficient proximate cause" of the loss such that coverage should be available notwithstanding policy exclusions for "Earth movement" and "water damage"

III. Coverage Issues Arising From Wildfires

- What is "Efficient Proximate Cause"?
- In so holding, the *Howell* court explained that the question for the jury was whether the preceding fire was the "predominating cause" of the subsequent loss

III. I Coverage Issues Arising From Wildfires

- What is "Efficient Proximate Cause"?
- In *Gillis v. Sun Ins. Office, Ltd.* (1965) 238 Cal.App.2d 408, in which an insured's boat gangway was blown off a dock and into the water during a windstorm, and then subsequently destroyed by wave action
- Coverage was available notwithstanding exclusions for water loss, because it was the gangway's *wind-blown fall into the water* which "was the start of a chain of events which permitted the waves to cause damage to the float. . ."

III. Coverage Issues Arising From Wildfires

- What is "Efficient Proximate Cause"?

- In *Encompass Ins. Co. v. Berger* (C.D. Cal. Oct. 7, 2014) Case No. CV-12-08294-MWF, 2014 WL 4987978, a wild fire denuded the insured property, including killing several significant trees
- Subsequent settling of the foundation and resulting cracking was found to have been caused by increased soil moisture – non-covered losses

III. Coverage Issues Arising From Wildfires

- What is "Efficient Proximate Cause"?

- However, because of testimony that the increased soil moisture resulted from the reduction in consumption due to the death of significant trees in the preceding fire, resulting damages, including internal cracking in the house, were found to be covered

III. Coverage Issues Arising From Wildfires

- What is "Efficient Proximate Cause"?
  - There are limitations.
- Ins. Code § 532 "If a peril is specially excepted in a contract of insurance and there is a loss which would not have occurred but for such peril, such loss is thereby excepted even though the immediate cause of the loss was a peril which was not excepted"
- Translation: No coverage where an expressly excluded peril is the "but for" cause of a more immediate, cause of loss which *is* covered

III. Coverage Issues Arising From Wildfires

- What Consequences Result From the Doctrine?
  - "Episodic" losses *may <u>or</u> may not* constitute a single claim
  - "Episodic" losses are those which arise at separate times, from separate or different causes: i.e., different fires at different times; or a fire in one year, followed by a debris flow the following year.
  - Contrast this with an "continuous" or "progressive" loss—such as contamination seeping from a landfill over time.

III. Coverage Issues Arising From Wildfires

- What Consequences Result From the Doctrine?
  - California courts typically recognize that a loss "occurs" when it becomes "manifest"—i.e., when you can see that it has happened
  - *See, e.g., Prudential-LMI Commercial Ins. v. Superior Court* (1990) 51 Cal.3d 674, 699 ("Once a loss is manifested … an event has occurred that triggers indemnity unless such event is specifically excluded under the policy terms.")

III. Coverage Issues Arising From Wildfires

- What Consequences Result From the Doctrine?
  - This rule is easily applied to a "loss in progress" or a "continuing loss" – i.e., one where the *cause* of the loss and the loss itself remain ongoing over time – think contamination leaking from a dump
    - But what happens where injuries are interrupted?

III. Coverage Issues Arising From Wildfires

- What Consequences Result From the Doctrine?
- California courts have not addressed the question yet
- But the potential is there: insured suffers a loss, the loss is repaired; 2-3 years later, after further rains, additional damage happens. Is this a new "occurrence" or not?

III. Coverage Issues Arising From Wildfires

- What Consequences Result From the Doctrine?
- California courts have not addressed the question yet
- But the potential is there: insured suffers a loss, the loss is repaired; 2-3 years later, after further rains, additional damage happens. Is this a new "occurrence" or not?
- The reasonable guess is that policyholders will contend it *is*, coverage providers, that it is *not*

III. Coverage Issues Arising From Wildfires

- What Consequences Result From the Doctrine?
  - Deductible and policy limits: how many apply??

III. Coverage Issues Arising From Wildfires

- What Consequences Result From the Doctrine?
- It seems likely that California courts will look to whether multiple losses are "distinguishable in time and space" and the result of different causal factors

III. Coverage Issues Arising From Wildfires

- What Consequences Result From the Doctrine?
- *See, Lexington Ins. Co. v. Travelers Indem. Co. of Illinois* (9th Cir. 2001) 21 F. App'x 585
- Each of four different losses a separate "occurrence"
- Factors considered: **(1) each loss was "distinguishable in time and space"; (2) each loss was subject to "separate causal factors"; and (3) each act of arson would support a separate criminal count in a criminal proceeding**

III. Liability Issues Arising From Wildfires

- Other Considerations
- Fault/Subrogation
- Did a neighbor's attempts at "mitigation" influence the loss?
- E.g., neighbor builds a barrier wall which diverts mudflow onto insured's property and causes damage; insurer may sue neighbor on behalf of insured

III. Liability Issues Arising From Wildfires

- Other Considerations
- What if *YOU* built the retaining wall or took steps to mitigate on your property?
- Government Code § 815:

"Except as otherwise provided by statute: (a) a public entity is not liable for injury, whether such injury arises out of an act or omission of the public entity or a public employee or any other person"

III. Liability Issues Arising From Wildfires

- Other Considerations: Do You Have Immunity?
- A public entity has no liability for any injury unless otherwise provided by statute.
- But …. Under Gov't. Code §§ 830 *et seq.*, public entities have a duty to avoid maintaining a dangerous condition of public property.

III. Liability Issues Arising From Wildfires

- Other Considerations: Do You Have Immunity?

- Article I, Section 19 of the California Constitution provides the basis for an inverse condemnation action against public entities.

"Private property may be taken or damaged for public use only when just compensation, ascertained by a jury unless waived, has first been paid to, or into court for, the owner."

- *Odello Bros. v. Cty. of Monterey* (1998) 63 Cal.App.4th 778, 785-786

III. Liability Issues Arising From Wildfires

- Other Considerations: Do You Have Immunity?

- Thus, though California law previously recognized certain immunities for public entity construction projects, "Today, neither a private owner nor a public entity has the right to act unreasonably with respect to other property owners. Neither may disregard the interests of downstream property owners, and a public entity can no longer claim immunity in tort or inverse condemnation actions."

Hauselt, supra, 172 Cal.App.4th 550, 557, quoting *Locklin v. City of Lafayette* (1994) 7 Cal.4th 327, 467

III. Coverage Issues Arising From Wildfires

- Other Considerations - Smoke and Ash
  - Deposition of byproduct of wildland fires
- Damage resulting from indirect thermal exposure
  - Contamination of building materials
  - Structural damage from water drops

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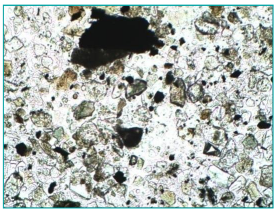
III. Coverage Issues Arising From Wildfires

- Other Considerations - Smoke and Ash
- Wildfire Particulate – Ash: Brown to silver/gray residues comprised of the partial to fully combusted residual debris

Fireplace sample



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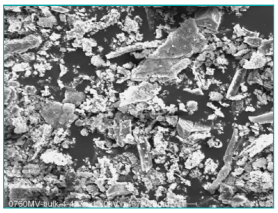


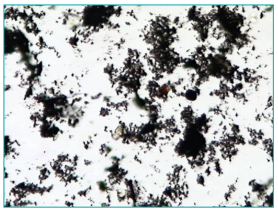
Scanning Electron Microscopy

III. Coverage Issues Arising From Wildfires

- Other Considerations - Smoke and Ash

- Wildfire Particulate – Char: Small dark black/brown clusters of micron aciniform (spherical) particles comprised of carbon and organic compounds

Fireplace sample



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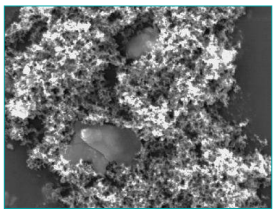

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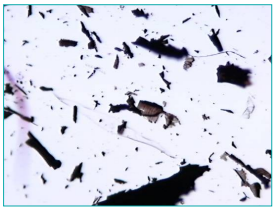
III. Coverage Issues Arising From Wildfires

- Other Considerations - Smoke and Ash

- Wildfire Particulate – Char: Partially burned black/brown debris that still retains characteristics of the original plant or cellulosic material

Fireplace sample



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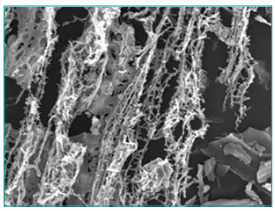

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III. Coverage Issues Arising From Wildfires

- Other Considerations - Smoke and Ash
  - Smoke
- May or may not be limited by policy language.

III. Coverage Issues Arising From Wildfires

- Other Considerations - Smoke and Ash
- For instance: "'Smoke damage' means sudden and accidental *direct physical loss* from smoke (including airborne, windborne, or wind-driven) combustion by-products or particulates such as carbon, soot, ash, char, debris that is visible to the unaided human eye, or odor from smoke or ash that is detected by the unaided human nose of an average person, and not by the subjective senses of you or by laboratory testing"

III. Coverage Issues Arising From Wildfires

- Other Considerations - Smoke and Ash
- Claims are typically subjective and can require extensive expert review to address
- Claims are often difficult to inspect/adjust once reported: "significant cleanup attempts already made"
- Significant dispute about long-term effects

III. Coverage Issues Arising From Wildfires

- Other Considerations - Smoke and Ash
- Ripe for dispute concerning the both source and scope of repair/remediation required
- Insulation replacement?
- A/C Duct cleaning/replacement?
- Roof?

III. Coverage Issues Arising From Wildfires

- Takeaways: What Factors Bear on Whether a Landslide/Debris Flow Following A Wildfire is A Covered Loss?
- Were landslides/mudflows a known risk prior to the loss and, most importantly, *had they actually occurred*?

III. Coverage Issues Arising From Wildfires

- Takeaways: What Factors Bear on Whether a Landslide/Debris Flow Following Wildfire is A Covered Loss?
  - This is *Howell*: Everyone knew the property was *subject* to landslides: but the lack of slope failure at the loss location in preceding years—despite greater rainfall—greatly influenced the Court's decision

III. Coverage Issues Arising From Wildfires

- Takeaways: What Factors Bear on Whether a Landslide/Debris Flow Following Wildfire is A Covered Loss?
  - Experts, experts, experts.

III. Coverage Issues Arising From Wildfires

- Takeaways: What Factors Bear on Whether a Landslide/Debris Flow Following Wildfire is A Covered Loss?
  - Virtually every one of the cases mentioned involved expert testimony

III. Coverage Issues Arising From Wildfires

- Takeaways: What Factors Bear on Whether a Landslide/Debris Flow Following Wildfire is A Covered Loss?
  - What will an expert tell you?
    - Historical and future landslide risk and factors
      - Weather patterns
    - Hygroscopic changes to the soil caused by fire
    - Effect of fire on the landscape, denuding of vegetation, etc., (increased subsurface flows, etc.)

IV. Conclusion

- Many unresolved issues but:
- Where debris flow, landslide or flood follows a wildfire within 5 years, and particularly within 1 to 3, consider the potential for a covered claim with fire as the “efficient proximate cause”.
  - Be prepared to retain experts
- Photographs before/after may assist in establishing cause

IV. Conclusion

- For Coverage Providers
- If you provide coverage for a public entity which is sued for inverse condemnation due either to the alleged negligent construction of mitigation/remedial measures or for negligence in preventing fire/debris flow, consider defending under a reservation of rights.

IV. Conclusion

- Risk Management
- Many policies already inspect and will recommend or require brush/hazard clearance and mitigation;
- Expect requirements for mitigation to be more frequently included in policies/coverage and more stringently enforced
- BE PROACTIVE – it's better to avoid the loss in the first instance.

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