Western Area Power Administration

WAPA Wildfire Strategy

Igniting Conversation

Mid-West Annual Meeting

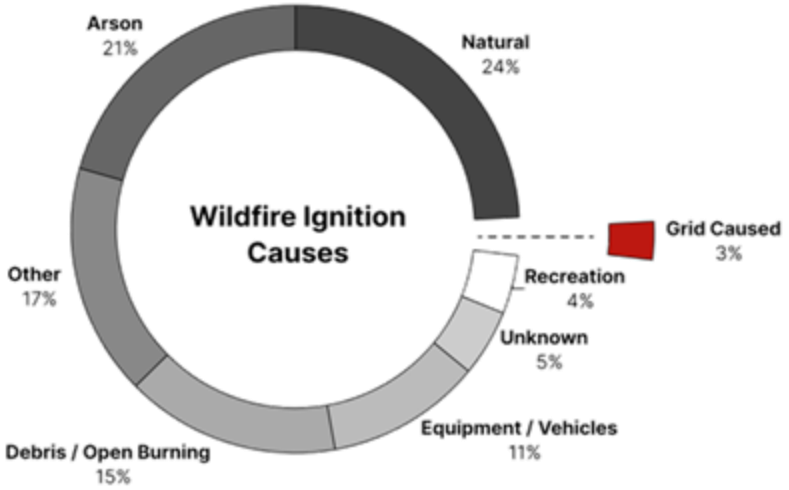
Wildfire Panel

10 Dec 2025

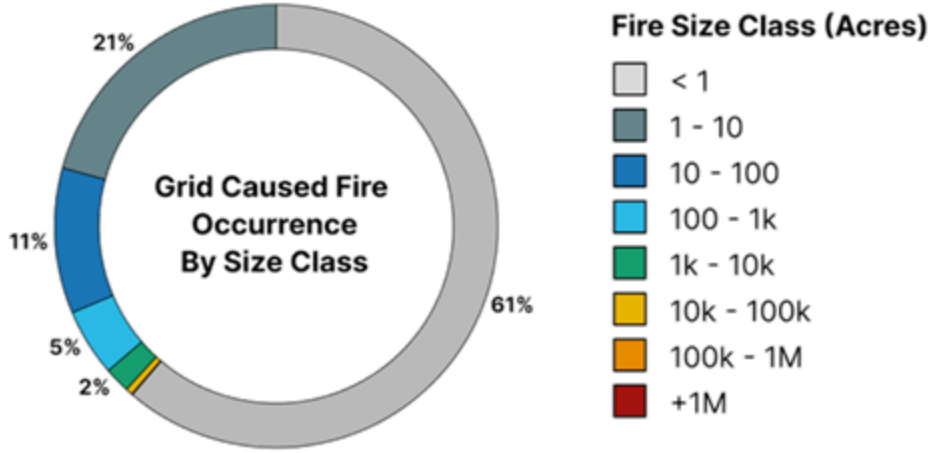

wildfire
liability

Bright Insight

According to a recent Sandia National Labs analysis[1], less than 3% of wildfires were ignited by power system equipment of any voltage class (1992–2024).



Source: NIFC InFORM Fire Occurrences, (Federal / Interagency)



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Although national-scale data is unavailable, Pacific Gas & Electric (PG&E) analyses[2] of California Public Utilities Commission (CPUC) data indicated almost 3x more ignitions per 100 circuit-miles for distribution compared to transmission.

[1] - Eagleston, Holly, Michelle Bester, Jubair Yusuf, Adit Damodaran, and Matthew J. Reno. 2025. "Systemic Drivers of Electric-Grid-Caused Catastrophic Wildfires: Implications for Resilience in the United States" Challenges 16, no. 1: 13. https://doi.org/10.3390/challe16010013.

[2] - Pacific Gas and Electric Company Amended 2019 Wildfire Safety Plan, available at: https://www.pge.com/assets/pge/docs/outages-and-safety/outage-preparedness-and-support/Wildfire-Safety-Plan.pdf

Regulatory smoldering

- Executive Order 14308 - Empowering Commonsense Wildfire Prevention and Response

  consider initiating rulemaking proceedings to establish, as consistent with applicable law, ***best practices to reduce the risk of wildfire ignition*** *from the bulk-power system without increasing costs for electric-power end users, including through methods such as vegetation management, the removal of forest-hazardous fuels along transmission lines, improved engineering approaches, and safer operational practices.*

- FERC Wildfire Risk Mitigation Tech Conference (21 Oct 2025).

  Are there electric utility best practices that should be mandated?

  - Direct wildfire mitigation plans.
  - Facilitate wildfire data-sharing while mitigating utility liability concerns.
  - Require advanced tools (e.g., AI + remote sensing, dynamic line ratings, drones, etc).
  - Foster interagency cooperation.

Raking the coals

Important to distinguish between:

- *Best* wildfire practices from *known* wildfire practices.
- Best practices to reduce the risk of wildfire ignition due to operation of the *bulk-power system* from best practices that are more suitable to *medium and low voltage distribution systems*.
- Practices to maintain transmission structural health and integrity towards *system reliability* from practices of fire hardening structures to improve *asset survivability*.

Examples:

- Why adaptive reclosing practices are better than existing practices to disable reclosing?
- Wildfire hazard modeling is an emerging practice that historically was not an area of electric utility focus or expertise, as well there is little consensus on methods or practices yielding risk-informed, cost-effective infrastructure decisions.

Sparking comments

- Obtaining permits to perform vegetation management and treatment work for rights-of-way on public lands may be challenging, including the application of intumescent coatings and fire-resistant wraps to transmission structures. Specifically, compliance with Section 7 of the Endangered Species Act (ESA) and Section 106 of the National Historic Preservation Act (NHPA) may add significant delays and costs.
- Vegetation removal rather than pruning within rights-of-way is likely better. Likewise, continuous tree trimming close to high-voltage transmission lines is not as safe for utility crews as removing them.
  - Vegetation hazards outside of transmission line easements are problematic, specifically in areas where tree canopy heights exceed the right-of-way width.
- While advanced conductors (e.g., ACCC) may yield higher transmission capacity while reducing sag, there is no evidence they are inherently less prone to igniting wildfires.
  - There may be no direct correlation between conductor operating temperature and wildfire ignitions, but advanced conductors have significantly higher maximum operating temperatures than traditional conductors.

Kindling considerations

- Public Safety Power Shutoffs (PSPS) = selectively and intentionally turning off power to part of WAPA's service area during periods of extreme fire risk from weather and fuel conditions, reducing the chances that a WAPA transmission line may ignite a wildfire.
- PSPS can cause significant hardships to customers who lose vital electrical power. Even temporary power outages carry dangerous risks to communities left without electricity to support emergency services, may disrupt communication networks, can impact public health reliant on medical and safety devices, as well as cause the loss of ventilation and air conditioning during extreme heat.
- Knowing communities WAPA serves rely on electric power for essential services ranging from communications networks to water supplies to, balancing the risks of igniting a wildfire with sustaining public well-being makes the use of PSPS a **last resort.**

Meaningful distinction:

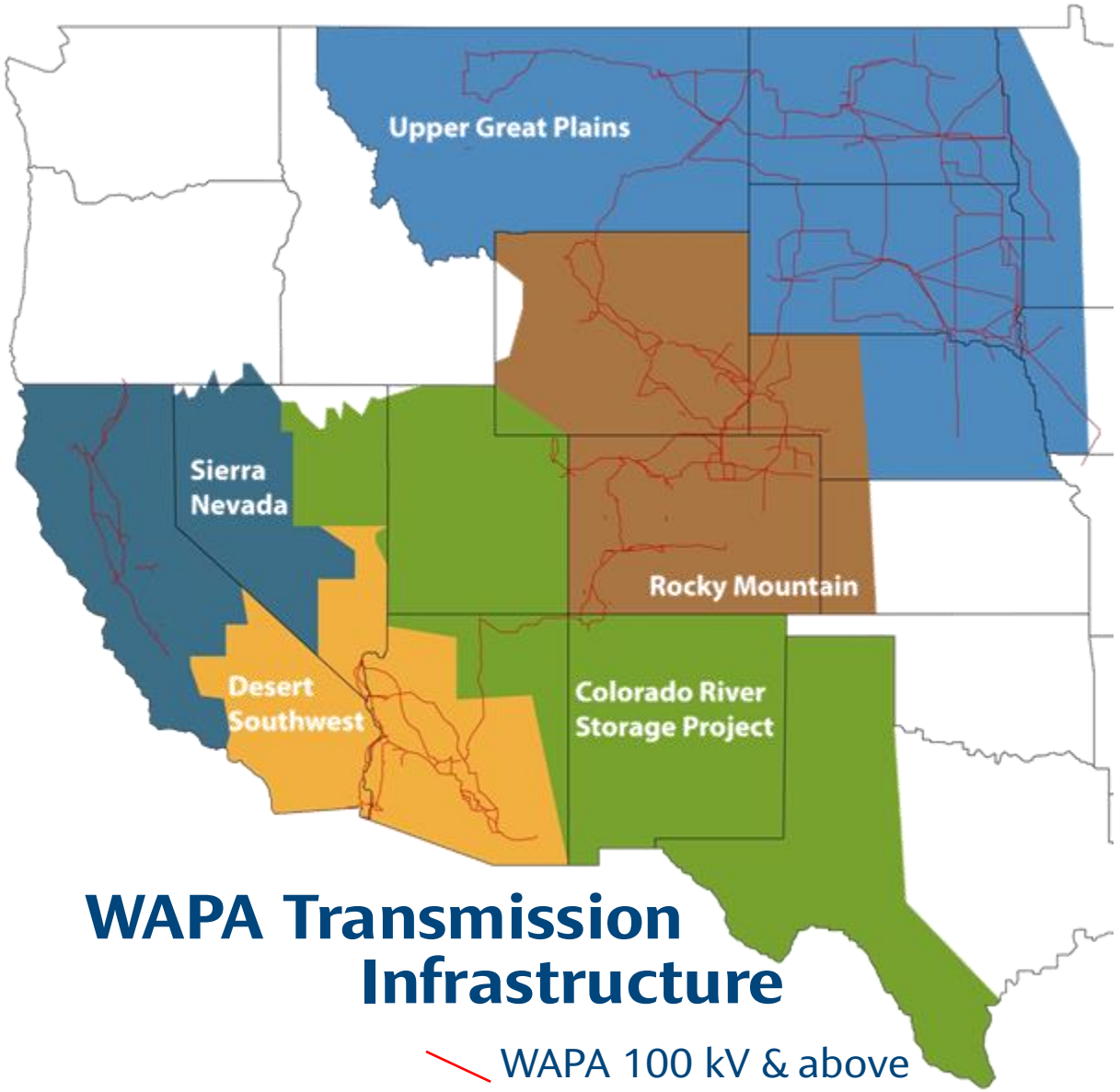
- Power Safety Shutoff (PSS) = deenergize transmission lines when an existing wildfire burns close by, improving safety for first responders in the vicinity and avoiding the possibility of compounding emergency conditions.

Brilliant Scale

- 17,293 circuit-miles (94% ≥100 kV).
- Over 105,000 transmission structures in 15 states, 223 counties.

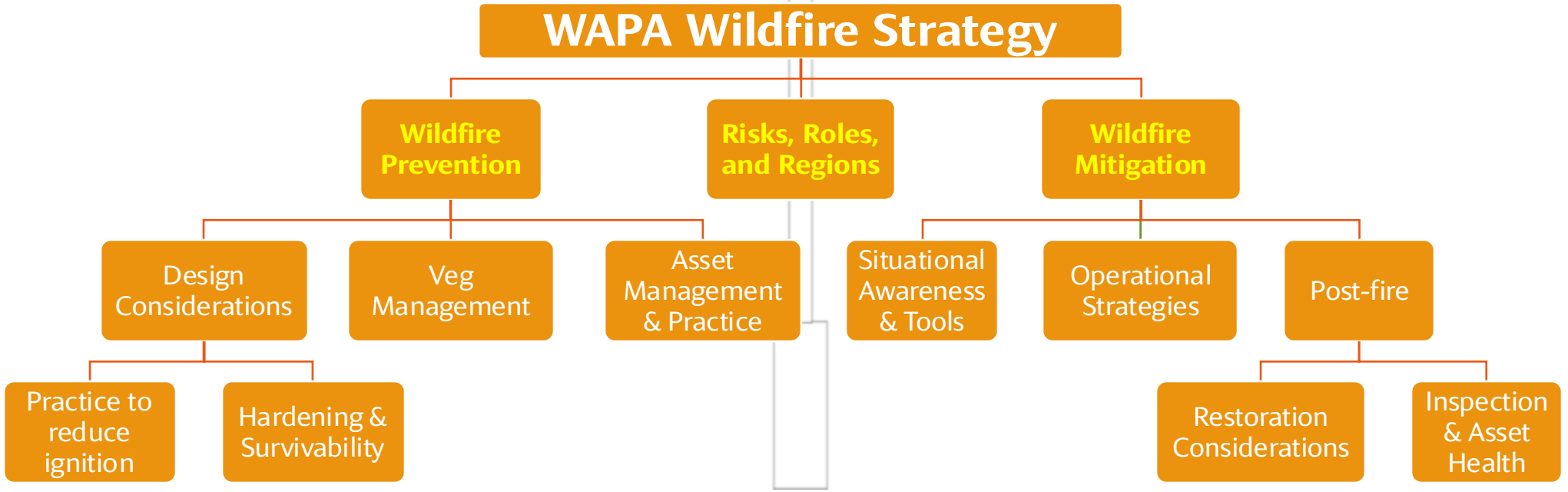
But wait,
total Transmission Operator footprint:

- 22,624 circuit-miles ≥100 kV.



WAPA-*wide* Wildfire Strategy

- Umbrella for common WAPA wildfire approach & considerations.
- DOES NOT eliminate or override regional wildfire plans.
- DOES provides a rally point for wildfire policies as backstop for regions.
- MINIMIZE prescriptive; MAXIMIZE value-based considerations.



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