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Trial by Fire: Reimagining Wildfire Insurance in California

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Trial by Fire:
Reimagining Wildfire Insurance in California

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ABSTRACT: This paper proposes the creation of the California Wildfire Authority (CWA), a public-private reinsurance mechanism designed to stabilize California's homeowners insurance market and sustain insurer participation amid escalating wildfire risk. Drawing on global catastrophe insurance programs, the paper identifies design principles that enhance resilience while preserving private market incentives. The proposed structure features mandatory insurer participation, layered cost-sharing across households, insurers, and government, actuarially sound and transparent pricing with targeted affordability support, and integration of verified mitigation measures. Pooling catastrophic losses statewide could reduce volatility, expand access to reinsurance and capital markets, and strengthen incentives for risk reduction. The analysis illustrates how a carefully designed wildfire program could enhance market stability and reduce reliance on ad hoc post-disaster interventions.

IMPORTANCE: California's homeowners insurance market is under severe strain. Insurer withdrawals, widespread non-renewals, and rapid growth of the Fair Access to Insurance Requirements (FAIR) Plan have revealed structural weaknesses. Climate change, expanding development in the wildland-urban interface, and regulatory constraints have made coverage scarce and unaffordable. California needs a rules-based mechanism to sustain insurer participation, preserve risk-based pricing, and avoid recurring crisis interventions.

OBJECTIVES: This research examines the causes of instability in California's homeowners insurance market and outlines design principles for a more resilient approach to managing wildfire risk. Drawing on global catastrophe insurance programs, it develops and analyzes a proposed public-private reinsurance mechanism—the California Wildfire Authority (CWA)—to stabilize the homeowners market; sustain insurer participation; and balance stability, solvency, affordability, and equity while maintaining risk-based pricing.

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FINDINGS: The proposed CWA would pool catastrophic wildfire losses statewide while leaving underwriting, distribution, and claims handling with private insurers. Centralizing extreme risk would reduce volatility, improve access to reinsurance and capital markets, and allow insurers to focus on more predictable losses. Smaller losses would remain with property owners and insurers, while the CWA covers major wildfire events, supported by a potential state backstop.

The design emphasizes clear participation rules, transparent governance, and capitalization requirements to ensure solvency and long-term stability. Coverage triggers would define wildfire events consistently across regions, with aggregation rules for multiple ignitions. Actuarially sound pricing would be paired with a transparent affordability framework combining risk-based premiums, means-tested assistance, and incentives for verified mitigation. The framework also includes mechanisms for post-event funding and reinsurance layering. Comparative analysis of programs such as the California Earthquake Authority (CEA), Australia's cyclone reinsurance pool, the United Kingdom's Flood Re, and Belgium's Bureau de Tarification—Catastrophes Naturelles shows how clearly defined participation rules, loss layers, and funding structures enhance resilience and sustain insurer participation, and reduce the need for ad hoc interventions.

CONCLUSIONS AND RELEVANCE: Sustaining coverage availability in California will require a deliberate, rule-based approach to managing catastrophic wildfire losses. A structure like the CWA, anchored in predefined cost-sharing, transparent pricing, and targeted affordability support, could protect solvency and improve coverage stability.

The analysis underscores the need for catastrophe insurance interventions that are established and clearly structured before crises occur and that balance affordability, solvency, and market participation. Transparent risk-based pricing, targeted affordability support, and defined post-event funding arrangements can improve predictability and reduce reliance on reactive responses. Although focused on California, the design principles are broadly applicable to jurisdictions facing climate-driven catastrophe risks that increasingly exceed private market capacity.

Introduction: A System Under Fire

The increasing frequency of more costly wildfires in California is testing the state's property insurance market and creating significant challenges for homeowners, insurers, and policymakers. Nine of the 10 costliest U.S. wildfires have occurred in this century, all but one in California (Refer to Table 1.) These escalating losses underscore the fragility of California's insurance system.

Table 1—Ten Costliest Wildfires in U.S, History, in Descending Order of Losses

Year	Month	State	Name	Total Losses (in 2024 dollars)
2025	January	California	Los Angeles County Fires[1]	Est. $40,000,000,000
2018	November	California	Camp Fire	$12,400,000,000
2017	October	California	Tubbs Fire	$11,397,000,000
2023	August	Hawaii	Lahaina Fire	$5,830,000,000
2018	November	California	Woolsey Fire	$5,208,000,000
1991	October	California	Tunnel/Oakland Hills Fire	$4,012,000,000
2017	October	California	Atlas Fire	$3,930,000,000
2020	September	California	Glass Fire	$3,540,000,000
2017	December	California	Thomas Fire	$3,175,000,000
2020	August	California	CZU Lightning Complex Fires	$3,000,000,000

Source: National Fire Protection Association (2024) and Cotality (2025)

Wildfire losses and regulatory approaches have put strain on California's insurance market. Proposition 103 restricts insurers' ability to adjust rates in response to evolving climate risks (Fors, 2025). California also has more homes in very high-risk areas than any other U.S. jurisdiction. [2] These pressures have driven insurer withdrawals and non-renewals, pushing many homeowners into the Fair Access to Insurance Requirements (FAIR) Plan. While the FAIR Plan is needed to provide critical coverage, it was not designed to absorb the current scale of wildfire risk (Veroff, 2025).

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[1] The Los Angeles County Fires include the Palisades Fire and Eaton Fire.

[2] California's 2025 fire hazard map shows a dramatic expansion of dangerous zones: the area designated as high or very high hazard has grown 168% since 2011, now encompassing communities where roughly 3.7 million people, about one in 10 residents, live (Christopher, 2025). More than 80% of recent housing development has occurred in these high-risk WUI zones.

Like other catastrophe perils, wildfires can cause highly correlated, community-wide destruction. However, they are distinctive in two respects. Ecologically, wildfire is a recurring and often necessary process that cannot be eliminated. Socially, most U.S. wildfires are caused by humans, adding an anthropogenic dimension not present in many other hazards (Congressional Research Service, 2023). These features heighten uncertainty in modeling and managing risk. Parameter uncertainty further complicates pricing and reserving. Climate change is lengthening fire seasons, intensifying drought, and altering vegetation patterns (Abatzoglou & Williams, 2016; Halofsky, Peterson, & Harvey, 2020; Jones et al., 2022; OECD, 2023). The wildfire crisis is further exacerbated by urban conflagrations, which are becoming larger, more frequent, and more severe (Watkins et al., 2025). This is due primarily to development in the wildland-urban interface (WUI) (Radeloff et al., 2018),[3] changing atmospheric conditions, and a legacy of fire suppression (Watkins et al., 2025). Paired with these factors, wildfire coverage is included in the standard homeowners policy, unlike flood and earthquake coverage, which is purchased separately, and the base homeowners market remains stable.

Recent experience has demonstrated that catastrophic wildfire losses can destabilize the entire market, as evidenced by insurer withdrawals, widespread non-renewals, and a widening protection gap. The current situation has raised questions about whether there is a better option for providing wildfire coverage. Drawing on lessons from global catastrophe insurance (CI) programs,[4] we propose the creation of a centralized reinsurance facility for catastrophic wildfire risk. Under the proposed design of the California Wildfire Authority (CWA), private insurers would retain the first layer of losses and cover more predictable events, while ceding upper-layer losses to the CWA. Pooling exposure statewide would improve stability and access to reinsurance and capital markets. Primary insurers would continue to underwrite, distribute, and handle claims, while the CWA would assume catastrophic risk, with potential state involvement in extreme tail losses. The structure is intended to preserve private market participation while enhancing affordability, ensuring availability, and promoting mitigation.

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[3] The U.S. Fire Administration (2022) defines the wildland-urban interface as "the zone of transition between unoccupied land and human development. It is the line, area or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels."

[4] CI programs are collaborative arrangements between the insurance sector and governments to provide insurance, co-insurance, reinsurance, or government guarantees for losses resulting from catastrophe perils to all or specific classes of potential claimants (OECD, 2021). A list the programs examined is given in the Appendix.

While California is the focus of this analysis, the design principles and trade-offs examined here are relevant to other high-risk states facing similar wildfire challenges. Using California as the central case study highlights the scale of the problem and the urgency of reform, while also providing lessons that are broadly applicable.

The paper proceeds as follows. The next section examines the current crisis in California's homeowners insurance market, including insurer withdrawals, FAIR Plan growth, and regulatory challenges. We then outline the objectives that guide CI program design. The proposed CWA is presented in detail, highlighting key design dimensions, such as participation, pricing, cost-sharing, and capitalization and funding. We then turn to operational, mitigation, and governance considerations before concluding with an assessment of how the CWA can improve market stability and serve as a template for managing climate-driven catastrophe risk.

Background: The State of the California Residential Insurance Market

California's property insurance market has become increasingly unstable. Since 2017, catastrophic wildfire losses have driven sharp premium increases, widespread non-renewals, and insurer withdrawals, leaving many households with limited or no coverage. Between 2020 and 2023, non-renewals averaged more than 900,000 policies annually (California Department of Insurance, 2024). The burden has been especially acute in WUI counties, where non-renewals rose more than tenfold after the 2017–2018 fire seasons. This reflects continued development in high-hazard areas and an accumulation of assets that outpace the system's capacity to adapt (Radeloff et al., 2018). These disruptions expose structural weaknesses in California's insurance framework and highlight the need for durable reform.

Market Contraction and FAIR Plan Growth

As private insurers have pulled back, the FAIR Plan has expanded dramatically. Created in 1968 as an insurer of last resort, the FAIR Plan is a syndicated pool funded by admitted carriers to provide coverage to homeowners unable to secure insurance in the voluntary market. It was intended as a temporary bridge until policyholders could return to private insurers. In practice, it has become a central player. By June 2025, FAIR Plan exposure reached $649.4 billion, a 42% increase since September 2024, while policies-in-force grew 31% to 610,179 (California FAIR Plan, 2025). Residential dwelling exposure alone rose from $160.4 billion in 2021 to $604.5 billion in mid-2025. Although the FAIR Plan ensures access, these policies provide limited coverage. The

[5] As a result, FAIR Plan policies are often paired with private market difference in conditions (DIC) policies to form complete homeowners insurance coverage, requiring higher total premiums from homeowners.

basic contract covers only fire. Optional extended coverage adds perils such as wind, but theft and liability remain excluded.[5] Many households are therefore underinsured relative to standard homeowners policies, even though FAIR Plan premiums are often higher.

Another weakness of the FAIR Plan is its financing structure. Losses are initially covered by reserves and reinsurance, and once these funds are exhausted, assessments are levied on admitted carriers in proportion to their market share. Insurers may recover assessments through surcharges on policyholders, subject to regulatory approval. This post-event model creates affordability challenges since households statewide may face higher costs even if not directly affected.

Regulatory Constraints and Reforms

Adopted in 1988, Proposition 103 requires prior approval of insurance rates and provides compensation for consumer intervenors. Intended to enhance accountability, it has made rate reviews protracted and prevented insurers from adjusting to evolving climate risks (Fors, 2025). The strain was evident in 2017 and 2018, when California homeowners insurers posted combined ratios exceeding 200% (Insurance Information Institute [III], 2024).

In 2023, the California Department of Insurance (DOI) launched the Sustainable Insurance Strategy (SIS) in response to mounting market pressures (California DOI, n.d.). The first stage included expedited rate reviews in exchange for insurer commitments in distressed regions. In December 2024, reforms expanded to allow reinsurance costs and catastrophe models in rate filings, aligning California more closely with national standards. At the same time, the DOI brokered a new FAIR Plan financing arrangement allowing insurers to surcharge all property policyholders to recover half of the first $1 billion in assessments (Laman, 2025). In July 2025, the use of a public catastrophe model was approved, coupled with requirements that insurers write 85% of their market share in designated distressed areas (California DOI, 2025b). By August 2025, the commissioner had granted multiple rate increases and approved at least three wildfire loss models (California DOI, 2025a, 2025c).

These steps mark a significant regulatory shift, but their success will depend on insurers' willingness to participate in high-risk areas and on households' ability to absorb higher premiums.

FAIR Plan Exposure

Despite recent reforms, FAIR Plan policies and exposure continue to rise, underscoring the ongoing instability of voluntary market participation. In 2025, a $1 billion assessment was levied to replenish FAIR Plan resources. However, its legality has been challenged in court due to concerns over pass-through surcharges to policyholders (Consumer Watchdog, 2025), underscoring the uncertainty surrounding future loss financing. Future fires could trigger new assessments and surcharges, aggravating affordability concerns for households already burdened by rising premiums.

Using legislative authority granted in 2018, the Commissioner has repeatedly imposed one-year moratoria on non-renewals after costly fire seasons. These actions provided temporary relief to hundreds of thousands of policyholders. However, once orders expired, insurers resumed retrenchment from high-risk areas (California DOI, 2024; Liao et al., 2022), demonstrating the recurring cycle of crisis intervention without effective structural reform. While SIS reforms represent progress, their ultimate impact on availability and affordability remains uncertain. Approvals of rate increases and changes to the intervenor process and wildfire models in 2025 may help, but significant structural change is required to improve market stability. A more targeted, longer-term solution is also necessary to reduce the financial vulnerability of households and communities. In the next section, we propose a new catastrophe insurance wildfire program.

Designing for a Catastrophe: Objectives for a Public-Private Wildfire Program

CI programs are typically created in response to market failures. While private markets can, in theory, insure natural disasters, the risk of bankruptcy, challenges in prefunding, and limited post-event capital constrain their capacity to underwrite extreme events (Born & Viscusi, 2006; Jaffee & Russell, 1997). Historical data indicate that insurers frequently reduce or withdraw coverage after catastrophes (Born & Klimaszewski-Blettner, 2013).

A guiding principle of intervention is that it should not crowd out private markets. CI programs should stimulate market solutions and promote direct insurer participation rather than replace them. CI programs are most effective when they mimic private structures, maintain risk-based pricing, and reinforce mitigation incentives (Bruggeman et al., 2010; Cummins, 2006). These principles, alongside clear policy objectives, provide the foundation for designing CI programs.

Government intervention into catastrophe insurance markets has had mixed results. Subsidized or mispriced programs have destabilized markets, exemplified by Florida's Citizens Property Insurance Corporation (Citizens). However, others have enhanced stability by addressing gaps in private capacity. U.S. examples include the Terrorism Risk Insurance Program (TRIP), the California Earthquake Authority (CEA), and residual market insurers, such as the North Carolina Insurance Underwriting Association. International programs include the Australian cyclone pool, the UK's Flood Re, and New Zealand's Toka Tū Ake Natural Hazards Commission (Toka Tū Ake EQC) (Kelly et al., 2025).

Objectives of a CI program

Public sector interventions in catastrophe insurance markets aim to achieve one or more of the following four objectives (OECD, 2021):

1. Provide or expand coverage availability for all or a subset of risks through primary or reinsurance markets.
2. Protect the solvency of public and private insurers and support market resilience.
3. Facilitate coverage availability through a pooling mechanism.
4. Reduce the protection gap through measures such as purchase mandates or pricing restrictions.

Programs that meet these objectives sustain insurer participation after major losses and enhance resilience by increasing the share of insured losses, which also improves recovery and reduces long-term economic costs (Kousky, 2019; You & Kousky, 2024). Well-designed programs also enhance risk awareness and encourage mitigation through pricing signals and public engagement, helping preserve the long-term insurability of catastrophe risks.

CI Program Design Elements

The effectiveness of a CI program depends less on individual design elements than on how well they are integrated within jurisdiction-specific legal, regulatory, and political contexts. Table 2 summarizes the main levers that jurisdictions typically use when designing catastrophe insurance programs. Taken together, these elements provide the design levers that programs use to align availability, solvency, affordability, and equity.

Table 2—CI Program Design Levers and Considerations

Design Lever	Purpose	Considerations
Participation requirements	Establish who contributes to and benefits from the program.	Broad, predictable participation spreads risk more evenly and reduces the potential for adverse selection, while selective or voluntary participation can concentrate exposure and undermine stability.
Pooling requirement	Establish a common mechanism to spread catastrophic losses across the market, reduce concentration risk, and support continued insurer participation.	Spreads high-risk losses across the industry and reduces concentration risk. Can stabilize availability and pricing when paired with clear governance and transparent cost allocation.
Coverage provided and trigger	Defines which perils, limits, deductibles, and exclusions are covered in the program.	Clear boundaries reduce disputes, support actuarial pricing, and provide certainty for policyholders and insurers.
Pricing and affordability mechanisms	Determine how premiums are calculated. Address distributional concerns when risk-reflective premiums exceed the capacity of households to pay.	Risk-based pricing is crucial for maintaining actuarial soundness, preserving capital adequacy, and effectively communicating risk to households and communities. Targeted support (subsidies, levies, or cross-subsidies) improves access but must be structured to minimize moral hazard and avoid undermining long-term sustainability.
Cost sharing and risk allocation	Specify how losses are distributed across stakeholders.	Layered structures place smaller, more frequent losses with households and primary insurers, reserving higher layers for pooled mechanisms, government reinsurers, and public backstops. Clearly defining these layers enhances predictability and protects solvency.
Capitalization and funding	Secure reliable, cost-effective claims-paying capacity across events and over time, including start-up capital.	Combines pre-event mechanisms (reserves, reinsurance, catastrophe bonds) with post-event assessments or contingent financing to ensure sustainability.
Insurance operations	Delineate the role of private insurers relative to any public sector role.	Retaining insurers' roles in underwriting, distribution, and claims handling can reduce administrative costs and preserve consumer trust, provided responsibilities are clearly specified and aligned.
Role of mitigation	Reduce expected losses and preserve insurability over time by linking coverage and pricing to verified reductions in risk.	Premium credits, eligibility requirements, or support for retrofitting programs at the household/community level.

Trade-Offs and Constraints in CI Program Design

CI program design requires balancing competing objectives rather than relying on any single element. No structure can eliminate these tensions; effective programs manage them transparently and adapt over time (Cummins, 2006; OECD, 2021).

A central trade-off is affordability versus solvency. Subsidies, levies, and pooling can expand access in high-risk areas but may erode capital adequacy unless paired with liability caps, reserves, or backstops. Affordability also has a temporal aspect: short-term cross-subsidies can entrench uneconomic pricing, weaken mitigation incentives, and undermine sustainability. Likewise, reducing the protection gap through mandates or expanded eligibility aids recovery but increases aggregate exposure, straining capacity when clustered or novel events occur.

Equity and efficiency considerations further complicate the issue of affordability. Broad-based levies spread costs predictably but may subsidize high-value properties. Targeted subsidies or risk-based assistance improve fairness but add administrative complexity and may be less politically feasible (OECD, 2021; Schwarze et al., 2011).

Risk-based pricing provides critical signals for mitigation and efficient capital allocation but often provokes political backlash. Rate restrictions create implicit, non-transparent cross-subsidies that encourage exposure growth and undermine sustainability. Most studies conclude that explicit, means-tested assistance within a risk-based framework is superior (Dixon et al., 2017; Kunreuther & Michel-Kerjan, 2011; Schwarcz, 2023).

Other trade-offs extend beyond affordability. Government guarantees must balance policyholder certainty with fiscal exposure: unlimited support enhances confidence and ensures claims are paid but also creates open-ended taxpayer liabilities. Capped guarantees protect public finances but leave policyholders with greater uncertainty and increase the risk of ad hoc intervention after large losses (Bruggeman et al., 2010; Jaffee & Russell, 2006). Institutional design also requires balancing centralization and flexibility. Centralized pools can provide economies of scale and more predictable capacity, yet may constrain insurers' underwriting discretion and raise governance challenges when participation, pricing, and loss sharing become politically contentious. Decentralized structures preserve competition and flexibility for insurers but can fragment the market and heighten volatility if losses are unevenly distributed across carriers. Funding mechanisms present a further tension. Pre-event reserves and catastrophe bonds provide stability and reduce post-disaster volatility but lock up capital in years without major losses. Post-event assessments avoid those upfront costs yet can destabilize insurers after large disasters and accelerate market withdrawal.

These trade-offs are further compounded by structural constraints. Regulatory legacies, such as mandatory-offer provisions and the role of residual market mechanisms, as well as political reluctance to expand mandates or provide open-ended guarantees, narrow the feasible design space. Peril-specific characteristics, such as correlated wildfire risk in the WUI or earthquake tail losses exceeding global reinsurance capacity, further limit options (Porter et al., 2021).

Program resilience requires managing trade-offs transparently, aligning incentives, and adapting structures to evolving risks. For California, this means reflecting state-specific constraints, including Proposition 103, the FAIR Plan, and limits on political support for public funding. Balancing affordability and protection for homeowners, while offering incentives for mitigation and promoting market stability, is essential. International experience demonstrates that clear objectives, aligned roles, and a focus on sustainability can yield workable solutions even in challenging markets.

The California Wildfire Authority: Proposal and Global Rationale

California's wildfire risk has outgrown the capacity of individual insurers to manage correlated, high-severity losses and still sustain a stable homeowners market. The proposed CWA would act as a centralized public-purpose reinsurer for catastrophic wildfire layers. International and domestic precedents, including the CEA, demonstrate that pooling catastrophic risk at the state level can stabilize markets while allowing private insurers to underwrite and manage claims. The CWA adapts this logic to wildfire. Its aim is to keep insurers writing statewide while transferring peak risk to a pooled vehicle with the scale to purchase reinsurance and tap capital markets efficiently.

Program Design Overview

The CWA's design is anchored in core policy objectives for a resilient CI program—market stability and continuity, greater economic resilience through a higher share of insured losses, equity, and stronger risk awareness and mitigation. We translate these objectives into concrete features—coverage, pricing, cost-sharing, mitigation, participation, and funding—that must work under existing regulatory and market conditions. Experience from domestic and international CI programs indicates that no single choice guarantees success; resilience comes from a coherent structure in which elements reinforce one another (Kelly et al., 2025). The sections that follow examine each dimension and its trade-offs for California.

Table 3 summarizes the program's design dimensions, the corresponding feature and function, and the priority decisions discussed below.[6] The sections that follow elaborate on each element and, where useful, note relevant precedents.

Taken together, the features in Table 3 form an integrated framework to balance affordability, availability, and long-term sustainability. Each element has a discrete role, but its effectiveness depends on how it interacts over time. Our aim is to outline feasible design options rather than prescribe fixed parameters. Specific values—such as insurer retentions and any affordability thresholds—should be determined through regulatory consultation, stakeholder engagement, and market testing.

Table 3—Design Dimensions of the California Wildfire Authority (CWA)

Design Dimension	Program Feature	Design Feature Function	Priority Design Decisions
Participation requirements	Mandatory participation by insurers, either through proportional underwriting or loss-sharing assessments.	Maintains broad market coverage. Prevents adverse selection. Distributes costs fairly.	Decide participation model. Establish a small-participant rule for minimal exposure.
Pooling requirement	Optional module to share retained first-layer losses on highest-risk segments: (i) risk-sharing pool (market sets price; pool shares losses), or (ii) residual pool (pool sets price/conditions; mandatory placement).	Makes insurer retentions feasible where concentration risk is acute. Clarifies capacity/pricing for hardest risk. Reduces adverse selection. Ensures availability.	Select the model for pool. Decide pricing authority. Specify eligibility and mitigation requirements.
Coverage provided and trigger	Reinsures only losses caused by named wildfire events. Covers dwelling, contents, and additional living expenses. Triggered by CAL FIRE designation.	Clarifies coverage scope. Limits basis risk between wildfire declaration and insured loss. Aligns with government disaster response frameworks.	Decide the event Choose the annual aggregation period (calendar year vs. contract year). aggregation rule. Specify the interface with the FAIR Plan.
Pricing and affordability mechanisms	Actuarially sound reinsurance pricing at state level. Premium caps per property are tied to wildfire risk and policyholder income, with subsidies covering any residual gap. Require insurer pass-through of CWA savings.	Promotes affordability. Preserves risk signals. Reduces protection gap. Sustains financial viability of the CWA.	Decide the rating basis (model-based approach and approved models). Decide means-test criteria and administration for assistance.

Design Dimension	Program Feature	Design Feature Function	Priority Design Decisions
Cost-sharing and risk allocation	Layered cost-sharing with: (i) a property owner deductible; (ii) insurer retention for initial losses; (iii) CWA coverage for higher-layer losses; and (iv) a government backstop for extreme tail risk.	Allocates financial responsibility across stakeholders. Maintains homeowner incentives. Keeps insurers invested in the results. Limits public exposure and promotes long-term sustainability.	Decide insurer retention level (per-event and/or annual aggregate). Choose CWA attachment and exhaustion points (per-event and annual aggregate). Choose the basis for applying layers (per-event, aggregate, or both). Decide whether to include a state backstop; if so, specify scope, cap, priority, and conditions.
Capitalization and funding	Initial capitalization from industry and/or government. Pre-event funding from premiums, reinsurance, cat bonds, and assessments. Post-event funding from assessments, bonding authority, contingent government guarantees, and direct public transfers.	Ensures liquidity post-event. Reduces reliance on ad hoc funding. Manages volatility.	Select the launch capitalization mix. Approve target capital and risk appetite. Decide policies for post-event assessments/ bonding caps and recoupment.
Insurance operations	Insurers retain responsibility for underwriting and claims. The CWA sets reinsurance terms and manages pooled capital.	Leverages insurer expertise. Streamlines operations. Reduces administrative duplication.	Confirm the division of functions between insurers and the CWA.
Mitigation incentives	Premium reductions available for properties and communities that meet approved wildfire mitigation standards (e.g., FireSmart, retrofitting).	Encourages risk-reducing behaviour. Improves collective resilience. Promotes long-term program sustainability.	Decide eligible measures and verification/audit approach. Specify the credit schedule.

Participation Requirements

A core design decision is which insurers must participate in the CWA and on what terms. Without participation rules, insurers may avoid high-risk areas, undermining coverage where it is most needed. Many jurisdictions use participation requirements to broaden risk sharing and deter abrupt post-catastrophe withdrawals.

California's recent reforms link the use of wildfire loss models in rate filings to a commitment to maintain market presence. Insurers that use catastrophe models must write at least 85% of their statewide market share in designated high-risk zones (California DOI, 2023). This builds on existing tools and is relatively easy to implement, but it does not fully prevent uneven loss concentration in severe years.

International practice often relies on rule-based participation. In Australia's cyclone pool, administered by the Australian Reinsurance Pool Corporation (ARPC), participation is mandatory for insurers writing eligible cyclone-exposed policies, with only a narrow carve-out for those with no exposure. Norway's Norwegian Natural Perils Pool (NNPP) makes natural perils cover compulsory and ties it to fire insurance, ensuring all fire insurers participate. Flood Re requires all home insurers to join, with the option to cede eligible policies funded by a market-wide levy and fixed premiums. Belgium likewise mandates natural catastrophe coverage in fire policies for "simple risks" (residential and small commercial properties) and utilizes a risk-sharing pool for high-risk properties.

Mandatory participation can be structured either through proportional underwriting or loss-sharing assessments. Under a proportional underwriting approach, insurers commit to maintaining a presence in designated high-risk areas commensurate with their statewide footprint. Under a loss-sharing assessments approach, insurers contribute to wildfire losses via assessments or cessions allocated by market share, even if they write little in high-risk areas. Either mechanism maintains broad market coverage (and thus availability), prevents adverse selection by discouraging selective withdrawal from high-risk communities, and distributes costs more fairly across the industry. To avoid undue burden on very small writers while preventing loopholes, exemptions could be applied to insurers with minimal wildfire exposure, as determined at the group level.

For California, the DOI proportional-writing requirement is the least disruptive starting point. If loss concentration remains a concern, broader pooling could be layered through the CWA to distribute extreme losses more evenly, as discussed in the next section. If a high-risk pool is established to share retained first-layer losses in the most challenging segments, the same participation principles would remain in place, ensuring that loss sharing remains broad, predictable, and transparent.

Pooling Requirements

Stabilizing insurer participation may require pooling arrangements that let companies cede the riskiest properties rather than drop them outright. Without such a mechanism, availability would shrink as insurers avoided high-hazard areas, and selective withdrawal could leave the FAIR Plan as the sole option for vulnerable households. Because primary insurers are expected to assume the first layer of losses, pooling is needed to spread concentrated exposures from the highest-risk properties and avoid destabilizing individual companies.

Pooling spreads extreme wildfire risk more evenly across the market. Structures can take the form of an all-risk pool or a high-risk sub-pool with mandatory or optional cession. In either case, insurers retain the first layer of loss, but sharing retained losses on the riskiest properties improves feasibility.

Three workable models illustrate the options. A risk-sharing pool enables insurers to set premiums based on approved filings, while the pool redistributes a defined portion of retained losses. Switzerland provides an example: cantonal building insurers underwrite and price natural hazard risks individually, but catastrophic losses are spread through an inter-cantonal pool supported by collective reinsurance. [7] This structure allows insurers to continue setting their own rates while ensuring that no single canton bears disproportionate losses.

A residual pool sets prices and conditions for defined high-risk segments, and placements are mandatory once the indicated premium exceeds a reference premium. Belgium's Bureau de Tarification—Catastrophes Naturelles (BT-CN) follows this model, with losses shared among participating insurers in proportion to market share.

The NNPP offers a third model. All insurers offering fire coverage must also provide natural perils coverage at a uniform premium rate. Premiums are ceded into the pool, which spreads losses below the reinsurance retention across participants and purchases collective reinsurance for extreme events. Insurers must also set aside an equivalent amount as catastrophe reserves on their own balance sheets. These reserves are used to pay each insurer's share of pool losses and can be carried forward tax-free if unused, allowing capital to accumulate over time. The pool operates without a government guarantee, relying instead on mandatory participation, uniform pricing, insurer-held reserves, and pooled reinsurance capacity.

For California, the proportional-writing requirement is the least disruptive starting point. If needed, pooling—whether broad or limited to a high-risk sub-pool—could be layered on to spread extreme losses more evenly. Pools require dedicated governance, transparent cost allocation, and coordinated claims administration. A wildfire-specific authority, such as the CWA, can provide this platform, provided it is carefully designed for efficiency and industry acceptance.

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[7] A canton is a territorial division within a country, similar to a state or province, with its own local government and administrative authority.

Coverage and Trigger

Four items must be defined: the scope of losses covered, the event definition that triggers coverage from the CWA, a simple rule for aggregating closely related ignitions, and the annual period over which aggregate attachments and limits apply. Clear choices on these points reduce disputes and support adequate pricing.

International practices suggest two primary trigger approaches. Some systems rely on a named or certified event (e.g., France's NatCat regime, Australia's cyclone and terrorism pools, and TRIP). Others attach coverage directly to the peril without a declaration (e.g., Norway and Belgium), where catastrophe cover is triggered by the size and eligibility of the loss.

Aggregation rules are equally important. A narrow time-and-distance window may split a single outbreak into multiple events, resulting in greater losses for primary insurers, while a broad window may combine unrelated ignitions and shift disproportionate losses to the public entity. Cost-sharing can be organized on a per-incident (covered event) basis, with coverage attaching once wildfire losses from a single fire exceed a retention, or on an aggregate basis, with coverage triggered when seasonal or annual incident losses surpass a threshold expressed in dollars, as a share of premium, or through a combination of both.

Our proposal favors a named-event trigger aligned with incident management in California. Each CAL FIRE incident or complex would constitute a covered event for purposes of the CWA coverage layer. A fallback rule would aggregate ignitions closely linked in time and space to avoid artificial fragmentation and undue strain on the primary market. An additional defined annual aggregate retention would protect private market solvency and support market participation.

California's design must also align with the integrated structure of U.S. homeowners insurance contracts, which bundle dwelling, contents, and additional living expenses. A California system should therefore allocate losses by insured amounts within such bundled policies, consistent with the practice of the FAIR Plan.

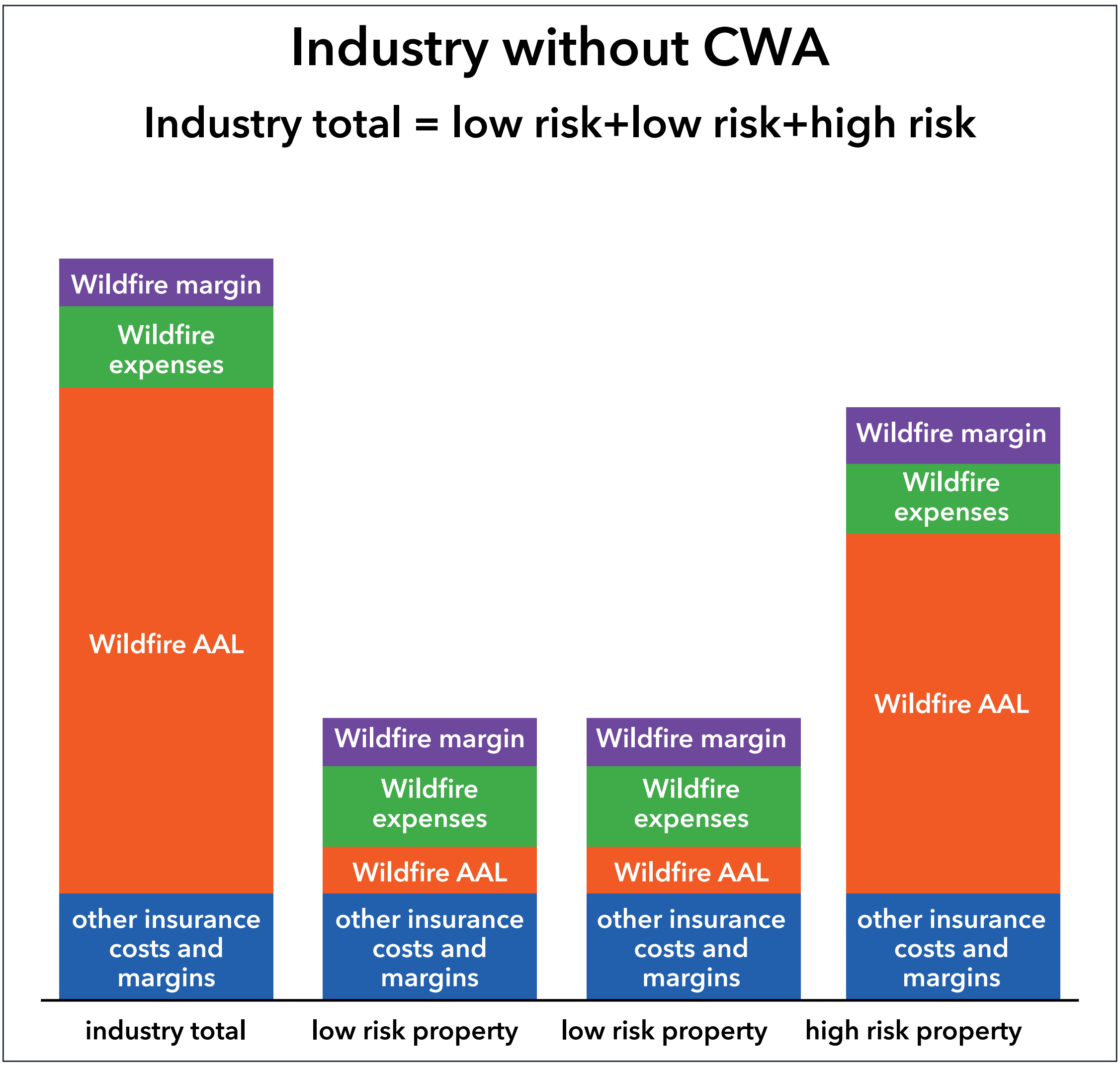
Pricing and Affordability Mechanisms

Pricing and affordability mechanisms address two distinct issues. Pricing is the risk-reflective technical rate for the CWA reinsurance layer, set to cover expected losses, risk finance, and administration over time. Affordability concerns households' ability to pay without dulling the risk signals that support capital and drive mitigation. Targeted support can address vulnerable groups, while transparent market-wide measures may be warranted in some cases.

The CWA's pricing should be actuarially sound at the state level, with premiums sufficient over a full underwriting cycle to fund expected losses, risk transfer, and administration. As with the CEA, scale and structure can lower the cost of risk without distorting pricing signals. Potential advantages include exemption from federal income tax, the absence of shareholder profit requirements, access to insurance-linked securities, and the ability to negotiate more favorable reinsurance terms through large placements and long-term relationships. The precise savings would depend on the CWA's scale, structure, and market conditions, but these features can produce measurable efficiencies.

Affordability for high- and very-high-risk properties will require cross-subsidization within the CWA framework. A risk-only subsidy is blunt, as these high-risk areas encompass both lower-income households and high-net-worth individuals. A better approach is to apply support to a transparent, risk-based price, with a means-tested sliding scale that reflects locational risk, insured value, and household income. Both the technical price and support should be visible by amount and location, and reviewed periodically to ensure incentives remain intact.

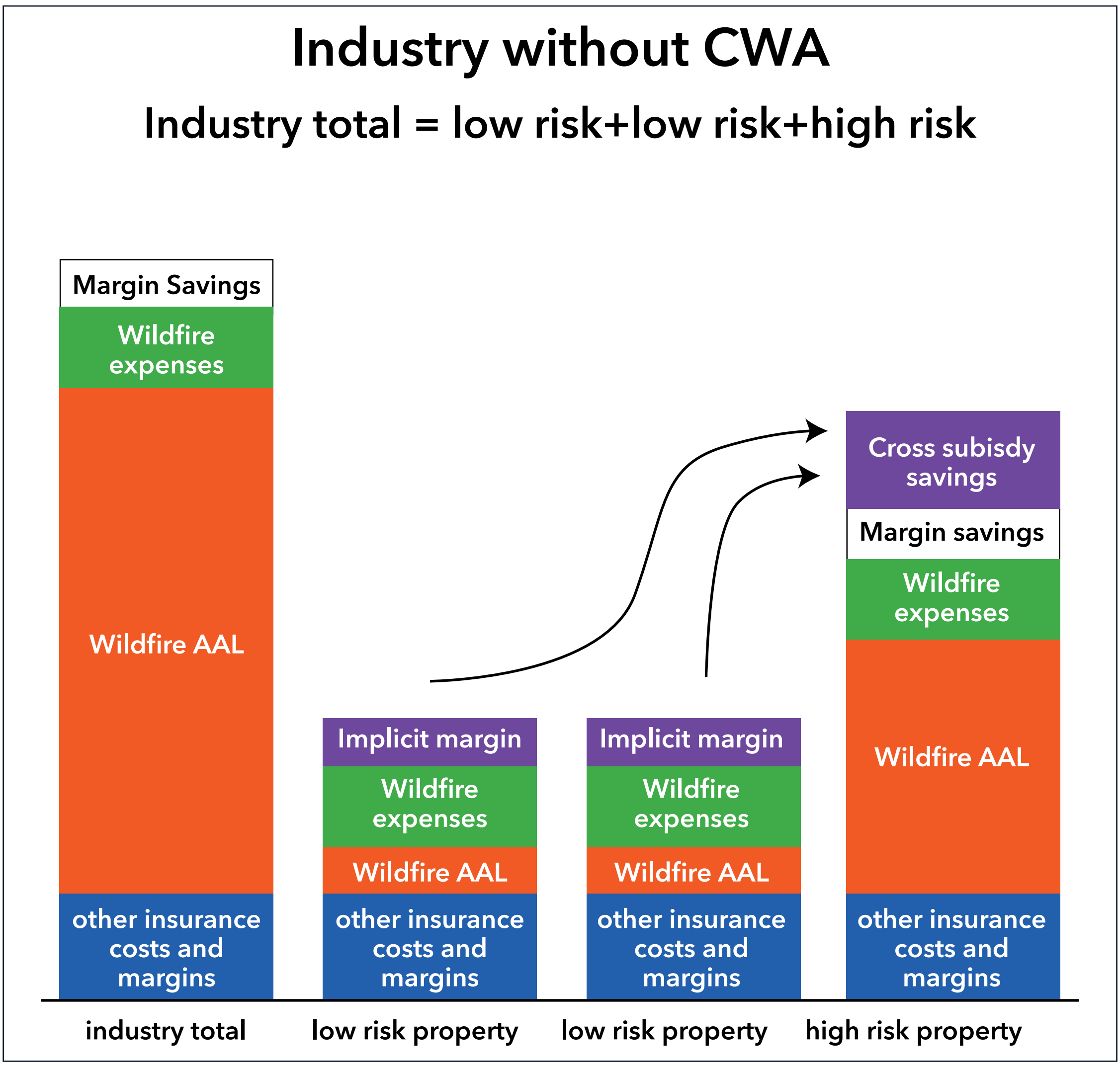
Figure 1—How the CWA Could Deliver a Subsidy



Source: Adapted from ARPC (2024)

There are many ways to fund affordability support. Australia's cyclone pool offers a clear model. Lower-risk properties are charged market-based reinsurance premiums that exceed ARPC's own cost of providing cover. The surplus is then used to lower the effective cost for the highest risk households, reducing premiums in cyclone-prone regions. Figure 1 provides a graphical representation of what this redistribution could look like in California.

In Australia, subsidies are provided to policyholders residing in high cyclone risk areas, which account for approximately 2% of policies (Australian Competition and Consumer Commission [ACCC], 2025). According to the ACCC's 2025 insurance monitoring report, average home and contents insurance premiums (measured per 100,000 AUD sum insured) in medium-to-high cyclone risk areas declined by about 11%, while small business policies in those zones saw reductions of around 24%.



Meanwhile, premiums for low- or no-risk properties rose 4–7% over the same period, reflecting broader cost pressures (e.g., reinsurance, building costs, extreme weather) rather than solely intra-market redistribution. The ACCC notes that these benefits depend on insurers fully passing the pool-related reductions through to policyholders; if insurers do not pass through the savings, the intended consumer relief may not materialize.

Other CI programs build affordability through market-wide cross-subsidies. In France, natural catastrophe cover is compulsory and bundled into all property policies. A uniform, state-set surcharge collected by insurers is calibrated to be actuarially sufficient in aggregate.[8] Because every policyholder contributes, costs are spread broadly, ensuring that high-risk households are insured without compromising overall sustainability.

Flood Re follows a similar logic. All home insurers pay an annual levy—currently £135 million—apportioned according to their market share (Flood Re, 2025a). Combined with risk-based technical pricing, the levy has kept coverage available for the most exposed homes: since launch, four in five households with previous flood claims have seen premiums fall by more than half, and the share of high-risk households able to obtain multiple quotes has risen from under 10% to 99% (Flood Re, 2025b).

Unlike markets where high-risk homes are a small slice, the scale of wildfire exposure in California requires significant but carefully targeted support to remain sustainable. Effective oversight will be essential to ensure that savings and subsidies are passed through to the most vulnerable households.

Cost-Sharing and Risk Allocation

Incorporating cost-sharing into the CWA will help ensure sustainability and maintain the presence of private insurers in the market. Not all wildfires are catastrophic; many fall within the range insurers can manage without jeopardizing solvency. A layered structure can help prevent withdrawals and preserve underwriting, risk-based pricing, and mitigation incentives. The proposed model includes a property owner deductible, insurer retention for initial losses, CWA coverage for mid-layer losses, and a government backstop for tail risk.

The first layer of loss rests with property owners through deductibles. Deductibles reduce costs but affect household recovery. High deductibles, as in earthquake policies, lower insurer liabilities but can leave households unable to fund essential repairs. Deductibles closer to standard homeowners terms improve recovery but raise program costs. California must strike a balance that supports both affordability and sustainability.

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[8] In 2025, the surcharge rates were increased to 20% of property insurance premiums for individuals, companies, and agricultural businesses (up from 12%), 9% of theft and fire premiums for motor vehicles (up from 6%), and 0.75% of glass breakage insurance (up from 0.5%) where no other property coverage is included in the motor vehicle policy. (Trust Risk Control, n.d.).

Insurers should retain a portion of loss above the deductible so that underwriting, pricing, and mitigation remain meaningful at the primary level and the CWA is not drawn into frequent, lower-severity events. Domestic and international programs illustrate the range of options.

Under TRIP, each insurer first absorbs a deductible equal to 20% of the prior-year direct earned premium. Above that level, losses are shared. The federal government pays 80%, and insurers pay 20%. The program includes an aggregate retention with post-event surcharges so that, for moderate events, costs ultimately rest with insurers rather than taxpayers (U.S. Department of the Treasury, 2024). In this way, the government provides liquidity after an event, but the long-run costs are borne by insurers.

Belgium offers a different approach. Its CI program made insurers collectively responsible for natural catastrophe claims up to a sector-wide ceiling of about €320 million prior to 2021. Regional governments assumed responsibility for amounts exceeding this limit, subject to specific limitations. Governments covered up to €280 million per insurer and per event, once losses exceeded €3 million, plus 0.35 times the premium income (Schwarze et al., 2011). The program includes an aggregate retention with post-event surcharges so that, for moderate events, costs ultimately rest with insurers rather than taxpayers.

The catastrophic floods of July 2021 exposed the weaknesses of these low caps. Statutory limits were quickly exceeded, and ad hoc agreements were required to ensure compensation. Reforms in 2023 raised the industry ceiling to €1.6 billion, shifting more risk to the private sector before government intervention is triggered (Belga News Agency, 2023). The revised structure repositions government as a backstop for mega-losses rather than a routine partner.

The ARPC terrorism pool also utilizes defined private retentions before public support is applied. Each insurer retains losses up to a firm-specific threshold ranging from AUD 100,000 to AUD 200 million. Above that level, ARPC responds from its own resources and retrocession, backed by a capped Commonwealth guarantee. As of 2024, the scheme has a claims-paying capacity of AUD 14.7 billion. That total includes ARPC cover of AUD 225 million, retrocession of about AUD 3.5 billion, ARPC net assets of AUD 0.96 billion, and a Commonwealth guarantee of AUD 10 billion (ARPC, 2024).

International programs highlight a structural distinction in delivering government support. In TRIP and Belgium, funds flow directly to insurers once the thresholds are exceeded, with no separate public entity involved. The ARPC illustrates an alternative. A dedicated public reinsurer pools risk, manages reserves, purchases retrocession, and administers claims under a government guarantee. The first model minimizes overhead and casts the state mainly as a financier. The second requires more governance infrastructure but offers centralized oversight and stability. The first model is not well-suited to California. The scale and correlation of wildfire losses demand a centralized program to manage exposure, stabilize the market, and coordinate with regulators.

The CWA coverage layer would apply to wildfire losses above insurer retentions but within its coverage limit. This layer is critical for reducing volatility and preventing insurer withdrawal from high-risk regions. By concentrating these losses within the CWA, private insurers can continue writing homeowners policies without facing solvency-threatening swings. The breadth of the CWA coverage limit will directly determine how often government support is triggered in extreme incidents.

The final layer concerns the CWA coverage limit and whether a state backstop should apply. Many jurisdictions rely on explicit guarantees to ensure claims are paid in extreme events. France's Caisse Centrale de Réassurance (CCR), Spain's Consorcio de Compensación de Seguros (CCS), and Toka Tū Ake EQC operate with unlimited state backing, which provides policyholder certainty but exposes taxpayers to open-ended fiscal risk. Others, such as Denmark's Stormrådet and the ARPC terrorism pool, use capped guarantees. Both approaches demonstrate that government backing, whether capped or unlimited, fosters confidence and encourages insurer participation.

Some programs operate without a government backstop, prorating claims if funds are exhausted. The CEA is the most prominent example. Its liability is capped, and if claims exceed capacity, payouts are reduced proportionally across policyholders (CEA, 2021). This supports an investment-grade rating but leaves households only partially indemnified and at risk of political intervention after a severe earthquake. Belgium's 2021 floods showed a similar risk. Statutory caps on both insurers and regional governments were quickly overwhelmed, requiring extraordinary ad hoc agreements to ensure compensation. These cases show that while pro rata mechanisms can preserve solvency, they erode policyholder certainty and can delay recovery.

The height of the CWA's liability ceiling will determine how often government support is triggered. A relatively low ceiling would draw the state into loss financing more frequently, as in Belgium before its 2021 reforms. A higher ceiling reduces the likelihood of state involvement but requires greater CWA resources. In California, some form of backstop will almost certainly be needed given the potential size of wildfire losses, but the ceiling and extent of government support can be adjusted over time.

For California, the implications are clear. A layered cost-sharing structure with household deductibles, insurer retentions, a stabilizing CWA layer, and either a government backstop or a defined high-limit structure will be essential for program credibility. Figure 2 illustrates how these layers align to distribute risk across households, insurers, the CWA, and government. The calibration of each layer will shape the distribution of risk and the likelihood of political pressure for post-event intervention.

Having defined who pays, the next section will address how each layer would be financed through capitalization, premiums, reinsurance, and contingent resources.

Figure 2—Illustrative layered cost-sharing structure

Capitalization and Funding

The CWA's success depends on adequate start-up capitalization and reliable long-term funding. Governments have used three main approaches to launch CI programs: direct public funding (e.g., CCS and CCR), redeployment of disaster relief funds (e.g., New Zealand and Iceland), and industry-funded capitalization (e.g., the CEA and Flood Re).

For California, initial capitalization could be combined from both industry and government sources. Like the CEA, the CWA could draw capital from direct investment by participating insurers. Like the CEA, the CWA could draw capital from insurer contributions. It could also issue surplus notes, serviced by premium and investment income, while the legislature could provide public funds through a direct contribution or start-up bond.[9] A state contribution, whether through a direct injection or authorization of a start-up bond, could further strengthen capitalization at launch. Each approach carries trade-offs: industry contributions demonstrate insurer commitment and reduce taxpayer exposure but may lead to higher premiums or political pushback, while government support provides immediate credibility but raises concerns about fiscal exposure and long-term reliance on public funds.

[9] Surplus notes are debt-like securities that require the regulator's approval to make interest and principal payments and function like equity in the insurer's capital structure.

Once operational, the CWA would rely primarily on pre-event funding. Premiums ceded to the authority for its wildfire loss layer would form the foundation of its reserves. Like most CI programs, including the CEA, Iceland's Natural Catastrophe Insurance (NTÍ), and the ARPC, the CWA would also purchase reinsurance and, in some cases, could issue catastrophe bonds or other insurance-linked securities to diversify exposure and expand claims-paying capacity. Pre-event funding helps mitigate volatility and demonstrates financial discipline, particularly in years without major losses.

The central challenge lies in post-event financing. Wildfire events of the scale already experienced in California are likely to exceed pre-funded reserves. At that point, the CWA would need to rely on contingent resources. The Florida Hurricane Catastrophe Fund (FHCF) combines post-event assessments with bonding authority, spreading costs over many years. These bonds are backed by assessments on most Florida property and casualty insurance premiums and are repaid through surcharges passed on to consumers. TRIP similarly uses post-event recoupment surcharges, while Flood Re can raise its levy on insurers to rebuild capacity. California's FAIR Plan also depends on post-loss assessments of admitted insurers, a mechanism used after the 1993 wildfires and the 1994 Northridge earthquake. These tools provide liquidity, but they can raise affordability concerns when the costs are ultimately borne by the insureds.

Other programs rely more explicitly on government support. The ARPC operates with a capped Commonwealth guarantee for terrorism and uncapped backing for cyclone risk. Similarly, Toka Tū Ake EQC and CCR operate with a state guarantee that is unlimited. Such mechanisms enhance market confidence but transfer fiscal exposure to taxpayers.

By contrast, programs with strict caps or pro rata mechanisms place the burden directly on claimants. The CEA pays claims on a pro rata basis if losses surpass its resources. Belgium's experience after the 2021 floods illustrates the political fragility of such approaches. Caps on losses can preserve solvency in theory, but in practice, they proved inadequate, and extraordinary agreements were needed to make households whole. These experiences suggest that pro rata mechanisms may not be politically viable following a major catastrophe.

For California, the choice of post-event funding mechanisms will shape the CWA's credibility and resilience. Heavy reliance on assessments risks destabilizing insurers and burdening households, while unlimited guarantees could strain state finances. A diversified approach—combining industry assessments, bonding authority, contingent capital, and clearly defined government support—offers the best prospect of balancing solvency, affordability, and political feasibility.

Operational, Mitigation, and Governance Considerations

In public-private policy programs, success depends on sound implementation, incentive structures, and oversight. The program design is not a solution by itself. Therefore, in this section, we briefly discuss ideas for achieving healthy insurance operations, mitigation, and governance.

Insurance Operations

Public-private CI programs take varied approaches to dividing underwriting, actuarial, and claims functions. The distribution of these responsibilities does not always conform to a traditional insurer-reinsurer relationship, and the choice of program strategy has significant implications for efficiency, consumer experience, and program resilience.

Reviewing the CI programs discussed, the CEA illustrates one end of the spectrum, functioning as a primary insurer while the underwriting and claims functions remain with participating insurers. At the other end of the spectrum, NTÍ is a fully centralized public insurer, with mandatory natural catastrophe coverage attached to fire policies, and premiums collected through a uniform surcharge. NTÍ underwrites, prices, and manages claims directly, eliminating private sector involvement but also avoiding any overlap in responsibilities.

Toka Tū Ake EQC represents a hybrid model. It provides the first layer of natural hazard coverage for residential dwellings, funded by a levy on fire policies, while private insurers cover household contents and the upper layers of dwelling losses.[10] In France, private insurers issue policies and collect a mandatory surcharge, which is then transferred to the CCS. The CCS manages reserves, sets the surcharge, and pays claims directly for extraordinary perils.

These examples demonstrate that CI programs do not adhere to a single template. Responsibilities for underwriting, pricing, and claims can be allocated in various ways, depending on policy objectives, market conditions, and the type of peril insured. In some cases, policyholders therefore interact with their existing insurer, while the CI entity's role is financial—setting rates, managing reserves, and purchasing reinsurance. In others, the CI entity underwrites, prices, and manages claims directly, eliminating private sector involvement (but also avoiding overlap in responsibilities). Yet other arrangements clearly delineate risk layers and separate catastrophe cover between public and private participants.

For California, the recommended design is to leverage private insurer expertise while centralizing catastrophic risk management. Insurers would continue to underwrite risks, maintain policyholder relationships, and settle claims. The CWA would assume actuarial and financial responsibilities, including pricing its wildfire reinsurance layer, managing reserves, and purchasing risk transfer through reinsurance and capital markets. This design parallels the CEA and, internationally, the ARPC cyclone pool,

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[10] Historically, claims were handled by both Toka Tū Ake EQC and private insurers, but delays after the Canterbury earthquakes led to reforms, giving private insurers primary responsibility for claims settlement.

where the public entity assumes a defined layer of risk while insurers retain consumer-facing roles. Combining private underwriting and claims with centralized capital management would let the CWA enhance efficiency and resilience while preserving private participation.

Role of Mitigation

The long-term viability of a CI program for climate-related perils depends on effective mitigation of future losses. In the case of wildfire, mitigation lowers the likelihood of ignition, reduces damage when fires occur, and limits correlated community-wide losses. These effects translate directly into insurance outcomes—availability, affordability, and premium stability—because catastrophe premiums reflect expected losses and tail risk.

International experience highlights both the value and the difficulty of embedding mitigation in CI programs. Some programs link premiums directly to resilience measures: for example, the CEA provides discounts for seismic retrofitting. By contrast, Flood Re has been criticized for addressing affordability without creating strong incentives for mitigation. Toka Tū Ake EQC has historically lacked clear mitigation linkages, a gap that became apparent after the Canterbury earthquakes. Meanwhile, concerns over moral hazard have been raised in Belgium, as coverage is extended without direct resilience requirements.

The ARPC cyclone pool illustrates the challenges of linking affordability with mitigation in practice. While the pool reduces premiums in cyclone-prone areas, stakeholders report that private mitigation measures are inconsistently recognized, poorly communicated, and only sometimes reflected in discounts. A lack of transparency and durable premium signals undermines household trust and limits incentives for widespread investment in risk reduction (ACCC, 2025).

The CWA would integrate mitigation more explicitly than is currently done in California. Risk-based pricing would reflect property-level wildfire risk scores (e.g., ember exposure, slope, access), with hardening and defensible space reducing expected losses and thereby premiums (Kousky, 2021). In addition, mandated premium credits and rating plan requirements would ensure recognition of verified mitigation measures such as ember-resistant construction, defensible space, and community programs (California DOI, 2022; Milliman & Cotality, 2023). Property-level measures include class A roofs, ember-resistant vents, non-combustible siding and decks, dual-pane tempered windows, and defensible space across the home ignition zone. Community-level initiatives include fuel reduction, fuel breaks, WUI codes and standards, Firewise USA, Fire Adapted Communities, and evacuation planning. Both approaches can reduce losses and program costs. Evidence suggests these investments are cost-effective: wildfire-resistant new construction can be achieved at essentially the same cost as conventional building (0% to 2% difference) (Headwaters Economics & IBHS, 2018), and stronger codes, land-use rules, and coordinated community measures deliver substantial long-term savings (NIBS 2017; NIBS, 2019).

Governance and Oversight

A clear mandate, defined scope, and measurable outcomes are essential for accountability. Independent boards with expertise in actuarial science, risk management, finance, public policy, and consumer protection reduce the risk of capture (Cummins, 2006). Transparent processes, including consultation on pricing, eligibility, and subsidies, enhance legitimacy and reduce perceptions of unfairness.

Governance also supports solvency and equity. Regular actuarial reviews, independent audits, and model governance reinforce financial discipline. Oversight of affordability mechanisms, deductibles, and claims ensures that they strike a balance between solvency and fairness, and do not disproportionately exclude vulnerable groups. Public reporting on reserves, capital adequacy, and risk appetite builds trust among insurers, policymakers, and the public. Governance must also be forward-looking: stress testing, capital planning, and reinsurance evaluation help manage systemic risk. Ongoing engagement with citizens, insurers, and local governments helps align programs with public expectations. Without credible governance, programs risk drifting into unsustainable practices and inviting political intervention after severe losses (OECD, 2021).

Conclusion

California's experience demonstrates that the current system for insuring wildfire risk is no longer sustainable. Catastrophic wildfire losses have strained private insurers, accelerated non-renewals, and driven unprecedented growth in the FAIR Plan, which was never designed to manage systemic, statewide risk. The combination of climate change, continued development in the wildland-urban interface, and regulatory constraints has exposed structural weaknesses that piecemeal reforms cannot fully address.

A public-private program tailored specifically to wildfire risk offers a more durable path forward. The proposed CWA is designed to stabilize the market by pooling catastrophic losses, while preserving the role of private insurers in underwriting, distribution, and claims. By incorporating clear participation requirements, actuarially sound pricing, affordability mechanisms, and explicit layers of cost-sharing, the structure aims to strike a balance between availability, solvency, and equity. Integration of mitigation incentives and transparent governance further strengthens its potential for long-term resilience.

Although no program can eliminate the trade-offs inherent in catastrophe insurance, international and domestic precedents show that carefully designed public-private mechanisms can enhance stability and reduce the protection gap. A CWA would provide a more predictable framework for financing catastrophic wildfire risk, reduce reliance on ad hoc post-disaster interventions, and support a more resilient homeowners market over time.

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CI Programs Referenced

Jurisdiction	**Program Name**	**Perils Insured**
Australia	Australian Reinsurance Pool Corporation (ARPC)	Cyclone (cyclone pool) Terrorism (terrorism pool)
Belgium	Regional governments and Bureau de Tarification – Catastrophes Naturelles (BT-CN)	All catastrophic perils for "simple risks"
California	California Earthquake Authority (CEA)	Earthquake
Denmark	Stormrådet	Storm surge and extreme rainfall
Florida	Citizens Property Insurance Corporation (Citizens)	Basic perils including windstorm and hail, fire and extended coverage but not flood
	Florida Hurricane Catastrophe Fund (FHCF)	Hurricane
France	Caisse Centrale de Réassurance (CCR)	Named catastrophic perils
Iceland	Natural Catastrophe Insurance (NTÍ)	Eruption, earthquake, landslide, avalanche, and overland flood
New Zealand	Toka Tū Ake Natural Hazards Commission (Toka Tū Ake EQC)	Volcanic eruption, earthquake, and secondary perils (including tsunami)
North Carolina (U.S.)	North Carolina Insurance Underwriting Association	Basic perils including windstorm and hail, fire and extended coverage but not flood
Norway	Norwegian Natural Perils Pool (NNPP)	Storm, flood, landslide, avalanche, and earthquake
Spain	Consorcio de Compensación de Seguros (CCS)	Extraordinary risks (both natural and human induced) but not wildfire
Switzerland	Swiss Cantonal Building Insurance System and Intercantonal Pool (IRV)	Fire, flood, storm, hail, avalanche, earthquake, and landslide
United Kingdom	Flood Re	Overland flood
United States	Terrorism Risk Insurance Program (TRIP)	Terrorism