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NOPM 5210: Disaster Philanthropy
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May 7, 2024

Relief and Recovery: Nonprofit and Philanthropic Responses to Global Wildfires

Fast-moving and unpredictable, the damage from wildfires is increasing year after year.

Overview

A wildfire, sometimes referred to as a "bushfire," is an unplanned, unwanted fire burning in a natural area. As the climate changes, the size, speed, and duration of fires is increasing, and it has become more difficult to put them out before they reach populated areas.

Not all fires are unwanted. Controlled burns are a part of forestry. For example, bushfires are common and accepted in Australia. For centuries, Aboriginal people have employed cultural burning practices to improve the health of the land and its people (Firesticks, n.d.). But unplanned and unmanaged fires risk causing death and destruction. In the United States alone, more than 4,300 people died from wildfires in 2021, with many more dying from smoke-related health issues (US Fire Administration, n.d.). Smoke can spread thousands of miles beyond a wildfire's footprint. For instance, in June 2023, smoke from Canadian wildfires enveloped the Northeastern United States. New York City's skies became dark in the midafternoon due to the thick smoke and photos of the city circulated on social media. Smoke exposure can cause long term heart and lung complications as well as death. As wildfires continue to increase across the world, smoke-related health-issues will follow.

In addition to health issues, fires often disrupt crucial utilities like electricity and water. The United States incurred $86.1 billion in damage due to wildfires from 2017 to 2021, nearly a 10-fold increase from 2012 to 2016 (National Oceanic and Atmospheric Administration, 2024). Global temperature increases due to climate change have resulted in more frequent and longer droughts and have created more conducive environments for wildfires to spread and gain intensity.

Wildfires can be caused by human error and carelessness, and natural phenomena. The 2018 Camp Fire in California was caused by an electrical equipment malfunction. The 2019 Australian

bush fires were largely caused by lightning. And in the 2023 rash of wildfires that spread across British Columbia, Canada, nearly three-quarters were caused by natural events, while one quarter were caused by humans. All were intensified and prolonged by drought and wind.

Wildfires can burn out of control in any corner of the globe, even in cold climates. Between 2014 and 2019, wildfire activity increased on every continent except Antarctica (United Nations Environment Program, 2022). Though not all parts of the world, or the United States, have firm protocols in place for wildfire response, it is increasingly important that organizations and governments plan for these disasters.

Prevalence of recent global wildfire activity, 2014-2019

Map by Douglas I. Kelley/ UK Centre for Ecology and Hydrology, 2021.
Source: MODIS Fire_cci Burnt Area product; Chuvieco et al. 2018.

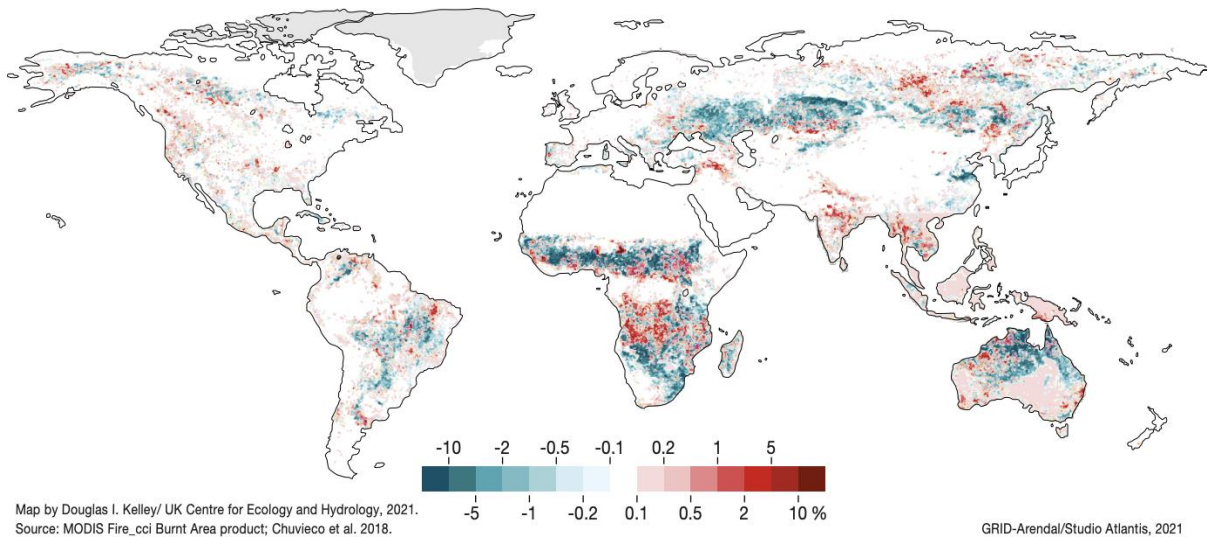GRID-Arendal/Studio Atlantis, 2021

Figure 1.6. An indication of the prevalence of recent global wildfire activity, calculated as the normalised difference between the annual average burnt area from January 2014 to December 2019 (the last five years of the MODIS record at the time of writing) and the long-term annual average burnt area (January 2001 to December 2019; based on the MODIS Fire_cci Burnt Area product; Chuvieco et al. 2018). In many regions, the return interval of wildfires may be longer than this illustrative period and many wildfire events may not be detectable at this scale. The red areas represent regions that have essentially increased in fire activity in the last five years compared to the long-term average, while the blue areas represent those where fire activity has decreased.

(United Nations Environment Program, 2022, p. 19-26)

Key Facts

- As fire response becomes more routine, important wildfire terminology has become more prevalent. Various early warning systems have been developed around the world, some using technology like ground sensors and satellite imagery (British Columbia, 2024). These systems are designed to give responders time to fight fires before they spread. Fire risk can also be integrated into weather reports in some areas, like in California where the highest level of warning is "red flag fire danger warning," which will be included in local newscasts (McMullen, 2021).

- Uncontrolled wildfires can burn for months at a time, impacting large geographic areas and several communities over a longer period. The nature of wildfires requires the long-term presence of first responders such as firefighters and emergency medical services to save lives and communities. In partnership with government officials, these first responders help evacuate and protect individuals and families in affected areas as conditions change. The nature of wildfires also means that evacuees can be displaced for a significant amount of time.

- In the immediate aftermath of a wildfire, affected populations often lose access to housing, food, water, healthcare, electricity, communications and more. It can take governments and service providers time to restore services after a disaster, leaving communities without critical resources. Under-resourced communities are disproportionately impacted and receive aid more slowly than their more privileged peers, which means that it takes far longer for these communities to rebuild. Nonprofit organizations play an important role in filling this gap by providing essential services, connecting affected people to shelter, and helping individuals and families get back on their feet.

- Wildfires can cause immediate and long-term health impacts, which can affect communities far from the flames. Wildfires directly injure or kill people and animals in affected areas and can indirectly contribute to health issues. Even after wildfires cease burning, airborne smoke can contribute to unhealthy air quality. After the 2019-2020 "Black Summer" bushfires in Australia, it's estimated that smoke in the air affected about 80% of Australia's population for several weeks at a time (Ahmed and Ledger, 2023, p.2). This airborne smoke forced Australians to stay inside and caused both short and longer-term health issues. During Black Summer, more than 30 individuals died as a direct result of the fires, 417 people died from smoke-induced health problems, and nearly 4450 others were hospitalized with cardiac and respiratory issues due to poor air quality (Ahmed and Ledger, 2023, p.2). In addition to physical health, wildfires can also impact mental health, of both first responders and affected populations.

- The environmental and economic impacts of wildfires can be long-term. It is estimated that Black Summer Bushfires in Australia cost farmers about $5 billion AUD because livestock died, crops were incinerated, and a significant land area was scorched (University of Sydney, 2021). The fires also had a negative impact on tourism, a key part of the Australian economy, with estimated domestic and international tourism losses of $4.5 billion AUD (Ahmed and Ledger, 2022, p.2). The World Wildlife Fund estimates that about 3 billion animals were killed or displaced by Black Summer bushfires (2020). The fires also reportedly led to the extinction of several species of flora and fauna (Australian Institute for Disaster Resilience, 2020, p. 15).

How to Help

- **Invest in preparedness before disasters strike to improve the recovery process.** Preparedness actions include planning for recovery and mitigation, fostering community resilience, conducting readiness exercises, establishing robust partnerships, and ensuring the continuity of health care services, both physical and mental, during disasters (Federal Emergency Management Agency (FEMA), 2011, p. 8). While governments provide some preparedness resources, philanthropy can support wildfire-prone communities through research, advocacy, and bringing key resources to vulnerable populations.

- **Housing and relocation are one of the greatest challenges that communities face after a wildfire.** In the aftermath, many lose their homes and access to shelter, leading to housing shortages that make it difficult for families to find affordable places to rebuild. After the Black Summer Bushfires in Australia, the Salvation Army helped residents move from evacuation centers to temporary accommodations and renovated homes for transitional housing (Salvation Army, n.d.). Housing is a key component of the recovery process, helping impacted communities get back on their feet so they can return to work and to school. Housing a long-term need for communities that are impacted by wildfires. Rebuilding can take years and displaced individuals need shelter and support throughout this process.

- **Collaborative efforts allow organizations to combine their resources to address needs.** During the 2018 wildfires in California, several organizations worked together to support a holistic recovery process. The FEMA-Funded Disaster Recovery Center at the Chico Mall served as a hub where survivors could access aid from FEMA, the California Office of Emergency Services, Butte County, the Department of Housing and Urban Development, and the Red Cross, streamlining the recovery process (Constant Associates, 2020).

- **Support mental and physical health initiatives for impacted communities and first responders.** The health implications of wildfires can endure for years, making recovery more difficult — especially if communities lose access to healthcare. After Black Summer, the Australian Red Cross developed Psychological First Aid training and offered psychosocial support to address mental health needs, especially of first responders and affected communities (Australian Red Cross, 2023, p. 8). In California, Direct Relief funded a mobile clinic in Paradise to address medical service gaps after the local hospital was destroyed (Direct Relief Staff, 2019). Filling these gaps in critical healthcare infrastructure can dramatically improve the wellbeing of affected communities.

- **Support research that seeks to understand the role that climate change plays in the increased prevalence of wildfires.** As wildfires continue to increase in frequency and destruction, enhanced understanding of humanity's role in exacerbating disasters can contribute to improved preparedness and resiliency tactics. This research can help influence government policies and minimize death and destruction after wildfires.

- **Learn from traditional indigenous forestry practices.** For centuries, indigenous Australians have employed cultural burning practices to mitigate and control bushfires (Firesticks, n.d.). As wildfires continue to spread across the globe, so too should the lessons that have been passed down from previous generations about controlled burning. Firesticks is an Australian nonprofit organization that aims to spread the knowledge of traditional indigenous land management practices, including cultural burning (Firesticks, n.d.)

- **Community foundations are well equipped to support local recovery efforts**. These organizations, which are typically local in scope but well-connected, have three key advantages. First, they have the familiarity to coordinate grassroots-level efforts during the initial disaster response by taking advantage of existing social and organizational linkages. Second, they have the locality and specificity to distribute resources in a way that is largely responsible to stakeholders and attentive to inequity, given their familiarity with the societal context of a given disaster. And third, community foundations have the experience and organizational competency to distribute funds in a way that is accountable and fiscally responsible. Additionally, because of their deep-rooted sense of place, they are typically well-positioned to ensure that there is an ongoing commitment to recovery even after the initial disaster response apparatus has pulled out.

What Funders are Doing

- **The Maui Strong Fund**, organized by the **Hawai'i Community Foundation** has disbursed more than $103 million in relief funds to community-based organizations working to help Maui recover, with a focus on economic resiliency, health and social systems, housing, and natural, historical, and cultural resources (Hawai'i Community Foundation). For example, the Fund supported women's shelters to offset the increased domestic violence post-disaster. The Fund made grants to support legal aid services, lowering barriers for filing insurance claims so families could rebuild their homes. In Maui, local organizations like the Hawai'i Community Foundation understood how to support the community's unique needs and which key players to work with to contribute to a holistic recovery.

- **The Moore Foundation** has become one of the largest funders focused on innovation for wildfire mitigation and has disbursed almost $50 million to date as part of its **Wildfire Resilience Initiative**, which focuses on "upstream solutions" like prevention ecology and improvements to risk indicator research (Mercado). These efforts help at-risk areas become more resilient, preventing wildfires before they ignite. The Moore Foundation granted nearly $600,000 to Conservation X Labs to develop innovative technology and other interventions to address wildfires in under-resourced areas (Mercado).

- **The Indigenous Peoples Burning Network** (IPBN) is a multi-tribal advisory coalition of experts on indigenous science and land stewardship funded by **The Nature**

Conservancy's North America Fire Initiative. Reflecting the role that Indigenous communities have historically played in maintaining ecosystems through the use and management of fire, IPBN prioritizes resilience and prevention, leveraging Indigenous knowledge of at-risk landscapes and conducting readiness trainings in tribal communities where wildfire danger is high (IPBN, n.d.). Since 2015, IPBN has worked with Indigenous communities across the United States, providing resources that are tailored to each community's cultural burning practices.

- After the 2018 northern California wildfires, **the North Valley Community Foundation** distributed millions to over 40 different community projects in Butte County, touching aspects of recovery as diverse as damage surveyance, septic replacement, and the restoration of local parks (North Valley Community Fund, 2023). Focused on reconstructive efforts, it deliberately held back some of its funds during the initial aftermath of the fires to avoid service overlap with other relief agencies, anticipating the lagging tail of local need.

- Also in California, the **Sonoma County Community Foundation** created a dedicated **Resilience Fund** in the wake of a series of fires that devastated the state in 2017, intentionally setting out to anticipate the middle- and long-term support the community would need (2020). The Fund went on to contribute to mental health support in the wake of the fires and even COVID-19 relief a few years later, highlighting the importance of community-based resiliency and broad-based preparedness investments.

Key Takeaways

- Focusing on preparedness and mitigation can help reduce the long-term impacts that wildfires have on communities.

- The road to recovery is long. Affected communities need long-term support as they rebuild. Funders have the opportunity to support longer term relief efforts to help communities build back stronger.

- Housing is one of the greatest challenges that communities face after wildfires.

- Physical and mental health impacts last far beyond the disaster itself.

Further Reading

Fast Fire Facts from USGS: https://www.usgs.gov/news/featured-story/fast-fire-facts-usgs

USGS Wildland Fire Science: https://www.usgs.gov/special-topics/wildland-fire-science/science

Wildfire Philanthropy: From Relief to Resilience:
https://philanthropynewsdigest.org/news/wildfire-philanthropy-from-relief-to-resilience

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Intterra National Fire Situation Map Tool: https://maps.wildfire.gov/sa/#/%3F/%3F/32.9717/-
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