

Environmental Justice Lessons from California Wildfires

Kimberly A. Cheung

Stanford University

Abstract

As climate change gives rise to an increasing complexity of threats from natural disasters, there is a rapidly growing need for environmental justice in our emergency response systems. In this paper, I researched the inequitable impacts of California wildfires on individuals with disabilities. The major gap I discovered was a lack of preparedness for individuals with specific electricity requirements, including day to day usage of durable medical equipment and assistive technology for activities like communication, movement, and self-care. In heightened wildfire risk conditions—high temperatures and strong winds—public utility companies are given the discretion to initiate public safety power shutoffs. While a supported wildfire reduction strategy, these shutoffs pose a disaster before the disaster for many people. Between disability activists and government agencies, there is acknowledgement for the need to better support individuals with disabilities throughout emergency preparedness, evacuation, and recovery. However, current emergency frameworks lack awareness towards the unique spectrum of human needs that arise in the face of natural disasters. In the context of supporting electricity needs during wildfires, I analyze three major movements—a large-scale corporate program, state-wide disability organization, and community-grounded grassroots movement—to piece together a vision for emergency action centered on disability justice values. Evidence of inequity in our current disaster response is clear, and I hope my research provides some insight into how we can move forward to ensuring that #NoBodyIsDisposable.

Keywords: natural disasters, environmental justice, emergency response, wildfires, disability justice, durable medical equipment, assistive technology, #NoBodyIsDisposable

“Click, click.” The power shuts off and all the electricity is gone. What does this mean for Yomi Wrong? A few days until her electric wheelchair battery will be drained dead, refrigerated medication will go dangerously bad, and backup power will be at a dwindling low (Hagan & Mosley, 2019).

“Beep, beep, beep...” sounds the fire alarm. However, Krystal Vasquez wonders if she could ever make it up the stairs to the ground floor exit? The airport evacuation sign reads, “Persons with disabilities: proceed to the nearest exit stairwell and await assistance” (2021). Her answer is to wait, and with this type of rhetoric, her life is devalued as secondary.

“Breaking news, the Dixie fire spreads into Butte County, California. Evacuations will begin soon.” With horror, Joyce Lindahl realizes her brother-in-law is in trouble. As his caregiver lives in a county which has already been evacuated, she is left in a frantic scramble to individually figure out a safe evacuation and sheltering plan (Morris, 2021).

These three scenarios are just snapshots of the isolation felt by people living with disabilities and their families while facing rapidly moving wildfires. In addition to many universally experienced stressors due to the havoc of disasters, individuals with disabilities face an extra challenge: emergency planning often fails to prioritize accommodation and inclusivity towards their unique survival needs.

Introduction

Over the past decade, California wildfires have continued to start earlier and end later, to the extent of adding up to four months to the standard wildfire season, which typically runs from late summer to early autumn; these drastic increases are largely driven by climate change (Cal Fire 2021; USDA 2021). In 2020, the Congressional Research Service recorded statistics that measured another record-breaking fire season; flames burned through 10.1 million acres in the United States of America, with approximately 9.5 million of these acres being in the West and 40% in California. This explosion of wildfires in California has a disproportionate effect on individuals with disabilities. In a 2017 United States Senate hearing on disaster preparedness and response, Paul Timmons, the president of Portlight for Inclusive Disaster Strategies, stated that “people with disabilities and older adults are two to four times more likely to die or be seriously injured in a disaster.” These stark statistics provide a clear necessity to understand why people with disabilities are at a higher risk and how we can do better to protect the lives of all.

Between disability activists and government agencies, there is consensual acknowledgement of the added risks experienced by individuals with disabilities in the face of emergency situations. In Article 11 of the 2006 United Nations Convention of the Rights for People with Disabilities, participating governments, including the United States,

committed to take “all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk, including situations of armed conflict, humanitarian emergencies and the occurrence of natural disasters.” Furthermore, the US Department of Health and Human Services Division for At-Risk Individuals, Behavioral Health, and Community Resilience goes on to acknowledge two categories of needs: “access-based needs,” needs that depend on access to particular resources, and “function-based needs,” needs revolving around assistance required due to restrictions or limitations an individual may face (Kailes, 2021, p. 252). While these perspectives are all oriented with urgency towards the necessity for inclusive disaster preparation, disability organizations elucidate the inequalities behind seemingly thoughtful policies and emergency infrastructure.

This is where I argue that the root cause of the inequalities in the rhetoric and action of our wildfire disaster plans is a lack of granularity and awareness towards the complexities of specific disability needs. Individuals with disability cannot be categorized into a “one size fits all” plan, as “not all citizens have the same needs during or after disaster[s],” says Hon. Donald M. Payne, Chairman of the Homeland Security Subcommittee on Emergency Preparedness, Response, and Recovery (2020). To further recognize the spectrum of disability, a 2019 Center for Disease Control and Prevention report states that one in four adults in California have a disability, including cognitive, hearing, mobility, vision, self-care, and independent living disabilities. Directly addressing individuals’ specific needs that arise over the course of an emergency is necessary.

One major gap I have identified in my research on California wildfires is a lack of support and planning for the requirements of individuals who rely on electricity-powered durable medical equipment and assistive technology. This is a direct reflection of the nature that current emergency plans are not centered around the voice of disability. More than half of individuals with disabilities have particular requirements that depend on electricity throughout emergency communication, evacuation, and sheltering, which include ventilators, motorized wheelchairs, refrigerators for medication (Ho, 2019). Collaboration of utility companies, emergency planners, and disability organizations is essential for meeting the electricity requirements that enable disabled individuals to support themselves, and for first responders and emergency personnel to best support them. In addition, with the climate crisis bringing about more and more deadly wildfires, public safety power shutoffs are becoming more prevalent and impacting individuals who rely on electricity in disproportionate ways before a wildfire even begins. Therefore, I insist we need to expand the range of what constitutes a wildfire disaster to include power outages, and furthermore create systematic change in the emergency response system to be inclusive of the unique needs of every single individual.

First, I will acknowledge and examine the work done by utility companies to assist individuals through public safety power shutoffs, in the context of the series of flaws in a top-down approach to meeting the diverse needs of the disabled community. Furthermore, I will introduce the potential of a novel pilot program Disability Disasters Access & Resources, a disability-centered effort to address individuals' electricity needs. Next, I will extend into greater granularity and analyze the success of mutual aid programs in natural disasters, through their organizational structure which revolves around the voices of those most in need. With analysis of a large-scale corporate program, state-wide disability organization, and community-grounded grassroots movement, I will propose essential values and four recommendations towards creating a system of emergency preparedness that keeps disability rights in its center, from rhetoric to action. Finally, I plan to expand to the greater exigence of strengthening emergency preparedness programs for individuals with disability, especially as the threat of natural disasters continues to spread globally. Rather than continuing to create reactive and inequitable policies that are at risk to break down when a natural disaster hits, we must engage communities in a ground-up, proactive framework that values the needs of every single individual.

MEDICAL BASELINE PROGRAM: *Flaws in Recognizing Specific Disability Needs*

In 2012, the California Public Utilities Commission “ruled that California Public Utilities Code Section 451 and 399.2(a) give elective utilities authority to shut off electric power to protect public safety”; these shutoffs de-energize power lines in the event of “strong winds, heat events, and related conditions” to reduce the likelihood of wildfires occurring. For the majority of individuals with disabilities who rely on electricity-powered durable medical equipment and assistive technology, these shutoffs are the start of havoc which continues to compound throughout the course of a wildfire: “Severed from electricity... thousands [are left] scrambling to secure emergency oxygen tanks, find backup generators or conserve dwindling battery power” (Yoon-Hendricks, 2021). The consequences of a loss of electricity put an extra strain on communities who have a life-or-death relationship solely with the ability to adapt in the absence of power.

In response, Pacific Gas & Electric Company (PG&E), the largest utility company in California, initiated the Medical Baseline Program to offer extended resources, such as advanced and additional emergency notices and check-ins if there is no confirmation that the individual received the alert. The Medical Baseline Program is introduced as “an assistance program for residential customers who depend on power for certain medical needs”; in addition, there is a thorough application process to determine the eligibility of an individual to gain access to resources of the programs and a reapplication form required every two years (PG&E, 2021). This format not only puts onus and responsibility on the shoulders

of individuals with disabilities, but it also creates a barrier to entry where one must fit into a medicalized definition. This falls directly into a pathological understanding of disability, a fallacy explored by associate professor Jay Dolmage in his archive of common disability myths, which states “people with disabilities have been historically labeled, sorted, and arrayed on scales according to their deviation from standardized norms” (2014, p. 34). However, this limited understanding prevents emergency models from recognizing the unique spectrum of needs of individuals with disabilities. Samuel Jain, a staff attorney at Disability Rights California, states, “It doesn’t include people vulnerable to extreme temperatures, or people who need an elevator or lift to exit their home. It doesn’t take into account people with medication that needs to be refrigerated, or assisted technology like speech-generating devices” (qtd in Yoon-Hendricks, 2021). While essential for many people with specific medical needs that require assistance during power outages, the Medical Baseline Program leaves a gray space for individuals within the diverse spectrum of disability.

The lack of a system which appropriately identifies electricity-based needs has further implications down the line of emergency response. Without a clear understanding of who is in the worst-off condition during power outages, provisions during evacuation and sheltering are negatively impacted. Particularly in the context of emergency personnel and shelter staff, recurring misunderstandings lead to the mistreatment of individuals with disabilities. In their emergency evacuation guidelines, American Medical Response, one of the largest ambulance companies in the United States, only acknowledges that individuals may lose independence through the inability to access resources such as “consumable medical supplies” or “durable medical equipment” (AMR, 2013). However, there is a noticeable gap in the recognition of the importance of assistive technology for essential components of working with responders during evacuation such as communication, memory, and social connection. Furthermore, in 2007, the Americans with Disabilities Act created an extensive step by step checklist to ensure that emergency shelters were accessible for individuals with disabilities, including requirements for choosing the location of the shelter, entrance to the shelter, and styles of living in the shelter. In response, Functional Assessment Service Teams (FAST) were created to “respond and deploy to disaster areas to work in shelters... to assist in identifying and meeting essential functional needs” (California Department of Social Services, 2007). While having official recognition from FEMA and the U.S. Department of Justice, individuals report that many shelters still lack many essential features, “like ramps, backup power sources, or accessible bathrooms” (Morris, 2021). An example of action by the FAST teams was to provide a donated power chair to Winne Pugh, whose own power wheelchair and electric scooter had been burned by the 2015 Butte Fire; however, this was six days after her arrival at the shelter (Romney). A concern with these teams is the reactive nature of the

program, signifying that the needs of the disability community are secondary. Both first responders and FAST teams are doing essential work to provide for individuals with disabilities in the face of disaster, however the upstream lack of understanding leads to inadequate training towards the unique and situational challenges which arise during an emergency response.

In further analysis of the Medical Baseline Program, government leaders have acknowledged that the program is built top down, rather than being built off the needs of the individual. Mark Chilarducci, the director of the California Governor's Office of Emergency Services states that “the whole topic of medical baseline continues to be a challenge with the utilities in their ability to have a granular situational awareness of that particular customer base [customers with disabilities]” (qtd in Shalby, 2019). As of June 24, 2021, The California Public Utilities Commission is still enhancing and updating existing guidelines and rules for public safety power shutoffs “to address various access and functional needs... through annual Access and Functional Needs Plans and annual surveys of customers to analyze awareness and applicability of resources.” Spurred on by successful disability activism, it is evident that government organizations are cognizant of gaps that exist in preparedness to support people who rely on electricity for their livelihoods. However, this statement to protect the needs of individuals with disabilities echoes empty commitments already made in 2006 by the United Nations. Here, rather than making rhetorical promises, I insist that we must solidify methods of understanding the challenges which individuals with disabilities face as the basis of equitable emergency response actions.

DISABILITY DISASTER ACCESS & RESOURCES: *Novel Efforts to Identify and Address Electricity Needs*

Now, I will examine the work done by a disability centered state organization in relation to identifying and addressing the electricity requirements present during power outages. The pilot program Disability Disaster Access & Resources (DDAR) was launched in 2020 as a groundbreaking effort to prepare and support the needs of individuals whose livelihoods rely on electricity-powered assistive technology and/or durable medical equipment. Developed by the California Foundation for Independent Living Centers, an organization funded by the U.S. Administration for Community Living and the California Department of Rehabilitation, this program seeks to integrate utility companies into conversation with disability organizations and formulate action towards more equitable emergency preparedness (Favuzzi, 2015; Mills, 2020).

In 2019, a 400-person survey elucidated that 53% of individuals with disabilities required electricity-powered assistive technology or durable medical equipment, such as communication devices, CPAP machines for breathing, and power wheelchairs; in addition, only 40% of the people knew they were eligible for the Medical Baseline Program (Mills, 2020).

This was a novel study conducted to identify the distinct electricity needs during public safety power shutoffs. As a pilot program “conducted in order to evaluate feasibility, duration, cost, adverse events, and improvement prior to full-scale program,” the group organized with battery vendors and utility companies to provide support like extra batteries and accessible vehicles (Mills, 2020). This work is just the beginning to connect large-scale organizations like utility companies in collaborative action concerning specific disability needs.

We further need to identify what electricity needs arise across the course of emergency communication, evacuation, sheltering, and recovery and then educate our communities, first responders, and disaster organizers. DDAR frontlines the effort to address the energy gap that I discovered in my research on disability and emergency response to wildfires. However, even further, I noted that electricity requirements persist throughout the full wildfire response, from communications to recovery. For example, over and over, we see evacuation protocols that revolve around “the assumption that people in disasters can walk, run, see, drive, read, hear, speak, and understand and respond immediately to instructions and/or alerts,” as disability scholar June Isaacson Kailes has studied (2021, p. 256). To avoid these assumptions, we must utilize radical listening to shift the trajectory of emergency preparedness to be more inclusive of the needs of individuals with disabilities. As defined by Chanel Lewis, radical listening is “the practice of intentionally quieting your internal voice and judgements, thereby offering your full mental space to speakers,” effectively “leading to more informed questions” and “enabl[ing] worthwhile conversations” (2017). In relation to identifying the needs of people with disabilities during evacuation, this process involves asking critical questions such as these: What physical, mental, or social challenges do you face as you exit a building? Which form of communication is best to notify you of an emergency evacuation? What would you say is the greatest risk posed for you during evacuation? Leader of the Radical Listening Project, Kathryn Thomson, further asserts that as a method of getting out of “ideological echo chambers,” places where one's ideas are reinforced by similar knowledge to one's previously held beliefs, radical listening has large implications for “healing social and political divides” (2020). Similar to how DDAR identified the most significant technologies used by individuals with disabilities, we need to further apply this towards a variety of situations in the emergency process—transcending physical boundaries to mental, social, and emotional barriers during a disaster as well. I call for a shift of mindset where the methods of radical listening enable emergency response leaders to identify the needs of individuals more clearly with disabilities, and even expanding to the range of all individuals, and utilize this knowledge as the guiding force of emergency planning decisions. Now, we must identify how to strike a balance between large-scale impact and granular

awareness—this is where the concept of mutual aid may provide a solution!

MUTUAL AID PROGRAM: *Further Granularity as Exemplified in Hurricane Sandy and the COVID-19 Pandemic*

In the contemporary context, mutual aid is a formation of local networks that emphasizes engaging and acknowledging the needs of those who are affected the most (Gammage, 2021). Dean Spade, a professor at Seattle University School of Law, defines three key facets of mutual aid:

- 1) Mutual aid addresses survival needs while building understanding of the root causes of inequity.
- 2) Mutual aid acts as a mobilization tactic for building solidarity around movements for political and social transformation.
- 3) Mutual aid projects are organized through direct participation and collective action. (qtd in Gammage, 2021)

The power of this ground-up work is that every individual's needs are valued and have a voice, even in the most large-scale movements. Significantly, the inspiration for mutual aid comes from a biological framework that has to do with natural disasters. Peter Kropotkin, a Russian anarchist philosopher, observed species responses to hostile environmental conditions and saw significant evidence that the greatest abundance of animal life occurred when individuals worked together towards “holistic flourishing” (Kropotkin, 1902). The mutual aid program has already been applied in a few significant emergency approaches.

One of the strongest examples of the mutual aid program was Occupy Sandy, an organization that arose in face of Hurricane Sandy, which struck New York on October 29, 2012. Following the abrupt closure of FEMA, the federal leaders of disaster response, a “laterally organized rapid-response team” was developed, demonstrating that “when official channels fail, other parts of society respond”; individuals turned to their neighbors to set up distribution sites at local churches, organize through Google Docs and Facebook, and summon an army of volunteers (Feuer, 2012). Due to this mutual rallying, Occupy Sandy was able to provide for needs that were being overlooked by larger FEMA inaction.

Another example of this mutual aid response is throughout the COVID-19 pandemic. Following the national mandates for all individuals to stay at home, “many different acts of solidarity” began, such as “grocery shopping and delivery, food parcel deliveries, collection of prescriptions, dog walking, postcard and library services, emotional support by telephone/email helpline, informational support on existing public services, community gardening, and more” (Fernandez-Jesus et al., 2021). These are the types of actions that fall under the idea of a neighborhood pod or network created by local engagement. By this

structure, communities make sure that every single individual has a buddy to look after them.

As exemplified by these two responses, mutual aid could have a huge role in the face of emergency responses to natural disasters. Major benefits of this strategy include its flexibility, speed, and hyper-local neighborhood by neighborhood-based qualities (Hagan, 2019; Boyd, 2021). For a direct wildfire example, Stacy Milbern, a disability rights advocate, describes the work she did after learning that even as a medical baseline customer, PG&E was not reaching out with any support. In a matter of hours, “Milbern and others in the Bay Area disabilities community were able to set up a shared document” that matched people in need with resources such as housing, items being brought to an individual who could not leave the house, and a place to refrigerate medicine (qtd in Ho, 2019). While a successful approach, mutual aid organizations should not be alone in providing emergency response for individuals with disability. In the next section, I will propose a disability-centered emergency response system inspired by the mutual aid framework being supported by larger corporations and organizations.

FOUR RECOMMENDATIONS FOR DISABILITY-CENTERED EMERGENCY RESPONSE: *Grounded in Disability Justice Values*

In order to create a disability-centered emergency plan, I believe it is first necessary to lay out the set of core values that will radiate throughout the process of emergency planning and response. Values originated from the basis of the mutual aid programs mirror major principles outlined by Sins Invalid, a disability justice-based performance project that brings historically marginalized voices to light. From their 10 Principles of Disability Justice, I choose three values to emphasize as the guidelines for a disability rights centered emergency program: “leadership of those most impacted, commitment to cross-movement organizing, and collective liberation” (Sins Invalid, 2015). Using these values as the foundation of an emergency preparedness plan, we can be certain to acknowledge the specific needs of every individual in response to natural disasters. The next four recommendations embody a shift which brings voices from the shadows to the forefront of emergency planning.

First and foremost, expansions of what constitutes emergency response to a natural disaster are necessary. In the context of the relationship of power outages to wildfires, Stephanie Collins, a senior associate of the Disability Rights Division reveals that “because blackouts are not considered natural disasters, like wildfires, there are fewer resources to fund aid and shelter” (2019). Given this analysis, the boundaries of what constitutes the beginning and end of a wildfire need to be redefined to accommodate the needs of all individuals. For individuals with disabilities who rely on electricity-powered technology, public safety power shutoffs

create a significant initial setback, hindering their abilities to respond when the wildfire spreads. Furthermore, in recovery phases, the loss of durable medical equipment or assistive technology, essential pieces for day-to-day health, presents an extra obstacle for regaining stability. As emergency response programs are developed, national recognition towards more flexibility in the start and end of disasters is preliminary to devising solutions and support mechanisms during emergency response.

Secondly, further research in the field of disability-centered emergency planning is critical. Currently, in relation to public safety power shutoffs, State Sen. Henry Stern says that “we actually don’t have an accurate picture of who’s vulnerable right now,” due to the flawed abilities of the Medical Baseline program to identify individuals who are in need (qtd in Shalby, 2019). As a result, we are not properly equipped to provide adequate resources for individuals with disabilities. For example, PG&E created “open community resource center[s]... that offer things like charge stations capable of powering medical devices, cell service, water, restrooms, and chairs,” however disability activist Samuel Jain points out that “not everyone who needs access to those centers during an outage may be able to get there” (qtd in Yoon-Hendricks, 2021). DDAR has started this investigation on the 400-person level of their 2019 community assessment, but this information needs to be even more prominent and diverse. Research efforts to identify who is the most affected by particular aspects of natural disasters, as well as in what ways individuals are affected, will enable more thorough training for first responders, in addition to building greater community awareness. This paper focused on electricity requirements of the disabled community, but what other needs are missing? The recent flux of natural disasters has elucidated the inevitable presence of unpredictable challenges, so being prepared in knowing the communities who need more support in predictable areas is vital to create some sense of grounding in emergency response.

Thirdly, the emergency response system needs an increased amount of emergency planning leadership roles for individuals with disabilities. Ranging from the local to the federal level, emergency programs must spotlight the voices of individuals who are most affected by wildfires to devise appropriate solutions. These roles have a place in all the groups mentioned in this paper, including PG&E, FEMA, American Medical Response, DDAR, and Red Cross. In addition, leadership by those who are harmed the most by inequitable emergency preparedness is a built-in system of accountability. Without a firm commitment to emergency protocols, the efficacy of safe locations with available electricity is significantly hindered: “Out of 2,059 community health centers throughout California, an analysis by Direct Relief, a nonprofit humanitarian organization, shows that 61 percent lack a form of backup power. In Butte County, there are no community health centers with backup power” (Morris, 2021). Although there are extensive lists for the

requirements of a shelter, there are major gaps from rhetoric to action. Bringing the voices of people with disabilities into the forefront of emergency planning conversations ensures that policies and protocols are not just words on a paper, but transferable actions for real change. The restructuring of societal hierarchy allows for preventative emergency planning *with* disabled communities, rather than *for*, allowing us to achieve personalized solutions on a large scale.

Fourthly, to enable avenues for communities to identify individual level problems and connect them with larger scale resources, the emergency response system needs structured mutual aid programs at the state level. As described earlier in this paper, the level of granularity which natural disaster mutual aid programs achieved in a matter of hours, where each individual of the community was matched to resources on a case-by-case level, was unmatched. Now imagine a structure of decentralized, ground-up organization where large-scale corporations and organizations are the ones applying to support the needs of communities that call for it, rather than individuals applying to be supported. Groups like FEMA, the Red Cross, and utility companies are indisputably major players in successful disaster relief efforts, and by applying their resources to the right leverage points—as identified by those in greatest need—we could have a much greater impact in our emergency plans. A powerful example of this was when the Red Cross called coordinators of Occupy Sandy, asking what the people needed; Occupy Sandy was able to carry out the door-to-door work, and then the Red Cross effectively provided support where the community needed help most (Burdick, 2017). This system of emergency response opens the field to more precise support for individuals through powerhouse organizations with resources. I propose more plans in favor of this form of collaboration, such as state organized forums for individuals to apply for increased efforts in the most needed areas.

This plan is a foundation that builds and builds, as more voices and needs rise to the surface. Disasters are complex and challenging, so we cannot use simplified, unilateral emergency plans to respond; rather we need to develop further granularity and strength in our efforts, because critical actions must be taken in the face of life and death. Ultimately, we are all at odds with natural disasters, and improving the emergency response system is a huge call for every single individual to come together and find strength in numbers. At the core of a disability-centered emergency response system is the mentality that we must understand and support everyone's unique needs.

GREATER EXIGENCE WITH THE RISING THREAT OF WILDFIRES

As wildfires are growing throughout Western Australia, Northern California, European countries (Spain, Portugal, Greece), Amazon and Southeast Asia, and Siberia, the need to mend flaws in our emergency

preparedness systems through interconnected approaches is needed now more than ever (Four Twenty-Seven, 2020). The impact of public safety power shutoffs on individuals with disabilities is one example of the result of emergency response that is not cognizant to everyone's unique needs. However, disability rights advocates like Samuel Jain are even further pushing utility companies to "improve its infrastructure so it can withstand higher wind events and not have to shut off power as a precaution in the first place" (qtd in Yoon-Hendricks, 2021). Although public safety power shutoffs will hopefully no longer be a problem of the future, as utility companies strengthen their security against weather conditions, there is a greater humanitarian lesson to be taken from this case study of an inequitable emergency response. Here, we observed an example of a landmark system under a lot of pressure, who, when faced to make rapid decisions, left the considerations of people with disabilities to the side. This is bigger than a public safety power shutoff problem or even a wildfire problem, expanding into much greater concerns of environmental justice. This is a *human rights problem*. As the prevalence of wildfires and many other natural threats rises, we must be prepared to respond to challenging and unprecedented times in ways that live up to the value that "*#NoBodyIsDisposable*" (Felt, 2021).

CONCLUSION

I am no expert on natural disaster plans, emergency preparedness, or infrastructure planning, but I am a young adult who has spent their life growing up around the increasing heat of climate change and the rapid growth of wildfires. Personally, I have been lucky enough to be safe from the wreckage of wildfires so far, but I want to make sure this is the case for everyone. Natural disasters are scary and unpredictable, but they have the power to bring us together as humans with the same goal to overcome dire odds. We have an opportunity to protect each other with unyielding determination, courage, and love. To do so, we must take proactive steps to emphasize cognizance of the needs of all individuals, significantly people with disabilities who rely on electricity-powered assistive technology and durable medical equipment. As a society, we must be ready to equitably defend all lives when the going gets tough. As Alice Wong, a prominent disability activist said on November 13, 2018, "California is on fire... Our lives are at stake and thoughts and prayers are not enough." Three years later, on August 27, 2021, Wong tweeted "Wrote this about California wildfires way back in 2018 and the same thing happens time and time again: disabled & older people are not centered in disaster planning and we make up a disproportionate number of deaths & people left behind." This lack of action and pattern of inequity is unacceptable; the time for change is now.

References

- American Medical Response Office of Emergency Management, and U.S. Department of Health and Human Services. (2013, 15 May). Guidelines for evacuation of individuals with disabilities during disasters. <https://www.amr.net/solutions/federal-disaster-response-team/references-and-resources/guidelines-for-evacuation-of-individuals-with-disa.pdf>
- Boyd, N. M., and Davis, M. (2021). Neighbors help in a pandemic. *Erasmus Journal for Philosophy and Economics*, 14(1), 33-46. <https://www.proquest.com/scholarly-journals/neighbors-help-pandemic/docview/2562270965/se-2>
- Burdick, L. (2017, September 29). After the flood: lessons from Occupy Sandy. *Resilience*, <https://www.resilience.org/stories/2017-09-29/after-the-flood/>
- California Department of Social Services. (2007). Functional Assessment Service Team (FAST) program. *CA.gov*, <https://www.cdss.ca.gov/inforesources/mass-care-and-shelter/fast>
- California Foundation for Independent Living Centers. (2020). Presented by Mills, C., Anderson, D., Gelardin, E. CFILC Presents: Disability Disaster Access & Resources. *Disability Access & Resources*, <https://disabilitydisasteraccess.org/>
- Cal Fire. (2021). 2021 incident archive. *CA.gov, State of California*, <https://www.fire.ca.gov/incidents/2021/>
- CA.gov. Utility public safety power shutoffs plans (De-Energization). *Public Utilities Commission, State of California*, <https://www.cpuc.ca.gov/pmps/>
- California Public Utilities Commission. (2021). CPUC issues additional guidelines and rules in continual improvement to utility execution of public safety power shutoffs. <https://www.cpuc.ca.gov/-/media/cpuc-website/consumer-support/documents/pmps/prior-actions/389401938.pdf>
- Center for Disease Control and Prevention. (2021). Disability impacts California. *Disability and Health Promotion, Disability & Health U.S. State Profile Data: California, U.S. Department of Health and Human Services*, <https://www.cdc.gov/ncbddd/disabilityandhealth/impacts/california.html>
- Collins, S. (2019). US power outages endanger people with disabilities: Emergency response plans should be inclusive, accessible. *Human Rights Watch*, <https://www.hrw.org/news/2019/10/23/us-power-outages-endanger-people-disabilities#>
- Congressional Research Service, & Hanson, L. (2021). Wildfire statistics, version 55, <https://sgp.fas.org/crs/misc/IF10244.pdf>
- Dolmage, J.T. (2014). An archive and anatomy of disability myths. *Disability Rhetoric, 1*, Syracuse University Press,

- search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=714601
&site=ehost-live
- Favuzzi, T. (2015). CFILC letter of support: Managed care organization tax (AB 2x4). *CFLIC Advocacy*, <https://www.cfilc.org/issues/issues.php?id=45>
- Felt, L. (2021). #NoBodyIsDisposable: The rhetoric of disability. *Class Title*.
- Fernandez-Jesus, M., Mao, G., Ntonti, E., Cocking, C., McTague, M., Schwarz, A., Semlyen, J., & Drury, J. (2021). "More than a COVID-19 response: Sustaining mutual aid groups during and beyond the pandemic." *Frontiers in Psychology: Cultural Psychology*, <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.716202/full#h1>
- Feur, A. (2021). Occupy sandy: A movement moves to relief. *The New York Times*, <https://www.nytimes.com/2012/11/11/nyregion/where-fema-fell-short-occupy-sandy-was-there.html>
- Four Twenty Seven. (2020). Climate change and wildfires: Projecting future wildfire potential. http://427mt.com/wp-content/uploads/2020/08/Projecting-Future-Wildfire-Potential_427_8.2020-1.pdf
- Gammage, J. (2021). Solidarity, not charity: Mutual aid's an-archic history. *Blog of the APA*, <https://blog.apaonline.org/2021/01/25/solidarity-not-charity-mutual-aids-an-archic-history/?amp>
- Hagan A., & Mosley T. (2019). How California blackouts are impacting people with disabilities. *WBUR*, <https://www.wbur.org/hereandnow/2019/10/29/california-blackouts-impact-disabled>
- Ho, V. (2019). California power shutoff: how PG&E's actions hit the medically vulnerable the hardest. *The Guardian, Oakland*, <https://www.theguardian.com/us-news/2019/oct/11/california-pge-utility-power-shutoff-disabled>
- Kailes J.I., & Lollar D.J. (2021). Disasters and disability: Rhetoric and reality. *Public Health Perspectives on Disability*, https://doi-org.stanford.idm.oclc.org/10.1007/978-1-0716-0888-3_12
- Kropotkin, P. (1902, retrieved 2009, February 16, proofread 2019, August 5). Mutual aid: A factor of evolution. <https://theanarchistlibrary.org/library/petr-kropotkin-mutual-aid-a-factor-of-evolution>
- Lewis, C. [TEDx Talks, TEDx Dirigo]. (2017). *Listening is Radical*, [Video], YouTube. <https://youtu.be/pfppBsJDrpA>
- Morris, A. (2021). 'We didn't have a plan': Disabled people struggle to evacuate from wildfires. *The New York Times, The New York Times Company*, <https://www.nytimes.com/2021/09/12/us/wildfires-disabled-people-evacuation.html>

- Pacific Gas & Electric Company. (2021). Medical baseline program application.
https://www.pge.com/includes/docs/pdfs/myhome/saveenergymoney/fiancialassistance/medicalbaseline/medbaseline_application_eng_v2.pdf
- Pacific Gas & Electric Company (accessed 2021). Medical baseline program overview. https://www.pge.com/en_US/residential/save-energy-money/help-paying-your-bill/longer-term-assistance/medical-condition-related/medical-baseline-allowance/medical-baseline-allowance.page
- Romney, L. (2015). California wildfires left the disabled in peril. *Los Angeles Times*, <https://www.latimes.com/local/california/la-me-disability-fires-20150928-story.html>
- Schweitzer, D. (2021). Wildfires in all seasons? *U.S. Department of Agriculture*, <https://www.usda.gov/media/blog/2019/06/27/wildfires-all-seasons>
- Shalby, C. (2019). Power outages leave those with disabilities especially vulnerable. Help remains a work in a progress. *Los Angeles Times*, <https://www.latimes.com/california/story/2019-10-25/problems-disabled-help-power-outages>
- Sins Invalid. (2015). 10 principles of disability justice. <https://www.sinsinvalid.org/blog/10-principles-of-disability-justice>.
- Thomson, K. [TEDx Talks, TEDxJIBC]. (2020). *The radical listening project: Healing social and political divides*, [Video], YouTube. <https://youtu.be/wlDYBw6gzW4>
- Timmons, P. (2017). Disaster preparedness and response: The special needs of older americans. *United States Senate Special Committee on Aging, Portlight Inclusive Disaster Strategies*, https://www.aging.senate.gov/imo/media/doc/SCA_Timmons_09_20_17.pdf
- United Nations. Article 11 – Situations of risk and humanitarian emergencies. *United Nations, Department of Economic and Social Affairs, Disability*, <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-11-situations-of-risk-and-humanitarian-emergencies.html#>
- United States, Subcommittee on Emergency Preparedness, Response, and Recovery of the Committee on Homeland Security, House of Representatives. (2020). Protecting every citizen: Assessing emergency preparedness for underserved populations. *U.S. Government Publishing Office, 1*.
- Vasquez, K. (2021). A disability should not be a death sentence during a natural disaster. *Environmental Health News*, <https://www.ehn.org/natural-disasters-disabled-community-2652503611/wildfire-bobcat-fire>

- Yoon-Hendricks, A. (2021). California power outage hits disabled, medically at-risk hard. *SacBee*, <https://www.sacbee.com/news/equity-lab/article254930057.html>
- Wong, A. (2018). In California wildfires, disabled people may be left behind. *Curbed San Francisco, Vox Media*, <https://sf.curbed.com/2018/11/13/18087964/california-wildfires-disabled-people-eldery-evacuation-disabilities>
- Wong, A. (2021). Tweet Message. *Twitter*, @SFdirewolf, <https://mobile.twitter.com/GHMansfield/status/1431474111394500615>