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ARTICLE

Ecosocial policy and the social risks of climate change: foundations of the US ecosocial safety net

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Abstract

As climate change progresses, natural hazards are projected to continue to increase in frequency and intensity, posing a new form of social risk, implicating both the welfare and environmental state and raising the salience of ecosocial policy as a mechanism to attend to the distributional effects of climate change mitigation and adaptation. This study posits a novel conceptual framework for ecosocial policy and offers the US ecosocial safety net as a case analysis. While we conceptualise disaster relief policy as a mode of the environmental state, it includes unique ecosocial policies that constitute the backbone of the US ecosocial safety net. This study describes and compares the developmental and functional synergies between the US welfare and environmental state manifested in the form of an ecosocial safety net by explicating the Individual Assistance Program and the National Flood Insurance Program. Our findings reveal synergies between US disaster relief and welfare, including parallel developmental trends, philosophies of deserving/undeserving, functions of racial capitalism and relationships with economic growth. This study and its conceptual framework of ecosocial policy offer a groundwork for the study of ecosocial policy in other contexts.

Keywords: ecosocial policy; environmental state; welfare state; climate change; climate risks

Introduction

The Intergovernmental Panel on Climate Change (2022) projects the increased frequency and intensity of natural disasters (known as 'natural hazards') as the human-induced effects on the climate remain largely unabated. Less affluent regions – both within and between countries – are projected to be most vulnerable to shocks produced by natural hazards (Yoon, 2012). These projected disproportionate impacts may exacerbate socio-economic inequities already present in many nations, and as climate change and subsequent natural hazards lead to augmented and complicated social risks, welfare states will also be implicated (Hirvilammi et al., 2023; Nelson et al., 2023), anticipating the increasing salience of the ecosocial policy landscape.

We define ecosocial policy as a set of policies and programs that address the overlap of social and environmental concerns while seeking to promote a sustainable and equitable society. Certain US disaster relief programs sit at the intersection of the domains of welfare policy and environmental policy, and, in some circumstances, constitute a distinct synergy in the form of an ecosocial safety net that attends to welfare in response to climate change and natural hazards. In its US conception, disaster relief policy is government intervention to help communities prepare for and recover from natural hazards. As a form of governance, disaster relief involves disaster preparedness, response, recovery and mitigation between levels of government, between local governments and between public and private organisations (Gerber, 2007).

Despite disaster relief's potential to cope with the distributional effects of climate change and natural hazards, it has not yet been identified in the burgeoning ecosocial policy literature. While certain commonalities between welfare and environmental states have been raised (Gough, 2016; Meadowcroft, 2005), disaster relief constitutes a previously unexplored synergy between the two policy domains that is already positioned to influence societies' adaptation to climate change.

In this study, we set out to describe the synergistic development and functions that underpin US disaster relief and welfare programs as a case study for the global literature on ecosocial policy to answer the following questions: What developmental and functional synergies exist between the US ecosocial safety net and welfare state? And how does the US ecosocial safety net relate to the global literature on ecosocial policy? We find the extant conceptualisation of ecosocial policy as a synergy between the environmental and welfare state a fruitful heuristic in the US case. In our view, typical disaster relief policy constitutes a mode of the environmental state because it moderates a socio-environmental interaction. In turn, we develop a conceptual framework for ecosocial policy that synthesises extant literature and argues for the inclusion of certain disaster relief programs as ecosocial policy. We posit that certain US disaster relief policies and programs constitute a rudimentary – and often inequitable – ecosocial safety net that diverges from the aspirational, decommodified ecosocial welfare reform suggested by scholars such as Dukelow and Murphy (2022). Because of their mimicry of the US welfare state and the literature's elucidation of potential synergies between the welfare and environmental states (Gough, 2016; Meadowcroft 2005; 2008), we compare the welfare and disaster relief policy domains to draw developmental and functional synergies between the two and demonstrate that the US ecosocial safety net integrates characteristics from both. The case of the US ecosocial safety net offers a previously unelucidated manifestation of ecosocial policy that can now be compared with other contexts. The synergistic development and functions between the US welfare and environmental states in the form of ecosocial policy may also prove instructive for the analysis of ecosocial policy in other countries as well. Moreover, our conceptual framework for ecosocial policy offers a guidepost for the conceptualisation and analysis of ecosocial safety nets and other forms of ecosocial policy.

We begin with a brief justification of why climate change and its effects warrant investigation by scholars of social policy. We then develop a conceptual framework for ecosocial policy and outline ecosocial safety nets as a component of that larger set. We then describe the US ecosocial safety net as a case study using descriptive and historical data on the Individual Assistance Program (IAP) and the National Flood Insurance Program (NFIP), two programs that constitute the backbone of the US ecosocial safety net. We then draw on histories of US disaster relief and welfare policy to understand the development and structure of the US ecosocial safety net. We use public, secondary data sources, which preclude the need for review from an institutional review board. Then, we account for common historical and functional features between US disaster relief and welfare drawn from our case analysis. We close with a brief explanation of potential implications for policy development and research in comparative context.

Climate change, natural hazards and social welfare

The connections between climate change and social welfare are growing clearer. One salient connection is the impact of climate change and natural hazards on households and communities as a social risk. Natural hazards have been associated with deleterious outcomes for macro-and-community-level economic development (Hallegatte and Rozenberg, 2017), as well as household-level income and wealth (Howell and Elliott, 2019). Relatedly, communities marginalised by race, gender and class often have disproportionate exposure and vulnerability to pollution, constituting environmental racism in many contexts (Bullard, 2018). These disparities also extend to natural hazards (Klinenberg et al., 2020).

Climate change and natural hazards also warrant attention from scholars of social policy because of the cost of adapting to climate change, which is already approaching – and in some cases exceeding – expenditures for welfare programs. Annual expenditures for the Disaster Relief Fund and NFIP alone already border on $50 billion. Federal outlays for the US Disaster Relief Fund were $37 billion in 2022 (OMB, 2023), and NFIP owed the US Treasury $20 billion in debt in 2022 (FEMA, 2022). However, 2022 Federal outlays for the Supplemental Nutrition Assistance Program (SNAP) were roughly $149 billion; Social Security Insurance, $66 billion; and Temporary Assistance for Needy Families (TANF), $15 billion (OMB, 2023). Moreover, federal appropriations do not fully account for the true costs of disaster relief, which are also funded by local, state and philanthropic sources. As the climate crisis progresses, the cost of disaster relief may grow to equal or even eclipse that of the traditional American welfare state.

Conceptualising the ecosocial safety net

Ecosocial policy can be defined as a set of policies and programs that address the overlap of social and environmental concerns while seeking to promote a sustainable and equitable society. This definition is informed by Gugushvili and Otto's (2023) assertion that ecosocial policy improves the ecological situation and redistributes resources between classes. Traditional examples of ecosocial policy have included energy-efficient home retrofitting, household solar panel subsidies and policies that offset the negative social effects of environmental regulation (Gugushvili and Otto, 2023), while others (e.g. Dukelow and Murphy, 2022) have advanced notions of sustainable welfare that reform existing welfare programs by integrating post-growth perspectives. In the context of the USA, a prominent ecosocial policy is the Low Income Home Energy Assistance Program, which assists low-income residents with the costs of residential energy consumption.

Conceptions of ecosocial policy have emphasised the synergies between the welfare and environmental states (Gough, 2016; Meadowcroft 2005; 2008). The concept of a welfare state emerged in the early twentieth century as a response to the challenges posed by industrialisation and urbanisation (Gough, 2016). The welfare state refers to a system in which the government plays an active role in promoting the well-being and economic security of its citizens through policies and programs. While the US welfare state can be considered as a patchwork of policies and programs that insufficiently attend to social welfare (Moffitt and Ziliak, 2020), it consists of two major types of income support programs designed to mitigate social risks – social insurance and social assistance programs. Social assistance programs offer resources reactively on the basis of immediate need, while social insurance programs operate as proactive safety nets by pooling resources through contributions from participants. Examples of US welfare programs include TANF and SNAP as social assistance programs, and Social Security and Unemployment Insurance as social insurance programs. In Esping-Andersen's (1990) three welfare capitalism typologies, the USA is characterised as an example of a liberal welfare regime, which emphasises market-based solutions and individual responsibility. In the USA, this orientation is evident in the comparatively less institutionalised social insurance programs and a greater reliance on residual social assistance programs.

The concept of the environmental state represents state management of the environment and its relationship to society that prioritises environmental protection and sustainability. The environmental state has evolved in many countries over the latter half of the twentieth century (Meadowcroft, 2012). The history of environmental states has traditionally been traced back to the emergence of environmentalism as a political movement in the mid-twentieth century (Meadowcroft, 2012). Political scientists Duit et al. (2016) and Meadowcraft (2005) define the environmental state as state activity and institutions that centre ecological considerations and social–environmental interactions as their central aim. While there does not appear to be scholarly discussions of classifying disaster relief policy as a component of the environmental state, it certainly aligns with this definition. Contrary to the extensive research on welfare states and burgeoning environmental states, scholars' attempts to theorise regarding the environmental state's extension into ecosocial policy and its development across nations lack substantial empirical evidence or in-depth case studies, as well as a guiding conceptual framework.

The domain of ecosocial policy can be conceptualised at the intersections of the welfare and environmental state. This is because the nature of the social–ecological nexus pulls from the state apparatuses that individually attend to the social (welfare state) and ecological (environmental state). Although they diverge in many circumstances, both welfare and environmental policy respond to capitalistic and industrial development (Koch, 2012) and involve regulation and redistribution (Fitzpatrick, 2011). Gough (2016) describes similarities and contrasts between the

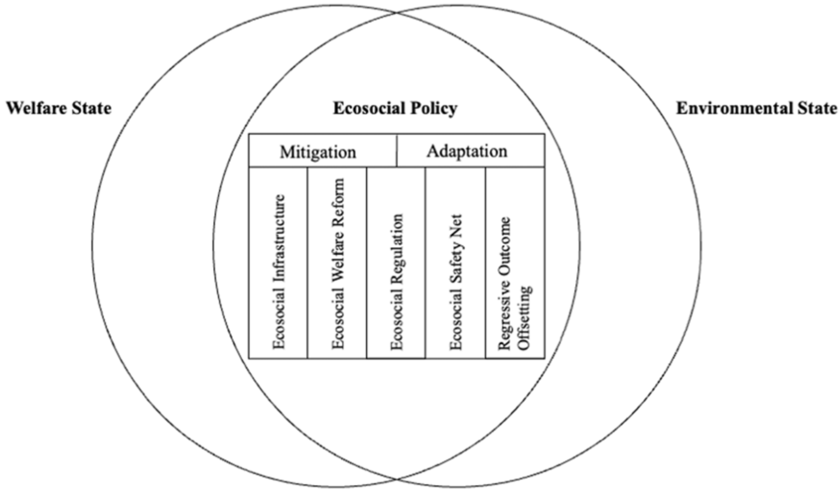

Figure 1. Conceptual framework of ecosocial policy.

welfare and environmental states with four key points: the welfare state is driven by domestic issues, while the environmental state is concerned with the global challenge of climate change; environmental state interventions are marginal compared with most welfare states; climate change is more complex than human welfare; and scientists are involved with measuring climate change in ways that are incomparable to human welfare. Despite these arguable divergences, many scholars (e.g. Gough, 2016; Koch and Fritz, 2014; Meadowcroft, 2008) argue that there are and will be more synergies between the welfare and environmental states, likely because, as the effects of climate change grow in intensity, welfare systems will be increasingly implicated.

While offering useful insights, these scholars neglect disaster relief policy as an arm of the environmental state even though it regulates society's relationship with the environment through a broader view of the meaning of regulation. We classify certain disaster relief programs under the umbrella of ecosocial policy, but only in the distinct form that attends to the social risks caused by climate change and natural hazards, which are called climate risks (Hirvilammi et al., 2023). We call these policies and programs an ecosocial safety net. We use the term 'safety net' to interchangeably include both social assistance and social insurance programs. Natural hazards represent a salient interaction between society and the environment, and certain disaster relief programs attend to the distributional impacts of that nexus.

For clarity, we posit a conceptual framework of ecosocial policy with five purposive pillars divided along the lines of climate change mitigation and adaptation (illustrated by Figure 1): ecosocial infrastructure, ecosocial welfare reform, ecosocial regulation, ecosocial safety nets and regressive outcome offsetting. We classify ecosocial policies that seek to reduce individual-and-household carbon consumption through modifications to infrastructure (e.g. energy efficient home retrofitting) as ecosocial infrastructure, and we consider efforts to 'green' the welfare state with reformed, 'sustainable' policy developed to address the interconnections of work, welfare, care and environment (e.g. four-day workweeks or participatory income programs) as ecosocial welfare reform. Furthermore, we posit that ecosocial safety nets attend to the social risks associated with climate change and natural hazards through redistributing economic resources, another domain that attends to the regressive outcomes of environmental regulation and energy costs (see Nelson et al., 2023, on social policy as a buffer from environmental taxes). Both ecosocial infrastructure and ecosocial welfare reform mitigate climate change by reducing carbon consumption through behavioural mechanisms. However, ecosocial safety nets and policies that offset the regressive outcomes of environmental regulation emphasise adaptation to climate change. We classify what we call ecosocial regulation as functioning as either mitigation or adaptation. Ecosocial regulation is an anomalous class of policies that regulate individual behaviour concerning the environment. Examples include disincentives for individual carbon consumption (e.g. carbon or fuel taxes) and (non)asylum on the grounds of climate change. Although these pillars are distinct in purpose, it is possible that some measures may intersect and that they may change as ecosocial policy evolves.

The case of US disaster relief should be understood in the context of the US environmental justice movement, where 'ecosocial' policy falls under the umbrella of environmental justice. Pellow (2018) explains that the US environmental justice movement gained visibility in the 1970s and focused on a legal framework for equal state protection from environmental harm that was found to disproportionately affect low-income communities and communities of colour. Under this framework, ecosocial policies can be considered an adaptation to the effects of climate change. Although the USA has recently begun to mitigate its contributions to climate change (i.e. the Build Back Better Act), adaptation efforts have centred on disaster preparedness and economic recovery. Moreover, although the US environmental justice movement grew out of the 1970s, its disaster relief efforts have a much older history. In the following sections, we describe the key disaster relief programs that comprise the US ecosocial safety net and their histories.

Core programs of the US ecosocial safety net

The Federal Emergency Management Agency (FEMA) – the principal disaster relief agency in the USA – administers two core programs that form the backbone of the US ecosocial safety net – IAP and NFIP.

The Federal Emergency Management Agency (FEMA) was created in 1979 to organise the federal government's response to natural hazards. Although many agencies are involved in disaster relief and preparedness, each of these agencies either only offers subsidiary funding or works exclusively with the ecological fallout of natural hazards; FEMA is the only agency that offers direct and direct subsidary assistance to individuals (Congressional Research Service [CRS], 2012). The vast majority of FEMA's programs and funding are directed at helping communities prepare for and recover from natural hazards. To our knowledge, IAP and NFIP are the only programs that diverge from FEMA's community-level preparatory and recovery efforts, leading us to reclassify them from disaster relief policy to an ecosocial safety net. These programs attend to the individual-and-household-level distributional effects of natural hazards and closely mimic the US welfare state.

Similar to welfare, IAP and NFIP diverge between the philosophies of assistance and insurance. IAP is a cluster of social programs that mimic the welfare state and offer assistance in response to natural hazards, while NFIP is a social insurance program that offers government-backed flood insurance to homes in flood zones.

The Individual Assistance Program

As of 2023, Individual Assistance Program (IAP) offers seven types of services to individuals and families ranging from temporary housing to unemployment insurance (FEMA, 2019), summarised in Supplemental Table 1. IAP's scope is expansive, and most of its programs offer similar services as various dimensions of the welfare state.

While FEMA provides a rich description of IAP's programs, we were only able to identify public data for IAP's Individual and Households Program (IHP), which consists of the Housing Assistance Program and Other Needs Program (FEMA, 2023b). We present these data to illustrate the number of recipients who have directly benefited from IHP since 2003 – the earliest year available – and the total annual dollar amount of those benefits. FEMA does not publish public individual-level cohort data, so recipients' sociodemographics and the effectiveness of the program are unknown. Although IHP represents only one program in IAP's cluster of programs, we can still use these data to draw several conclusions about the nature of the US ecosocial safety net.

As shown in Figure 2, annual expenditures for IHP were roughly $2 billion except for in 2005 and 2017. We see that expenditures spiked in 2005, 2008, 2012 and 2017, which correspond with extreme hurricane seasons. Figure 3 shows that hundreds of thousands of households have benefited from IHP. Interestingly, many more households benefited from IHP than those who were recorded as 'eligible', which may be attributed to either a data collection error or the provision of resources to recipients despite their eligibility (Table 1).

The National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) also administers NFIP, which offers federally backed, subsidised flood insurance to homeowners and business owners. The insurance plans are sold through private insurance agencies but are guaranteed by the federal government (Rubin et al., 2012). At the time of NFIP's enactment, most homeowners were not insured, leading to considerable losses from natural hazards in the 1960s (Strother, 2018).

The National Flood Insurance Program (NFIP) has garnered considerable debt because of escalating flood damage from hurricanes. In addition to losses from subsidised premiums, costs from reimbursements have risen (FEMA, 2018; FEMA, 2022). Subsidised rates for NFIP were replaced with risk-based premiums in 2012 but were quickly reinstated amid political backlash in 2014 through an updated 'affordability framework' that requires means testing (FEMA, 2018). Significantly, FEMA (2018) found that, while NFIP policyholders had higher incomes than

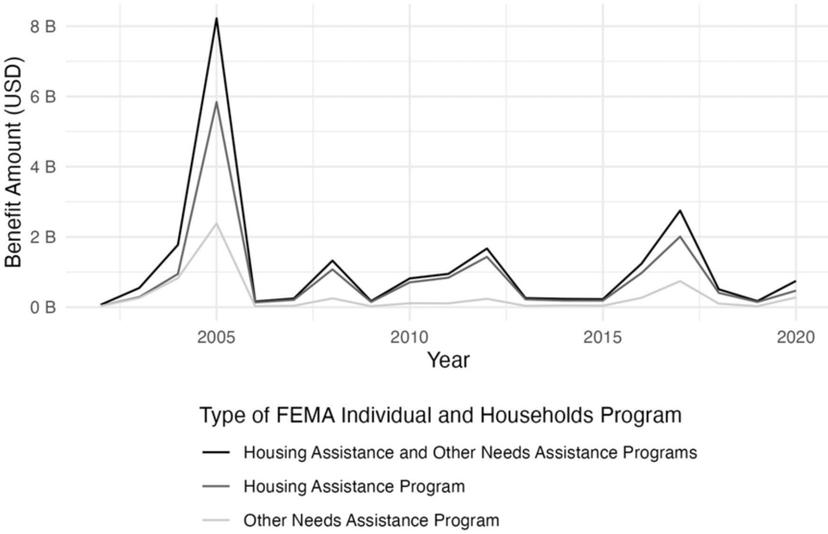

Figure 2. Individual And Households Program funding by year.

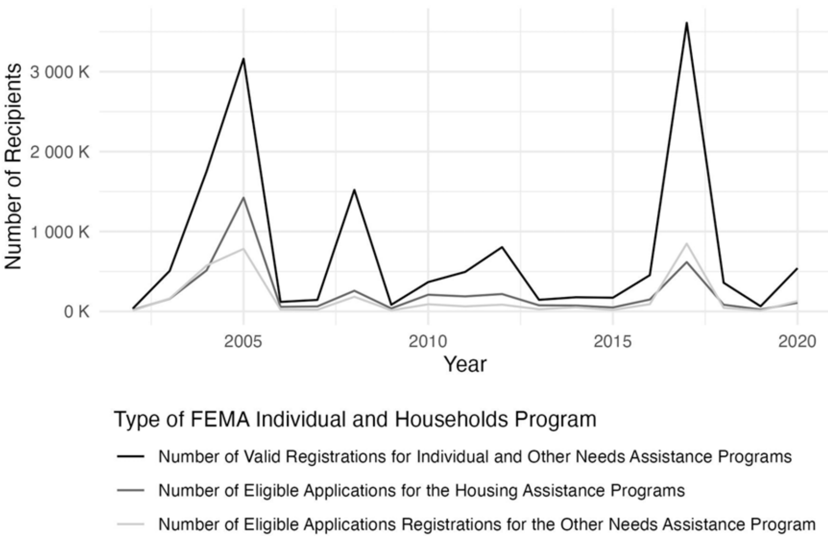

Figure 3. Individual And Households Program eligibility and registration by year.

non-policyholders in the same neighbourhoods, 51 per cent of NFIP policyholders in the most at-risk areas were low-income.

Figure 4 illustrates NFIP claim amounts between 1978 and 2022 collected from FEMA's public NFIP database (FEMA, 2023a). As with IAP, these data demonstrate that most NFIP claims correspond with hurricane seasons.

Similarly, Figure 5 illustrates that, while hundreds of thousands of property owners have received NFIP claims since 1978, the annual number varies around a

Table 1 FEMA individual assistance program services

Program	Description	Services
Mass Care and Emergency Assistance (MC/EA)	MC/EA provides 'life-sustaining' services to survivors before, during and immediately after an environmental hazard.	MC/E services include sheltering; feeding; distribution of emergency supplies; support for individuals with disabilities and others with access and functional needs; reunification services for adults and children; support for household pets, service and assistance animals; and mass evacuee support.
Individuals and Households Program (IHP) assistance	IHP offers direct and financial services to 'eligible' individuals and families who have 'uninsured or underinsured' expenses. IHP does not intend to cover the full expenses of environmental hazards but to meet basic needs. IHP benefits are not considered income for application to other social welfare programs and may be administered up to eighteen months after a presidential declaration of disaster.	IHP services are divided between Housing Assistance and Other Needs Assistance and include lodging expense reimbursement, rental assistance, home repair and replacement assistance, multi-family lease and repair, transportable temporary housing units, direct lease assistance, permanent housing construction, personal property insurance, moving and storage, transportation assistance, group flood insurance, funeral assistance, medical and dental assistance, child care assistance, assistance for miscellaneous items, critical needs assistance and removal assistance.
Disaster Case Management (DCM)	DCM offers temporary casework for survivors.	DCM can provide direct casework to survivors and funding to eligible organisations to finance their own caseworkers.
Crisis Counseling Assistance and Training Program (CCP)	CCP offers funding to eligible organisations for community-based outreach and psychoeducational services.	CCP services can include crisis counselling, public education, community support, development and distribution of educational materials and media and public service announcements.
Disaster Legal Services (DLS)	DLS offers legal aid to survivors through the American Bar Association's Young Lawyer's Division.	DLS services are limited to cases that would not normally incur fees, which can include help with insurance claims, recovery or reproduction of legal documents, home repair and landlord disputes, preparation of power of attorney and guardianship materials and FEMA appeals.
Disaster Unemployment Assistance (DUA)	DUA offers unemployment and re-employment benefits through the Department of Labor by providing fundings to eligible organisations. DUA is only eligible to those who are not eligible for regular state unemployment insurance. DUA benefits are determined by state law and vary state-by-state but are generally limited to twenty-six weeks of payment.	DUA offers direct unemployment insurance payments.
Voluntary Agency Coordination (VAC)	VAC is administered by Volunteer Agency Liaisons.	Volunteer Agency Liaisons support nonprofit and volunteer organisations with service delivery, administration and fundraising.

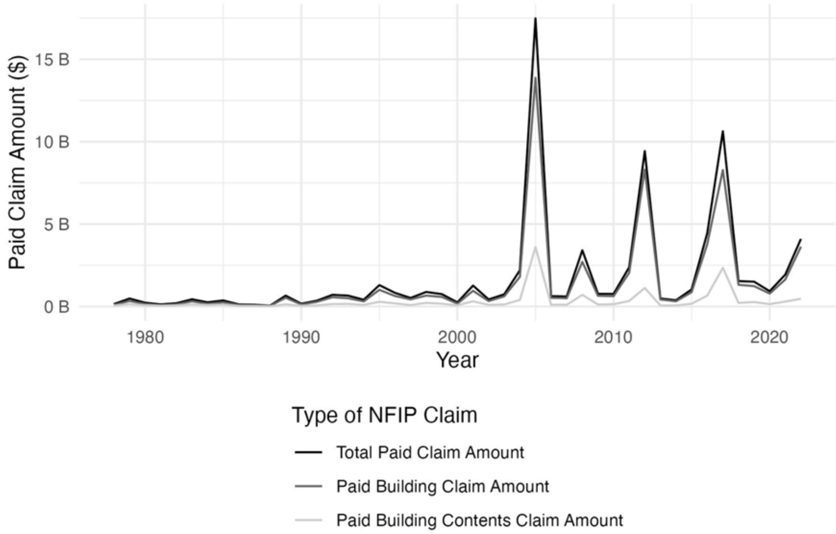

Figure 4. Annual National Flood Insurance Program claim amount.

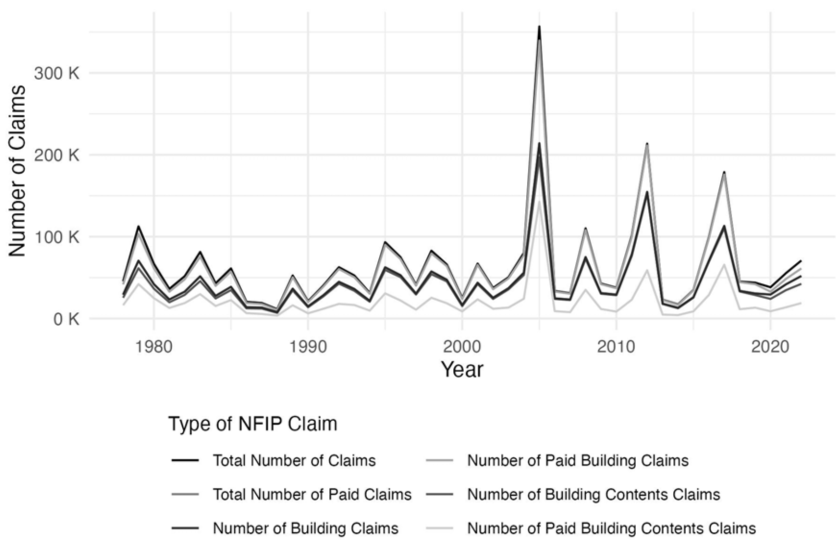

Figure 5. Annual amount of National Flood Insurance Program claims.

consistent average except for years with catastrophic hurricane seasons. Moreover, FEMA's data indicate that very few, if any, NFIP claims are rejected each year, which either points to a rigorous or generous claims process.

While NFIP has clearly been widely utilised, it has also been criticised for creating a moral hazard, whereby homeowners purchase property in high-risk areas, developers construct property in high-risk areas and local governments design land-use policies to enable and encourage development in high-risk areas, a phenomenon

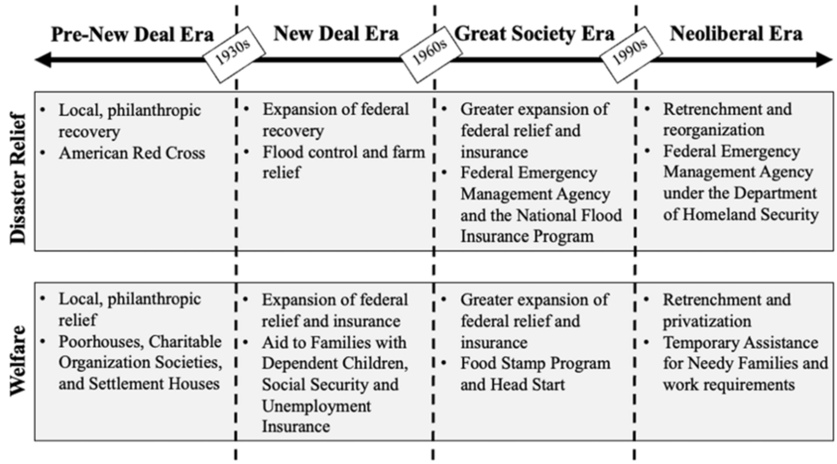

Figure 6. Periods of US disaster relief and welfare.

that has also been explained by weak implementation and enforcement of NFIP and limitations of homeowners' assessment of risk (Ben-Shahar and Logue, 2016; Pralle, 2019).

The historical development of US disaster relief and welfare

We now describe and compare the development of US disaster relief and welfare policy. Since there exist few histories of US disaster relief policy, we mainly draw from Rubin et al.'s (2012) account. A central theme drawn from this comparison is that the development of both US disaster relief and welfare follow similar trajectories from decentralised volunteerism to federal expansion to relative neoliberal retrenchment. Before the New Deal in the 1930s, both US disaster relief and welfare efforts were local affairs that relied on philanthropy and volunteerism. The New Deal coincided with massive expansions of federal involvement in both policy domains. Largescale intervention roughly followed thirty-year periods for both disaster relief and welfare, seeing greater expansion in the 1960s and then relative retrenchment in the 1990s and early 2000s, though changes to disaster relief lagged roughly a decade behind that of welfare (Figure 6).

Pre-New Deal era

Natural hazards were thought of as random 'acts of God' in early American history and therefore warranted little government intervention (Rubin et al., 2012). Disaster relief was largely administered by private means through churches, charities and sometimes local governments and guided by a laissez-faire reluctance to involve the federal government in social issues.

This is exemplified by the founding of the American Red Cross (ARC). ARC was chartered in 1881 by the US Congress to act on behalf of the federal government to develop a system of managing national and international disaster relief and preparation (Irwin, 2013). ARC is a unique organisation in that it is chartered by the US Congress and is obligated to meet the requirements of that mandate but is also an independent non-profit (Irwin, 2013). In effect, American disaster relief has historically been applied nonuniformly through charitable means.

Meanwhile, informed by the Elizabethan Poor Laws, the US welfare state grew out of the poorhouse throughout the nineteenth century (Katz, 1996). In early US history, poorhouses offered institutional resources for the poor. Another more scrutinised form of assistance called outdoor relief also extended non-institutional relief to the poor. These initiatives were locally funded and organised. The next development came after the Civil War with the creation of widows' pensions and veterans' pensions and the Freedman's Bureau. Although limited by political and administrative shortcomings, the Freedman's Bureau administered food assistance, medical care, public education and land redistribution for both Black and white men in the American South (Colby, 1985).

The next major developments in US welfare came in the form of Charitable Organization Societies (COS) and the Settlement House movement. COS were philanthropic, volunteer associations that sought to reform and streamline poverty relief in the late nineteenth century (Ehrenreich, 1985). The COS movement sparked organisations in many major US cities that attempted to evaluate and regulate relief provisions and that were hallmarked by volunteers who would meet with recipients in their homes to judge whether they were worthy or unworthy of resources. Juxtaposed to COS's focus on the individual, Settlement Houses were another type of volunteer organisation adopted in many US cities that offered mutual aid and advocated for structural reform through political action (Katz, 1996).

The New Deal era

The philosophy of local, philanthropic relief changed in the 1930s and 1940s with flood control policy and New Deal legislation, marked by flood and drought relief programs for farmers affected by the Dust Bowl. Rubin et al. (2012) note that '[b]y the end of the Depression, one out of every three or four farmers in the area affected by the Dust Bowl had accepted government relief at one time or another' (p. 67).

Federal intervention made a substantial evolution in 1950 with the Federal Disaster Relief Act, which authorised federal agencies to offer supplies and personnel to states and authorised the ARC to offer food and medicine to survivors (Rubin et al., 2012). Rather than associating these developments with the incipient environmental movement, Rubin et al. (2012) attribute this development to the administrative trend of 'civil defense' that swept the post-war government during the onset of the Cold War. Civil defence was a governance philosophy that motivated the government to prepare for acts of aggression from other nations. In response to costly floods, disaster relief was thought of as a form of civil defence and was conceptualised alongside the growing military–industrial complex. Although this era was marked by significant developments in federal disaster relief, much of the public viewed disaster relief efforts as ineffective.

The USA saw its first major expansion of the federal welfare state with the New Deal in the 1930s. This era of policymaking instituted much of the contemporary piecemeal welfare state, creating work and cash transfer programs as well as unemployment insurance and pensions. These programs dramatically expanded federal relief, collectively reducing poverty; however, they have been criticised for implicitly and often explicitly excluding people of colour (Ehrenreich, 1985; Katz, 1996).

The Great Society era

To remedy the perceived shortcomings of disaster relief policy of the last era, the government passed additional disaster relief acts in subsequent decades to expand federal services for disaster relief. As with the previous era, Rubin et al. (2012) attribute these developments to mounting costs from contemporary natural hazards along with Congressional realisations of gaps in federal disaster relief rather than to the budding environmental movement. The Disaster Relief Act of 1966 authorised federal agencies to offer loans to survivors, the National Flood Insurance Act of 1968 offered subsidised flood insurance to homeowners and the Disaster Relief Act of 1970 authorised temporary unemployment and housing benefits (Rubin et al., 2012).

After several amendments, the Disaster Relief Act was renamed the 'Robert T. Stafford Disaster Relief and Emergency Assistance Act' (the 'Stafford Act'), and numerous changes were made to restructure the relationship between federal and state governments. One consequence of these administrative developments was the increasing prominence of the role of the federal government in disaster relief.

During the Great Society era, the USA witnessed significant developments in its welfare state. The launch of President Lyndon B. Johnson's ambitious policy agenda aimed to eradicate poverty. This era saw the introduction of several landmark legislative initiatives, including the Economic Opportunity Act, the establishment of Medicare and Medicaid and the expansion of the Social Security Act (Jansson, 2018). These programs aimed to provide economic support to certain vulnerable populations. While the initiatives of the 1960s expanded the welfare state and made strides in poverty reduction, they also faced criticisms regarding their effectiveness, sustainability and unintended consequences (Jansson, 2018).

Neoliberal era

Rubin et al. (2012) explain that FEMA's political apogee was in the 1990s when FEMA was seen to have successfully responded to devastating natural hazards; however, they argue that the apparent mishandling of response to the events on 11 September 2001 led to the reorganisation of FEMA under the newly formed Department of Homeland Security (DHS).

Disaster relief has seen vacillating changes since its incorporation into DHS. The Disaster Mitigation Act of 2000 reformed the Stafford Act to further promote pre-disaster planning and reduce federal expenses by increasing the role of charitable organisations by restricting the types of individual assistance available, capping housing assistance and restricting eligibility for assistance (Rubin et al., 2012). However, FEMA's role was again reconceptualised through the enactment of the Post-Katrina Emergency Management Reform Act of 2006, which sought to give

FEMA more autonomy within DHS in light of DHS' apparent shortcomings in responding to Hurricane Katrina (GAO and Jenkins, 2008).

The US welfare state has also seen neoliberal reform with the passage of the Personal Responsibility and Work Opportunity Act of 1996, which among many other changes, greatly restricted the principal cash transfer program with tenure and work requirements and limited welfare provision for immigrants (Soss et al., 2011). These reforms have been criticised for exacerbating racial divisions that disfavour people of colour (Schram et al., 2010). While the welfare state has generally trended towards retrenchment and devolved governance in recent decades, expansive, temporary programs were initiated in the early 2020s to cope with coronavirus disease 2019 (COVID-19), although those efforts were soon rescinded.

Synergies between US disaster relief and welfare

We draw several conclusions from our case analysis that elucidate synergies between US disaster relief and welfare embodied in its ecosocial safety net.

Developmental trends

Though not completely aligned, the development of US disaster relief followed a trajectory from volunteerism to state intervention and then to neoliberal public–private partnerships such as the welfare state. Similar to disaster relief, pre-Progressive era welfare relied on volunteerism and was conceptualised as a philanthropic issue. The Progressive era saw development in welfare through volunteer associations and casework through COS and Settlement Houses (Ehrenreich, 1985; Katz, 1996). Coinciding with this trend, ARC was founded in 1881 as a quasi-public–private organisation staffed by volunteers. According to Irwin (2013), ARC grew out of the COS movement and was guided by middle class progressivism, much like welfare. Furthermore, the first federal disaster relief program coincided with the New Deal era, which saw a major expansion of welfare programs, albeit disaster relief did not yet share the expansive scope of welfare. As with welfare, however, disaster relief interventions expanded in the mid-twentieth century along with the Great Society, even enacting NFIP. Disaster relief expanded through the end of the twentieth century, diverging from welfare, which saw major retrenchment. However, after FEMA's perceived failures in the early 2000s, FEMA's authority was reduced through subsumption to DHS, which outsourced much of its programming to private and volunteer organisations. These latter developments are associated with neoliberalism, a global trend towards the privatisation of government services through market governance.

The evolution of US disaster relief and welfare follow similar trends, revealing the concurrent philosophies that underwrite both. Skocpol (1995) suggestion for a heavily nuanced polity-focused explanation of welfare state development, belying the traditional industrialisation thesis and cultural explanation, leaves us hesitant to posit a single theory for the evolution of the US ecosocial safety net, but its history supports Ehrenreich's (1985) observation concerning the tendency of the welfare state – and disaster relief, in our view – to ebb and flow with contemporary currents in social and political thought. Regardless, their co-development constitutes a substantial synergy between the welfare and environmental states that underwrite the US ecosocial safety net.

Philosophy of deserving and undeserving

As with the welfare state, the US ecosocial safety net has developed a distinction between social assistance and social insurance. The IAP can be classified as an assistance program, while NFIP can be classified as an insurance program. In the USA, assistance and insurance programs are associated with diverging public discourses and generosity of benefits, in part because of public perception of the nature of beneficiaries.

While there are clear commonalities between the development of the US disaster relief and welfare policy, there are also divergences between the two, most demonstrably by the realisation that change in disaster relief policy has lagged behind that of welfare by roughly a decade. We posit that where development diverges can be explained by the notion of the deserving and undeserving poor that informs the distinction between social assistance and insurance.

Influenced by Victorian philosophies of pauperism and the Elizabethan Poor Laws, the US approach to welfare is tinged by the Protestant work ethic – the explanation that poverty can be alleviated by a strong work ethic and the association between poverty and personal moral failure (Weber, 2001 [1930]) – and subsequent values regarding the deserving and undeserving poor (Katz, 1996; Piven and Cloward, 1993). In sum, someone deserves assistance if they meet a moral threshold – which has been connotated with personal characteristics such as employment, race, gender and citizenship – otherwise, they do not deserve assistance. Reid (2013) also characterises disaster relief through a deserving/undeserving framework influenced by neoliberalism because of its response to Hurricane Katrina, where there were reports of FEMA delaying and denying assistance to households whose need was suspect. This argument is also evidenced by the means-and-insurance-tested eligibility standards in IAP and NFIP. In essence, these programs' eligibility standards seek to filter out those who need assistance from those trying to take advantage of the system.

The deserving/undeserving framework is tied up with the idea of moral hazard, which is exemplified by recent debates related to NFIP. Baker (1996) explains that moral hazard is the notion that, in terms of government spending and programs, 'less is more.' They conclude that the logic of moral hazard justifies less social assistance because recipients may exploit the benefit, creating an incentive to lazily avoid work. Moral hazard and the philosophy of deservingness reveal themselves in disaster relief through public and political discourse on why people live in disaster-prone areas, why people do not leave risky areas and why people cannot cope with the effects of natural hazards on their own. It may also reveal itself in stringent eligibility criteria obscured by FEMA's public data.

Disaster relief policies have expanded in areas and political moments when the victims of natural hazards have been viewed as deserving of assistance because of their faultless bad luck (i.e. 1940s farmers and 1960s homeowners). When natural hazards were thought of as random acts of God, it was difficult to blame people, especially the middle class. This philosophy coincided with the expansion of disaster relief. In recent decades, however, pressured by rising expenditures and the quantification of risk, the blame has shifted from nature to the individual.

The National Flood Insurance Program (NFIP) serves as a stark example of this trend. Public discourse ranges from why everyone should bear higher flood premiums so that wealthy individuals can have multimillion-dollar summer homes on the coast to why low-income people have been allowed to live in disaster-prone areas (Elliott, 2021). The question of who deserves flood insurance culminated in fickle legislation that first dramatically restricted NFIP and then expanded it again in the 2000s. Meanwhile, hazard-related losses have grown exponentially in recent decades (Smith and Vila, 2020). As such, we expect the tendency to retrench public benefits in response to notions of un-deservingness to become increasingly salient as more people, many of whom may be middle class, are harmed by climate change.

Functions of racial capitalism

Another synergy between US disaster relief and welfare is that both have developed along racial and ethnic lines, creating and perpetuating systematic racism for the benefit of a white middle class. We use Melamed's (2015) definition of racial capitalism, where the accumulation of capital is dependent on unequal differentiation of human value and production across racial and ethnic groups. Ehrenreich (1985) suggests that the welfare state that grew out of Progressive Era and New Deal legislation was the result of a white, middle-class movement to preserve the capitalist social order for the benefit of property owners, a position also supported by the arguments of many other scholars (Colby, 1985; Piven and Cloward, 1993; Soss et al., 2011).

Disaster relief is also associated with racial capitalism in at least two ways: as engines of white homeownership and as recovery machines. Elliot (2021) argues that NFIP has extended homeownership to white people, even in areas at risk of flood damage, at the exclusion of people of colour. In function, NFIP augmented the creation of a white middle class through homeownership, the principal lever of accumulating wealth in America, at the expense of people of colour, even if it meant that the government may have underwritten risky insurance policies in areas at risk for flooding.

Moreover, the influx of capital to communities after natural hazards through FEMA, a phenomenon called 'recovery machines', exacerbates racial inequities that function to further exploit communities of colour and extend the power and wealth of a white middle class (Pais and Elliott, 2008). Recovery machines occur, in part, because disaster relief programs respond to the destruction of property, not community, and because of intense political and financial pressure for communities to build back bigger than before the hazard (Pais and Elliott, 2008). Klinenberg et al. (2020) sum it up by positing that, while whiter, wealthier homeowners benefit from the influx of disaster relief capital, racially marginalised populations face displacement, rising rents and insufficient benefits. While the connections between NFIP and racial capitalism are evident, it is unclear how IAP, the other part of the US ecosocial safety net, relates to this phenomenon because of the paucity of individual-and-household-level socio-economic and demographic data.

Relationship to economic growth

A final synergy between US disaster relief and welfare that is manifested in its ecosocial safety net is their relationship to economic growth. Hirvilammi et al. (2023) suggest that, regardless of type of welfare regime, there exists 'particular work-welfare nexus and a strong connection to economic growth' that has persisted throughout the development of welfare states (p. 7). In the USA, this is evidenced by the conditioning of benefits on work, a history of welfare capitalism and the funding of programs with economic growth.

The US ecosocial safety net has a similar relationship to economic growth; in fact, it prioritises economic growth. IAP offers time-and-income-limited benefits that are revoked once economic recovery has been achieved, while NFIP enables the accumulation of wealth and advances the mechanism of property ownership and values for economic recovery.

Although the US ecosocial safety net functions as a recovery machine that advances economic growth as the antidote to natural hazards, it diverges from the green growth approach of other areas of the environmental state (see Buch-Hansen and Carstensen, 2021, on green growth) by prioritising economic growth without attention to the environmental impacts of that growth. In effect, it functions similarly to the welfare state in that relief emphasises the restoration of work as a mechanism of social inclusion, diverging from Dukelow and Murphy's (2022) prescriptions for decommodified, post-productivist ecosocial welfare. Ironically, because the US ecosocial safety net does not ascribe to green growth or post-growth approaches, the work and unbridled economic growth that it advances may contribute to the warming climate associated with more destructive natural hazards.

Implications for ecosocial policy

Understanding the development and functions of the 'ecosocial safety net' is essential to addressing pressing challenges at the intersection of climate justice and welfare. This study contributes a conceptual framework for ecosocial policy that allows for the cross-national analysis of modes of ecosocial policy such as ecosocial safety nets. We classify ecosocial safety nets under the larger umbrella of ecosocial policy, which also encompasses other forms such as ecosocial infrastructure and ecosocial welfare reform. These forms of ecosocial policy are united around the common purpose of attending to the intersections of social and ecological welfare. Our conceptualisation of the ecosocial safety net differs from that of the extant literature on ecosocial policy because we describe an existing, imperfect system that is not yet attuned with literature that prescribes green growth or decommodification (Dukelow and Murphy, 2022). We classify disaster relief policy as a form of the environmental state and then reclassify specific disaster relief programs under a unique synergy between the welfare and environmental states. From this perspective, we draw developmental and functional commonalities between the welfare and environmental states at this nexus previously unaddressed by scholars such as Gough (2016).

To the authors' knowledge, this is the first study to describe the case of the US ecosocial safety net and to draw such comparisons between US disaster relief and welfare policy. Our empirical contribution highlights the developmental and functional commonalities that exist between the environmental and welfare states through the US ecosocial safety net. The US ecosocial safety net primarily responds to flood damages from intense hurricane seasons. We find that both US disaster relief and welfare policy developed and retrenched along similar trajectories – from decentralised volunteerism to federal expansion and then to relative neoliberal retrenchment. We classify these roughly thirty-year policy periods as the pre-New Deal Era, the New Deal Era, the Great Society Era and the Neoliberal Era. While both the ecosocial safety net and welfare state share the philosophical distinction between social insurance and social assistance, we attribute the divergences in their development to notions of moral hazard. Natural hazards were historically seen as ‘random acts of God’, though this seems to be changing, and the ecosocial safety net interacts with discourses of deserving and undeserving program recipients differently than with welfare policy. We also point out that, as with welfare, the US ecosocial safety net serves the function of sustaining racial capitalism and upholds a relationship to economic growth.

While this study expands what we may consider ecosocial policy, it also deepens our understanding of how ecosocial policy might function as a mechanism of climate change adaptation. The USA already has a form of ecosocial policy that fosters adaptation. However, we found little empirical evidence of the efficacy of the US ecosocial safety net. Without more granular data, we are unable to evaluate the efficacy and distributional stratification of this adaptation along the lines of race, class and gender. Governments can promote more equitable adaptation by first collecting these data.

We are left with the question of how this case might relate to ecosocial policy in other nations. Given the paucity of literature on the topic, we suggest that additional research is needed to compare ecosocial safety nets and ecosocial policy to find macro patterns such as ecosocial welfare state regime types and global developmental trends such as divergence and convergence. However, this study and its conceptual framework of ecosocial policy offer a groundwork for this research in other contexts. Ecosocial policy can now be conceptualised and analysed along our posited domains of ecosocial policy, and ecosocial safety nets can be compared with the developmental and functional qualities of the US case. This constitutes a novel line of research with potentially significant real-world implications as climate change and climate risks persist.

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References

Baker, T. (1996), ‘On the genealogy of moral hazard’, *Texas Law Review*, **75**, 237. https://scholarship.law.upenn.edu/faculty_scholarship/872.

Ben-Shahar, O., and Logue, K. D. (2016), 'The perverse effects of subsidized weather insurance', *Stanford Law Review*, **68**, 571.

Buch-Hansen, H., and Carstensen, M. B. (2021), Paradigms and the political economy of ecopolitical projects: green growth and degrowth compared. *Competition & Change*, **25**(3–4), 308–327.

Bullard, R. D. (2018), *Dumping in Dixie: Race, Class, and Environmental Quality*. Abington: Routledge.

Colby, I. C. (1985), 'The Freedmen's Bureau: From social welfare to segregation', *Phylon*, **46**, 3, 219–230.

Congressional Research Service (CRS). (2012), 'Federal Emergency Management: A Brief Introduction', Washington DC: Library of Congress. https://sgp.fas.org/crs/homesec/R42845.pdf

Duit, A., Feindt, P. H., and Meadowcroft, J. (2016), 'Greening leviathan: The rise of the environmental state?', *Environmental Politics*, **25**, 1, 1–23. 10.1080/09644016.2015.1085218

Dukelow, F., and Murphy, M. P. (2022), 'Building the future from the present: Imagining post-growth, post-productivist ecosocial policy, *Journal of Social Policy*, **51**, 3, 504–518. 10.1017/S0047279422000150.

Ehrenreich, J. H. (1985), The Altruistic Imagination: A History of Social Work and Social Policy in the United States. Ithaca, NY: Cornell University Press.

Elliott, R. (2021), *Underwater: Loss, Flood Insurance, and the Moral Economy of Climate Change in the United States*. New York, NY: Columbia University Press.

Esping-Andersen, G. (1990), *The Three Worlds of Welfare Capitalism*. Princeton, NJ: Princeton University Press.

Federal Emergency Management Agency (FEMA) (2018), 'An affordability framework for the national flood insurance program', https://www.fema.gov/sites/default/files/2020-05/Affordability_april_2018.pdf.

Federal Emergency Management Agency (FEMA). (2019), 'Individual assistance program and policy guide (IAPPG)', FP 104-009-03. https://www.fema.gov/sites/default/files/2020-09/fema_individual-assistance-program-policy-guide_11-29-2018.pdf.

Federal Emergency Management Agency (FEMA). (2022), 'The watermark for fiscal year 2022 quarter 4', Federal Insurance and Mitigation Administration. https://www.fema.gov/sites/default/files/documents/fema_watermark-q4-fy22.pdf.

Federal Emergency Management Agency (FEMA). (2023a), 'OpenFEMA Dataset: FIMA NFIP Redacted Claims – v2', https://www.fema.gov/openfema-data-page/fima-nfip-redacted-claims-v2.

Federal Emergency Management Agency (FEMA). (2023b), 'OpenFEMA Dataset: Individuals and Households Program – Valid Registrations – v1', https://www.fema.gov/openfema-data-page/individuals-and-households-program-valid-registrations-v1.

Fitzpatrick, T. (Ed.). (2011), *Understanding the Environment and Social Policy*. Bristol: Policy Press.

Gerber, B. J. (2007), 'Disaster management in the United States: Examining key political and policy challenges', *Policy Studies Journal*, **35**, 2, 227–238. 10.1111/j.1541-0072.2007.00217.x

Gough, I. (2016), 'Welfare states and environmental states: A comparative analysis', *Environmental Politics*, **25**, 1, 24–47. 10.1080/09644016.2015.1074382.

Gugushvili, D., and Otto, A. (2023), 'Determinants of public support for eco-social policies: A comparative theoretical framework', *Social Policy and Society*, **22**, 1, 1–15. 10.1017/S1474746421000348.

Hallegatte, S., and Rozenberg, J. (2017), 'Climate change through a poverty lens', *Nature Climate Change*, **7**, 4, 250–256. 10.1038/nclimate3253.

Hirvilammi, T., Häikiö, L., Johansson, H., Koch, M., and Perkiö, J. (2023), 'Social policy in a climate emergency context: Towards an ecosocial research agenda', *Journal of Social Policy*, **52**, 1, 1–23. 10.1017/S0047279422000721.

Howell, J., and Elliott, J. R. (2019), 'Damages done: The longitudinal impacts of natural hazards on wealth inequality in the United States', *Social Problems*, **66**, 3, 448–467. 10.1093/socpro/spy016.

Intergovernmental Panel on Climate Change (IPCC). (2022), 'Climate change 2022: Impacts, adaptation and vulnerability', https://www.ipcc.ch/report/ar6/wg2/.

Irwin, J. (2013), *Making the World Safe: The American Red Cross and a Nation's Humanitarian Awakening*. Oxford: Oxford University Press.

Jansson, B. S. (2018), *The Reluctant Welfare State*. Boston, MA: Cengage Learning.

Katz, M. B. (1996). *In the Shadow of the Poorhouse*. New York, NY: BasicBooks.

Klinenberg, E., Araos, M., and Koslov, L. (2020), 'Sociology and the climate crisis', *Annual Review of Sociology*, **46**, 649–669. 10.1146/annurev-soc-121919-054750.

Koch, M. (2012), *Capitalism and Climate Change: Theoretical Discussion, Historical Development and Policy Responses*. London: Palgrave Macmillan.

Koch, M., and Fritz, M. (2014), 'Building the eco-social state: do welfare regimes matter?', *Journal of Social Policy*, **43**, 4, 679–703. https://doi.org/10.1017/S004727941400035X.

Meadowcroft, J. (2005), 'From welfare state to ecostate', in J. Barry and R. Eckersley, (eds.) *The State and the Global Ecological Crisis*. Cambridge, MA: MIT Press.

Meadowcroft, J. (2008), 'From welfare state to environmental state?', in I. Gough, J. Meadowcroft, J. Dryzek, J. Gerhards, H. Lengfield, A. Markandya and R. Ortiz (eds.), JESP Symposium: Climate Change and Social Policy, *Journal of European Social Policy*, **18**, 331. https://doi.org/10.1177/0958928708094890.

Meadowcroft, J. (2012), 'Greening the state', in Steinberg, P., and VanDeever S. D. (eds.), *Comparative Environmental Politics: Theory, Practice, and Prospects*, Cambridge, MA: MIT Press, 63–87.

Melamed, J. (2015), 'Racial capitalism', *Critical Ethnic Studies*, **1**, 1, 76–85. https://doi.org/10.5749/jcritethnstud.1.1.0076.

Moffitt, R. A., and Ziliak, J. P. (2020), 'COVID-19 and the US safety net', *Fiscal Studies*, **41**, 3, 515–548. https://doi.org/10.1111/1475-5890.12243.

Nelson, K., Lindh, A., and Dalén, P. (2023), Social sustainability in the decarbonized welfare state: Social policy as a buffer against poverty related to environmental taxes. *Global Social Policy*, 1–28. https://doi.org/10.1177/14680181231217659.

Office of Management and Budget [OMB]. (2023), 'Budget of the United States Government, Public Budget Database, Fiscal Year 2024', https://www.govinfo.gov/app/collection/budget/2024.

Pais, J. F., and Elliott, J. R. (2008), 'Places as recovery machines: Vulnerability and neighborhood change after major hurricanes', *Social Forces*, **86**, 4, 1415–1453. 10.1353/sof.0.0047.

Pellow, D. N. (2018), *What is Critical Environmental Justice?* San Francisco, CA: John Wiley & Sons.

Piven, F.F., and Cloward, R. (1993), *Regulating the Poor: The Functions of Public Welfare*. New York: Vintage.

Pralle, S. (2019), 'Drawing lines: FEMA and the politics of mapping flood zones', *Climatic Change*, **152**, 2, 227–237. https://doi.org/10.1007/s10584-018-2287-y.

Reid, M. (2013), 'Social policy, 'deservingness,' and sociotemporal marginalization: Katrina survivors and FEMA', *Sociological Forum*, **28**, 4, 742–763. https://doi.org/10.1111/socf.12051.

Rubin, C. B., Jones, A., and Kovacich, A. (2012), *Emergency Management: The American Experience, 1900-2010*. Boca Raton, FL: CRC Press.

Schram, S. F., Soss, J. B., and Fording, R. C. (Eds.). (2010), *Race and the Politics of Welfare Reform*. Ann Arbor, MI: University of Michigan Press.

Skocpol, T. (1995). *Protecting Soldiers and Mothers: The Political Origins of Social Policy in the United States*. Cambridge, MA: The Belknap Press of Harvard University Press.

Smith, G., and Vila, O. (2020), 'A national evaluation of state and territory roles in hazard mitigation: Building local capacity to implement FEMA hazard mitigation assistance grants', *Sustainability*, **12**, 23, 10013. 10.3390/su122310013.

Soss, J., Fording, R. C., and Schram, S. F. (2011), *Disciplining the Poor: Neoliberal Paternalism and the Persistent Power of Race*. Chicago, IL: University of Chicago Press.

Strother, L. (2018), 'The National Flood Insurance Program: A case study in policy failure, reform, and retrenchment', *Policy Studies Journal*, **46**, 2, 452–480. https://doi.org/10.1111/psj.12189.

United States Government Accountability Office (GAO), and **Jenkins, W. O.** (2008), 'Actions taken to implement the post-Katrina emergency management reform Act of 2006', US Government Accountability Office. https://www.gao.gov/products/gao-09-59r.

Weber, Max. (2001) [1930], *The Protestant Ethic and the Spirit of Capitalism*. New York, NY: Routledge.

Yoon, D. K. (2012), 'Assessment of social vulnerability to natural disasters: A comparative study', *Natural Hazards*, **63**, 2, 823–843. https://doi.org/10.1007/s11069-012-0189-2.

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