CLIMATE & WILDFIRE INSTITUTE 2024 SIGNATURE CONVENING

Wildfire Data & Technology: Reducing Barriers & Building Resilience
October 16-17, 2024
Lake Tahoe, California

2024 CONVENING REPORT

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ABOUT CWI

ACCELERATING SOLUTIONS TO THIS ERA'S CLIMATE & WILDFIRE CHALLENGES

The Climate & Wildfire Institute (CWI), a 501(c)3 nonprofit organization, connects science to public policy and decision-making to accelerate solutions to a fast-changing climate. As a boundary organization, we bring communities and cross-sector leaders together, putting science into action to build climate and wildfire resilience. Bringing climate and wildfire science to policy and decision-makers speeds the implementation of science-based approaches at the regional and local levels, a critical component to ensuring solutions are practical and accessible to even our more vulnerable communities.

CWI SIGNATURE CONVENINGS

CWI's Signature Convenings bring together fire experts, regional partners, industry leaders, and on-the-ground practitioners to accelerate solutions to this era's most pressing climate and wildfire challenges. This year's convening examined how wildfire data and technology intersect with policy and practice to bridge the gap between innovation and implementation.

SPECIAL ACKNOWLEDGEMENTS

Staff support for this convening was generously funded by the Coalitions and Collaboratives (COCO)'s Action, Implementation & Mitigation (AIM) Grant. CWI thanks the following contributors who provided planning and technical logistics, industry expertise, and photography and videography services in support of this convening.

> Mikel Robinson, Founder, Full Scope Management, Inc.
> Bethany Hannah, Executive Director, The American Wildfire Experience
> Chris Bartkowski, Founder, Generikal

2024 SPONSORS

Thank you to our incredible sponsors - Fire Aside and the California Tahoe Conservancy - for your generous support of this year's convening. Your commitment to advancing wildfire resilience across the Western United States inspires us all, and we are deeply grateful for your partnership in making this event a success.

EXECUTIVE SUMMARY

In response to the growing need for data-informed, collaborative wildfire resilience strategies, CWI's 2024 Signature Convening, "Wildfire Data & Technology: Reducing Barriers & Building Resilience," assembled over 60 experts, practitioners, community leaders, and policymakers to explore how data and technology can better serve communities and ecosystems facing escalating fire risks. The two-day event provided a platform to discuss: 1) The confluence of wildfire data and technology with beneficial fire, 2) Bridging the gap between innovation and implementation, and 3) Perspectives on data and technology in policy and practice, focusing on actionable pathways forward. The convening's objectives were threefold:

IDENTIFY DATA AND TECHNOLOGY GAPS AND OPPORTUNITIES FOR ENHANCED RESILIENCE

Through lightning talks, panel discussions, and collaborative breakout sessions, participants examined current limitations in wildfire data systems and identified priority areas where technology could support more effective fire management, public health outcomes, and community resilience.

PROMOTE INCLUSIVE AND ACTIONABLE DATA PRACTICES

Recognizing the diversity of communities affected by wildfires, CWI sought to foster dialogue on inclusive data practices, including data sovereignty for Indigenous communities and equitable access to resilience resources for underserved areas. Discussions emphasized the importance of public engagement and culturally respectful data-sharing models that build trust and empower communities.

LAY THE FOUNDATION FOR THE SPRING 2025 DATA CONVENING

Participants' insights will shape future agendas, including CWI's Spring 2025 Data Convening, ensuring workshops are tailored to produce actionable outcomes and facilitate cross-sector collaboration to drive wildfire resilience.

This report synthesizes the convening's key discussions, takeaways, and recommendations, setting the stage for continued momentum as we prepare for our Spring 2025 Data Convening. CWI and its partners are committed to creating a more resilient future by advancing data-informed wildfire resilience strategies.

CONVENING SUMMARY

PANELS & PRESENTATIONS

Over two days, attendees engaged with four expert panels, two individual presenters, and each other during breakout sessions and evening networking opportunities facilitated by CWI. Discussions emphasized the need to reduce risk around the application of innovative technologies and explored strategies to maximize impact with minimal data. While some participants noted that the wildfire community already has sufficient data, models, and a clear understanding of needed actions, others stressed the value of new data and technology innovations to guide policy and implementation in this rapidly evolving field.

WELCOME & OPENING REMARKS

The convening welcome and opening remarks highlighted the importance of cross-sector collaboration and the commitment to co-producing solutions that prioritize both cultural knowledge and technological innovation in wildfire resilience. Speakers included:

> Herman Fillmore, Director, Culture & Language Resources, Washoe Tribe
> Ken Alex, Board President, Climate & Wildfire Institute
> Marissa Christiansen, Executive Director, Climate & Wildfire Institute

CWI Executive Director welcomes attendees and provides opening remarks on day one of the convening.

CONVENING SUMMARY

PANEL ONE: FRAMING PERSPECTIVES ON THE CONFLUENCE OF DATA AND TECHNOLOGY IN WILDLAND FIRE

The first panel explored ways to reduce barriers to wildfire resilience through accessible data and technology, emphasizing that data should drive societal impact and cultural shifts. İlkay introduced the Wildfire Science & Technology Commons as an example of how open data can foster collaboration across scales. Acceleration of progress is the goal, but understanding what is being slowed down — through awareness and insights from data and technology innovations — is crucial to the meaningful application of solutions.

Through individual introductions and a moderated Q&A, panelists explored the value of accessible data and technology in supporting beneficial fire strategies. Some highlights include a need to incorporate different knowledge types, co-production of knowledge, and communication of data and information to communities and decision-makers in a manner that is both engaging and relatable to the public. Data infrastructure is needed to retain, update, and share information. Speakers included:

> İlkay Altıntaş (Moderator), Board Member, Climate & Wildfire Institute
> Kimberley R. Miner, Associate Program Manager, Wildland Fire Program, National Aeronautics & Space Administration (NASA)
> Scott Gregory, Deputy Director of Technology, California Department of Forestry and Fire Protection (CAL FIRE)
> Christina Restaino, Director, University of Nevada, Reno, Living with Fire
> Rhiana Jones, Environmental Director, Washoe Tribe of California and Nevada

Panel one speakers kick off the convening with perspectives on the confluence of data and technology in wildland fire.

PANEL TWO: EXPLORING DATA AND TECHNOLOGY IN POLICY AND PRACTICE

The second panel highlighted key policy and practical challenges related to putting good fire on the ground, mitigating smoke impacts on human health, complexities of multi-jurisdictional efforts, and sociocultural barriers to implementation. Speakers included:

> Michael Wara (Moderator), Senior Director of Policy, Stanford University
> Frank Frievalt, Director, Wildland-Urban Interface (WUI) Data Commons
> Teresa Feo, Research Director & Senior Policy Advisor, Megafire Action
> Kim Seipp, Managing Director of Science & Research, Blue Forest
> Erin Ernst, Natural Resources Division Director, California Tahoe Conservancy

Panelists shared insights about how to bridge policy gaps with data-backed investments, asset risk reduction, and regional public-private partnerships. Individual presentations illustrated the various ways succinctly communicated data can inform comprehensive wildfire policy and community-focused action. The discussion underscored the role of storytelling and data in community engagement, with panelists agreeing on the importance of using real-time models and data to inform policymakers and foster public understanding of the benefits and risks associated with fire management.

AFTERNOON OPENING PRESENTATION: BRIDGING THE GAP BETWEEN INNOVATION AND IMPLEMENTATION

The afternoon opening presentation discussed how innovative technologies are transforming the pace and scale of fuel reduction projects to prevent catastrophic wildfires, highlighting BurnBot's AI-enabled, human-operated systems that automate labor-intensive tasks and enable precise prescribed burns on challenging terrains. The presentation also covered BurnBot's holistic approach to fuels treatment, successes in treating thousands of acres, and plans to optimize costs and workforce capacity while also addressing ecological and community needs. Speakers included:

> Anukool Lakhina, CEO, BurnBot

Panel two speakers share their expertise on wildfire data and technology in policy and practice.

PANEL THREE: REGIONAL CASE STUDY - PACE AND SCALE OF CURRENT DATA AND TECHNOLOGY SOLUTIONS

The third and final panel for day one offered a regional case study, focused on practical, scalable tools and models for community resilience. The panel highlighted regional innovations in Marin County and the Tahoe Sierra (see Appendix II) that can inspire broader applications. Barriers to innovation – such as limited resources, regulatory constraints, and weak mandates for private sector partnerships to advance wildfire technologies – were presented to frame the conversation. Speakers included:

> Chris Anthony (Moderator), Strategic Wildfire Consultant
> Amy Berry, CEO, Tahoe Fund
> Hussam Mahmoud, Professor of Infrastructure, Colorado State University
> Jason Brooks, Co-Founder, Fire Aside
> Mark Brown, Executive Officer, Marin Wildfire Prevention Authority
> Eric Horntvedt, Wildfire Prevention Manager, Truckee Fire Protection District

Panelists shared examples from their communities, illustrating efforts to overcome these key barriers and drive progress. They emphasized the importance of funders and investors willing to support innovative approaches, even without guaranteed success. Notably, the communities represented on the panel were high-income areas, underscoring the need for scalable wildfire management models and accessible data services for underserved regions. Panelists agreed that increased collaboration and streamlined processes, alongside funding innovations, are essential to de-risk wildfire resilience technologies and advance universal, impactful solutions.

KEYNOTE PRESENTATION: HOT, FAST OR SLOW, COOL - A FIRE INTENSITY MANAGEMENT MODEL

The day concluded with a keynote presentation on a holistic, long-term strategy for wildfire resilience, recognizing fire as a fundamental ecological process. Key themes included shifting from suppression to integrating "good fire" to manage landscapes, backed by a $210 million investment from the Moore Foundation. The 12-year action plan includes three primary strategies: pre-fire community and ecosystem interventions, early fire response, and rethinking wildfire through a "telescope" lens for future resilience. The presentation underscored a global "fire metasystem" approach, engaging various sectors (policy, public health, technology, finance, and academia) in reimagining wildfire management for the next 50 years. The ultimate vision is a national wildfire strategy, moving from crisis response to embracing fire as a managed ecological process by 2075, with FireSat and other emerging technologies leading data-driven decision-making. Speakers included:

> Kate Dargan, Wildfire Strategist

CONVENING SUMMARY

FILM SCREENING & DISCUSSION

Day one concluded with a casual dinner and optional film screening, providing additional space for networking and discussion. Two short films were presented, followed by a facilitated discussion by Bethany Hannah, Former Deputy Director of Operations and External Affairs at CWI.

CAN AI HELP FIREFIGHTERS MANAGE WILDFIRES? | FIRESAT

FireSat will give firefighters and researchers access to high-resolution imagery, updated every 20 minutes, and analysis by AI models optimized to detect wildfires 1/400th smaller than current early detection satellites.

THE FIRE POPPY

"My focus is breaking down the barriers that keep people from the land. Teaching people, of all backgrounds, that fire is a tool for good, medicine for the land and its people. It's use, a responsibility."

- Sasha Berleman, Ph.D.

"As much as we're a water planet, we're a fire planet."

- Kate Dargan, Wildfire Strategist

CWI wraps up day one of the convening with an optional film screening and additional networking opportunities.

PANEL FOUR: PERSPECTIVES ON DATA IN POLICY AND PRACTICE - DEFINING AND ACHIEVING COMMUNITIES' NEEDS

This final panel brought in insights and reflections from day one and highlighted the importance of merging talent development with data and technology innovation to address wildfire resilience challenges effectively. Panelists emphasized the need for open, accessible data systems to empower under-resourced communities, ensuring equitable access to tools and information critical for local decision-making. The discussion underscored the benefits of convergence research — integrating knowledge across disciplines to drive scalable, sustainable solutions grounded in open science. Participants also discussed the role of cultural values in prioritizing land management, with a focus on respecting Tribal sovereignty and safeguarding sensitive information. Ultimately, the panel called for a common platform to unify data and foster shared governance, where organizations like CWI can lead with humility, inclusivity, and a commitment to actionable insights. Speakers included:

> İlkay Altıntaş (Moderator), Board Member, Climate & Wildfire Institute
> Jessica McCarty, Biospheric Science Branch Chief, National Aeronautics and Space Administration (NASA)
> Patrick Wright, Director, California Wildfire & Forest Resilience Task Force
> Margo Robbins, Executive Director, Cultural Fire Management Council
> Cat Fong, Associate Researcher, National Center for Ecological Analysis & Synthesis (NCEAS)
> Chris Anthony, Strategic Wildfire Consultant

Panel four speakers, audience members, and CWI staff share their insights and reflections on day two of the convening.

To close the convening, CWI Executive Director, Marissa Christiansen, synthesized insights gained over the two days, with closing remarks emphasizing the importance of continued partnership and innovation. Closing with a collective call-to-action, Marissa drew on participant reflections to underscore the need for ongoing collaboration across sectors, a commitment to inclusive and culturally respectful data practices, and a focus on scalable technology solutions. The insights and relationships built during these two days will guide CWI and its partners as they continue to develop a resilient future, bringing communities, data, and technology together in the face of evolving wildfire challenges.

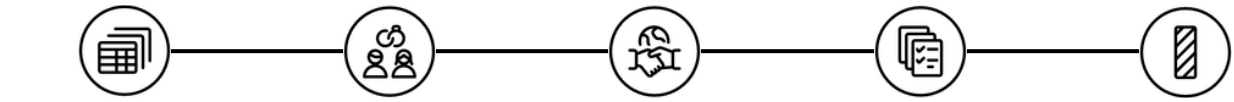
CONVENING SUMMARY

BREAKOUT SESSIONS

The breakout sessions at CWI's 2024 Signature Convening provided participants with a collaborative space to explore the practical applications of data and technology for wildfire resilience. Focused discussions revealed the importance of user-centric data systems, cross-sector partnerships, inclusive communication strategies, and sustainable, scalable solutions to foster landscape resilience and community support. These conversations highlighted the interconnected roles of data integration, community engagement, and policy adaptation in building comprehensive fire resilience strategies.

A convening attendee smiles during a breakout session conversation in between panel presentations.

KEY TAKEAWAYS



DATA & TECHNOLOGY INTEGRATION FOR PRACTICAL USE | COMMUNITY ENGAGEMENT & KNOWLEDGE SHARING | EXPANDING PARTNERSHIPS & INCLUSIVITY | ACTIONABLE OUTPUTS & SCALABILITY | OVERCOMING BARRIERS TO IMPLEMENTATION

DATA AND TECHNOLOGY INTEGRATION FOR PRACTICAL USE

Application-Driven Data Systems: Participants emphasized the need for data systems designed with end users in mind, advocating for a user-centered design. A proposed approach is to create specific user cases and reverse-map what a useful design would require, ensuring that solutions are actionable.

Breaking Down Data Silos: Collaboration across agencies, particularly at local, state, and federal levels, was emphasized. Ensuring data consistency, bridging public-private gaps, and avoiding duplication will enhance data utility and trust.

Improving Smoke Communication: There is a need for real-time smoke models and accessible communication about smoke impacts and benefits of prescribed burns to build public trust. This includes focusing on both wildfire and prescribed fire emissions to show the relative benefits of managed fire.

COMMUNITY ENGAGEMENT AND KNOWLEDGE SHARING

Support for Private Landowners: Participants noted a gap in support for private landowners who face unique challenges in fire and smoke management. More targeted resources, data access, and guidance on fire-resilient practices could foster broader landscape resilience.

Storytelling and Education: Data should be packaged with compelling, data-backed storytelling to communicate effectively with diverse stakeholders, from local communities to policymakers. Storytelling that incorporates human elements and long-term benefits can foster greater public understanding and support for fire resilience efforts.

EXPANDING PARTNERSHIPS AND INCLUSIVITY

Tribal Partnerships and Data Sovereignty: Indigenous perspectives and data sovereignty must be integrated into data-sharing frameworks to respect Tribal control over sensitive information. Developing Tribe-specific data hubs controlled by Indigenous communities could enhance cultural alignment.

Increasing Practitioner and Private Sector Engagement: Bringing more fire practitioners and insurance representatives into the conversation was emphasized. Insurance partnerships were

viewed as a potential avenue to support community resilience by leveraging risk data and underwriting incentives for proactive fire management.

ACTIONABLE OUTPUTS AND SCALABILITY

Scalability and Systematic Solutions: There is a strong demand for scalable and sustainable solutions that can be adapted to varied landscapes and communities. Replicable frameworks, vetted models, and case studies of successful implementations could help guide regional adaptation and build support among diverse stakeholders.

OVERCOMING BARRIERS TO IMPLEMENTATION

Risk Mitigation and Policy Shifts: Policies need to support risk-sharing mechanisms, particularly for low-resource communities and high-risk areas. Streamlining environmental regulations and reducing bureaucratic roadblocks could also accelerate the adoption of fire resilience practices.

Cost-Benefit Models and Investment Appeal: Developing models to quantify the economic and health benefits of wildfire resilience (e.g., avoided costs from reduced smoke impacts) can attract investment and legislative support.

Attendees enjoy sharing their perspectives during breakout sessions on day one of the convening.

CONVENING HIGHLIGHTS & RECOMMENDED NEXT STEPS

CWI's 2024 Signature Convening emphasized the pivotal role of data and technology in advancing wildfire resilience, bridging Indigenous knowledge and cutting-edge innovation to develop solutions that serve communities, ecosystems, and policymakers. The following thematic highlights and corresponding pathways forward emerged from this year's convening in an effort to progress towards more fire-resilient future.

THEMATIC HIGHLIGHTS	RECOMMENDED PATHWAYS FORWARD
INTEGRATING INDIGENOUS KNOWLEDGE WITH INNOVATION Incorporating Indigenous knowledge into data-driven practices is essential for restoring fire-adapted landscapes. Co-producing knowledge with Indigenous groups can ensure that technological advancements not only inform and respect cultural practices but also remain responsive to community-specific data needs.	**SUPPORT DATA SOVEREIGNTY AND INDIGENOUS-LED INITIATIVES** Recognize and support Indigenous knowledge frameworks, including data sovereignty, allowing communities control over their data. Partner with Indigenous-led initiatives to implement culturally-aligned practices, co-producing knowledge that respects and leverages traditional ecological insights in fire resilience.
DATA AS ESSENTIAL INFRASTRUCTURE FOR WILDFIRE RESILIENCE Data powers informed decision-making around wildfire resilience, yet the accessibility, accuracy, and maintenance of this data remains challenging. Beyond conventional measures like "acres treated," new types of data and metrics around social, cultural, and ecological impacts should be considered and applied to holistically assess resilience outcomes.	**ESTABLISH DATA INFRASTRUCTURE FOR REAL-TIME PUBLIC ACCESS** Build data infrastructure that provides real-time, user-friendly information on fire risks, smoke movement, and public health impacts. Utilize IoT, predictive smoke modeling, and visualization tools to communicate the public health considerations and safety measures associated with controlled burns and proactive wildfire management. Ensure tools increase transparency and public understanding, emphasizing holistic, multi-benefit outcomes.

CONVENING HIGHLIGHTS & RECOMMENDED NEXT STEPS

THEMATIC HIGHLIGHTS

CROSS-SECTOR COLLABORATION FOR A FUTURE-READY WORKFORCE

As wildfire risk grows with climate change, collaboration across fire agencies, tech companies, health organizations, and local communities is essential. Developing a diverse and tech-savvy workforce will support the integration of technology into practice. Improved coordination between federal, state, and local partners, and among private and public sectors, is crucial to prevent redundancy and advance scalable solutions in fire management.

POLICY AND PRACTICE SHIFTS ENABLED BY DATA

Moving from a suppression-centered model to proactive, data-informed fire management is vital. Federal and state policies must evolve to support good fire practices, including prescribed burns. Data-backed cost-benefit analyses reveal that health and ecological benefits can drive policy change and public acceptance, making fire management strategies sustainable in the long term.

RECOMMENDED PATHWAYS FORWARD

PRIORITIZE WORKFORCE DEVELOPMENT AND COMMUNITY ENGAGEMENT

Invest in developing a workforce skilled in technical and cultural fire management to meet rising fire resilience needs. Education programs should empower community involvement in land stewardship, especially in underserved areas, and promote greater understanding of ecological and cultural impacts.

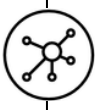
SCALE INNOVATION AND TECHNOLOGY FOR UNIVERSAL ACCESS

Support scalable, data-driven wildfire management models that can be deployed across diverse communities, including those with limited resources. Highlight successful applications of AI, IoT, and other emerging technologies to address complex wildfire challenges. Policy adjustments should facilitate the scaling of these innovations for broader impact, particularly in high-need areas.

"Data is infrastructure. Data is wisdom."

- Insights from convening attendees

CONVENING HIGHLIGHTS & RECOMMENDED NEXT STEPS

THEMATIC HIGHLIGHTS	RECOMMENDED PATHWAYS FORWARD
 OPPORTUNITY FOR CENTRALIZED KNOWLEDGE PLATFORMS Centralized, open-access, and user-centered platforms for storing and sharing data are critical for enhancing transparency and public-private collaboration. Providing real-time, integrated data on fire risks, smoke movement, and public health impacts can augment current fire management and response efforts. Enhanced fire models and visualization tools can bridge gaps between communities, policymakers, and practitioners, building trust and encouraging data-driven action. Importantly, these platforms must strike a balance between aspirations for open collaboration and respect for Indigenous data sovereignty.	 ENCOURAGE PUBLIC-PRIVATE PARTNERSHIPS AND DATA INTEGRATION PLATFORMS Drive innovation through partnerships between tech companies, public agencies, and local communities, supported by funding programs that mitigate the risks of new technologies and facilitate pilot projects in high-need areas. Platforms should enable seamless sharing of information on fire risks, smoke, and public health impacts, ensuring that data-driven tools and insights are accessible to communities and decision-makers alike.

Achieving wildfire resilience demands an integrated approach that leverages diverse expertise, values Indigenous leadership, and builds bridges between data, technology, and community needs. CWI remains steadfast in its commitment to fostering collaboration and amplifying the efforts of its partners.

To effectively implement the Recommended Pathways Forward, securing adequate funding and capacity is essential. Support from philanthropy, government, and private sectors is crucial to address existing gaps in infrastructure, workforce development, and technology deployment. While the pathways outlined offer clear steps towards addressing this era's climate and wildfire challenges, their success depends on sustained funding. This investment is necessary to develop and maintain real-time data infrastructure, strengthen Indigenous-led initiatives, cultivate a skilled workforce, and advance public-private partnerships – laying the foundation for a more prepared and more resilient future.

CONCLUSION

CWI's 2024 Signature Convening brought together experts, practitioners, community leaders, and policymakers in wildfire resilience, creating a dynamic platform for sharing insights, advancing collaborative strategies, and addressing pressing challenges in fire management.

DATA INTEGRATION AND ACCESSIBILITY

INCLUSIVITY AND EQUITY

AMPLIFIED COMMUNITY ENGAGEMENT

DATA INTEGRATION AND ACCESSIBILITY

A clear need emerged for systems that bridge data silos, align public and private interests, and present information in formats accessible to both practitioners and the public. The goal is to enable data that not only informs but also actively supports decision-making on the ground, from private landowner strategies to large-scale wildfire response. Engaging more fire practitioners, insurance representatives, and community members will help ensure that future data applications are practical, trustworthy, and tailored to real-world challenges.

INCLUSIVITY AND EQUITY

Tribal partnerships remain critically important – strengthening data ownership through Tribe-specific data hubs controlled by Indigenous communities, embedding data sovereignty principles into all data-sharing frameworks, and more directly involving low-resource communities and private landowners can foster greater trust and collaboration across resilience efforts, ensuring that Indigenous communities retain control over their data and agency to make informed decisions to address their unique challenges.

AMPLIFIED COMMUNITY ENGAGEMENT

The convening emphasized the need for compelling, data-backed storytelling that communicates the benefits and trade-offs of fire management practices, especially around prescribed burns and smoke. Public education and community-based storytelling are essential to fostering trust and support for resilience initiatives, particularly through the lens of smoke management and health impacts.

Speakers and attendees engage in conversation during breakout sessions and networking opportunities at the convening.

LOOKING FORWARD: SPRING 2025 DATA CONVENING

Moving forward, CWI aims to build on these discussions with a Spring 2025 Data Convening focused on actionable outcomes. Key recommendations stemming from participant feedback and identified priority themes include:

ENHANCED WORKSHOP STRUCTURE

Shift to a workshop format with dedicated time for networking, hands-on planning sessions, and developing actionable outputs.

FOCUS ON USER-CENTERED DESIGN

Incorporate sessions on user-centered data systems and tools, with breakout discussions on specific user needs and design requirements. Provide a detailed review of existing tools and datasets, identifying any redundancies and gaps.

EXPANDED PARTICIPATION ACROSS SECTORS

Invite more fire practitioners, communities of practice, public and private sector policy-makers, and Tribal leaders. Consider a specific focus on Tribal data sovereignty, community resilience, and collaboration with insurance agencies.

SCALABILITY AND SYSTEMIC SOLUTIONS

To meet diverse community needs, showcase replicable case studies and models that can be adapted across regions. Share success stories, particularly around proactive management and economic benefits, to guide regions with limited resources or capacity in building their resilience frameworks.

CWI's 2024 Signature Convening has set the stage for a solutions-focused, workshop style Spring 2025 Data Convening. CWI is committed to fostering a unified approach to wildfire resilience strategies that integrate data, community needs, and respect for different types of knowledge. Together, we are moving towards a collaborative future that builds sustainable and inclusive resilience across landscapes and communities.

This 2024 Convening Report represents an accounting of some of the conversations from this convening but this is just the first step in how these conversations will continue forward at both CWI and amongst our attendees. We encourage you to share this report broadly with your networks to continue these conversations. Please send any feedback or questions to sgoodman@climateandwildfire.org.

APPENDIX 1:

AGENDA: DAY ONE

October 16, 2024
Palisades Ballroom | Palisades Village, Lake Tahoe, CA

8:00 AM Breakfast & Sign-in

9:00 AM Welcome & Opening Remarks
- Herman Fillmore, Director, Culture & Language Resources, Washoe Tribe
- Ken Alex, Board President, Climate & Wildfire Institute
- Marissa Christiansen, Executive Director, Climate & Wildfire Institute

9:20 AM Framing Perspectives: Confluence of data and technology in the wildland fire space
Lightning Talks & Panel Discussion, moderated by İlkay Altıntaş, Research Scientist, University of California, San Diego

- Kimberley R. Miner, Associate Program Manager, Wildland Fire Program, National Aeronautics & Space Administration (NASA)
- Scott Gregory, Deputy Director of Technology, California Department of Forestry and Fire Protection (CAL FIRE)
- Christina Restaino, Assistant Professor, University of Nevada, Reno Extension & Director, Living with Fire Program
- Rhiana Jones, Environmental Director, Washoe Environmental Protection Department

10:35 AM Break

10:45 AM Exploring the confluence of wildfire data and technology with policy & practice
Lightning Talks & Panel Discussion, moderated by Michael Wara, Director, Climate and Energy Policy Program, Stanford University

- Frank Frievalt, Director, Wildland-Urban Interface (WUI) Data Commons
- Teresa Feo, Research Director & Senior Policy Advisor, Megafire Action
- Kim Seipp, Managing Director of Science & Research, Blue Forest
- Erin Ernst, Natural Resources Division Director, California Tahoe Conservancy

11:45 AM Breakout Session: Identifying challenges and opportunities

12:30 PM Lunch

1:30 PM Afternoon Opening Presentation: Anukool Lakhina, Co-Founder & CEO, BurnBot, Inc.

1:45 PM Regional Case Study: Pace and scale of current data and technology solutions
Lightning Talks & Panel Discussion, moderated by Chris Anthony, Strategic Wildfire Advisor

- Amy Berry, CEO, Tahoe Fund
- Hussam Mahmoud, Professor of Infrastructure, Colorado State University
- Jason Brooks, CEO, Fire Aside
- Mark Brown, Executive Officer, Marin Wildfire Prevention Authority
- Eric Horntvedt, Wildfire Prevention Manager, Truckee Fire Protection District

3:00 PM Break

3:15 PM Breakout Session: Applying lessons learned

4:00 PM Keynote Presentation: Kate Dargan, Wildfire Strategist

4:45 PM Day One Reflection & Day Two Overview
- CWI Staff

5:00 PM Conclusion of Day One

6:30 PM Dinner | Bar ONE

7:30 PM Film Screening (Optional) | Bar ONE

APPENDIX I (CONT'D):

AGENDA: DAY TWO

October 17, 2024
Palisades Ballroom | Palisades Village, Lake Tahoe, CA

8:00 AM	Breakfast
9:00 AM	Welcome & Opening Remarks - CWI Staff
9:20 AM	Final Plenary: Perspectives on Data in Policy and Practice - Defining & achieving communities' needs Lightning Talks & Panel Discussion moderated by - İlkay Altıntaş, Research Scientist, University of California, San Diego - Jessica McCarty, Deputy Division Chief & Biospheric Science Branch Chief, Earth Science Division, National Aeronautics and Space Administration (NASA) Ames Research Center - Patrick Wright, Director, California Wildfire & Forest Resilience Task Force - Margo Robbins, Executive Director, Cultural Fire Management Council - Cat Fong, Research Scientist, National Center for Ecological Analysis & Synthesis (NCEAS) - Chris Anthony, Strategic Wildfire Advisor
10:45 AM	Break
11:00 AM	Breakout session: Identifying data-centered themes and next steps
11:45 AM	Plenary Discussion & Closing Remarks
12:00 PM	Lunch & Conclusion of Day Two

APPENDIX II:

TAHOE SIERRA WILDFIRE RESILIENCE COLLABORATIVE ONE PAGER

CLIMATE & WILDFIRE INSTITUTE

GORDON AND BETTY MOORE FOUNDATION

TAHOE SIERRA WILDFIRE RESILIENCE COLLABORATIVE

ALIGNING REGIONAL WILDFIRE RESILIENCE EFFORTS

The Tahoe Sierra Wildfire Resilience Collaborative is a cross-boundary initiative which aims to 1) align regional partnerships, projects, resources, and funding to advance wildfire resilience; 2) share opportunities to increase knowledge and solutions for wildfire resilience; and 3) support the development of a community framework to align SPARK projects with the goals of the Gordon & Betty Moore Foundation (Moore Foundation)'s Wildfire Resilience Initiative.

The scope of this collaborative spans 2.4 million acres across four national forests, two states, 12 counties, and five watersheds. It complements the work of the Moore Foundation's "Select Pilot to Achieve Results by Key indicators" (SPARK) projects, designed to identify best practices, scalable solutions, and impactful strategies that achieve measurable and widely applicable outcomes across the Western U.S. and Canada.

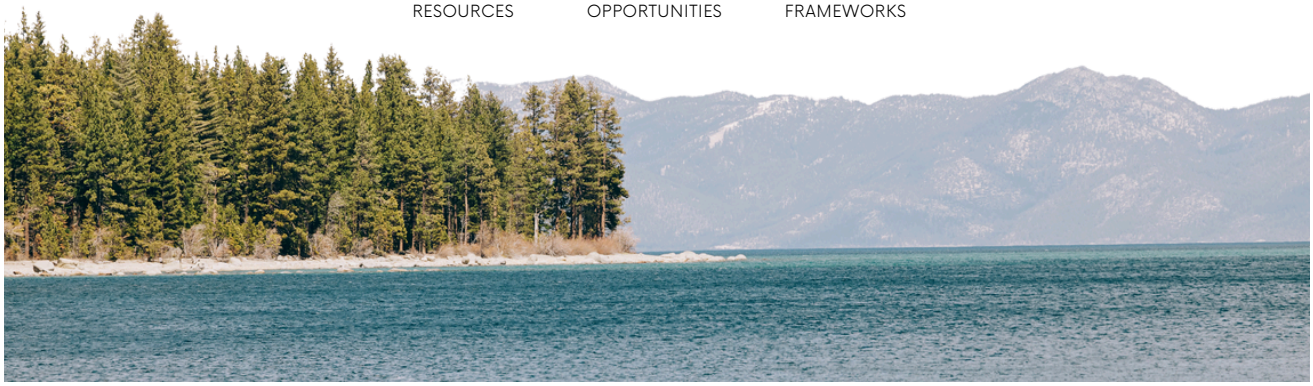
Led by the Climate & Wildfire Institute, with support from Chris J Anthony Consulting and the Gordon and Betty Moore Foundation, the Tahoe Sierra Wildfire Resilience Collaborative aims to accelerate pathways to broad-scale, durable wildfire resilience across Western North America. It is funded by the Gordon and Betty Moore Foundation's Wildfire Resilience Initiative, which aims to enable beneficial fire and reduce vulnerability to extreme wildfire to safeguard healthy, fire-adapted ecosystems and resilient, fire-prone communities.

CORE BENEFITS

ALIGN RESOURCES

SHARE OPPORTUNITIES

ESTABLISH NEW FRAMEWORKS



APPENDIX III:

ADDITIONAL RESOURCES & FURTHER READING

The following resources and coalitions provided valuable insights that shaped the themes, panelist selection, and program design of CWI's 2024 Signature Convening. While not all directly cited in the main report, they reflect the broader context of knowledge and collaboration that informed our work. This list is not exhaustive but offers a starting point for further exploration.

- The State of FireTech 2023 Annual Update. Wonder Labs, December 2023.
- Wildfire Science & Technology Commons. UCSD, 2023.
- Red Sky Summit 2023 Proceedings. Red Sky Summit, 2023.
- Culturing Burning: Building Leadership, Trust, and Capacity. CA Task Force, 2023.
- Intentional Fire Website. Climate and Wildfire Institute.
- Scoping the Public Health Impacts of Wildfire. Berkeley Center for Law, Energy, and the Environment, 2023.
- A Global Sampling of Wildfire Economic Impact: The Benefits of a Dedicated Satellite Constellation to Detect and Monitor Wildfires. Earth Fire Alliance, 2023.
- Increasing Damages from Wildfires Warrant Investment in Wildland Fire Management. DOI, 2023.
- End of Year Report 2022. CA Task Force, 2022.
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