

Date of Hearing: June 22, 2026

ASSEMBLY COMMITTEE ON NATURAL RESOURCES

Isaac G. Bryan, Chair

SB 1079 (Stern) – As Amended April 28, 2026

SENATE VOTE: 33-0

SUBJECT: Department of Forestry and Fire Protection: Fire Innovation Unit

SUMMARY: Establishes the Fire Innovation Unit (FIU) in the Department of Forestry and Fire Protection (CAL FIRE), under the direction of a Deputy Director of Wildfire Innovation.

EXISTING LAW:

- 1) Requires the Office of Emergency Services (CalOES) and CAL FIRE to jointly establish the Wildfire Forecast and Threat Intelligence Integration Center to collect, assess, and analyze threat indicators that could lead to catastrophic wildfires, reduce the likelihood and severity of wildfire incidents, and develop and share intelligence products related to wildfires. (Government Code (GC) 8586.7)
- 2) Establishes the Office of Wildfire Technology Research and Development (Office) within CAL FIRE to study, test, and advise regarding procurement of emerging technologies and tools in order to more effectively prevent and suppress wildfires within the state. The office shall serve as the central organizing hub for the state government's identification of emerging wildfire technologies. Sunsets the Office on January 1, 2029. (GC 8586.8)

THIS BILL:

- 1) Establishes within CAL FIRE a FIU to serve as CAL FIRE's innovation arm and as the state's principal hub for wildfire technology research, coordination, procurement, and deployment for technologies that improve ecosystem and landscape scale resilience, community risk reduction, ignition reduction, early detection, fast fire suppression, and decision support tools.
- 2) Requires the FIU to consist of the existing Office, two new programs created by the bill: the Innovation, Outreach, and Coordination Program (IOCP) and the Rapid Acquisition and Deployment Program (RADP).
- 3) Requires the Office to do all of the following:
 - a) Perform scientific and technical evaluations of emerging wildfire technologies;
 - b) Conduct and participate in laboratory and field tests of wildfire technologies within CAL FIRE and in partnership with local, state, tribal, federal, and international fire agencies;
 - c) Document operational and technical results of laboratory, field, and operational evaluations of wildfire technologies; and,
 - d) Issue recommendations on wildfire technologies regarding adoption and performance standards.

- 4) Requires the IOCP to do all of the following:
 - a) Coordinate with end users across local, state, tribal, federal, and international fire agencies;
 - b) Identify innovation gaps;
 - c) Serve as a liaison between technologists and frontline personnel;
 - d) Oversee collaborative development efforts between CAL FIRE and technology developers;
 - e) Implement the Wildfire Innovation Grant Program established by this bill;
 - f) Collaborate with public and private educational and research institutions;
 - g) Coordinate demonstration events in established testbeds;
 - h) Provide the requisite firefighting expertise necessary for field trials in operational environments; and,
 - i) Facilitate information sharing with local fire agencies and relevant state agencies, including CalOES, regarding wildfire technologies evaluated, piloted, or deployed through the FIU.
- 5) Authorizes the RADP to do all of the following:
 - a) Pilot and scale wildfire technologies through use of flexible contracting authorities pursuant to this bill;
 - b) Manage the Wildfire Innovation Grant Program;
 - c) Enter into agreements with local governments, state and federal agencies, tribes, nonprofit and philanthropic organizations, utilities, public and private educational institutions, and private companies; and,
 - d) Ensure that all projects carried out include clear objectives, performance metrics, and audit provisions.
- 6) Authorizes the FIU to enter into memoranda of understanding, cooperative research and development agreements, contracts, and grant agreements with public agencies, private sector entities, nonprofit organizations, educational and research institutions, tribal governments, and philanthropic partners.
- 7) Authorized the FIU to consult with and invite participation from relevant state agencies, including CalOES, for technologies under evaluation that may support the state agencies' operational missions or impact cross-agency technology integration.
- 8) Authorizes the FIU to establish and administer a Wildfire Innovation Grant Program and authorizes the FIU to issue solicitations, conduct a merit-based award process, and oversee

grant performance. Requires the grant program to fund early-stage, mature, or dual-use technology projects that enhance wildfire readiness, mitigation, or response.

- 9) Provides that eligible entities include, but are not limited to, local, state, and federal agencies, tribal entities, nonprofit organizations, public and private academic and research institutions, and private sector technology developers.
- 10) Requires the FIU, to the extent practicable, encourage projects that evaluate technologies across diverse operational environments and geographical conditions within the state to assess performance under varying terrain, fuel types, and weather conditions.
- 11) Requires all grants awarded pursuant to the Wildfire Innovation Grant Program to align with statewide wildfire resilience goals and include clear metrics for success that are informed by end-user input.
- 12) Authorizes the FIU to administer or monitor pilot, prototype, or demonstration projects involving public agencies, private technology companies, nonprofit organizations, educational institutions, tribal governments, and philanthropic partners to evaluate, mature, and validate wildfire-related technologies.
- 13) Requires the FIU, if it administers or monitors a pilot, prototype, or demonstration project, to consider if the wildfire-related technology meets the criteria for formal validation.
- 14) Authorizes the FIU to award a technology vendor that completes an FIU-administered or FIU-monitored pilot, prototype, or demonstration project and receives a formal validation a follow-on contract for operational fielding without a separate competitive solicitation process, if the scope of the follow-on contract is substantially similar to the wildfire-related technology that received a formal validation.
- 15) Defines “substantially similar” to mean that the follow-on award is limited to the same use case, operational context, and performance characteristics that were evaluated during the pilot, prototype, or demonstration project.
- 16) Authorizes the FIU to use flexible contracting authorities to acquire proven technologies for pilot, prototype, and demonstration projects and to award follow-on contracts to support pilot-to-scale transitions.
- 17) Authorizes the FIU to collaborate with public and private educational and research institutions on wildfire technology and innovation.
- 18) Authorizes the FIU to enter into partnerships, memoranda of understanding, or cooperative research agreements with the University of California, the California State University, community colleges, independent nonprofit institutions of higher education, and other accredited research centers to support wildfire technology and innovation.
- 19) Authorizes the FIU to provide technical expertise, operational data, field testing environments, and appropriate funding to ensure the technologies developed in the collaborations are transitioned into wildfire operations.

- 20) Authorizes the FIU to establish testbeds to test or evaluate emerging technologies. Requires the FIU to establish or designate testbeds where technologies can be safely deployed and evaluated under real-world conditions.
- 21) Authorizes the FIU to provide technical assistance to local, state, tribal, federal, and international fire agencies to facilitate deployment of wildfire-related technologies.
- 22) Authorizes the FIU to maintain a publicly available resource, including, but not limited to, an information bulletin, to provide visibility into technologies evaluated, piloted, or deployed.
- 23) Authorizes the FIU to provide opportunities to participate in demonstrations, pilot programs, and field testing.
- 24) Requires the FIU, if it provides opportunities for participation, to seek operational feedback from participating local, state, tribal, federal, and international fire agencies, and where appropriate, state agencies.
- 25) Provides that participation by a private entity in any FIU-authorized pilot, prototype, testing, demonstration, or research activity does not by itself constitute a conflict of interest, create an unfair competitive advantage, be considered a gift of public funds, or disqualify the private entity from any simultaneous or subsequent procurement, solicitation, or contracting opportunity with the state or a local agency.
- 26) Requires information, data, or predecisional materials exchanged during activities conducted to be treated as nonprocurement sensitive and not to be used as a basis to exclude or disadvantage any participant in future competitive procurement.
- 27) Requires, on or before January 1, 2028, and annually thereafter, CAL FIRE to submit to the Governor and the appropriate fiscal and policy committees of the Legislature a report summarizing all of the following information:
 - a) Technologies and projects evaluated, tested, or deployed under the FIU;
 - b) Results and findings regarding cost-effectiveness and operational performance of the FIU; and,
 - c) Partnerships and funding sources leveraged to support innovation activities.
- 28) Requires the director to implement this bill only upon an appropriation by the Legislature for its purposes in the annual Budget Act or another statute.
- 29) Authorizes CAL FIRE to reorganize existing positions and resources to fulfill the purposes of this bill.
- 30) Sunsets the provisions of this bill on January 1, 2033.

FISCAL EFFECT: According to the Senate Appropriations Committee, while the bill's provisions would be contingent upon an appropriation, it could result in General Fund cost pressures in the hundreds of thousands of dollars each year for CAL FIRE to administer the FIU. There could be additional costs that are likely to be significant, to the extent that the FIU elects to implement the Wildfire Innovation Grant Program as authorized by the bill. It specifies that

the program shall fund early-stage, mature, or dual-use technology projects that enhance wildfire readiness, mitigation, or response. However, the bill does not specify the number or size of the grants to be awarded.

COMMENTS:

1) **Author's statement:**

Last year, Angelenos experienced firsthand that California wildfires are becoming more destructive and deadlier with increasingly extreme weather. It is critical we prioritize programs with innovative technology and research to properly equip our emergency management personnel who keep our communities safer in the face of disaster. SB 1079 creates the FIU under CAL FIRE, giving California a formal mechanism to identify firefighter needs, source technologies, prototype solutions, and move successful technologies from pilot to scale. By establishing a robust and permanent unit to test and deploy new firefighting technology, protecting Californians from future megafire disasters becomes not just an aspiration, but a coordinated priority for the state.

2) **Wildfire risk mitigation.** Wildfires have been growing in size, duration, and destructivity over the past 20 years. Growing wildfire risk is due to accumulating fuels, a warming climate, and expanding development in the wildland urban interface. The Legislature has enacted various laws to mitigate the risk as the risk has exponentially increased.

In 2019, the Legislature enacted SB 209 (Dodd), Chapter 405, Statutes of 2019, to establish the state's Wildfire Forecast and Threat Intelligence Integration Center (Center), which requires CalOES and CAL FIRE to jointly establish a first-of-its-kind center focused on wildfire forecasting; wildfire risk, hazard, and threat assessments; fire weather and fire behavior; and, intelligence gathering, analysis, and dissemination. The Center maintains a statewide wildfire forecast and threat intelligence strategy to improve how wildfire threats are identified, understood, and shared in order to reduce threats to residents, businesses, and governments.

SB 109 (Dodd), Chapter 239, Statutes of 2021, established the Office as CAL FIRE's technical and research backbone. The Office evaluates potential solutions, conducts research and field testing alongside CAL FIRE's Innovation, Outreach & Coordination Unit, documents results, and provides recommendations for adoption.

AB 9 (Wood), Chapter 225, Statutes of 2021, created the Community Wildfire Preparedness and Mitigation Division within the Office of the State Fire Marshal. The deputy director is responsible for fire preparedness and mitigation missions of CAL FIRE, including oversight of the Fire Prevention Grants Program, defensible space requirements, the California wildfire mitigation financial assistance program, the establishment of fire hazard severity zones, consultation with the Office of Energy Infrastructure Safety regarding wildfire mitigation plans, general plan safety element review, wildland building code standards, and implementation of the minimum fire safety standards.

California has made meaningful progress in wildfire innovation over the past decade. New technologies are emerging to support early detection, rapid suppression, community risk reduction, ecosystem resilience, and ignition prevention. However, a group of fire risk

reduction groups including California Fire Safe Council, MegaFire Action, Napa Fire Wise, and others, note that the pathway from promising idea to proven pilot to scaled deployment remains fragmented and slow. Too often, innovative tools stall between demonstration and adoption — not because they lack value, but because there is no formal system to evaluate, integrate, and deploy them efficiently across the state’s wildfire agencies.

- 3) **Fire Innovation Unit.** The Office currently serves as a central hub in CAL FIRE for identifying emerging technologies, but functions primarily as an information-gathering channel rather than a structured pathway for testing, validating, procuring, and deploying solutions. Supporters state that SB 1079 “expands that foundation into a complete innovation pipeline, including pilots, demonstrations, testbeds, grant support, academic partnerships, and pathways for rapid operational adoption.”

CAL FIRE has an existing Fire Innovation Unit, which represents its unified effort to drive the development and deployment of next-generation wildfire technology and operational advancements. By partnering with philanthropic organizations and nonprofits, CAL FIRE has access to capital to fund the innovation pipeline without relying exclusively on state funds. This partnership effectively de-risks the early development of FIU capabilities while ensuring that scarce taxpayer resources are focused on testing, validating, and scaling technologies that meet real operational needs.

The Innovation, Outreach & Coordination (IOC) Unit engages directly with CAL FIRE programs, units, and regions to define operational needs and gather technical requirements. IOC staff work closely with partners to ensure that new technologies address true field challenges, leveraging operational experience to guide research and development efforts.

A January 2026 RAND Corporation report, *Accelerating Technological Innovation Across the U.S. Wildfire Management System*, concluded that the wildfire management system remains fragmented and lacks mechanisms to coordinate innovators, accelerators, and end users, recommending the creation of dedicated innovation structures to speed adoption of wildfire technologies.

This bill places CAL FIRE’s FIU and IOC programmatic structure in statute, creates a new RADP, and requires the IOC to implement a new Wildfire Innovation Grant Program.

- 4) **Staying on top of technological advancements.** The advancement of technology has been important for state and local agencies to improve their detection of and response to emergencies. As the Assembly and Senate Governmental Organization Committees have summarized, advances in various technologies are helping to better prepare communities for, and help first responders in identifying and battling wildfires including: the Santa Ana Wildfire Threat index, operated by the United States Forest Service, which uses advanced simulation models to forecast wildfire threats up to six days in advance for communities in Southern California; drones used to map routes for firefighters, and to identify small fires in thick smoke; temperature and humidity sensors to detect the presence of a fire, and infrared cameras used to detect hot spots; satellite imagery used to map the current position of wildfires and using that knowledge to model and forecast the future movements of a fire; and, AlertCalifornia, a state-focused program that manages a network of more than 1,200 monitoring cameras and sensor arrays and a new AI system that provides early wildfire

confirmation and actionable real-time data to quickly scale fire resources, helps evacuations through enhanced situational awareness, and monitors fire behavior.

With the advent of AI and the ever-present need to coordinate amongst state, federal, and local jurisdictions on emergency response, technology can improve our ability to detect the most minute changes in weather or temperature and respond faster and in a more coordinated fashion to prevent wildfire destruction and death.

The FIU will be authorized to establish testbeds to test or evaluate emerging technologies and provide technical expertise, operational data, field testing environments, and appropriate funding to ensure the technologies developed in the collaborations are transitioned into wildfire operations.

5) **Double referral.** This bill is also referred to the Assembly Emergency Management Committee.

6) **Related legislation:**

AB 441 (Hadwick) Extends the sunset on the Office to January 1, 2031. This bill is referred to the Senate Appropriations Committee.

SB 973 (Becker) directs CAL FIRE to implement specified wildfire risk and resilience related activities and formalizes CAL FIRE's partnership with the California Fire Safe Council to administer and deliver the Wildfire County Coordinator Program. This bill is referred to the Assembly Natural Resources Committee.

SB 326 (Becker, 2025) requires the deputy director of Community Wildfire Preparedness within CAL FIRE to prepare a Wildfire Risk Mitigation Planning Framework, a Wildfire Risk Baseline and Forecast (Forecast), and a Wildfire Mitigation Scenarios Report. Requires, contingent upon an appropriation, CAL FIRE to provide local assistance to local governments to achieve wildfire risk reduction consistent with the aforementioned plans, for defensible space inspections, and to facilitate compliance with forthcoming ember-resistant zone (known as zone o) regulations. This bill was vetoed.

REGISTERED SUPPORT / OPPOSITION:

Support

Calforests	Fire Districts Association of California
California Fire Chiefs Association	Firewerx
California Fire Safe Council	Megafire Action
California Forward	Muon Space
California Special Districts Association	Napa Communities Firewise Foundation
City of Moorpark	Net-zero California
Climate Resolve	Orange County Fire Authority
DAN Munsey, Fire Chief of the San Bernardino County Fire Protection District	Pacific Forest Trust
Del Norte Fire Safe Council	Rain
Fire Aside	Rockrose Risk
	Safe Community Project

San Bernardino County
San Bernardino County Fire Protection
District

Santa Clara Valley Habitat Agency
Tahoe Fund; the

Opposition

None on file

Analysis Prepared by: Paige Brokaw / NAT. RES. /