

**DRAFT Insurance Primer**  
**ICARP-Climate Insurance Sub Working Group**  
**December 11, 2020**

**Background:** The Integrated Climate Adaptation and Resiliency Program (ICARP) and the California Department of Insurance (CDI) have created a collaborative subgroup to explore opportunities to improve community climate resilience using landscape-scale insurance-related mechanisms and strategies.

Land use decisions and insurance are intricately connected. Availability of insurance will influence – and even determine – the extent to which particular parcels can be bought, sold, and inhabited. Likewise, land use decisions will drive insurance availability and affordability. The loss of insurance could mean the loss of a home as lenders will not finance mortgages without insurance.

CDI licenses, regulates, and examines insurance companies operating in California. This role is often described as twofold: 1) financial oversight over insurance companies to guard against insolvency and 2) consumer protection by evaluating insurance company pricing to prevent excessive or inadequate rates, preventing unfair business practices by insurance companies, and promoting availability of insurance. For example, each time an insurance company decides to revise its rates, CDI has the authority to review those rates to prevent excessive, inadequate, or discriminatory rates. To address climate change impacts, the Insurance Commissioner has pursued policies that will proactively mitigate climate risks and promote innovation in the insurance market to better protect consumers.

Under Senate Bill 246, the Governor’s Office of Planning and Research is charged with coordinating state and local resilience activities, with a focus on activities that support local implementation of climate risk reduction and resilience activities through ICARP. The ICARP Technical Advisory Council (TAC) supports OPR in facilitating coordination among state, regional, and local agency adaptation efforts. OPR also provides guidance and technical assistance to communities on general plans and other long-range planning processes.

This insurance primer is the first step in bridging communication gaps between ICARP and the Climate Insurance working group. The subgroup opted to focus on private and residential insurance for the purposes of this initial collaborative effort. ICARP is also developing an accompanying planning primer. These two primers will provide the foundation for discussion on if and how landscape-scale adaptation strategies could be considered in private insurance risk analysis.

**Scope:** This primer is intended to provide fundamental information on insurance policies and how they are designed and priced in California.

- How does insurance work?
  - For nearly any type of insurance, an insurance company needs to know:

- What is the threat?
    - What is the asset?
    - What is the severity and frequency of damage, and volatility of risk?
  - In the case of homeowners, the threat may be catastrophic wildfire, the asset is the home itself, and the severity and frequency of damage would be determined, in California at least, by the insurance company's loss history.
- What does insurance do and not do?
  - Insurance is very common for automobiles, trucks, homes, and businesses, and provides financial assistance to replace losses, whether total or partial.
  - Fire is a standard part of homeowners insurance, yet flood, heat, and erosion are not.
  - Insurance is less common for unique items that cannot be replaced.
- What are indemnity vs. parametric insurance concepts?
  - Historically, the common insurance strategy is one of indemnity. When a damaging event occurs, such as a fire, the insurance policy provides funds for replacing items up to the overall limit of the coverage.
  - Certain products are based on a parametric trigger, such as windspeed or acres burned. These products tend to have the advantages of providing fast and flexible funds for recovery, but those funds may or may not correlate to the amount of damage sustained.
- What happens when you cannot find insurance?
  - Homeowners insurance is required by lenders, and includes common elements such as fire, water, and liability coverage.
  - Insurance companies have flexibility with what risks to write but are required to adhere to their underwriting guidelines.
  - If a homeowner cannot find insurance in the general "admitted" market, they may find a more specialized product in the "surplus lines" market, or they are guaranteed to be written insurance by the California FAIR Plan.
    - The California FAIR Plan is a non-profit that has been in place since the 1960s and is backstopped by the insurance companies that write homeowners insurance in California. If the FAIR Plan ever has a shortfall in reserves, insurance companies are assessed in the proportion of their market share to pay the necessary claims.
- How is insurance priced?
  - In general, insurance policies are priced relative to the risk.
  - Rates have traditionally been established by analyzing past history to project risk over the time period of the insurance contract.
    - California state law prohibits insurance rates that are excessive, inadequate, or unfairly discriminatory.



Commonly, risk thresholds are developed from historical events. If the loss history for an insurance company indicates that certain home features are relatively high risk, then the company may impose a threshold. For catastrophic wildfire, a common metric for pricing insurance, until the last decade, was the distance from the home to brush. More recently the common practice has changed to rely on wildfire risk scores, based on steepness of slope, surrounding fuel load, and emergency access roads to determine a score for each home. Insurance companies then can set a threshold at a certain score, above which they will not write and price relative to fire risk score.

- How can insurance apply to landscape risk mitigation?
  - Landscape management and natural ecosystems can buffer the effects of climate threats to homes.
    - Currently, insurers do not look at landscape variables in developing their risk thresholds and risk scores. Developing strategies to effectively integrate landscape risk reduction, while also avoiding unintended incentives for maladaptation, could make insurance more available and more affordable.
  - Insurance provides incentives for investments in restoration and land management strategies that reduce risks.