

Date of Hearing: April 7, 2025

ASSEMBLY COMMITTEE ON EMERGENCY MANAGEMENT

Rhodesia Ransom, Chair

AB 441 (Hadwick) – As Introduced February 6, 2025

SUBJECT: Wildfire prevention: Office of Wildfire Technology Research and Development: wildfire mitigation program

SUMMARY: This bill extends the sunset date for the Office of Wildfire Technology Research and Development and removes the sunset date for the California Wildfire Mitigation Financial Assistance Program. Specifically, **this bill:**

- 1) Extends the sunset date for the Office of Wildfire Technology Research and Development from January 1, 2029 to January 1, 2033.
- 2) Repeals the sunset date for the California Wildfire Mitigation Financial Assistance Program.

EXISTING LAW:

1. Establishes Cal FIRE within the California Natural Resources Agency, and establishes various programs for the prevention and suppression of wildfires at Cal FIRE, as provided. (Public Resources Code § 701)
2. Establishes the Office of Wildfire Technology Research and Development within Cal FIRE. (Government Code § 8586.8)
3. Provides the Office of Wildfire Technology Research and Development shall serve as the central organizing hub for the state government's identification of emerging wildfire technologies and is under the direct control of the Director of Forestry and Fire Protection. (Government Code § 8586.8)
4. Provides the Office of Wildfire Technology Research and Development shall undertake, but is not limited to, the following activities:
 - (a) Develop a balanced, multimodal research and development program designed to identify, research, test, and evaluate emerging technologies and tools designed to improve the state's preparation for, and response to, wildfires in the state, including, but not limited to, fire retardants and ground, aerial, mobile, portable, communication, predictive modeling, software, or stationary equipment used for California's wildfire preparedness and by first responders.
 - (b) Consult with public, private, and nonprofit entities in identifying new technologies tools, software, and other advances in wildfire preparedness and response.
 - (c) Make recommendations to state and local agencies on the most effective and useful technologies and tools for procurement. (Government Code § 8586.8)
5. Establishes a sunset date of January 1, 2029 for the Office of Wildfire Technology Research and Development (Government Code § 8586.8)

6. Authorizes the California Office of Emergency Services (Cal OES) to enter into a joint powers agreement with the Department of Forestry and Fire (Cal FIRE) to develop and administer a comprehensive wildfire mitigation program. (Government Code § 8654.4)
7. Asserts that wildfires pose a catastrophic threat to California lives, property, and resources, and that this threat is magnified by climate change (Government Code § 8654.2).
8. Asserts the intent of the State of California to offer financial assistance to communities in support of a comprehensive mitigation and risk reduction in order to promote faster recovery after disasters and a more resilient state (Government Code § 8654.2.d).
9. Asserts the intent of the State of California to develop a comprehensive financial assistance program to help property owners, whole communities and local governments retrofit existing housing, commercial, and public properties in wildfire hazard areas to a cost-effective standard that provides comprehensive risk reduction to protect structures from fires spreading from adjacent structures or vegetation, and to prevent vegetation from spreading fires to adjacent structures Government Code § 8654.2.e).
10. Establishes a sunset date of July 1, 2029 for the California Wildfire Mitigation Financial Assistance Program (Government Code § 8654.10).

FISCAL EFFECT: Unknown. A fiscal committee has not analyzed this bill.

COMMENTS:

Purpose: According to the author, “Assembly Bill 441 is a crucial step in strengthening California's wildfire mitigation efforts. By extending the sunset date of the Office of Wildfire Technology Research and Development (OWTRD) and permanently establishing the California Wildfire Mitigation Program (CWMP), the bill ensures continued access to cutting-edge technologies and financial assistance for high-risk communities. With increasing disaster frequency and intensity, home retrofitting and fire-hardening initiatives are essential to protecting vulnerable residents, particularly in rural areas. Strengthening these programs guarantees that Californians will have the support needed to mitigate wildfire impacts long into the future.”

Equity Impact: According to the author’s staff, “Strengthening Californians’ wildfire resilience is an expensive undertaking, and one that primarily impacts residents in rural communities. According to a 2024 report by the University of California Agriculture and Natural Resources, the cost of retrofitting a typical 2,000-square-foot home in California can range from \$2,000 to upwards of \$100,000. For many Californians, these high expenditures are not feasible. These high costs are particularly distressing to many rural Californians, 85% of whom live in high wildfire risk areas. Within the rural population, 15.5% live at or below the poverty rate.”

They continue “The CWMP focuses on high socially-vulnerable communities and provides financial assistance for low- and moderate-income households – offering rural and low-income families the ability to fortify their infrastructure against future wildfires. If this program were to sunset, thousands of vulnerable Californians are at risk of losing their homes, businesses, and

communities to wildfires. Now more than ever, Californians need help protecting themselves from wildfires – and as more families experience financial hardship, families are being forced to choose between hardening their home or affording groceries. The CWMP is critical and not only is it needed today, but based on California’s wildfire trends, will continue to remain in demand for the foreseeable future.”

Office of Wildfire Technology Research and Development: The Office of Wildfire Technology Research and Development (OWTRD) was established within the California Department of Forestry and Fire Protection (CAL FIRE) by Senate Bill 109 (Dodd, Ch. 239, Stats. 2021) to serve as California’s central organizing hub for identifying emerging wildfire technologies. The OWTRD has developed a balanced multimodal research and development program designed to identify, research, test, and evaluate emerging technologies and tools designed to improve the State’s preparation for, and response to, wildfires within the State. Senate Bill 109 also established the Wildfire Technology Research and Development Advisory Review Board (Advisory Board). The Advisory Board is required to submit its findings annually to the Governor and Legislature beginning in January 2024 and every year thereafter until the scheduled date of repeal, January 1, 2029.

Advisory Board Members:

- Secretary of the Natural Resources Agency, or their designee.
- The Director of the Office of Emergency Services, or their designee.
- The Director of the Department of Forestry and Fire Protection, or their designee.
- One representative from academia involved in the field of wildfire research and technology development (Appointed by the Governor).
- One representative from the private wildfire response science, engineering, and technology industry (Appointed by the Governor).
- One representative from local government (Appointed by the Governor).
- One member of the public employed as a first responder (Appointed by the Governor).
- One member who is appointed by the Senate for a term of four years who is involved in victim services.
- One member who is appointed by the Assembly for a term of four years who is involved in the protection of privacy and civil liberties.

According to Cal FIRE, “In 2023, the Office prioritized recruitment, hiring, and training of personnel, and created a bespoke database and management system to support its work. The Office conducted internal outreach within CAL FIRE and external outreach with federal and local agencies, private vendors, academic institutions, and other relevant entities to raise awareness of its mission and identify priority areas of focus related to emerging technologies. Current focus areas include last-mile connectivity, dismounted firefighter location, enhanced situational awareness, firefighter health and safety, and data availability and integration. The Office conducted evaluations and field tests in these areas, including in Jackson Demonstration State Forest in Mendocino County, and expects to work with the Advisory Board to fine-tune these focus areas in the coming year.” The office is also now prioritizing Artificial Intelligence (AI) and IoT (internet of things) technology. AI can be used to improve wildfire suppression by detecting fires early, predicting their occurrence, analyzing satellite imagery and environmental data, providing real-time mapping and tracking, guiding firefighting efforts, deploying AI-powered drones for aerial surveys, and aiding in post-fire analysis and restoration. IoT improves wildland firefighting by enhancing situational awareness, firefighter safety, and resource

management through connected technologies. IoT capabilities are only expected to grow as this technology continues to emerge and be implemented in this field.

Additionally, the office developed business processes for capturing, screening, and evaluating prospective emerging technologies, which will inform product development and innovation by communicating the specific needs of the wildfire industry to entities developing emerging technologies.

California Wildfire Mitigation Program: In 2019, the Legislature passed and the Governor signed into law AB 38 to create the California Wildfire Mitigation Program (CWMP). The law authorized a joint exercise of powers agreement between Cal OES and Cal FIRE to strengthen community-wide resilience against wildfires. This included developing a state home hardening initiative to retrofit, harden, and create defensible space for homes at high risk of wildfires, focusing on high socially-vulnerable communities, and providing financial assistance for low- and moderate-income households. The effort is meant to encourage cost-effective wildfire resilience measures to create fire-resistant homes, businesses, public buildings, and public spaces. This includes a community hardening approach to achieve wildfire resilience, low-cost retrofits with ignition-resistant materials to bring homes up to the standard of the California Building Code Chapter 7A, community and homeowner wildfire education on defensible space and home retrofitting, and providing financial assistance to support home hardening work for qualifying homeowners.

In coordination with state and local partners, Cal OES and CAL FIRE also established a state wildfire home hardening framework that can be modeled throughout vulnerable California communities. The framework provides the opportunity for California communities to leverage state and federal resources and develop local wildfire home hardening programs that address community resiliency needs. To help expedite local wildfire home hardening program development and inform the build-out of the state's framework, Cal OES and CAL FIRE will provide state funding, resources, and support for demonstration communities to implement community wildfire home hardening projects in areas with high social vulnerability and wildfire risk.

The pilot program was first launched in 2023 and is intended to provide funding for defensible space and ignition resistant retrofits to harden approximately 2,500 homes in six counties. According to Cal OES's website, there are 252 active applications, 134 assessments are currently complete, 24 homes are in progress, and 18 homes are fully completed.

Related/Prior legislation: SB 896 (Dodd), Chapter 928, Statutes of 2024. The Generative Artificial Intelligence Accountability Act establishes guidelines for the use of generative AI within state government operations, as specified.

AB 609 (Papan, 2023) would have required Cal FIRE to submit a report to the Legislature that assesses the feasibility of conducting an evaluation of innovative new aerial firefighting technologies. (Held on the Senate Appropriations Committee Suspense File)

SB 109 (Dodd) Chapter 239, Statutes of 2021 established, within Cal FIRE, the Office of Wildfire Technology Research and Development and the Advisory Review Board to conduct research and testing on emerging technologies to prevent, predict, and fight wildfires.

AB 2469 (Committee on Emergency Management) Chapter 402, Statutes of 2024. Extended the sunset dates for the Emergency Management Assistance Compact and the California Wildfire Mitigation Program.

AB 38 (Wood) Chapter 391, Statutes of 2019: This bill established the Joint Powers Agreement that would develop and administer the Wildfire Mitigation Program, to encourage cost-effective structure hardening and retrofitting to create fire-resistant homes, businesses, and public buildings.

AB 2983 (Rodriguez, 2024): This bill proposed to add a member of the Department of Insurance to the Wildfire Mitigation Program Board in order to better facilitate coordination between wildfire mitigation efforts and the availability and affordability of wildfire insurance. (Vetoed)

AB 2344 (Petrie-Norris, 2024): This bill would require the Wildfire and Forest Resilience Task Force to compile and publish information about state and federal fire prevention programs before July 1, 2025 (Held in Assembly Appropriations)

AB 1 (Connolly) of this session, would require the Department of Insurance, on or before January 1, 2030, and every 5 years thereafter, to consider whether or not to update its regulations to include additional building hardening measures for property-level mitigation efforts and communitywide wildfire mitigation programs. (Assembly Committee on Insurance)

SB 616 (Rubio, et al) of this session, would require Cal OES and CAL FIRE to revise the CWMP in accordance with prescribed community hardening standards and guidelines developed pursuant to the bill's provisions, as specified. (Senate Committee on Insurance)

AB 270 (Petrie-Norris) of this session, would require the Office of Emergency Services to establish a pilot program to equip the state with the nation's first testbed autonomous firefighting helicopter. (Currently in Assembly Committee on Emergency Management)

AB 275 (Petrie-Norris) of this session, would require the Office of Emergency Services to establish, on or before December 31, 2026, a working group to study the feasibility of making the SoCal Edison-funded Quick Reaction Force firefighting helitanker program permanent (Currently in Assembly Committee on Emergency Management)

AB 372 (Bennett) of this session, would establish the Rural Water Infrastructure for Wildfire Resilience Program within the OES for the distribution of state matching funds to communities within the Wildland Urban Interface, as specified (Assembly Desk)

AB 550 (Petrie-Norris) of this session, would require the Wildfire and Forest Resilience Task Force to annually compile and post on its internet website specified information relating to specified state and federal grant programs relating to fire prevention, as specified. (Assembly Committee on Natural Resources)

AB 227 (Gabriel) and SB 65 (Weiner) of this Session: Both house budget bills currently include an \$8 million dollar allocation for the WMP, (Currently in the Assembly Budget and Senate Budget and Fiscal Review Committees.)

AB 433 (Chen) of the 2021-2022 Session: This bill would have authorized the joint powers authority implementing the WMP to accept voluntary contributions from utility customers and would require the contributions be deposited in the California Wildfire Mitigation Financial Assistance Fund, which the bill would establish in the State Treasury. (Rescinded by the author.)

REGISTERED SUPPORT / OPPOSITION:**Support**

None on file.

Opposition

None on file.

Analysis Prepared by: Ryan Fleming / E.M. / (916) 319-3802