



THE WILDFIRE INTELLIGENCE CENTER: TRANSFORMING OUR APPROACH TO WILDFIRES

Photo source: Earth Fire Alliance; Firesat

By Eric Horne, National Policy Director, Megafire Action

Peak fire season is upon us once again. Across the West, communities are watching the sky turn orange, feeling their lungs fill with smoke, evacuating their homes, and mourning the loss of irreplaceable ecosystems. Despite ever-growing resources, federal, state, and local wildfire responders are not equipped with the necessary tools to succeed. Tackling the megafire crisis requires rethinking our approach to “good fire”, leveraging the best available technology, and creating a transformative federal office – the Wildfire Intelligence Center.

“Good fire” – wildfires of the historically proper intensity – reduce the risk of catastrophic megafires by removing flammable vegetation (fuels) that drive fires out of our control. Good fire has been severely disrupted over the past century due to a combination of factors including overzealous fire suppression policies, the expansion of development into wildlands, and climate change. The result: wildlands in the Western United States have not

been burning at historically proper intervals and intensity to maintain healthy, fire-adapted ecosystems.



Despite historic increases in funding for forest restoration treatments in the Bipartisan Infrastructure Law and Inflation Reduction Act, inadequate data/decision support services for fire/land management agencies mean precious funds are too often spent on “random acts of restoration”. In order to avoid being a day late and a dollar short in meeting our restoration goals, we must harness the power of data and technology.

GOOD DATA, GOOD FIRE

In addition to treating forests, authorities must know which fires, or portions thereof, can be classified as good fire and be allowed to burn with proper oversight, and which fires pose too great a risk of becoming megafires and must be suppressed. To make these critical decisions, on-the-ground decision-makers of all jurisdictions require real-time access to high-fidelity weather data, fire spread models, emergency response tools, and other critical intelligence.



New geospatial data tools and machine learning technology are improving real-time intelligence on forest conditions and wildfire risk, which can prove essential in predicting whether a fire will be beneficial or destructive.

Source: Truckee Fire 2024 CWPP

These tools can also help land managers target their forest restoration treatments on the highest-impact areas, essential for making the most of inadequate budgets. Meanwhile, advancements in fire detection – such as high resolution satellite imagery and AI-enabled camera towers – are now commercially available and allow for near-instantaneous detection of new wildfires. These technologies can enable better-informed wildfire decisionmaking and resource allocation, giving us hope that catastrophic fires can be brought under control, *but there remain major barriers to realizing their potential.*

WHY WE NEED A WILDFIRE INTELLIGENCE CENTER

Although advances in wildfire technology hold great promise, available technological services are highly fragmented across more than 50 federal programs, all with strained budgets. Simply put, *the technology is available, but the government currently lacks the ability to get these tools in the hands of those who desperately need it, when they need it.* To address this pressing need, the recent landmark Wildland Fire Mitigation and Management Commission Report calls for a centralized federal Wildfire Intelligence Center to leverage cutting edge technology and improve the interoperability and effectiveness of the many entities engaged in wildfire work.

Wildfires burn across jurisdictional lines, necessitating cooperation between local, state, tribal, and federal agencies, and also between the private and public sectors. The Wildfire Intelligence Center would provide decision support across the entire wildfire lifecycle of

prevention, suppression, and recovery efforts, thereby minimizing inequalities between different jurisdictions and allowing stakeholders to retain their autonomy while holistically addressing the wildfire crisis.

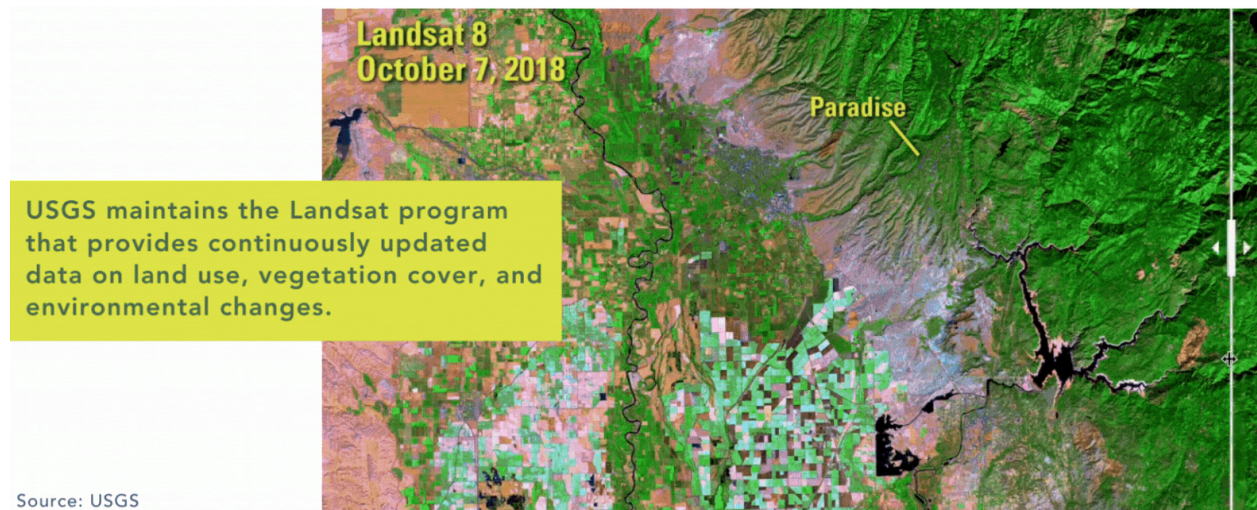
Crucially, the Center would guide land managers in deciding at the moment of detection whether to put out a new fire based on a variety of factors, including topography, humidity, fuel loads, and community risk. Instead of trying to do the impossible and suppress all wildfires, we must instead aim to minimize negative outcomes like lives lost, homes destroyed, and ecosystems suffering excessive damage, says Annie Schmidt, advisor to the NWCG Wildland Urban Interface Mitigation Committee.

Under a unified and improved decision support system, state, tribal, and local agencies would retain their autonomy and their ability to experiment with new technologies and approaches. “While this model would involve some unification of services, the Commission underscored that it would in no way centralize the overall decision authority of participating agencies and entities,” wrote the WFMMC. Moreover, to ensure that every major stakeholder has a voice, the Center would also have a board of directors with representatives from relevant agencies, departments, and other entities.

BRINGING THE CENTER TO LIFE



A natural home for this entity would be the United States Geological Survey and/or the National Oceanic and Atmospheric Administration. Land management agencies such as the Forest Service will be critical to the success of the Center, but unlike land management agencies, which oversee only federal lands, these USGS and NOAA already work across jurisdictions and study land regardless of who owns it. Also unlike land management agencies, whose charters don't allow for such wide-ranging activities, the core missions of USGS and NOAA are to analyze real-time data across the nation.



NOAA, on the other hand, releases maps that forecast the path of wildfire smoke, even from sources as far away as Canada. In July, the Department of the Interior and the Forest Service signed an agreement with NOAA to use NOAA satellites' advanced remote sensing capabilities to improve the speed and accuracy of wildfire detection, signaling the federal government's openness to cross-jurisdictional innovation.

Momentum in Congress for resolving the megafire crisis has never been greater, with numerous Members of Congress introducing bills that include a Wildfire Intelligence Center. For example, the bipartisan Fix our Forests Act – which passed out of the House Natural Resources Committee in June and was endorsed by our organization – includes a "Fireshed Center" that would "focus on the assessment and prediction of fire in both the built and natural environment, reduce fragmentation across Federal land management agencies, promote coordination and data sharing, streamline procurement processes, and provide

publicly accessible information to support planning for both fire response and recovery.” In July, the House of Representatives passed an appropriations report urging federal agencies to adopt “proven, existing, commercially available advanced decision support tools and analytics”. The ongoing fire season creates a unique atmosphere of urgency in Washington to get the best possible tools in the hands of our frontline wildfire responders, and quickly.

Megafire Action is a non-profit dedicated to ending the crisis of destructive wildfires by promoting a holistic approach to natural lands management, wildfire response, and community resilience to ensure that fire-dependent ecosystems and fire-affected communities thrive.