



## Improving the Incident Strategic Alignment Process: Recommendations from the 2023 fire season

### What is the Incident Strategic Alignment Process?

The Incident Strategic Alignment Process (ISAP) is an emerging framework for considering risk and developing strategy during wildland fire management and all-hazard response. It is an iterative, collaborative, risk-based dialogue informed by advanced spatial and fire behavior analytics that takes place among Incident Management Team (IMT) members, Agency Administrators (AAs), and external partners. Throughout these conversations, those engaged with ISAP focus on four “pillars”: critical values at risk (CVAR), strategic actions, risks to responders, and probability of success (see the [ISAP Story Map](#)) to co-construct durable incident-level strategy to minimize risks to communities, landscapes, and fire responders.

In partnership with the Incident Strategic Alignment Process (ISAP) developers and the USDA Forest Service (USFS) Rocky Mountain Research Station, the Colorado Forest Restoration Institute and the Public Lands Policy Group at Colorado State University deployed a mixed-methods study that explored ISAP through participant observation and semi-structured interviews. We observed the use of ISAP on three 2023 incidents: the Elkhorn Fire (USFS Region 4, ID), the Quartz Ridge/Bear Creek/Mosca Fires (USFS Region 2, CO), and the Six Rivers Forest (SRF) Lightning complex (USFS Region 5, CA; Figure 1). On each incident, we observed and interviewed ISAP coaches who work to socialize the framework both before and during fire season, Incident Management Team (IMT) leaders

and members, Agency Administrators (AAs), and external partners who engaged with ISAP. We also observed ISAP instruction during National Wildfire Coordinating Group (NWCG) courses, S-520 and M-582, to understand how ISAP is formally taught to IMT members and AAs. We use the term “participants” throughout this brief to broadly refer to interviewees and to those who explicitly permitted us to observe them engage with, coach, or instruct ISAP on fires or during NWCG courses. In this document, we outline recommendations based on our findings for improved ISAP implementation and engagement. We have tailored these recommendations to specific groups—IMTs, AAs, and ISAP coaches—and include cross-cutting recommendations that apply to multiple audiences.



Figure 1 – This map shows the locations of the fires we observed during the 2023 fire season.

### Recommendations to Improve ISAP Engagement by IMTs

**Develop a formalized curriculum through NWCG to teach core ISAP concepts to IMTs and those throughout the fire response system.** Many participants suggested the required Complex Incident Management (CIM) courses for IMT members should include advanced ISAP training (i.e., at the 400-500 NWCG course level). They also emphasized the importance of introducing ISAP concepts at the 100-300 NWCG course level to build understanding before individuals become CIM-qualified Section Chiefs and Officers. For example, one participant said,

*[ISAP] is a lot of philosophical stuff...it's in the weeds with nuanced things. We need to teach those [ISAP concepts] to line officers and IMTs early in their careers.*

Additionally, teaching new firefighters ISAP concepts could provide those individuals with helpful language necessary

to ask questions, communicate risks, and better understand why ground resources are being asked to take certain actions or refrain from others.

**Leaders must encourage and support the use of ISAP through clear leadership intent.** Most participants said that if the Incident Commander (IC), Section Chiefs, and other IMT leaders actively support ISAP, the team is more likely to adopt and apply ISAP principles. As one IMT member said,

*[Our IC] has been super engaged in it since the start, and we've been really blessed to have several people on our team who understand it, embrace it, coach others, and they're bringing us along with them.*

Without clear leader's intent and support from members of an IMT, some participants said it would be likely that ISAP conversations would be de-prioritized in favor of other pressing responsibilities and commitments.

**Develop multiple ISAP facilitators on each IMT roster to ensure consistent ISAP use over the fire season.**

Many participants revealed a need for multiple personnel across functional areas that can facilitate ISAP risk and strategy conversations to ensure consistent implementation throughout the fire season given that the composition of IMTs is not consistent across incidents. Participants did not indicate that specific IMT positions were better for this role than others, rather that strong facilitation skills and neutrality are more important qualities. Some said it can be useful for an ISAP facilitator to have extensive fire experience; however, facilitators should primarily be comfortable engaging team members and guiding conversations about risk and strategy.

**Incorporate all members of an IMT's Command and General Staff in risk and strategy meetings to promote greater alignment across an IMT.**

Participants said the full benefits of team alignment cannot be achieved unless all Command and General Staff members are involved. Many participants said that ICs, Operations and Planning Section Chiefs, and Safety Officers are the primarily groups involved during risk and strategy meetings, but that leaders from other areas including Liaison, Logistics, Public Information, and Finance are not always invited to attend risk and strategy meetings. Some participants from these less-frequently included positions voiced a desire to be actively engaged earlier in critical values and strategy discussions. One Finance Section Chief said,

*It is helpful for me to understand where firefighting resources are going to be because we're going to be working and responding to any of their needs. If we have people that are located further out then that can cause some additional risk for them, and that could potentially impact my section. I then have to be prepared to work with the Safety [Officer] and Logistics [Section Chief] ... Being involved in the whole [ISAP] process gives me that heads up earlier on.*

## Recommendations to Improve ISAP Engagement by AAs

**Use pre-season planning such as Potential Operational Delineations (PODs) workshops and Quantitative Wildfire Risk Assessments to assist with understanding of and readiness to apply ISAP.** Both IMT and AA participants said that pre-season exercises could help AAs and other local fire and fuels managers determine CVAR, document fire containment opportunities, and prepare AAs to better articulate social, political, and ecological considerations that may influence decision-making to IMTs and to external partners. As one AA said,

*Ideally, before a team is even ordered, you'll have that conversation about the values, and understand why we're going to need people to respond....Then you can refine it down [on the fire] with the team and other Agency Administrators about what the strategies are that are actually going to protect those values.*

**Agencies should support AA-focused ISAP training to better prepare AAs to engage during risk and strategy conversations.**

Most study participants emphasized the importance of engaging AAs to institutionalize risk-based decision-making through ISAP on wildfires. Because AA qualifications are not governed by NWCG, it is difficult to use that venue to house ISAP training tailored to AAs. Participants said individual agencies should facilitate ISAP training to ensure that AAs can learn and apply the framework. Some suggested specific opportunities to improve ISAP engagement for AAs, including tailored training on ISAP during agency-specific AA qualification courses, ISAP modules during yearly AA refresher classes, and Incident Management Response Roundtable calls.

## **Familiarize local cooperators and partners with ISAP during the pre-season and make efforts to include them in risk and strategy conversations during incidents.**

External cooperators said that local unit leadership should brief individuals such as county sheriffs, county commissioners, local emergency managers, fire protection district leadership, and utility companies on ISAP principles before fire season. Our participants said an effort to better engage local external cooperators and partners would allow these entities to more effectively engage alongside AAs and IMTs during CVAR and strategy discussions. Engaging cooperators in the pre-season and during incidents may help ensure utility infrastructure and vulnerable WUI values are considered and protected if it is safe and effective to do so.

## **Recommendations for ISAP Coaches and Developers**

### **Explore opportunities to better integrate ISAP with the Wildland Fire Decision Support System (WFDSS) and clarify how ISAP currently engages with that system.**

Several participants, including AAs and local fuels planners, were unclear how ISAP incorporates WFDSS decisions or informs them. Some participants commented on how much time and effort WFDSS requires for each fire and wondered if ISAP would be additional, rather than complementary, to WFDSS. Participants said that clarifying ways that ISAP currently integrates with the WFDSS, and how it might integrate with next-generation WFDSS, could help address some hesitation toward adopting ISAP.

**Sustain in-person coaching during and before incidents to help new users learn ISAP and improve the framework's implementation.** Participants expressed the importance of ISAP coaching to help new users learn and apply the framework. They noted that there is a learning curve to consistently and effectively operationalize ISAP, which has yet to be fully institutionalized, suggesting the importance of ongoing ISAP training. In particular, consistent coaching on CVAR and probability of success may be needed to check biases and assumptions in fire management. As one participant said,

*[ISAP] just needs to keep being used and keep getting buy-in from everybody by having continuous trainings and presentations of the process. Having ISAP coaches come out, even to units, to give presentations and to give trainings, and to have those units commit to use the process...that, to me, would be the biggest thing.*

## **Cross-Cutting Recommendations**

**Use morning operational briefings to promote vertical alignment by utilizing ISAP language to communicate risks and strategic intent throughout the chain of command.** Some participants suggested that IMTs and AAs could use morning operational briefings to outline the decision-making rationale behind specific strategic choices. By using ISAP language (critical values at risk, strategic actions, risks to responders, and probability of success) to anchor morning briefings and communicate strategic intent, participants said AAs and IMTs could better promote vertical alignment from line officers to the field-level personnel charged with executing strategies.

**Clearly document risk and strategy meetings and conversations to promote strategy longevity through team transitions.** Several participants noted challenges with information transfer between teams. Participants said this is often due to inconsistent direction and systems for documenting, storing, and transferring ISAP records, including strategic risk assessments and discussion notes from risk and strategy meetings. To promote strategic continuity between teams, some participants specifically recommended designating an IMT member to be responsible for managing strategic risk assessment documents and discussion notes. This individual would also be responsible for working with an incoming IMT to transfer these documents and explain the information within them during a team handoff.

**Improve meaningful and appropriate collaboration with Tribal Nations during incidents.** Some participants said there is a need to improve engagement with Tribal Nations during CVAR conversations. Specifically, participants recommended holding one-on-one CVAR meetings with individual Nations before convening a larger group, and ensuring facilitators respect the unique sensitivities that may exist, particularly around sharing and prioritizing cultural values on strategic maps. Some recommended that local boundary-spanning individuals who have established relationships with Tribal Nations be present during these meetings to facilitate effective engagement.



This report was funded by USDA Forest Service State, Private, and Tribal Forestry, Office of Fire and Aviation Management (22-CA-11132543-056) and USDA Forest Service Rocky Mountain Research Station (19-JV-11221636-170).

Contact: Ty Aldworth - [Tyler.Aldworth@colostate.edu](mailto:Tyler.Aldworth@colostate.edu)  
June 2024 • CFRI-2408

Authors: Aldworth, T.<sup>1</sup>, Buettner, W.C.<sup>2</sup>, Greiner, M.<sup>2</sup>, Beeton, T.<sup>1</sup>, Schultz, C.A.<sup>2</sup>

<sup>1</sup>Colorado Forest Restoration Institute, Colorado State University  
<sup>2</sup>Public Lands Policy Group, Colorado State University