



Implementing the Incident Strategic Alignment Process on the 2023 Six Rivers Lightning Complex

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. 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.

Approach

In partnership with ISAP developers and the United States 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 the ISAP on three incidents during the 2023 fire season. Field observations on, and in-depth interviews with, ISAP coaches, IMTs, AAs, and external partners who engaged with the ISAP on the Six Rivers Lightning Complex (referred to as the SRF Lightning Complex) in Northern California revealed factors that facilitate and frustrate the implementation of the ISAP during wildfire response, and offered valuable lessons learned for the wildfire community. The Smith River and Happy Camp Complexes, which occurred adjacent to the SRF Lightning Complex, indirectly affected strategy discussions. However, we focus this brief on findings exclusive to the SRF Lightning Complex (Figure 1).

Case Study 3/3: The SRF Lightning Complex¹

The first fires of the SRF Lightning Complex were ignited by lightning on the evening of August 14, 2023 on the Six Rivers National Forest (NF). Twenty-seven lightning fires were eventually discovered and grouped into a single, ‘complexed’ incident.² The complex was managed by two successive Type 1 IMTs (August 19-September 15), followed by two successive Type 2 IMTs (September 16-October 9). On October 10, the fire was handed off to a Forest-level Type 3 IMT, and eventually handed back to the local Districts.

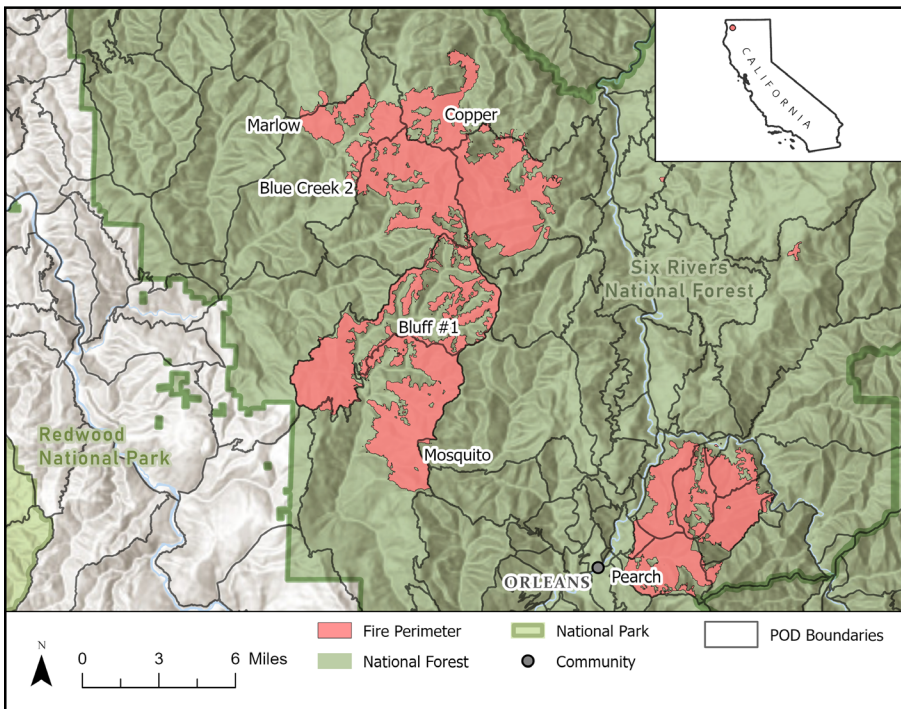


Figure 1: Map showing the largest fires within the SRF Lightning Complex after they had been linked by the strategic firing operation. Adjacent complexes and smaller ignitions within the SRF Lightning Complex have been intentionally excluded from this map to help the reader focus on the fires discussed in this brief.

Nearly all the fires within the complex were located in challenging, rugged terrain. The Pearch Fire posed an immediate near-term risk to critical values due to its proximity to the town of Orleans. Bluff #1, Mosquito, Blue Creek #2, Marlow and Copper fires (known hereafter as the ‘main group’) posed potential longer-term risks to the Yurok Reservation in the event of continued warming and drying and a significant east wind event.

Between August 27-30, the first Type 1 IMT conducted a defensive firing operation along the western edge of the Pearch Fire to protect the town of Orleans and began to construct indirect line around the main group of fires to the west utilizing Potential Operational Delineation (POD) boundaries. The first Type 1 team transitioned to a second Type 1 team on September 2. Concurrently, a rainstorm significantly reduced potential fire behavior in the area. This rain event provided an opportunity to re-introduce culturally significant and ecologically beneficial fire onto the landscape. The Forest, IMT, and local Tribal fire managers initiated a second, strategic firing operation on September 12 using the improved POD boundaries as holding features to link the main group of fires together and accomplish cultural and ecological

1. The timeline for this fire was developed from our observations (which took place from September 1 – 6), interviews, and documentation located on the website “inciweb.wildfire.gov”.
2. A group of individual fires can be ‘complexed’ when there are multiple fires and they can be combined under the unified command structure of a single IMT. This is often done to increase organizational efficiencies. A group of fires may or may not be ‘complexed’ due to a host of contextual factors. For more information visit, https://dem.nv.gov/uploadedfiles/demnvgov/content/raining/ics400_completesm_sept2011-part2.pdf

objectives (see Figure 1). This firing operation was completed by a Type 2 team who took command on September 16. The final complex size was over 41,000 acres.

Throughout the incident and across team transitions, the ISAP was used to conduct risk and strategy dialogues between the Six Rivers NF, each IMT, and local partners, including members of the Hoopa, Yurok, and Karuk Nations.

Facilitating and Frustrating Factors Impacting ISAP Implementation

Facilitating Factors

Long-standing relationships between the Six Rivers NF, Tribal Nations, and local communities were cited by most participants as a key factor that facilitated the ISAP risk and strategy dialogues. Participants said formalized memoranda of understanding and informal personal relationships allowed the Tribal Nations, IMTs, and Six Rivers NF to navigate culturally sensitive conversations about critical values and build alignment between these parties on the purpose, need, and approach for the chosen strategies. As one participant said,

“We were able to hear from [the District Ranger] about his concern in this area. We heard from the Yurok Fire Chief what his concerns are. We heard it from the Hoopa Tribe... If you can get the right players there, the right decision-makers, [the ISAP] works great. It really does.”

On the SRF Lightning Complex, our participants said the strategy of putting significant amounts of fire onto the ground after the rain event differed from normal practice in the area of taking the opportunity to directly suppress what fire remained. The use of advanced fire behavior models, weather forecasts, historical data, and Risk Management Assistance (RMA) analytics allowed the IMT to frame potential strategic actions in relation to their probability of success and develop a cohesive rationale to share with boots-on-the-ground firefighters about why putting fire back on the landscape was a risk-informed approach. One participant said,

“Leaning into [probability of success] allowed [the team] to have some really good conversations, including with crews who are on the ground.”

Frustrating Factors

Most participants said that vertical alignment between IMTs, AAs, and ground-level firefighting resources was challenging at times because the proposed strategy was different than common practices, which resulted in some hesitancy among ground resources. Due to this hesitancy, two of the IMTs and the Six Rivers NF conducted additional meetings with operational leaders, including hotshot superintendents and crew bosses, in an attempt to better engage firefighters and discuss the strategy. As one participant said,

“We went to the main base camp and had a big meeting with branch directors, the other Ops chiefs, the divisions, and the hotshot superintendents. We were asking them to do something different than what they would have normally done. There was pushback, and it came from the ground... I don't know if we changed everybody's mind, but we did have some hotshot superintendents come and tell us afterwards, ‘We buy into this, we want to do this.’”

Another challenge a few participants shared was that some decisions appeared to change after risk and strategy meetings. External partners in particular said they felt changes to decisions sometimes occurred after meetings and that the justification for these changes were not always well documented. They noted this sometimes impacted the alignment between fire managers and was frustrating to not feel included in the decision-making process.

Conclusion

The ISAP was used to build a common operating picture of CVAR between IMTs, AAs, and local community partners including Tribal Nations and was used to develop, communicate, and execute a strategy to safely and effectively re-introduce culturally significant and ecologically beneficial fire to the landscape. Overall, participants indicated broad support for the ISAP and said long standing relationships between the Six Rivers NF, Tribal Nations, and other local communities, in combination with advanced analytics and strategic fire planning tools facilitated effective use of the ISAP. However, some said vertical misalignment between IMTs and ground resources on strategic intent and some challenges in communication between the IMTs, AAs, and other partners frustrated the ISAP.

SRF Lightning Complex Lesson Learned – Using The ISAP To Facilitate Engagement With Tribal Nations During CVAR Conversations

The SRF Lightning Complex demonstrated how the ISAP should be reflexive to the local context. Several participants reported room for improvement in the critical values conversations between the IMT and Tribal Nations. Rather than relying on an IMT member to facilitate CVAR conversations, participants recommended utilizing trusted community-connected partners to facilitate meaningful and culturally appropriate critical values conversations between fire managers and Tribal representatives. They added that Tribal engagement should begin long before a fire ignites so incident-specific critical values conversations can take place with the appropriate sensitivity and respect. Our participants further recommended that individual Tribal Nations should receive their own space to communicate their values to an IMT or land management representative, rather than have those conversations together in a communal setting. One participant advised,

“Be sensitive to the fact that sometimes when we're talking about multiple Tribes, that bringing them all together and then asking for information about one Tribe's sacred site is not the right way to ask those questions.”



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