
SENATE COMMITTEE ON APPROPRIATIONS

Senator Sabrina Cervantes, Chair
2025 - 2026 Regular Session

SB 1079 (Stern) - Department of Forestry and Fire Protection: Fire Innovation Unit

Version: April 28, 2026

Urgency: No

Hearing Date: May 11, 2026

Policy Vote: N.R. & W. 7 - 0, E.M. 9 - 0

Mandate: No

Consultant: Ashley Ames

Bill Summary: This bill would establish the Fire Innovation Unit (FIU) within the Department of Forestry and Fire Protection (Cal FIRE) to advance wildfire technology research, coordination, procurement, and deployment, as specified.

Fiscal Impact: 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 a 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.

Background: Existing law establishes the Office of Wildfire Technology Research and Development (OWTRD) within CAL FIRE to serve as the central organizing hub for state government's identification of emerging wildfire technologies. The Office evaluates potential solutions, conducts research and field testing, documents results, and provides recommendations for adoption.

Existing law establishes the Wildfire Forecast and Threat Intelligence Integration Center jointly led by the California Office of Emergency Services (Cal OES) and Cal FIRE to serve as the state's integrated central organizing hub for wildfire-related forecasting, weather information, and threat intelligence.

Proposed Law: This bill establishes the FIU within Cal FIRE to serve as its 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. It specifies that the FIU shall consist of the OWTRD, the Innovation, Outreach, and Coordination Program (IOCP), and the Rapid Acquisition and Deployment Program (RADP).

This bill requires the OWTRD to do the following:

1. Perform scientific and technical evaluations of emerging wildfire technologies.

2. 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.
3. Document operational and technical results of laboratory, field, and operational evaluations of wildfire technologies.
4. Issue recommendations on wildfire technologies regarding adoption and performance standards

This bill specifies the requirements for the IOCP, including the coordination with end users across local, state, tribal, federal, and international fire agencies, serving as a liaison between technologists and frontline personnel, and overseeing collaborative development efforts between Cal FIRE and technology developers.

This bill allows the RADP to do the following:

1. Pilot and scale wildfire technologies through use of flexible contracting authorities pursuant to this bill.
2. Manage the WIGP.
3. Enter into agreements with local governments, state and federal agencies, tribes, nonprofit and philanthropic organizations, utilities, public and private educational institutions, and private companies for purposes of this bill.
4. Ensure that all projects carried out pursuant to this bill include clear objectives, performance metrics, and audit provisions.

This bill 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 for purposes of this bill.

This bill authorizes the FIU to establish and administer a Wildfire Innovations Grant Program (WIGP), as specified. Eligible entities may include government agencies—local, state, federal, and tribal—as well as nonprofit organizations, public and private academic and research institutions, and private-sector technology developers.

The bill provides that in administering the WIGP, the department shall, to the extent practicable, encourage projects that evaluate technologies across diverse operational environments and geographic conditions within the state to assess performance under varying terrain, fuel types, and weather conditions.

This bill provides that the FIU may establish and administer a WIGP and specifies the WIGP shall fund early-stage, mature, or dual-use technology projects that enhance wildfire readiness, mitigation, or response. It requires all grants awarded pursuant to the WIGP to align with statewide resilience goals and include clear metrics for success that are informed by end-user input.

This bill authorizes the FIU to administer or monitor pilot, prototype, or demonstration projects involving specified partners to evaluate, mature, and validate wildfire-related technologies. It requires the FIU to establish technical and operational criteria for formal validation and to consider if the wildfire-related technology meets the criteria for formal validation. The bill also allows the FIU to award a follow-on contract without a separate competitive solicitation process to a technology vendor that completes an FIU-administered or FIU-monitored pilot, prototype, or demonstration project and receives a formal validation, if specified conditions are met

This bill directs Cal FIRE, on or before January 1, 2028, and annually thereafter, to submit to the Governor and the appropriate fiscal and policy committees of the Legislature a report summarizing specified information relating to the performance of the FIU.

The bill's provisions would be operative until January 1, 2033.

Staff Comments: The Office of Wildfire Technology Research and Development (OWTRD) within Cal FIRE serves as its central organizing hub for state government's identification of emerging wildfire technologies. It evaluates potential solutions, conducts research and field testing, documents results, and provides recommendations for adoption. According to the analysis of this bill by the Senate Committee on Emergency Management: This bill also seeks to build upon the work of the OTWRD.

According to the OTWRD's 2025 annual report, "many new and emerging technologies in the wildfire industry fall short across several critical areas: they often lack reliability, interoperability with other systems, and cost effectiveness. Many do not scale and require significant time and effort to implement and train personnel. Additionally, many solutions are designed without a meaningful human oversight component, limiting their practical utility in high-risk, dynamic environments. Of the many individuals and organizations that submit ideas to the OWTRD, a small number are feasible for further study or engagement by the fire industry. To ensure developing technology is helpful for end users, technology innovators must engage with end users to fully understand current challenges related to cost, scale, interoperability, training, and useful impact on current practices to make useful technology for the wildfire community." The additional authorities and parameters established in this bill are intended to align with the work of OTWRD by further accelerating deployment of effective and innovative technology in the state's evolving wildfire threat environment.

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