

Internal Environmental Displacement: A Growing Challenge to the United States Welfare State

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Abstract

While the greatest potential for environmental displacement occurs in poorer nations, internal displacement has resulted from environmental change and disasters in the United States; and climate change will likely amplify this movement. I describe how environmental displacement is a policy drift that reduces the effectiveness of current welfare state policies to protect US populations from the risk of impoverishment. Evidence from previous disasters indicates environmental displacees have particular assistance needs. I identify the four main assistance needs in my Environmental Displacement and Resilience Model then use this model to evaluate whether current policies address housing, finances, health, and discrimination needs of those displaced. My analysis highlights a gap between the country's response to disasters and the current welfare state social safety nets. Without disaster and welfare policy changes environmental displacement will continue to be a policy drift that leave displacees vulnerable to social and economic marginalization.

Key words

Environmental displacement; climate change; disasters; social vulnerability; United States welfare state

Resumen

Mientras que el mayor potencial de desplazamientos por causas medioambientales se da en los países más pobres, en los Estados Unidos se ha producido un desplazamiento interno como resultado de cambios ambientales y desastres; y es probable que el cambio climático aumente estos movimientos. Se describe cómo los desplazamientos por causas ambientales suponen un fallo político que reduce la

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eficacia de las actuales políticas del estado de bienestar que se deben desarrollar para proteger a la población de Estados Unidos contra el riesgo de empobrecimiento. Evidencias de desastres anteriores indican que los desplazados por causas medioambientales tienen necesidades de asistencia especiales. Se identifican las cuatro necesidades de asistencia principales que recoge Modelo de Desplazamiento Medioambiental y Resiliencia de la autora, para después usar este modelo para evaluar si las políticas actuales cubren las necesidades de vivienda, finanzas, salud y discriminación de los desplazados. Este análisis demuestra que hay una brecha entre la respuesta del país ante los desastres y las actuales redes de protección del estado de bienestar. Si no hay cambios en las políticas de desastres y bienestar, los desplazamientos por causas medioambientales seguirá siendo una deriva política que deja a los desplazados en una posición vulnerable frente a la marginalización social y económica.

Palabras clave

Desplazamiento por causas medioambientales; cambio climático; desastres; vulnerabilidad social; estado de bienestar en Estados Unidos

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1. Introduction

The “welfare state” describes the rise of government assistance programs in industrialized nations following World War II. These programs were designed to protect citizens from a variety of risks to their social and economic livelihoods including unemployment, disability, and disasters. While not often viewed as welfare recipients, disaster victims are deemed worthy of direct governmental assistance because disasters are seen as beyond individual control. Disasters, particularly the Dust Bowl Drought of the 1930s, were even used as rhetorical tools to promote the establishment of United States (US) welfare programs, and since then the effects of disaster have been continually defined as a risk to individual livelihoods that should be collectively shared (Dauber 2009).

Thus in the US, understanding the relationship between general welfare programs and disaster assistance is important as climate change increases the intensity and frequency of environmental hazards. Moreover, in disaster after disaster, research has shown that those who face the greatest impacts and have the least ability to recover from disaster in the US are those who were already in precarious social and economic positions—those who are in need or are on the verge of needing governmental assistance in daily life (Phillips *et al.* 2010). Hurricane Katrina further highlighted the need for an integrated discussion of disaster assistance and general governmental welfare assistance to ensure that the welfare state fulfills its mission of spreading certain risks collectively and prevent 21st Century disaster impacts from becoming what Hacker (2004) refers to as “policy drift.”

In this paper, I focus on one specific outcome of disasters and environmental change—permanent environmental displacement—and I begin by describing how it is creating a growing chasm between policy and social conditions of risk (Hacker 2004). Using research from past events and drawing on Cernea’s (1997) model of development-induced impoverishment risks, I identify four specific needs (housing, economic recovery, health, and anti-discrimination and marginalization) in the Environmental Displacement and Resilience Model to establish foci for research and welfare policy discussions on limiting the risk of impoverishment from environmental displacement. I then evaluate the ability of current disaster, general welfare, and discrimination policies to meet these needs by reviewing over 30 documents from federal agencies, Congressional records, and external research think tanks. This review raises three issues, discussed below, with the US welfare state that identify environmental displacement as creating policy drift.

2. Policy drift as welfare state retrenchment

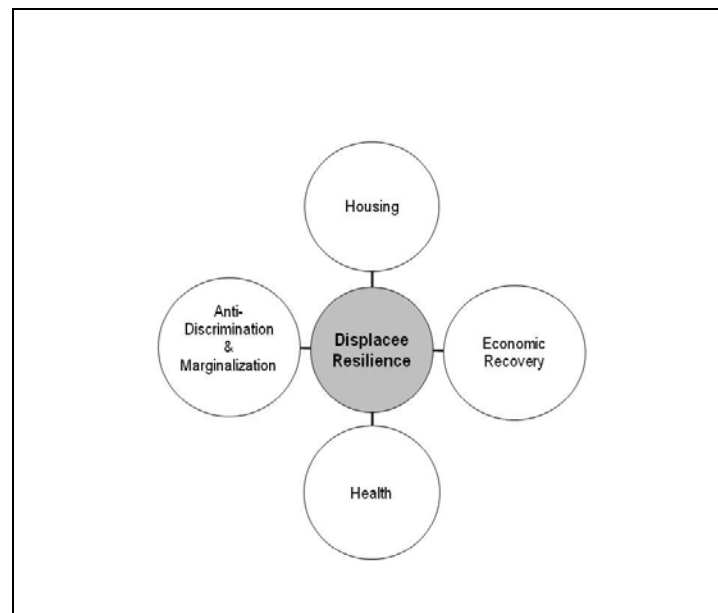
Hacker (2004) argued that understanding the US welfare state today is less about debating the potential for major policy changes (which have been few) and more about noticing the small and often undetected changes *in society* that limit the effectiveness of welfare programs. One such change is “drift” in which social changes create new or increased risks to the financial stability of many Americans. Once the underlying forces of society have changed, the welfare state will be unable to meet its stated goals of protecting citizens from impoverishment without changes in policy. Examples of drift include changes in the economy—globalization, de-industrialization, service sector growth—or population changes—household structure change, ageing populations, growing inequality—that have put households at greater risk of falling into poverty (Piersen 2001). Without new policies or expansion of current policies, drift creates welfare state retrenchment. Thus, it mimics the effect of a major welfare policy change, namely, undermining the stated purpose of social welfare (sharing certain risks collectively) and increasing the amount of “risk privatization” in which “stable social policies have come to cover a declining portion of the risks faced by citizens” especially for already disadvantaged populations (Hacker 2004, p. 243).

The current examples of policy drift in the academic literature focus solely on societal changes. By including environmental changes, more risks can be identified. In particular, population displacement from mounting environmental change is a risk that is currently ignored by the US welfare state, and much of the US policy system. Environmental displacement occurs when people are forced to leave their homes due to either gradual or sudden changes in the environment (Biermann and Boas 2010). Impoverishment from environmental displacement is often perceived as a problem for low-income countries, yet a small but significant number of people in the US will continue to be forced to permanently move as they have in the past (Pais and Elliott 2008). Hurricane Katrina (2005) and the Dust Bowl Drought (1930s) are examples of environmental displacement in US history, along with the 1927 Louisiana flood, the 1948 Oregon flood, 1992's Hurricane Andrew, the 1993 Mississippi River Floods, and 1999's Hurricane Floyd (Levine, Esnard and Sapat 2007, Rivera and Miller 2007). Climate change will amplify this displacement by increasing both the scale and frequency of gradual-onset events (chronic drought or sea level rise that make areas uninhabitable or unable to support certain economic sectors) and sudden-onset disasters (floods, wildfires, and tropical storms) that destroy infrastructure and homes (Field *et al.* 2007). Coupled with demographic forces such as population growth, development in hazardous areas, and increasing economic inequality, disaster and environmental changes will further increase the likelihood more people will be driven from their homes in years to come (Gutmann and Field 2010, Raleigh, Jordan and Salehyan 2008). Unfortunately, we know little about the resilience of permanently displaced populations in the US since there has been little academic focus on displacement and long-term recovery; we even lack an estimate of the quantity of internal environmental displacees (Finch, Emrich and Cutter 2010). The limited evidence on US environmental displacement suggests that forced environmental displacement usually leads to further insecurity and constrained resilience for US populations as it does for populations elsewhere in the world (Cernea 1997, Klot 2004).

3. Impoverishment risks of US environmental displacement

To understand how environmental displacement represents a policy drift, I adapt Cernea's (1997) model of the impoverishment risks from development projects to the US situation using academic literature on US disasters and displacement. Cernea identified eight impoverishment risks: landlessness, joblessness, homelessness, marginalization, increased morbidity and mortality, food insecurity, loss of access to common property, and social disarticulation. I condense these risks into four main areas of concern in the Environmental Displacement and Resilience Model (Figure 1) —housing, economic recovery, health, and anti-discrimination and marginalization—that without attention will create a secondary and often more detrimental disaster of further impoverishment and marginalization for US displacees. I briefly describe how the risks that displacees face differ from those faced by populations who either voluntarily move or disaster-affected populations who are able to rebuild in place. This discussion provides foci for evaluating the welfare state's ability to attend to this issue.

Figure 1: Environmental Displacement and Resilience Model



4. Housing

Gradual environmental change negatively affects ecosystem-dependent livelihoods and sudden disasters destroy homes and businesses. Thus, the loss of economic and social resources for environmentally-displaced populations makes housing a central concern for displaced populations (Cernea 1997). Specifically, environmental displacement in the US results in dramatic drops in homeownership and increased public housing rates among displacees.

Many low- and middle-income households are unable to maintain homeownership through the displacement. Homeownership is foundational to Americans' economic security and homes represent the majority of households' wealth that may not be fully recouped after displacement. The loss of homes is particularly detrimental for minority and low-income households whose homes represent a larger portion of their household wealth compared to others (Finch, Emrich and Cutter 2010, Li *et al.* 2010). Not only do homeownership rates decline among environmental displacees, but there is an increase in public housing rates among those displaced compared to populations who can remain in their original location and those who voluntarily relocate. No matter their housing situation pre-event, those displaced from environmental events are at greater risk than those not displaced of relying on public housing, homeless shelters, or transitory living arrangements with friends and family for shelter, and obviously, those with the fewest resources pre-event will be at the greatest risk of becoming homeless following displacement (Hori and Schafer 2010). Low-income populations who were surviving pre-event without governmental housing assistance often meet income eligibility requirements for government housing programs following displacement (Abramson *et al.* 2010, Morrow-Jones and Morrow-Jones 1991).

The inability to get appropriate and affordable housing forces many socially vulnerable populations to relocate numerous times after the initial displacement. Morrow-Jones and Morrow-Jones (1991) found that 60% of disaster displacees changed residences within three years and Weber and Peek (2012) report that many disadvantaged Hurricane Katrina displacees relocated anywhere from 2 to more than 12 times, with African American females relocating more than other demographic groups. Without stable housing, displacees' recovery is prolonged and their financial, emotional, and educational resilience is reduced (LaRock 2005, Peek and Fothergill 2008, Picou and Marshall 2007).

5. Economic Recovery

While housing itself is an economic concern, displacees face other economic barriers to recovery which include securing employment, beginning or restarting government welfare benefits, and the disruption of informal social networks that provide economic resources and services. This issue incorporates the many economic aspects of Cernea's model (1997) including joblessness, food insecurity, economic marginalization, loss of social network resources, and loss of access to common pool resources (especially for Native American and ecosystem-dependent populations).

Reestablishing employment is necessary for displaced populations to begin recovery, but the loss of human, cultural, and social capital reserves following displacement makes finding new employment opportunities and surviving difficult. For example, displacees from Hurricane Katrina had greater declines in income than those not displaced, and African American displacees had the lowest likelihood of employment recovery (Hori, Schafer and Bowman 2009). Loss of ecosystem-based economic sectors will affect resource-dependent laborers who may need to retrain to find employment in another sector; and Native Americans are already the most economically disadvantaged group in the US, making displacement for those that pursue traditional livelihoods particularly dire. Finally, for populations already living in or near poverty, any financial setback dramatically alters their life chances. Even those who were receiving governmental welfare benefits pre-event may find that displacement, especially across jurisdictional lines, can interrupt and possibly reduce this economic support (Lein *et al.* 2012).

Because of their lack of economic resources pre-displacement, many disadvantaged populations are dependent on social networks (family, friends, and neighbors) for financial assistance, childcare, food, and shelter. Environmental displacement highlights some weaknesses of social network resource dependence (Litt 2008). First, poor and minority populations are less likely than others to move from where they are born and less likely to have geographically diverse network connections. Thus environmental displacements can disrupt entire support networks (Li *et al.* 2010). If the resources that these social networks provided are not available in a new community, resilience is limited (Tobin-Gurley, Peek and Loomis 2010).

6. Health

Forced displacement increases mental and physical trauma compared to voluntary migration, resulting in increased morbidity and mortality of displacees (Cernea 1997). While the risk of death from disaster and environmental change is much lower in the US than in other nations, US environmental displacement still affects the health of displacees, including negative mental health outcomes and lost or limited access to physical health resources.

Forced relocation following Hurricane Katrina resulted in the separation of families, resettlement in unfamiliar cities, and lack of access to recovery information, which amplified the emotional toll of the storm (Whaley 2009). Moreover, displacees may have negative perceptions of the new community, which further constricts their emotional and mental resources during recovery (Erikson 1976, Kuntz 1973, Yabiku *et al.* 2009). Tobin-Gurley, Peek and Loomis (2010) found that successful mental health recovery (complicated by pre-existing issues for many disadvantaged individuals) was the most important factor in overall recovery for Katrina displacees.

Physical health needs of displacees extend beyond the immediate crisis period and often conflate with pre-existing problems. For populations with few resources before displacement, they are more likely to lack health insurance pre-event, lose employment-based health benefits if they lost employment during displacement, or face disruption in government-provided healthcare as they reapply for coverage in

a new location. Other physical health impacts of displacement include the loss of primary care physicians, loss of medical records, and disruptions in prescription coverage (Abramson and Garfield 2006).

7. Anti-discrimination and marginalization

A final concern affecting US environmental displacees is discrimination and social marginalization, including the loss of social standing and cultural practices (Cernea 1997). Discrimination and marginalization are included in the Environmental Displacement and Resilience Model because ethnic and racial minorities are more likely to live in environmentally risky areas and are disproportionately poor. This makes them more likely to be represented among the environmentally displaced *and* displacement exacerbates pre-existing societal tensions based on race, ethnicity, religion, and class (Lueck 2011). While discrimination is common in the US during non-disaster times, trauma from the initial environmental impact and unknown surroundings after displacement amplify the effect of direct and indirect discrimination and marginalization.

Displacement transports affected populations to other communities with their own pattern of racism and population segregation. This was evident in Hurricane Katrina after which displacees recounted racial slurs, accusations of being undocumented immigrants and criminals, employment discrimination, racial discrimination from private citizens offering assistance, and refusal of leasing agents to accept federally-funded assistance (Fussell, Sastry and Vanlandingham 2010, Weber and Peek 2012). Undocumented immigrants are specifically vulnerable as they face possible deportation as well as racial discrimination because immigration regulations are enforced during disaster recovery (Wing 2006). Discrimination in housing, labor markets, and social assistance organizations can reinforce the funneling of displacees into economically- and ethnically-segregated communities, slowing their recovery and fostering continued marginalization (Foulkes and Newbold 2000, Portes and Rumbaut 1996). Conflict in neighborhoods undergoing immigration may be amplified in areas taking in environmental displacees.

Even without direct racial or ethnic discrimination, environmental displacement increases the demand for services, infrastructure, and resources in the host community, which leads to resentment and hostility against displaced populations (Moore and Smith 1995, O'Lear 1997). Because the public perceives disasters as temporary phenomena, displacees have short timeframes to return to "normal" and the host community expects displacees to integrate or move back home quickly. Many Hurricane Katrina displacees were unable to return home or become self-sufficient quickly, which caused compassion for them from the host communities to dissipate within a few months (Peek 2012). Displacees' social status, which was weakened during displacement, quickly transformed from "victim" and worthy of assistance to "competitors" for jobs, social services, and other amenities or "outsiders" changing the racial, cultural, and economic composition of the receiving community.

Direct and indirect discrimination reinforces marginalization, social isolation, and loss of community experienced by displacees. Forced resettlement without regard to kinship relations, housing type or location, neighborhood configurations, or cultural norms disrupts relationships and cultural sources of strength (Erikson 1976). Displacement can also create cleavages within populations, increasing internal conflict over scarce resources during recovery (Gill and Picou 1998). Forced displacement, the intensification of internal cleavages, and damage to agricultural and fishery practices may also cause the loss of distinct cultural traditions. For example, traditional lifestyles of Native American Cajun communities, whose fishing livelihoods have lasted centuries in the coastal wetlands of Louisiana, may disintegrate as sea level rise and erosion bring the Gulf of Mexico closer to their homes each year. The loss that will be experienced in these communities is

irreplaceable, thus attention to the increasing marginalization of entire cultures is an important and understudied topic in the US.

8. Environmental displacement as drift: three issues

From the Environmental Displacement and Resilience model, we see that needs of displaced populations are often extenuations of the everyday needs of the poor and marginalized in the US. These needs include timely access to affordable housing, including rental options, public housing, and affordable loans to regain home-ownership; employment and cash assistance for food, childcare, and transportation; long-term physical and mental health assistance; and policies that address discrimination and segregation in relocation communities, help maintain community ties, and are sensitive to relocation options including land type, traditional livelihoods, housing structures, food assistance, and community cohesion. Increasing resilience in these four areas becomes a multifaceted project that includes both immediate and long-term needs of affected populations.

These issues raise questions about the ability of the current welfare state to address the risk of impoverishment for environmental displacees. Effective assistance programs help ensure displacees have pre-event resources to mitigate and prepare for and adapt to environmental change and have access to post-event recovery resources and programs to be resilient in a new location (Gajewski *et al.* 2011). While these needs could theoretically be addressed through a variety of measures, including a mix of private and public resources, there is currently *no* discussion of environmental displacement as a risk to livelihoods in the US in these realms. In fact of the policy documents evaluated, only *one*, a Brookings Institution (2010) policy critique, even mentions permanent environmental displacement, and they focus solely on Native Alaskan populations facing sea level rise. Because of this issue and because the US welfare state involves a complicated mix of centralized and state-based assistance programs, my goal in this section is to discuss the implications of environmental displacement on the ideals of the welfare state. Thus, I limit my following discussion to an overview of general concerns presented by environmental displacement and future research will be needed to determine the effectiveness of a variety of policy and legal options (e.g. insurance, mitigation, direct assistance, etc.).

As Hacker (2004, p. 246) discussed, policy drift implicates policymakers in the question of, “whether and how to respond to the growing gap between the original aims of a policy and the new realities that shifting social conditions have fostered.” If the risks highlighted above are to be addressed and the ideals of the welfare state to share risk collectively upheld, policymakers have three issues to address: inadequate assistance timeframes, ignorance of small and gradual-onset events, and targeted assistance to those most in need.

9. Inadequate assistance timeframe

Environmental displacees have both immediate short-term needs, especially during disasters, and also often take longer to fully recover following displacement than populations who voluntarily relocate or those able to rebuild in place—thus an apparent challenge presented by permanent environmental displacement is the timeframe for assistance. Disaster policy, which provides immediate assistance, and general welfare policy, which addresses continued need, should together cover environmental displacees’ needs, but long-term and permanent displacement highlights the temporal gap in practice between these programs.

Federal disaster policy only has procedures for short-term and temporary assistance to populations affected by environmental events. The Federal Emergency Management Agency (FEMA) coordinates disaster assistance through the *National Disaster Housing Strategy* and the National Disaster Recovery Framework. In terms of housing assistance, populations displaced from a federally-declared disaster can

receive rental assistance and home repairs funding for 18 months or receive a set monetary allotment (adjusted yearly for inflation). Homeowners may request assistance to get a loan for a new property. Several federal agencies from the Department of Housing and Urban Development (HUD) to the Small Business Administration run over 30 programs that administer emergency disaster housing assistance (FEMA 2009). The *National Disaster Housing Strategy* clearly emphasizes the immediacy of disaster assistance programming by identifying the need to secure stable housing *quickly* as a central goal of disaster housing assistance. Unfortunately, the document does not create new or extend current housing programs to do so (FEMA 2009). Disaster economic assistance is provided for an even shorter time period than housing assistance—26 weeks of disaster unemployment insurance and financial support. This assistance is provided through a multitude of programs, which were recently converted to a case management approach in which FEMA and nonprofit employees provide referrals to a multitude of governmental and nongovernmental assistance programs and assist individuals in selecting and applying for assistance (FEMA 20011a).

The current standard of 18 months for housing assistance and 26 weeks of financial assistance may be appropriate for those able to quickly return and rebuild but these programs may end even before other displacees determine whether they can or will return (FEMA 2011a). For example, over five years after Hurricane Katrina, hundreds of FEMA temporary housing trailers were still occupied by the most disadvantaged displacees. Even extra appropriations to social service programs during large-scale disasters are too short-lived to fulfill their mission. For example, the Department of Labor created special career counseling and construction training programs following Hurricane Katrina which lasted only six months (GAO 2009a).

In recent decades, attention to mental healthcare following disasters has increased with large-scale mobilization of professional volunteers to disaster sites (Whaley 2009). The bulk of counseling for displaced populations falls to volunteers and nonprofit organizations that offer immediate assistance in extreme situations. There are no specific programs offering long-term counseling for displacees, which may be the most needed assistance to promote overall resilience following displacement (Tobin-Gurley, Peek and Loomis 2010). Disaster financial assistance can be used to cover health insurance costs among other financial needs but there is no specific program addressing the healthcare (physical or mental) of environmentally-displaced populations.

The extended recovery period of both previously disadvantaged and newly disadvantaged displacees is meant to be addressed by transitioning from disaster programs to traditional welfare programs. But as the GAO states, “a disaster can exacerbate the long-standing challenges at-risk populations have in accessing needed assistance from multiple programs” (GAO 2008, p. 42). These programs include unemployment insurance, job placement and assistance, food vouchers, breakfast and lunch programs at schools, early childhood education programs, bus transit programs, and healthcare programs (GAO 2010, Winston *et al.* 2006). For financial and medical assistance, families with dependent children or pregnant women are also eligible for the Temporary Assistance to Needy Families program, the 1996 replacement to entitlement-based welfare assistance, along with Medicaid or Medicare (GAO 2009a). But, these programs respond poorly to sudden changes in the overall level of need, which may occur after a large disaster. Furthermore, the transition from disaster assistance to general welfare programs once the timeframe for disaster aid ends requires updated or new applications, which are bureaucratically complicated and often result in individuals losing assistance during review.

Even if environmental displacees do manage to transfer to general welfare programs, their prolonged recovery needs may still be unmet. Welfare programs are critiqued in general as ineffective in addressing the long-term and chronic

needs of many low-income households (GAO 2010). General welfare programs are meant to provide temporary assistance and thus most social service programs have either continuous time limits (such as two years of continual support) or lifetime limits on assistance (such as five years for the Temporary Assistance to Needy Families cash assistance program). These time limits mean populations who received assistance pre-displacement have a limited timeframe for assistance post-event and thus have less time to become self-sufficient. For example, some displacees from Hurricane Katrina still needed assistance five years after the event—long after disaster *and* general welfare programs withdraw assistance. Recent research indicates that it can take nearly a decade for full disaster recovery, much longer than any assistance programs (FEMA 2011b).

Reducing prejudicial treatment based on race, ethnicity, religion, and class from other individuals and institutions and creating culturally-sensitive recovery options is central to promoting resilience, but this may be the most complicated component of the Environmental Displacement and Resilience Model to address in a timely manner. Direct discrimination following displacement falls under general federal anti-discrimination policy such as the Civil Rights Act and the Fair Housing Act. Together these policies prohibit intentional discrimination in federally-funded programs, employment, and housing transactions and were used following Hurricane Katrina to address racism in assistance programs (Feder 2008, HUD 2010). But, the sudden surge in discrimination following displacement challenges the effectiveness of these policies because the recourse options are time consuming and cannot provide the necessary assistance in a timely manner. Recourse for discrimination under these policies requires an official complaint to the federal government or a lawsuit against a specific individual or organization perpetrating the discrimination. When needing *immediate* housing and employment, displacees have little time, energy, or money to follow through with the required discrimination complaint or lawsuit that takes months or years to adjudicate. Unfortunately, neither welfare or civil rights programs nor revisions to disaster assistance policy following Hurricane Katrina acknowledge that environmental displacement is a unique impoverishment risk that raises questions about the timeframe of assistance programs or how to address both short- and long-term needs of displacees.

10. Event-based assistance

The types of environmental events that trigger displacement also highlight the changing nature of risk. Disaster policy provides a politically feasible access point for addressing environmental displacement, and has been used to support relocation following large-scale disasters. But, outside large-scale, sudden disasters, environmental displacement will likely follow current patterns of economic migration, which is smaller in scale and potential circular (Warner 2011). Small-scale events and slow-onset events creating this pattern of displacement are unaccounted for in current disaster assistance schemes.

Local governments have primary responsibility for preparing for, responding to, and recovering from disasters; the federal government intervenes when local and state capacity is overwhelmed (when a *federal* disaster is declared). Disaster-based assistance provided by FEMA requires a federal disaster declaration (Stafford Act 1988). Small and most gradual-onset events are often overlooked in this process, leaving displacees from these events without access to federal disaster-based assistance and local and state governments without access to federal assistance to supply for the needs of victims. For example, from 1953 through 2010, droughts comprised only 2.5% of federally-declared disasters and there is no standard for sea level rise to induce a federal declaration without storm impacts (FEMA 2010). Thus, FEMA lacks a mandate to assist Native Alaskan and Cajun populations who are *already* experiencing displacement induced by climate change. During large-scale catastrophic events, Congress can relax eligibility requirements or provide

additional funding to assist lower levels of government. This is a special outcome, seen most recently in Hurricane Katrina, and the general lack of federal attention results in the invisibility of displacees from certain environmental hazards. While FEMA is working to improve housing, economic, and health assistance to disaster victims, increasing environmental displacement from types of events not traditionally covered by disaster policy contributes to the “growing gulf between social risks and benefits” (Hacker 2004).

The potential for displacees to be excluded from disaster-based assistance means that other assistance programs will face increased need. Even in small-scale displacements, the level of need for general welfare programs will rise as economic losses make more individuals eligible for assistance. The ability of current assistance programs to meet the needs of more disadvantaged populations is an ongoing concern.

11. Assistance to those most in need

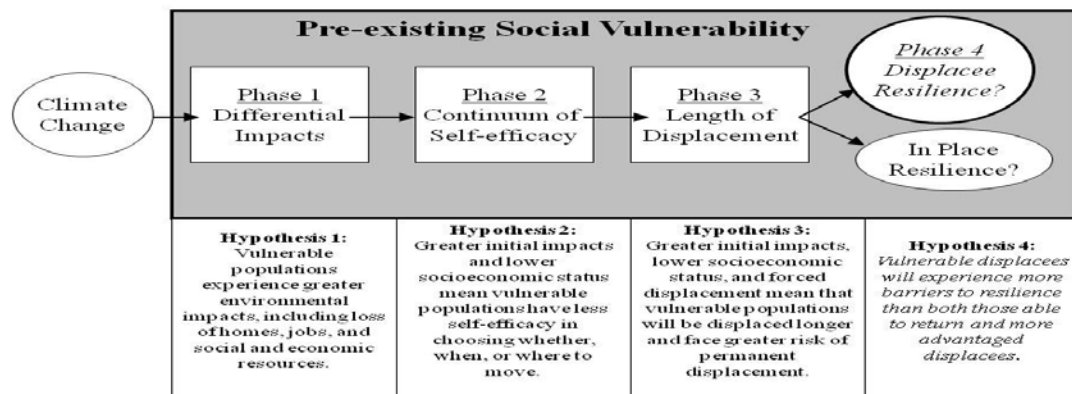
From research following previous disasters, we know that disasters are social phenomenon in which the risk of impact and ability to recover are mediated by social structures. “Social vulnerability” is used to describe these “social, economic, and political processes that influence how hazards affect people in varying ways and with differing intensities” (Wisner *et al.* 2004, p. 7). Economic structures—e.g. homeownership, financial assets, future income potential, insurance coverage—and social status—e.g. political power, marginalization, minority status, education, gender, age—influence individuals’ and households’ ability to prepare for, mitigate, respond to, and recover from disaster impacts (Cutter, Boruff and Shirley 2003, Phillips *et al.* 2010). The social vulnerability perspective also highlights the role of social structures in determining risk of climate change impacts and also the risk of displacement from environmental events (Adger 2006). Populations range from being “environmentally motivated” to “environmentally forced” depending on the intensity of environmental impact and *the feasibility of their in-place recovery or adaptation* (Warner 2010). The feasibility of in-place recovery or adaptation is contingent upon social, economic, and political resources available. As Fussell and Elliot (2009, p. 389) stated, environmental displacement will mimic disaster impacts as socially-structured phenomena with environmental and climate impacts filtering through the US social structure to result in “multiple and highly unequal processes of resettlement.”

While all displaced populations will face the potential of impoverishment, previous vulnerabilities are exacerbated during and following displacement leaving socially vulnerable groups to face more and larger obstacles to recovery from the initial environmental impacts *and* the displacement process (Fothergill and Peek 2004, Hunter 2005, Weber and Peek 2012). For example, in a seminal study on this issue, Morrow-Jones and Morrow-Jones (1991) found that those displaced by disasters in the US were more likely to be female-headed households, minority group members, and from lower income and education brackets than those who relocated for other reasons. As noted in policy drift in general, individuals living at or near the bottom of economic and social hierarchies are the most affected by increasing risk privatization.

Figure 2 below depicts the process of environmental displacement in the US and highlights the likelihood of displacement for socially vulnerable populations as the cumulative outcome from a series of risks triggered by an initial environmental change (see Lueck 2011 for detailed discussion). This figure emphasizes that the most vulnerable populations will be over-represented among those *forced* to *permanently* relocate. Thus populations most in need of general welfare assistance in daily life will have the increased burden of displacement and the impoverishment that follows because “the way in which migration occurs and the resources migrants

are able to access before, during, and after moving will necessarily shape social outcomes for environmental migrants" (Marino 2012).

Figure 2: Multi-phase model of US environmental displacement



Note: Adapted from Lueck (2011)

Welfare state policies are meant to provide social safety nets for impoverishment. If populations already disadvantaged, either living in or near poverty, are most at risk of environmental displacement and face the most difficulty recovering, they are those most likely in need of the social safety net discussed here. Targeted legal planning, for the four resilience concerns presented here *and* the populations most vulnerable, is superior to more general approaches (Berke *et al.* 2010). Current policies take an "all-population" approach and, in addressing discrimination, a purportedly "color-blind" one. For example, disaster policy distributes funds based on geographic proximity to the impact and amount of lost assets, not pre-existing need, which obviously benefits those already advantaged in US society. The *National Disaster Housing Strategy* is meant to streamline public, private, and non-profit collaboration related to disaster housing assistance, and it calls for specific attention to low-income and special needs populations (those with disabilities, children, and the elderly). But the document includes only vague statements about achieving this goal (FEMA 2009, GAO 2009b). More specifically, none of the six fully-funded disaster housing programs target socially vulnerable populations (FEMA 2011a).

The need for affordable housing and public housing options highlight the complex issues surrounding assistance to disadvantaged populations in the US. During disasters, loss of housing supply causes inflation in housing costs, especially rentals, and during gradual-onset events more people are trying to get low-income housing in communities that are often already at full capacity (Fischer and Sard 2005). The lack of affordable housing in the US is a chronic problem that will affect environmental displacees. The *National Disaster Housing Strategy* acknowledges this problem but proposes only tax-credits for developers to rebuild low-income and public housing in place and geographically transferable HUD housing subsidies for eligible individuals. HUD runs the general housing programs supporting low-income populations by providing housing vouchers and assistance programs. HUD assistance is meant to be transferable from one location to another. But getting assistance in a new location again depends on the amount of affordable and subsidized housing available in the new community and, if displacees cross a state line, the amount of assistance that that state provides (which may be less than what displacees were receiving previously). Also, HUD's programs require individuals to find their own housing, which is difficult when displaced to unfamiliar communities or without access to transportation to locate adequate housing

(Paradee 2012). The risk of losing housing and rising housing costs facing displacees cannot be addressed without reconsidering the role of the state in housing markets and generating more affordable housing options in *all* communities—a perfect example of drift that leaves the current welfare state incapable of maintaining a social safety net for the most needy populations.

General welfare policy assists poor and low-income individuals and households through means-tested income measures without providing specific attention to marginalized or disadvantaged groups or other differentiation beyond income. Specific groups face increased challenges, for example single mothers, which are complex and often require these groups to seek multiple governmental and nonprofit programs to cover all their needs (Tobin-Gurley, Peek and Loomis 2010). Disaster policy revisions following Hurricane Katrina drew attention broadly to socially vulnerable groups, identifying the socio-economically disadvantaged, minorities, educationally disenfranchised, women and children, individuals with disabilities, and the elderly as deserving special attention. But there is little specific guidance from FEMA on assisting these groups or on addressing discrimination, segregation, or marginalization—the greatest challenge to policy directed at displacee resilience (Cernea 1997, Farber *et al.* 2010). The Government Accountability Office (GAO 2008) acknowledged that current disaster programs were unable to assist disabled, unemployed, and homeless displacees following Hurricane Katrina. Overall case management programs had discontinuous funding streams, lack of support or clear assignments, high employee turnover, and ineffective or incomplete outreach to the most vulnerable populations which limited and complicated the ability for populations to get continuous economic assistance (GAO 2009a).

Finally, the consequences of environmental displacement on racial and cultural minorities are a growing risk that “color-blind” approaches insufficiently address. The pervasive and historical legacy of discrimination and marginalization in the US that is amplified during environmental displacement requires culturally sensitive and targeted aid programs, not just complaint-based recourse (Henkel, Dovidio and Gaertner 2006). Current discrimination policies overlook unintentional discrimination, e.g. language barriers in the application processes and private citizens offering assistance to certain races, genders, and family types (Crowley 2006, HUD 2010). Furthermore, the impact on cultural heritage, specifically for Native American populations, is the invisible impact of environmental change (Collins 2008). Current discrimination policy is incapable of addressing cultural loss or entire community disarticulation, unintentional or institutional discrimination, and passive forms of racial and cultural indifference. While Native Alaskan populations are the only group acknowledged as potential US environmental displacees, the discussion of relocation options and goals remains superficial and ignores the question of cultural heritage maintenance. Increased participation of these groups may draw attention to discrimination and eliminate the need for disaster-specific “Citizens’ Bill of Rights” as was implemented after Hurricane Katrina (Sanyika 2009), but policy-makers have yet to fully engage a discussion of these issues for environmental displacement. This final area of displacee resilience raises the most direct policy and legal questions in the space between disaster, welfare, and civil rights policy (Sterett 2009).

12. Conclusion

While lawsuits following Hurricane Katrina challenged federal disaster assistance programs highlighting these three issues, no policies or programs were changed in the practice of FEMA *beyond* Hurricane Katrina survivors. Hurricane Katrina was a large-scale example of what environmental displacees in the US will likely encounter in the future: inadequate assistance and risk of impoverishment because changed environmental and societal circumstances leave current policies ineffective in addressing their needs.

Some residents who were just 'getting by' in New Orleans and others who were already impoverished were thrown into deeper poverty during prolonged displacement—a problem that could not be adequately addressed by either disaster assistance programs or local social assistance programs alone. (Fussell and Elliott 2009, p. 386)

There is no simple or quick solution, and because of the current political climate, it is unlikely that welfare assistance programs will be expanded. This does not negate the fact that the need for welfare assistance in the US continues to increase. For example, the poverty rate grew from 11% to over 14%, with racial and ethnic minorities experiencing almost twice those numbers, and individuals receiving food assistance more than doubled to 39 million from 2000 through 2010 (GAO 2010). With more frequent and severe disaster impacts becoming "the new normal" for the US under climate change (Kolmannskog 2009) and social inequality increasing, the number of potential displacees will increase and in turn creates even more inequality as more people risk falling into poverty due to displacement. While the recent housing crisis resulted in more homes lost and increased the risk of displacement for many US populations (JCHS 2008), the growing risk of environmental displacement only adds to these increasing risks of displacement under current economic and political conditions.

In this paper, I outlined a framework for understanding how environmental changes also affect the social landscape in which the US welfare state operates, and thus changes in the environment along with social changes result in increasing privatization of the risk of impoverishment from environmental displacement. "Displacement is a caused disruption, not a natural disaster, and its perverse effects must and can be counterbalanced" (Cernea 1997, p. 1570), and thus I identified both the needs of environmental displacees and the issues with which policymakers will likely grapple. The needs of displacees are intertwined and interdependent, so it is difficult to support full recovery through programs that address only one issue—emphasizing the need to integrate the welfare state and displaced populations into the discussion about disaster and climate change response and recovery. Whether new policy is developed or current policies are adapted, the US must acknowledge that environmental displacement is not an unfortunate and unlikely event resulting only from extremely catastrophic disasters, but a normal part of life in the US (Bullock, Haddow and Haddow 2009, Lauten and Lietz 2008). Focusing on socially vulnerable displacees will move the disaster resilience discussion from immediate humanitarian assistance and rebuilding in place towards encouraging environmental justice and fostering resilience to our changing climate (Berke *et al.* 2010, Meertens 2010, O'Brien *et al.* 2006).

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