



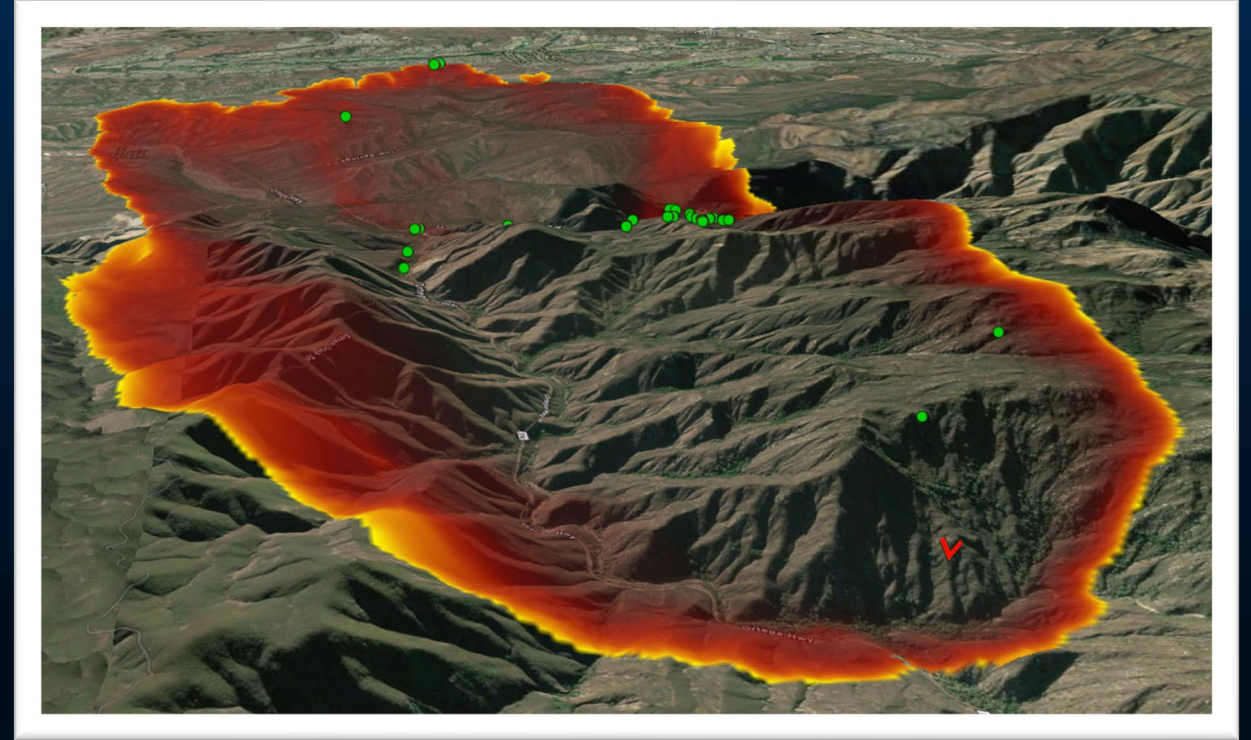
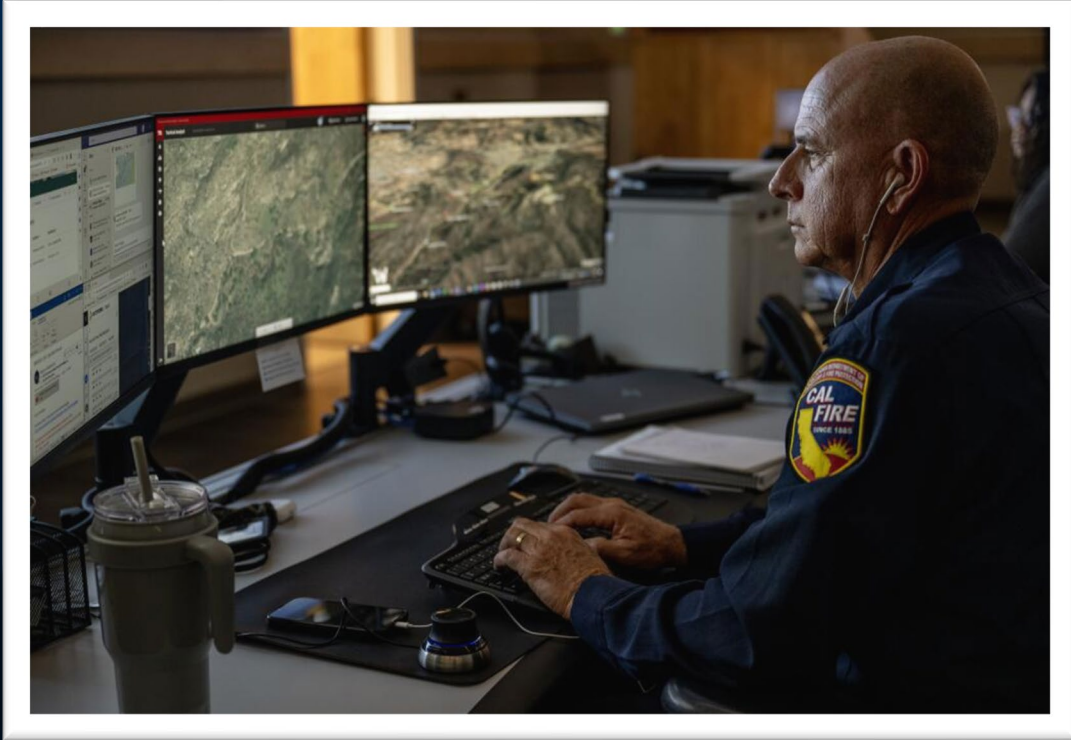
Fire Intelligence Briefing

Operational Intelligence for
modern wildfire response



Fire Intelligence Program

The Coordinated process of collecting, analyzing, and delivering near real-time data to support field operations, decision-makers, department leadership before, during, and after an incident.



The program brings together multiple platforms from weather forecasts, fuel conditions, fire potential, remote sensing, and field reports and turns it into actionable insights for operational leaders.



Fire Intelligence Program

The Program is comprised of 76 personnel.

- Sacramento – 27
 - Intel – 9
 - Remote Sensing - 6
 - WFTIIC – 7
 - Predictive Services – 1
 - RA's – 4 (1 Policy, 1 Apps, 2 PS)
- Northern Region IOC – 11 +3 PS Mets
- Southern Region IOC – 11 +3 PS Mets
- Unit Fire Intel Data Specialist – 21



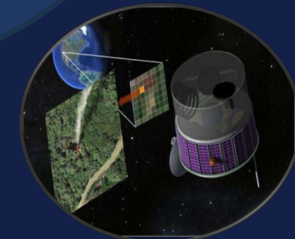
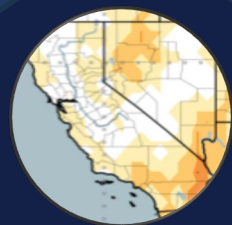
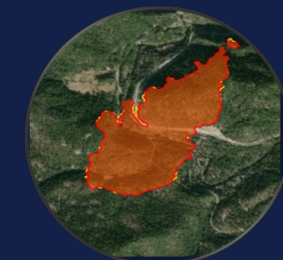
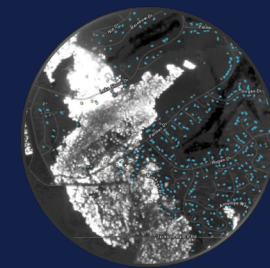
Fire Intelligence

Predictive Services

Ongoing Assessment

Wildfire Threat Assessment

Early Detection





TECHNOSYLVA SUITE OF APPLICATIONS



**WildFire Analyst
Enterprise**

Computer



**WildFire Analyst
Mobile**

Phone / Tablet



TA Mobile

Phone / Tablet



Tactical Analyst

Web Browser



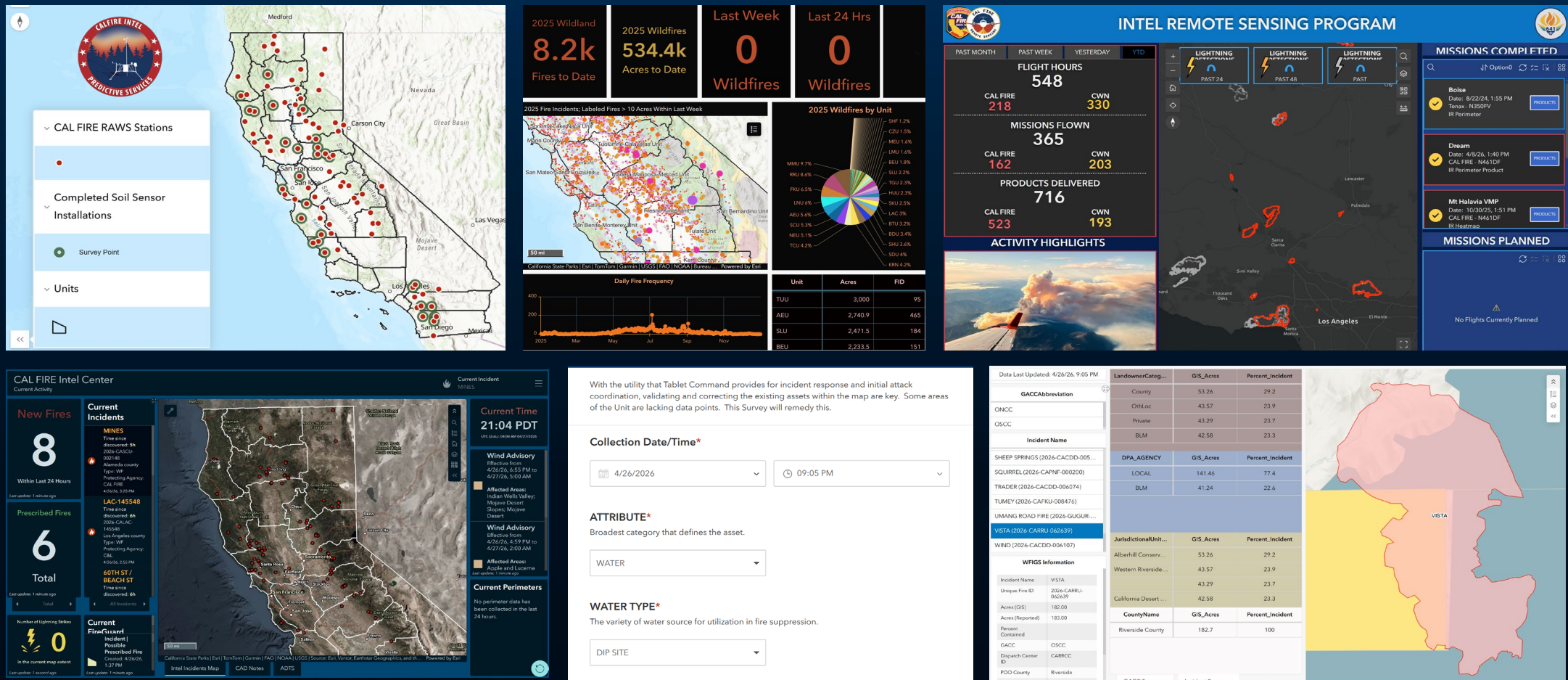
CAL-Mapper v4

Fuels Treatment
Tracker



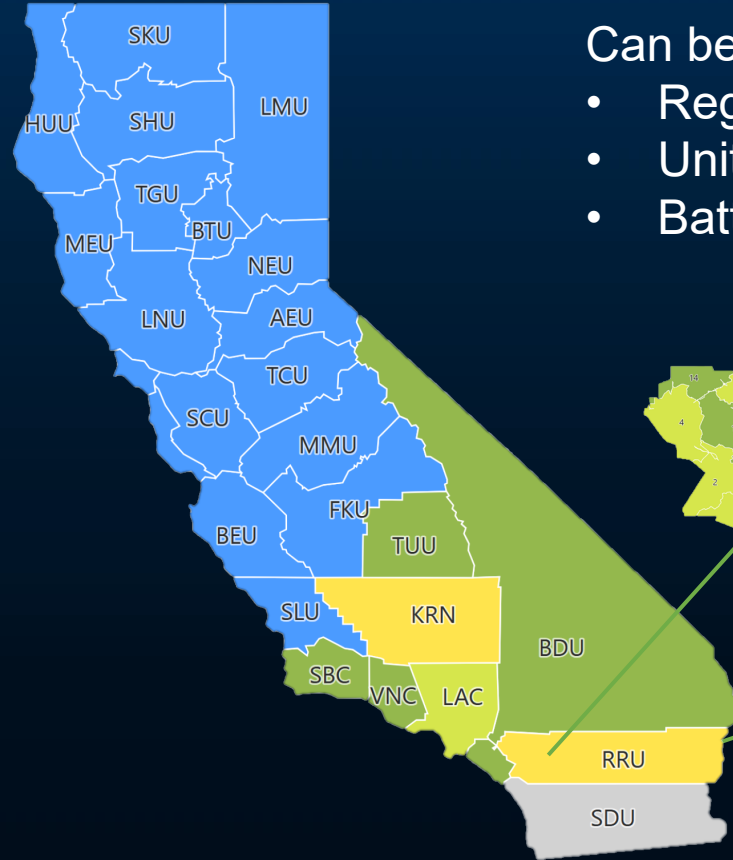
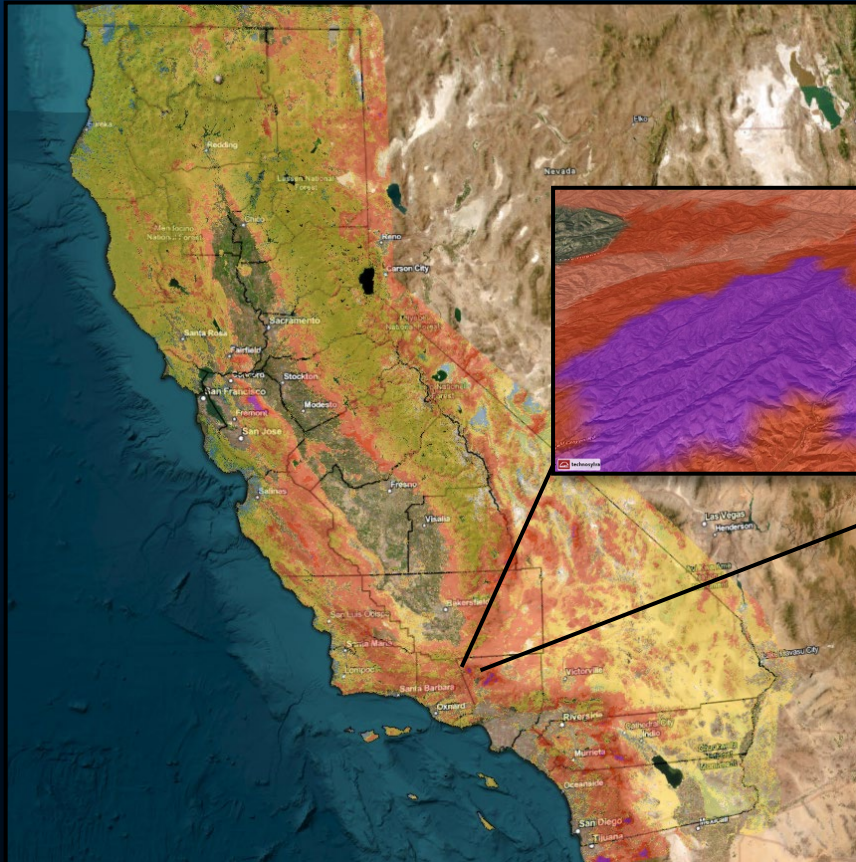
Geospatial Expertise

Fire Intelligence Data Specialists have geospatial expertise to design custom tools, web maps, dashboards, create surveys, enhance data quality, improve data layers for more informed decision-making.



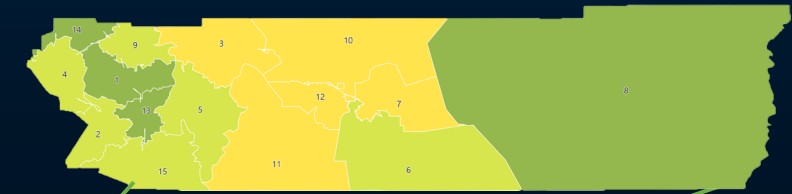
Fire Size Potential Forecasting

Fire Intelligence Data Specialists can provide forecasted hourly fire potential throughout the day.



Can be aggregated to the:

- Region Level
- Unit Level
- Battalion Level



Use case: Decision-support for proactive resource pre-positioning, assist in move-up and cover of resources.

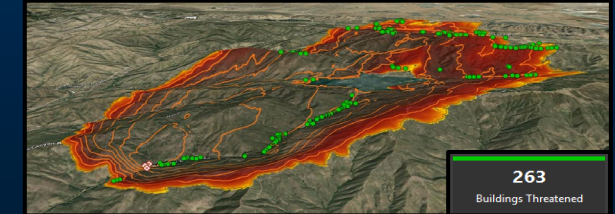


Fire Spread Simulations

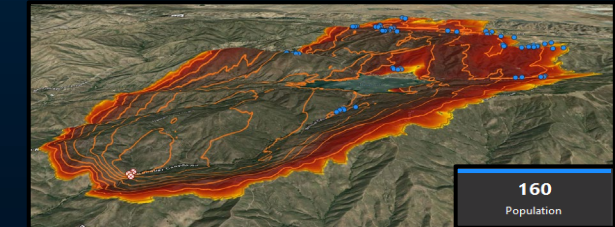
Fire Intelligence Data Specialists can provide on-demand fire spread predictions to gain forward looking insights on fire behavior, forecasted fire weather, direction of travel, potential threats and impacts to infrastructure.



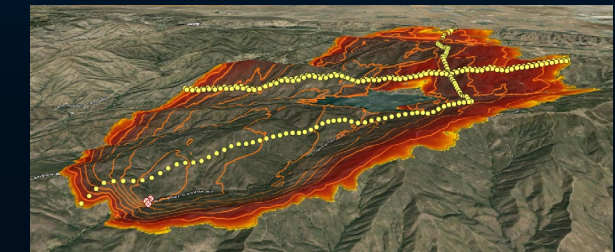
Potential Building Threatened



Potential Population Impacts



Potential Critical Infrastructure Impacts



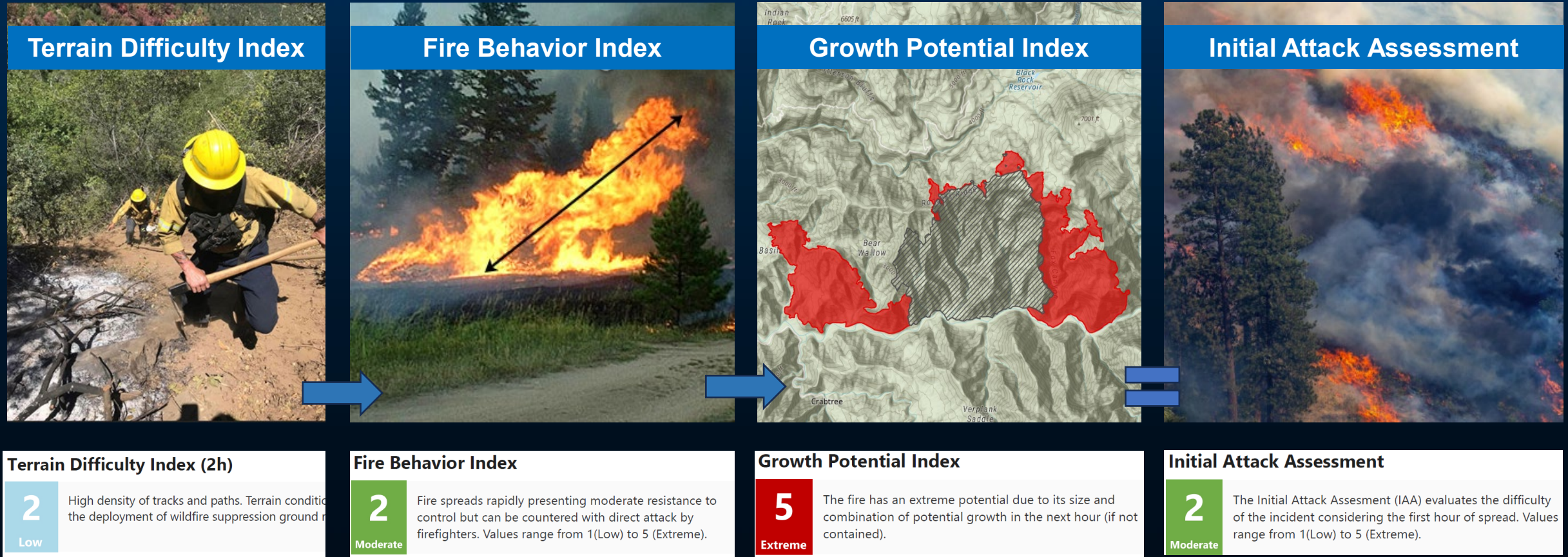
Use case:

- Predictive intelligence for ECCs, IC's, and leadership on potential.
- Can run simulations against proposed or completed fuel breaks to evaluate their effectiveness.



Initial Attack Assessment Metrics

Fire Intelligence Data Specialists can communicate the estimated initial attack success of the initial dispatched resources.

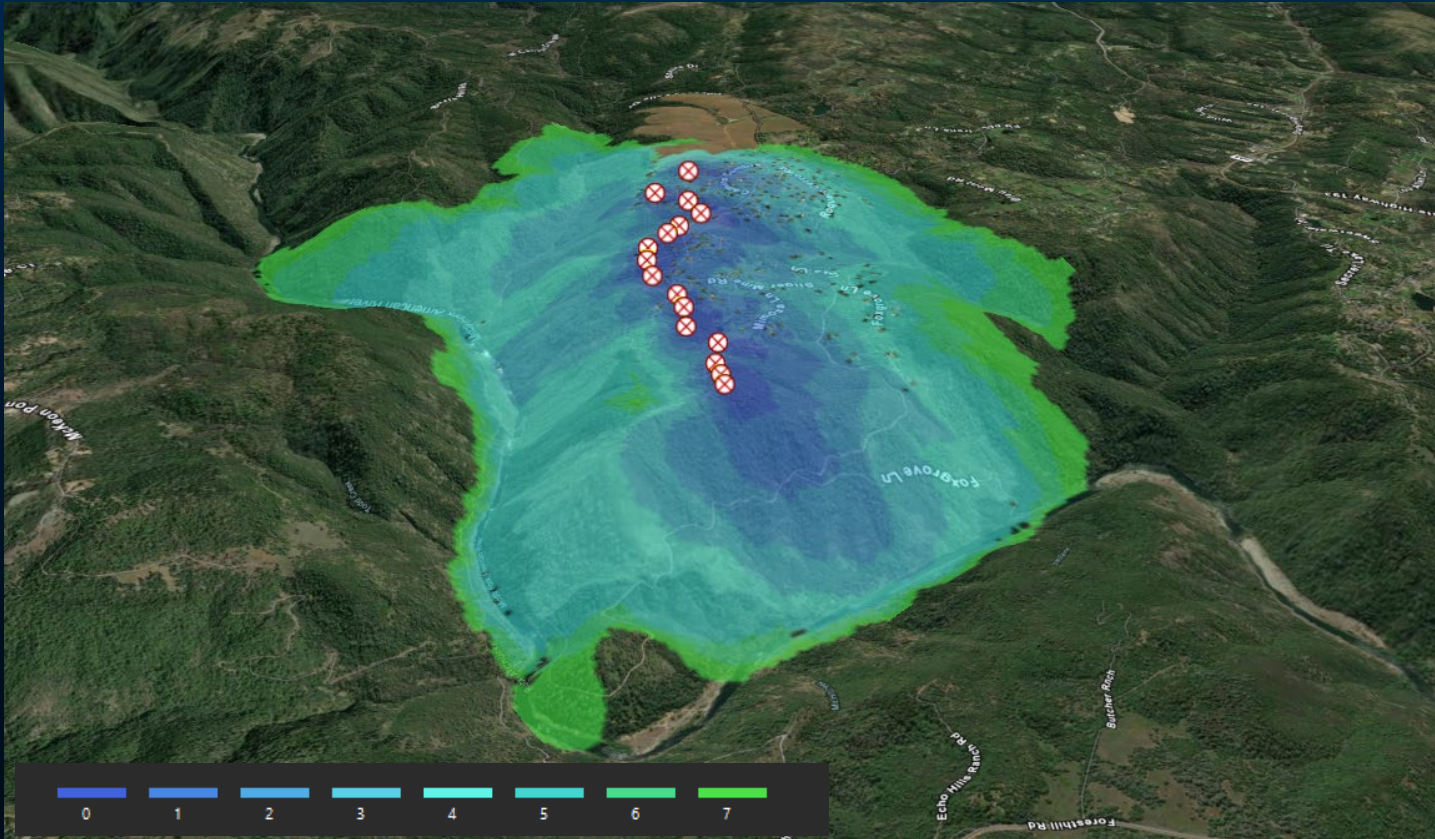


Use case: Educating the field on what the IAA is and could be decision-support for augmenting dispatches.



Fire Spread Simulations – Exposure Mode

Fire Intelligence Data Specialists can provide fire spread predictions in an exposure mode, which helps identify the amount of time you may have if a fire is around an area of interest.

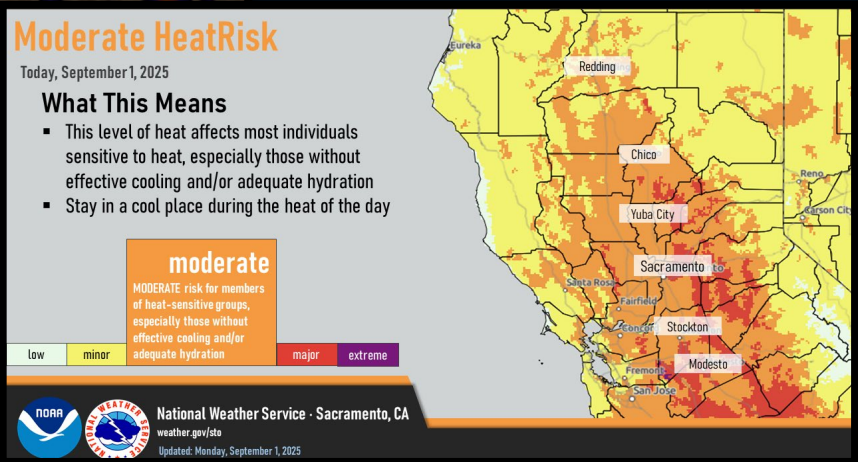
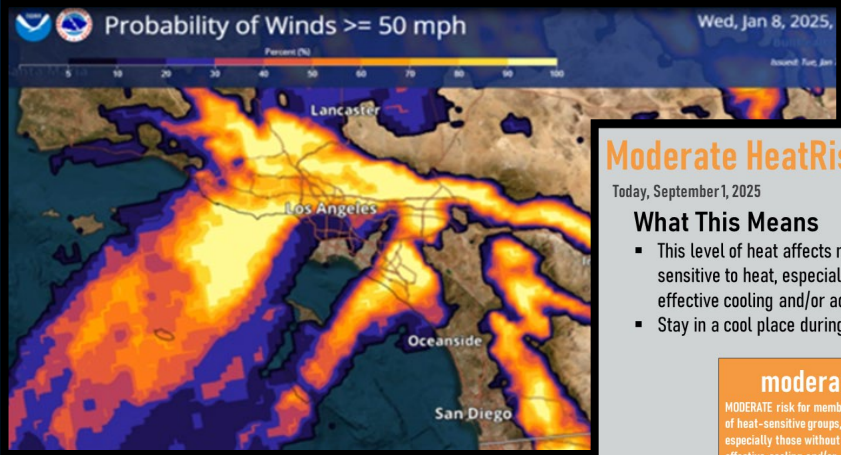


Use case:

- Can be used to identify potential trigger points for decisions or notifications.
- Can provide insights in when to expect potential impacts to communities, infrastructure (highways, railways, powerlines, etc.).
- Can be beneficial way to communicate threats and/or answer questions from dignitaries for impacts.

Situational Awareness – High Risk Weather Events

Fire Intelligence Data Specialists can provide situational awareness forecasting products that signal impending high-risk weather events for pre-planning and response.



NATIONAL WEATHER SERVICE
San Diego CA

Critical Fire Weather and Windy Conditions Mon-Tue

WINDS: 25-40 MPH
Gusts: Up to 60 mph,
locally over 75 mph in mountains

5-15% relative humidity

Bring flammable objects indoors (furniture, door mats, trash cans...)

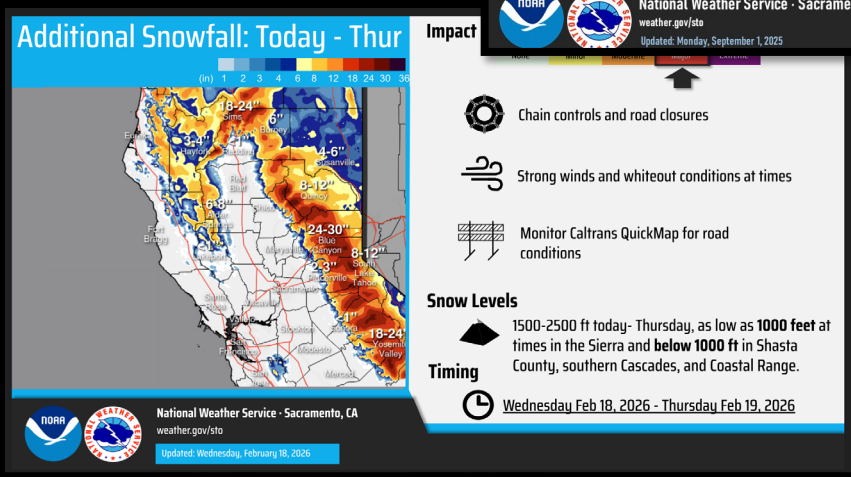
Have emergency kit ready to go. Pack it in.

PLAN

[SANTA ANA MOUNTAINS]
[INLAND ORANGE CO / IE]
[SAN DIEGO CO VALLEYS]
[SAN BERNARDINO, RIVERSIDE, SAN DIEGO COUNTY MOUNTAINS]

Winds increasing from northern areas to southern areas on Monday. Strongest winds Mon PM - Tues AM. Winds subsiding Tuesday night.

Highest winds in mountains / foothills of San Diego County. Be safe if driving, especially in high profile vehicles!

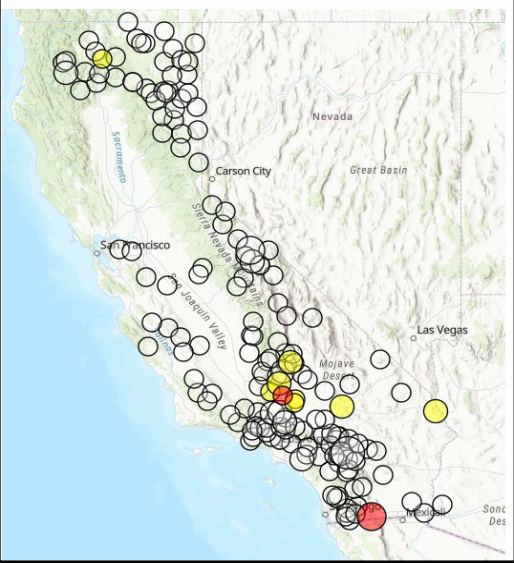


Hi-Res guidance shows the potential for isolated thunderstorms to develop early this afternoon and linger into the overnight hours. Main thunderstorm hazards include lightning, small hail, gusty winds, and brief heavy rain so exercise caution if commuting and find the latest road conditions at quickmap.ca.gov. Lingering afternoon mountain showers and isolated thunderstorms (10-15% probability) continue on Monday and Tuesday.

Elsewhere, dry conditions will prevail. Highs will warm into the upper 60s to 70s in the Valley and foothills, with 40s to low 60s across higher elevations.

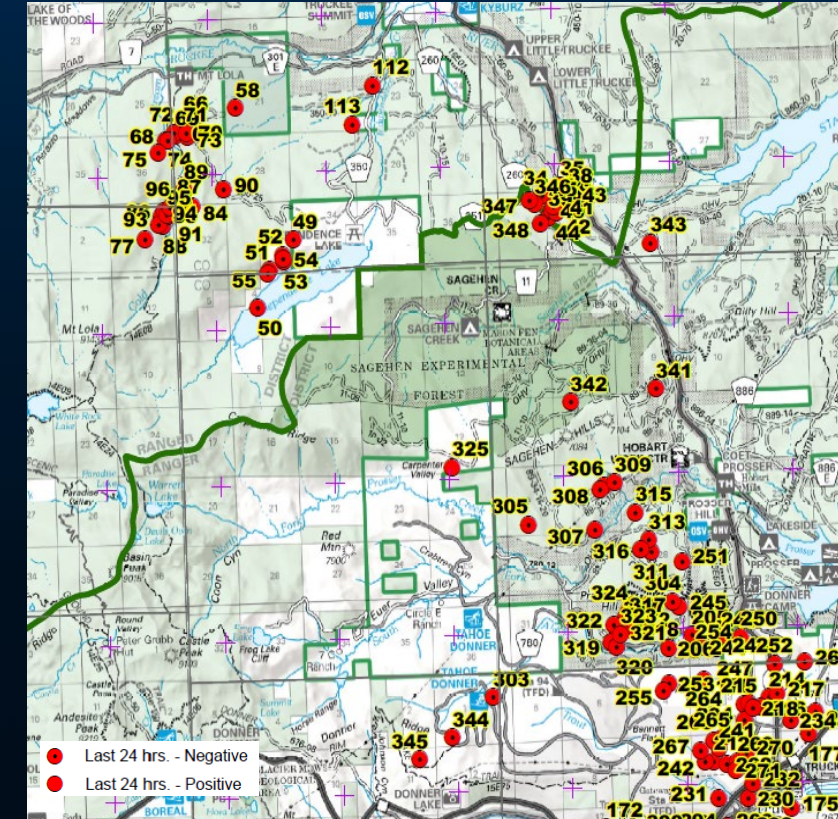
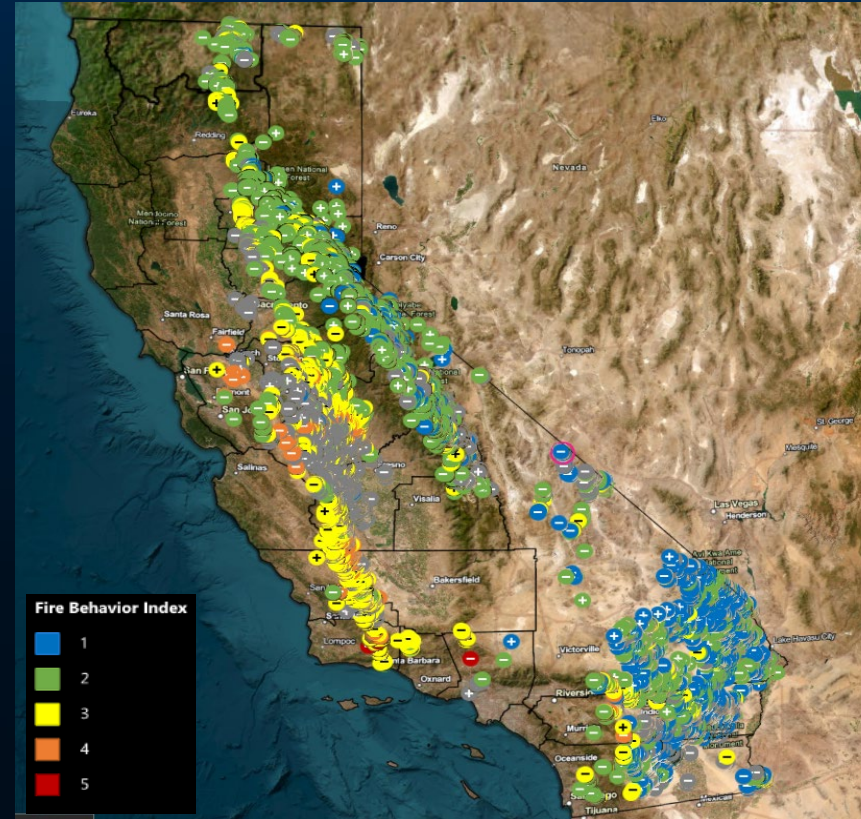
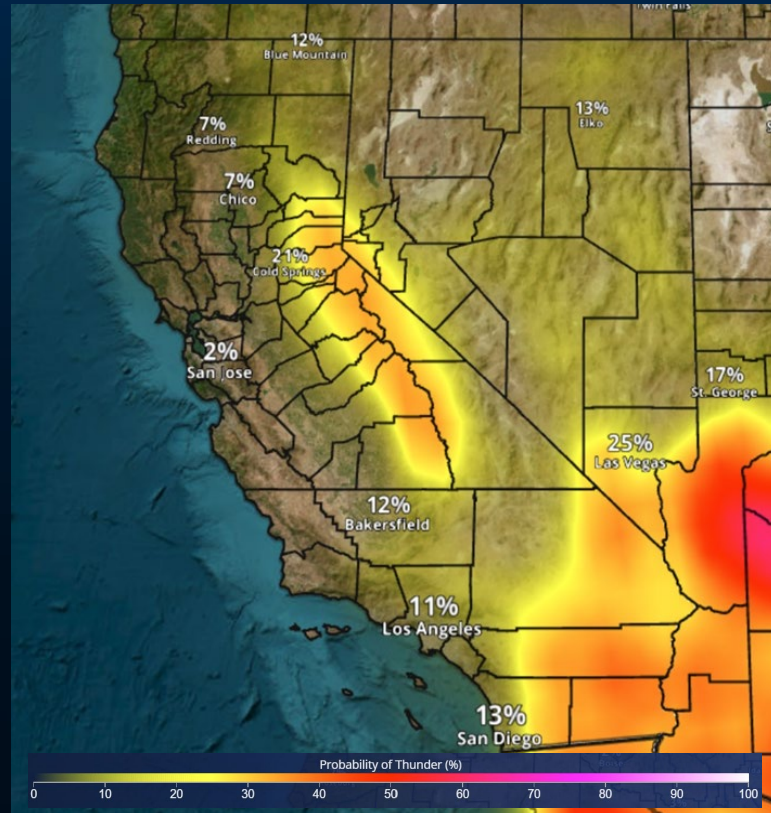
...Mid to Late Week...
Drier and warmer weather is likely across the area as ridging builds in from the eastern Pacific. Above normal high temperatures are expected, with mid 70s to mid 80s across the Valley and foothills and over the mountains.

Ensembles hint at another trough approaching the region late week into next weekend that may bring unsettled weather and slightly cooler temperatures.



Lightning Forecasting & Detection

Fire Intelligence Data Specialists can provide lightning forecasting products ahead of any activity, provide observed lightning strikes with an assigned Fire Behavior Index to help prioritize response, and can produce seek & destroy geo-referenced maps or webmaps for field use.



Early Detection

Fire Intelligence Data Specialists facilitate setting up access to receive alerts from FireGuard & ALERT California.



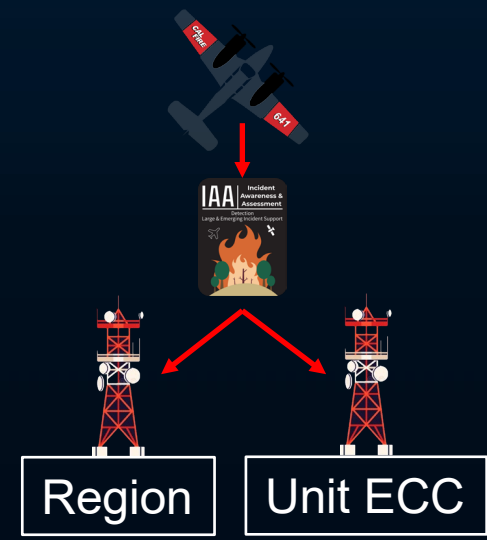
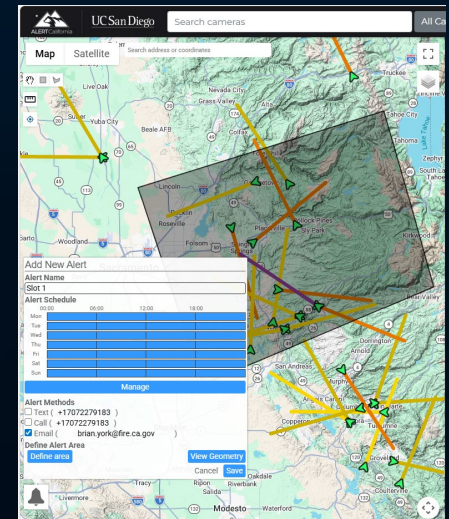
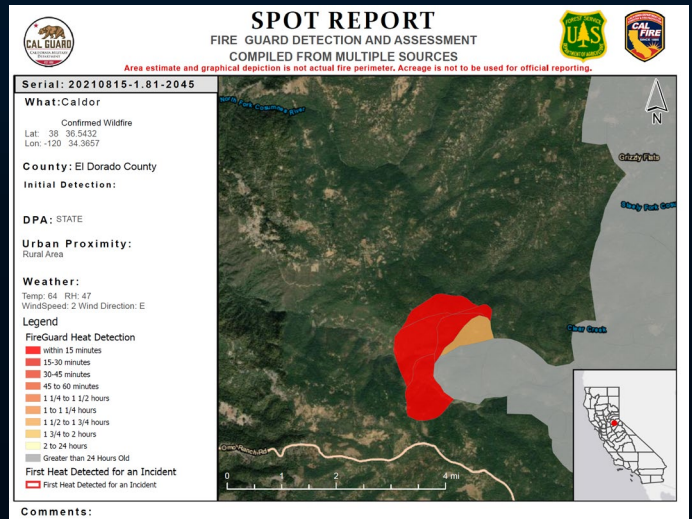
Spot Report



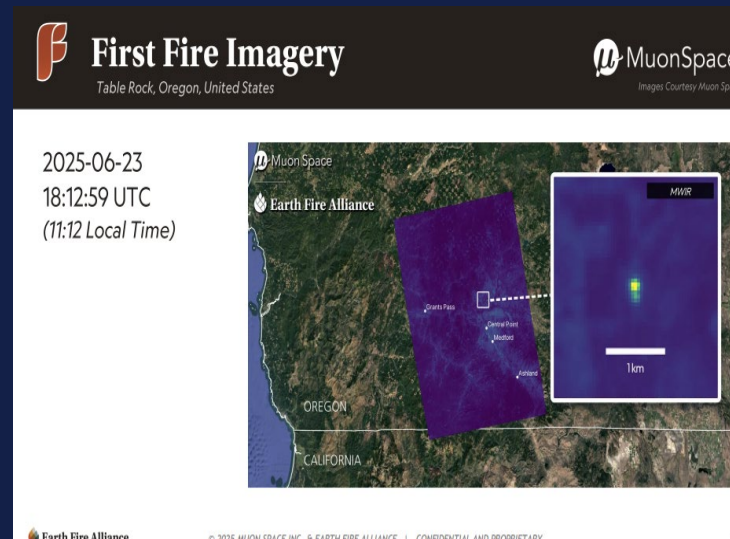
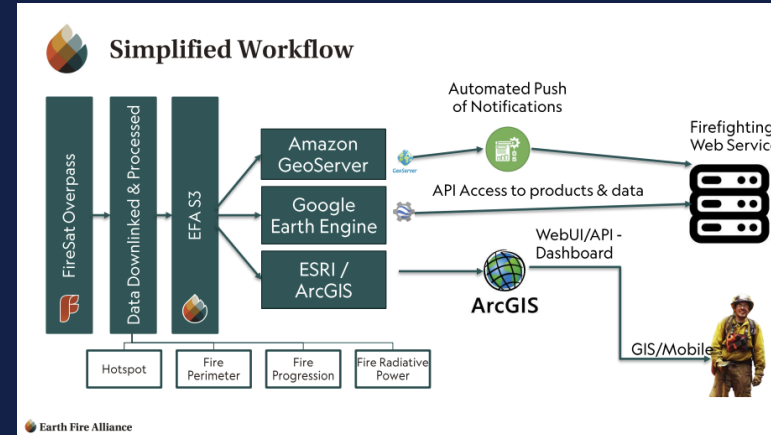
AI Alerts



New Heat Detection

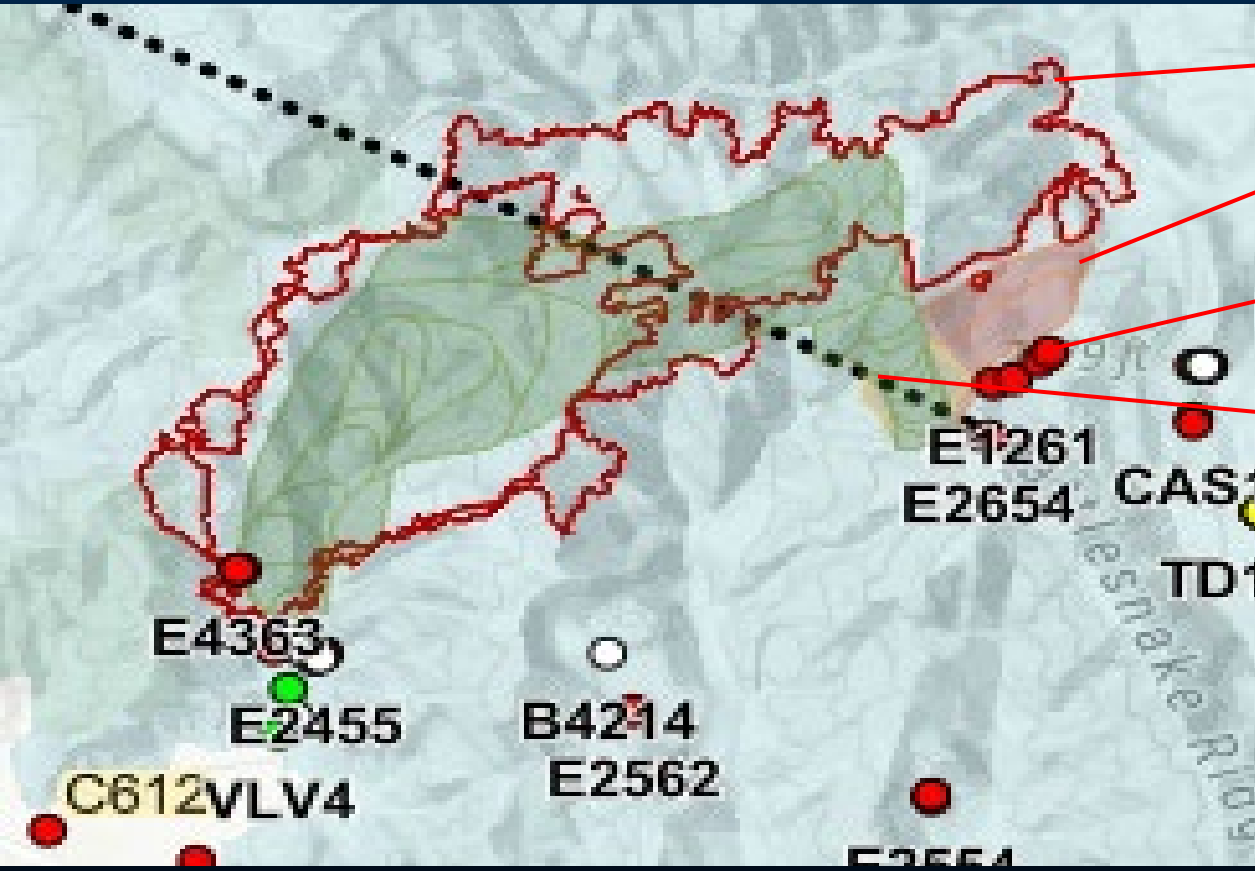


Earth Fire Alliance – FireSat

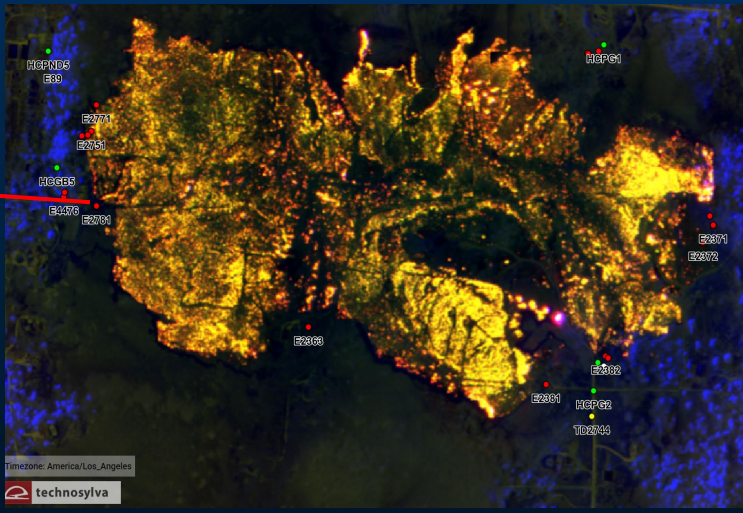


Ongoing Fire Assessments

Fire Intelligence Data Specialists can produce visualizations/products using data from FireGuard, IAA, TA Mobile, Tablet Command, and ALERT California.



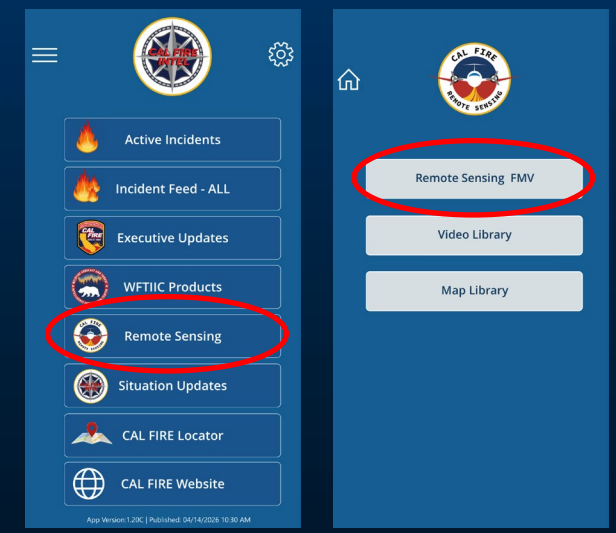
- IAA Collects
- Fire Guard
- AVL – Resources
- ALERT California



Intel Aircraft Product Dissemination – Imagery



Intel Aircraft Product Dissemination – Full Motion Video



SME – Intel App

Situational Awareness

Tools

- North Ops Briefing
- South Ops Briefing
- Fuel Reduction Tracker
- RAWS Weather Observations
- Historic Fire Perimeters
- AlertCA Cameras
- NWS Radar
- Lightning viewer

Unit Incident Updates

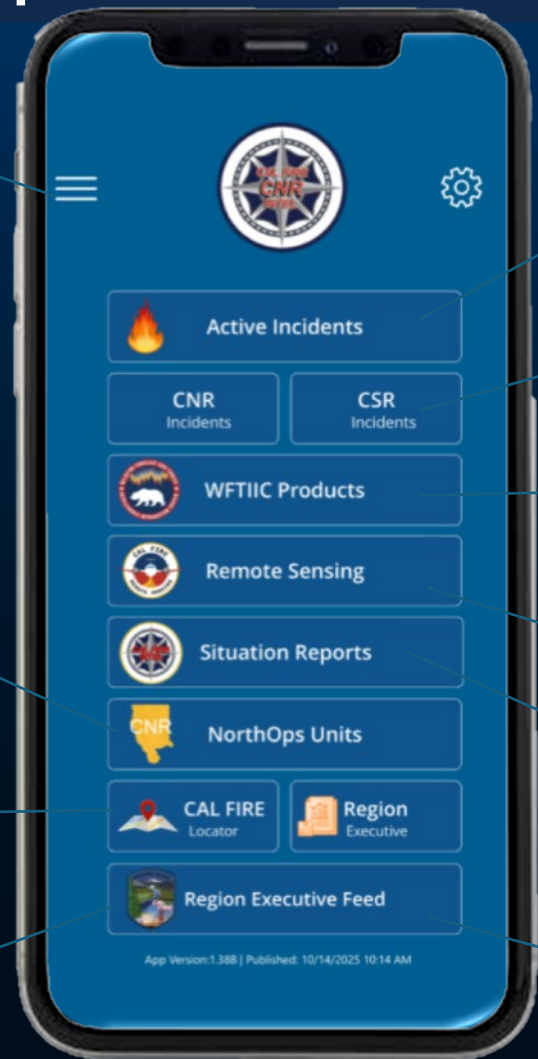
Incident Updates, Duty Chief updates, Fire Potential Products, Weather, ECC, Other

CAL FIRE Locator

Locate Facilities and Tones

Region Exec Feed

Link to Region Executive



Region Active Incidents Feed Near real-time intel on extended attack fires collated from Region Intel and 3D map once mapped by any sensor aircraft. Select by incident.

Incident Feed all by region Teams chat of all Statewide incidents combined in one feed CNR Intel and CSR Intel, ticker tape style.

WFTIIC Products

- Fire Size Potential Daily Forecast
- Lightning Activity
- PSPS Event Report
- 4-Month Outlook
- Seasonal Outlook PPT

Remote Sensing Products

- Live Full Motion Video – Intel aircraft
- Full Motion Video Archive Clips

Situation reports

CA Incident Summaries, Inc Ops Maps, IAPS, 209s, Resource Drawdown Reports

Region Exec Products

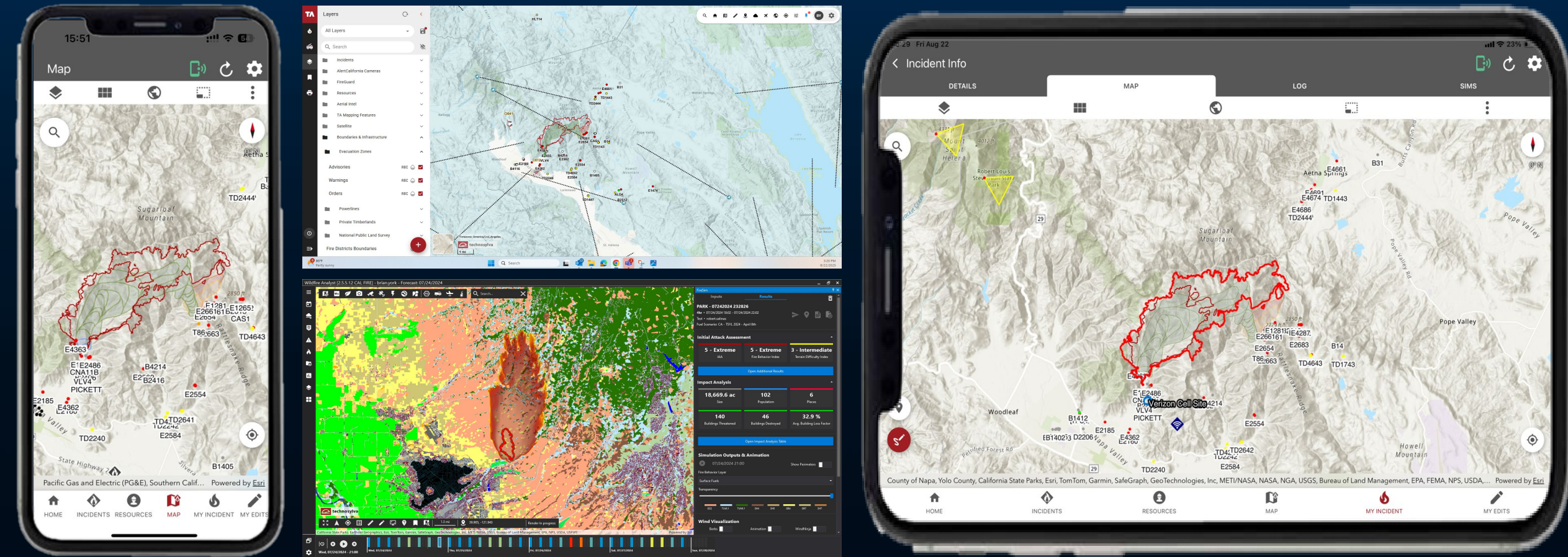
Link to Region Executive Products

App Version current app software published date



Technosylva Tactical Analyst & WFA

Fire Intelligence Data Specialists are the technical resource for all Technosylva applications. They are who should be leveraged to teach initial and refresher training to Unit personnel. Engagement in Unit CPT's is a great outlet to make sure all staff are exposed to the latest features and functionality.



ALERT California

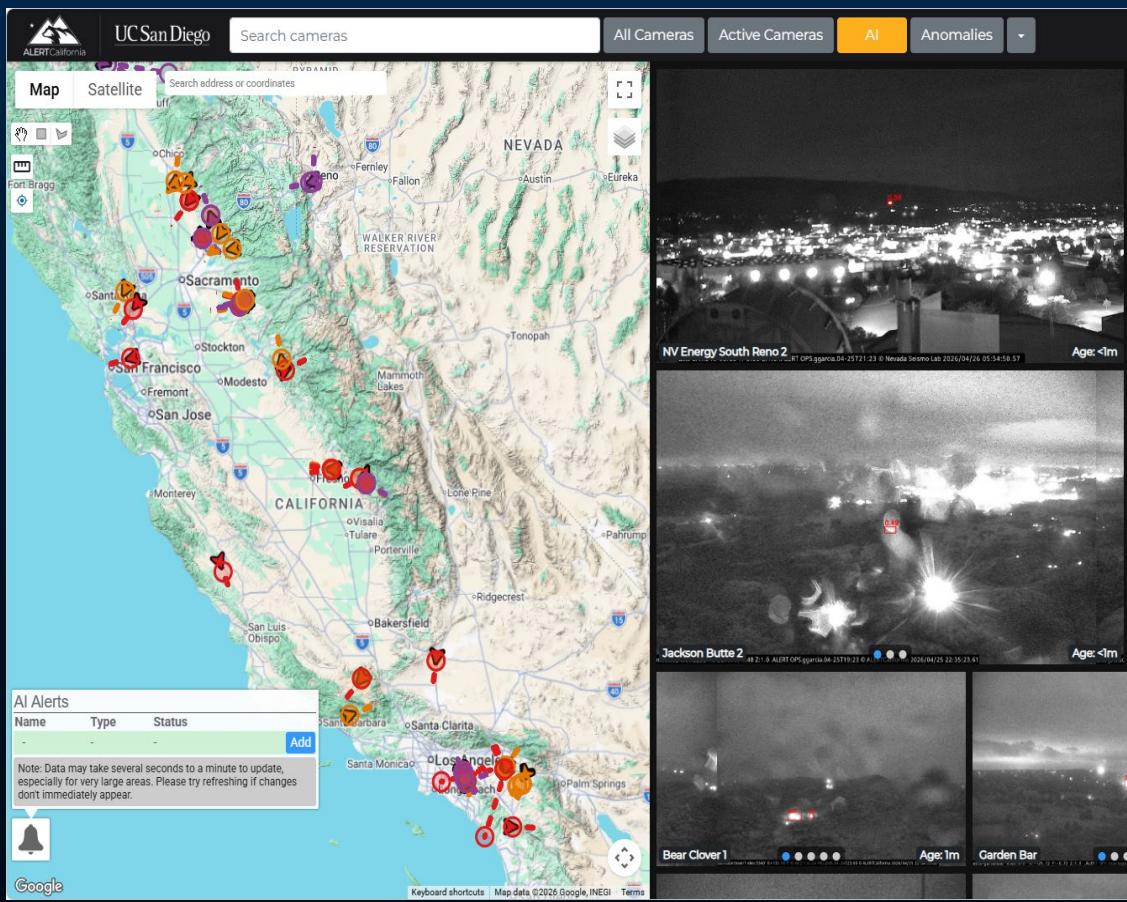
Fire Intelligence Data Specialists are the Unit POC for ALERT California and function as the SME and Trainer.

New Camera Request



OBJECTID	Proposed Site Name	CAL FIRE Unit	Unit Priority	Submitter Last Name	Submitter Email	Status	Land Ownership
4	462 Cahill	CZU	1	Sampson	richard.sampson@fira.ca.gov	Proposed	Private
5	467 Cabrillo	CZU	2	Sampson	RICHARD.SAMPSON@FIRE.CA.GOV	Proposed	Local Government
6	468 Montana 2	CZU	3	Sampson	RICHARD.SAMPSON@FIRE.CA.GOV	Proposed	Local Government
7	463 Swanton	CZU	4	Sampson	richard.sampson@fira.ca.gov	Proposed	Private
8	428 French Meadow L.O.	FUJ	3	Anderson	wnm7@biga.com	PSE	Private
9	424 Pine Flat Lake	FUJ	1	Anderson	wnm7@biga.com	PSE	Private
10	424 Basin Camp	FUJ	2	Anderson	wnm7@biga.com	PSE	Private
11	1 Oneshopper Lookout	HUJ	Acut	daniel.sca@fira.ca.gov	Proposed	Private	CA Dept. of Parks and Recreation
12	2 Top Top Ridge/Powery Point	HUJ	2	Acut	daniel.sca@fira.ca.gov	Proposed	Other State Lands
13	8 Fiddle Hill	HUJ	3	Acut	daniel.sca@fira.ca.gov	Proposed	Other State Lands
14	1 Top Road	HUJ	4	Acut	daniel.sca@fira.ca.gov	Proposed	Local Government
15	4 Crescent City	HUJ	5	Acut	daniel.sca@fira.ca.gov	Proposed	Other State Lands
16	5 Bald Hills Schoolhouse	HUJ	6	Acut	daniel.sca@fira.ca.gov	Proposed	National Park Service
17	6 Walker Ridge	HUJ	7	Acut	daniel.sca@fira.ca.gov	Proposed	Other State Lands
18	7 Inca Buttes Lookout	HUJ	8	Acut	daniel.sca@fira.ca.gov	Proposed	Bureau of Land Management
19	484 Orca Towers	HUJ	1	Anderson	wnm7@biga.com	PSE	Private
20	485 GORC Fieldbrook	HUJ	9	Anderson	wnm7@biga.com	PSE	Private
21	285 Walker Men	HUJ	10	Acut	daniel.sca@fira.ca.gov	Proposed	Other State Lands
22	425 Bucks Lake	UNJ	1	Anderson	wnm7@biga.com	PSE	Private
23	355 Soda Canyon	UNJ	Approved?	Hurley	shantan.hurley@fira.ca.gov	Suggested	Private
24	462 Sage Canyon	UNJ	1	Hurley	shantan.hurley@fira.ca.gov	Suggested	Private
25	356 Katherlake Ridge	UNJ	2	Hurley	shantan.hurley@fira.ca.gov	Suggested	Non-Profit Conservancies and Trusts
26	357 Knoxville Recreation / Lake Berryessa	UNJ	3	Hurley	shantan.hurley@fira.ca.gov	Suggested	Private
27	423 Boggs Men	UNJ	4	Hurley	shantan.hurley@fira.ca.gov	Suggested	CA Dept. of Forestry and Fire Protection
28	464 Old Point Arena Radar Station	MEJ	2	Arma Jones	arma.jones@fira.ca.gov	Proposed	Private
29	465 Former Lookout off Fish Rock Road	MEJ	1	Arma Jones	arma.jones@fira.ca.gov	Proposed	Private
30	466 Logging Property near State Land	MEJ	3	JONES	arma.jones@fira.ca.gov	Proposed	Private

Ops Hub Login





Fire Intelligence Program – The Future

The Fire Intelligence Program stands at the forefront of an evolving operational landscape where technology, data availability, and the demand for rapid decision-support continue to accelerate.

As advancements in remote sensing, analytics, real-time to near-real-time intelligence delivery, risk forecasting, and fire spread prediction become increasingly sophisticated, the role of Intel will only grow more critical.

The future of fire intelligence will demand even greater precision, speed, and adaptability and together, this team is equipped to meet that challenge.



Thank You

Phillip SeLegue
Staff Chief – Intel

