

PART 2: Advancing Distributional Equity in Climate Adaptation

As the introduction to this series explains, climate change is a global phenomenon, touching all life on Earth. Every place will experience its effects—including its impacts on human health—but not in the same way or to the same degree, as worldwide trends manifest through local weather patterns and environmental changes. Where a person lives will, in large part, drive the individual's experience of climate change. Even within a single place, individuals and communities may experience climate change in starkly different ways. Some people are more vulnerable to the health impacts than others—that is, they are more susceptible to and less able to cope with its impacts, often owing to socioeconomic factors. Therefore, it is essential that in the United States, officials at every level of government and other stakeholders act with urgency and persistence to adapt (and to mitigate its intensity, although mitigation is not the focus of this series)—and to do so equitably.

The selection of cases in this series was informed in part by the Georgetown Climate Center's <u>Equitable Adaptation</u> <u>Legal & Policy Toolkit</u>, which was released in 2020 and contains a more expansive scan of exemplars. Trust for America's Health selected cases based on several factors, including replicability and diversity of geography, objective, and intervention type.

The cases examined in <u>Part 1</u> differ in numerous ways, but they share a central and critical element: each adaptation effort is explicitly intended and designed to advance procedural equity—that is, the process undertaken to conceptualize, design, and administer adaptive policies and programs. Procedural equity is achieved when a wide range of stakeholders, particularly those who stand to be most harmed by climate-related hazards, have a genuine voice and decision-making role at each stage, rather than perfunctory inclusion after options have been narrowed or

decisions have been effectively made. Equitable processes are informed throughout by the insights, priorities, and needs of people who have firsthand lived experience navigating relevant threats, and those ideas are supported with technical expertise.

Part 2 of the series covers adaptation efforts that reflect distributional equity—the extent to which adaptive actions result in a fair allocation of benefits and burdens across a host of interrelated sectors. In some cases, procedural equity can be a prerequisite of or a contributor to distributional equity.

This series follows a December 2020 report, <u>Climate Change</u> <u>& Health: Assessing State Preparedness</u>, that examined each state's readiness to protect residents from the health impacts of climate change in light of the nature and level of risks they face.

Community Land Trusts' Role in Equitable Adaptation

In 1969, amid the last gasps of Jim Crow policies in the American South that disenfranchised Black people and frequently denied them property rights, and as civil rights movement participants were losing their jobs or employment in retaliation for their involvement,1 a group of organizers in Georgia tried something new in their area—they raised enough money to collectively purchase 5,735 acres in Lee County,2 about 100 miles southwest of Macon. Then, after establishing ownership of the land in a trust, they made it available to Black sharecroppers, who could settle and develop it, cultivating farms of their own and opening a new avenue of economic and housing security. New Communities, Inc., the name of the project, served as the country's first community land trust (CLT).3,4

Today, CLTs are an important tool that states, localities, and other stakeholders use to increase their long-term supply of affordable housing, as well as parks, community gardens, and other shared assets. They take different forms-indeed, their flexibility is a key virtue—but generally they are community-led nonprofit organizations that acquire land for a community's benefit and hold ownership of parcels in a trust. The organizations typically build new housing and/or other community amenities on land or renovate existing structures or spaces. Homes are then sold or leased to households with modest incomes, while ownership of the land within the property's lot boundaries, including the land under the house, remains with the trust and is leased (often for 99 years) to the homeowner or

tenant. This arrangement has several benefits, including: (1) the cost of buying or renting the house becomes less expensive because the value of the structure is decoupled from the value of the land; and (2) the land stays within the community's possession, helping to preserve its affordability for future residents, while homeowners earn equity on the house.^{5,6}

In connection to their usefulness for creating and preserving affordable housing supply, CLTs can also help enhance the resilience of communities and families to climate-related threats, and indeed the resilience and sustainability of the housing itself. When it comes to resilience generally and the capacity of people and places to adapt to a changing climate, housing is a critical and multidimensional factor. Direct connections between people's housing and their level of vulnerability are varied:⁷

- People with serious health risks are particularly vulnerable during and after extreme weather events that damage homes and disrupt access to electricity, sanitation, and safe food and water.
- People who live in poor-quality housing tend to be at greater risk of flood-related injuries and illness. What's more, people living in crowded housing, as well as people living in areas with deteriorating water infrastructure (e.g., sewage, drainage, storm water systems, drinking-water systems), can face increased exposure to waterborne pathogens that cause gastrointestinal illness and diarrhea, among other conditions.

- People without access to shelter are at high risk during weather conditions associated with winter storms, severe thunderstorms, and extreme heat. Severe winter weather conditions or extreme heat also pose serious risks to people living in low-quality, poorly insulated housing, both because of their increased exposure to the elements and because they may be unable to afford adequate heating or cooling and/or be forced to choose between food and heating/cooling expenditures. This is especially true for older adults.
- People who experience housing displacement because of a climateor weather-related disaster are at increased risk of post-traumatic stress disorder, anxiety, depression, and suicidal thoughts and behaviors.

CLTs can help mitigate these risks by: (1) providing access to stable, high-quality housing that includes weatherization features and floodproofing (e.g., Florida Keys Community Land Trust is building hurricane-resistant, elevated homes⁸); (2) incorporating energy/water efficiency elements and renewable energy supplies (e.g., Homestead Community Land Trust in Seattle, Washington, is building homes that function entirely on renewable energy⁹) that help keep residents comfortable, lower utility costs, and reduce greenhouse gas emissions; and (3) using green infrastructure to reduce stormwater pollution and flood risks (the Aquidneck Land Trust collaborates with partners to employ such projects in Rhode Island^{10,11}).¹² They can also increase resilience more indirectly by freeing up family resources for other priorities that

can be crowded out by unaffordable housing, such as healthcare, childcare, transportation, and education, and by fostering social cohesion through reduced displacement and shared decision-making.¹³

An aspect of most CLTs that make them unique is their governance structure. They are often led by a board comprising three parties: residents, community members, and other public and private stakeholders. According to Jessica Grannis, the interim vice president for coastal conservation at the National Audubon Society, "By giving community members a voice in decision making around land use and stewardship of lands, land trusts can support more equitable climate solutions that reflect the needs and priorities of the community."14 Some go so far as to explicitly mandate consensus-based governing,15 intentionally looking to representatives of groups that have been historically marginalized as leaders and prioritizing social justice, environmental stewardship, and generational equity.

To help expand the number and scale of CLTs, state and local governments can take several policy actions, including providing them with access to public lands; providing start-up funding and ongoing technical assistance; and facilitating access to other public funding sources. ¹⁶

This brief includes three case studies that examine CLTs in Boston, Massachusetts; Louisiana; and Albuquerque, New Mexico—with a focus on how they are helping to build people's resilience against climate-related and other environmental health hazards.

Case Study 1: Dudley Neighbors, Inc., Boston, Massachusetts

Background

In the 1980s, Nubian Square, an area formerly known as Dudley Square in the Roxbury Neighborhood southwest of downtown Boston,17 was, in The Boston Globe's words, "one of the most blighted places in the country, a monument to racism and neglect."18 Exclusionary practices such as redlining-which discouraged loans within the boundaries of certain neighborhoods, usually populated by people of color-and intentional disinvestment had left the neighborhood neglected and rundown. Property values plunged so precipitously that some landlords took to burning down their own homes, seeing more profit in collecting insurance than in collecting rent.¹⁹ So many blocks were laid low by arson that fully half of the 62 acres surrounding then-Dudley Square were overgrown and neglected vacant lots.²⁰ Throughout the neighborhood, 1,300 parcels had been abandoned.²¹ The neighborhood became an unsanctioned dumping ground, with Bostonians from other parts of town unloading old appliances onto curbs. At the same time, the neighborhood's close proximity to downtown threatened to pair any revitalization effort with gentrification, which, left unchecked, could have forced out longtime residents.

In the decades leading up to this point, the ethnic and racial makeup of the neighborhood had also undergone dramatic change. Populated in the first half of the 20th century largely by Irish- and Italian-Americans, the neighborhood had transitioned to a multilingual and multiracial populace. In 1950, 95 percent of the neighborhood was white; by 1980, it had become significantly more diverse,22 as the Great Migration, the exodus of some 6 million Black people fleeing Jim Crow in the Cotton Belt for cities in the North and West, along with the arrival of Cape Verdean immigrants, brought in more Black residents. 23,24,25 In addition, the share of Latino residents rose when many moved in after being priced out of Boston's expensive South End neighborhood and others relocated from Puerto Rico or immigrated from the Dominican Republic, Honduras, and Guatemala.26 This diversity added to the need for any equitable revival effort to take an intentionally inclusive approach.

The Turnaround

As a starting point, residents initially organized to persuade the city to enforce anti-dumping ordinances. In 1984, the Boston-based Riley Foundation became invested in the effort, after touring the neighborhood with officials from two local nonprofits, La Alianza Hispana ("The Hispanic

"We had the opportunity to sit together and dream together and come up with a shared vision of how we want to see this neighborhood grow and what we wanted it to look like. And we've been able to keep that vision in the forefront of our mind."

- Ché Madyun, First Board President of the Dudley Street Neighborhood Initiative

Alliance") and the Nuestra Comunidad ("Our Community") Development Corporation. The Men a newly formed advisory group held its first public meeting, residents objected to the makeup of the group, which consisted entirely of people from outside the neighborhood. The Chastened, trustees of the Riley Foundation stepped back and community members began leading the dialogue; in early 1985, the Dudley Street Neighborhood Initiative (DSNI) was formed, with residents comprising the majority of the board.

Board members elected by residents now serve up to two terms, with all meetings open to the public. Community members who attend consecutive meetings are permitted to vote on board member selection and advocate on behalf of the initiative's work.²⁹ Bylaws require that each of the four main cultural groups in the area which DSNI categorizes as African American, Cape Verdean, Latino, and white—have equal representation on the board.³⁰ In total, there are 35 seats: 20 for community residents (four each for Latino residents, residents of Cape Verdean descent, Black residents, white residents, and youth residents). The remaining seats are allocated to community development organizations (two), faith-based organizations (two), nonprofit social-service organizations (seven), and local small businesses (two). Then those 33 board members select two additional people.

Reflecting back on those early days, and the years that followed, Ché Madyun, a Dudley resident who served as the first board president, said: "We had the opportunity to sit together and dream together and come up with a shared vision of how we want to see this neighborhood grow and what we wanted it to look like. And we've

FIGURE 1: Before/After: Dennis Street in Nubian Square







been able to keep that vision in the forefront of our mind."31

With DSNI established and a governing board elected, residents set about working with the city to close illegal garbage transfer stations that had popped up in the neighborhood. Beyond cleaning up, DSNI, with the help of urban planners, engaged more than 200 community members in a comprehensive plan to address job and business development, affordable housing, and development of public spaces.^{32,33} Community members envisioned a "vibrant, urban village," a place that fostered social cohesion, with all the amenities and infrastructure that the term implies.^{34,35} The plan received a boost when the city adopted it and committed \$134 million, 36 but serious obstacles still stood in the way: Dudley had become a patchwork of private-owned parcels, foreclosed properties, and absentee landowners who were reluctant to sell to the DSNI, believing the neighborhood was ripe for development as the city began expanding a nearby subway line.37

That is when, in 1988, the DSNI formed a subsidiary corporation called Dudley Neighbors, Inc. (DNI), one of the first CLTs in the country. Establishing DNI enabled community members to acquire land, allowing for community

decision-making and ensuring that longtime residents who lived in housing atop the land would not be priced out of the neighborhood. In other words, residents would control their neighborhood's destiny and participate in its progress, allowing development without displacement. (See Figure 1.) However, the DNI needed a mechanism for acquiring enough contiguous land to support the breadth of affordable housing envisioned in the revitalization plan. Ultimately, it found an ally in then-Mayor Raymond Flynn. In 1989, after much lobbying, the city-controlled Boston Redevelopment Authority voted unanimously to give DNI the power of eminent domain, allowing it to expropriate private property for public use, in return for compensation.³⁸

While the city could have utilized the eminent domain power itself, it lacked the credibility and standing with residents. As John Barros, DSNI's former executive director, explained, the city elected to delegate the power because "nobody would trust them," whereas DNI represented a "neighborhood organization [that had] built some credibility, still in its young days [but also with a] robust process of engaging people [and] a collaborative board structure of multiple stakeholders in the neighborhood."

DNI's Growing Impact

Placing the power of eminent domain into the hands of the people who would be directly affected by its application was pivotal. DNI was the first community land trust in the nation to be granted such power,⁴¹ and it was a crucial tool in allowing the DSNI to begin to realize its vision for the neighborhood. Publicly owned parcels were turned over to the land trust, and eminent domain permitted the trust to acquire the rest, effectively giving it perpetual control over more than 30 acres.⁴² All told, the DNI created at least 225 affordable homes from 1988 to 2020, with plans to create another 1,000 units by 2030—a mix of single-family homes, rental units, and co-ops. Buyers—who must meet income restrictions—purchase the homes and pay a small fee to lease the land. Permanent affordability is ensured by restricting resales to other qualified buyers.⁴³

The work of the DSNI, and of its community land trust, has been about more than building affordable homes. They have also enhanced greenspaces in the neighborhood and promoted a more Earth-friendly sensibility. In 2004, when the soil under an old auto garage was too contaminated to build new housing, the DSNI instead constructed a 10,000-square-foot greenhouse on the site. 44,45 (See Figure 2.) It has also helped steward an urban farm, commercial buildings, a charter school, parks, and a town plaza. 46,47 The farm and greenhouse have proved to be low-cost sources of healthful foods, enhancing food security for residents. 48 The parks and other greenspaces help with stormwater management; mitigate the urban heat island effect, in which heat radiates off from impervious surfaces, and provide a place for people to stay cool (see *Part 1* of this series for further discussion of extreme heat and related disparities in urban areas); and offer recreational space for community members to play and build social bonds.

Decades after the city's \$134 million seed investment, which was critical to DSNI's early success, the organization now funds a third of its annual budget from government sources and the rest from corporate and foundation grants, events, individual donations, and earned income from its properties.⁵⁰ Its private fundraising is assisted by Massachusetts's Community Investment Tax Credit, which the state enacted in 2012 to "enable local residents and stakeholders to work with and through community development corporations to partner with nonprofit, public

FIGURE 2. Dudley Greenhouse



Source: Dudley Neighbors, Inc. 49

and private entities to improve economic opportunities for low and moderate income households and other residents in urban, rural and suburban communities across the commonwealth."⁵¹ The refundable 50 percent tax credit for qualifying donations of at least \$1,000 is meant to support high-impact, community-led economic-development initiatives, including land trusts like DNI.^{52,53,54,55} During the first four years of the credit's availability, DNI leveraged \$150,000 in credits to generate \$300,000 in donations.⁵⁶

The Dudley Street Neighborhood Initiative offers a useful model of how to increase an area's resilience—and to do so in an equitable way. First, by increasing the city's stock of permanently affordable housing-an anomaly amid Boston's rampant gentrification and housing affordability crisis—the initiative increased housing security, prevented displacement, and freed up families' resources for other needs. Indeed, the city's 2013 climate-readiness plan pegged housing insecurity as a risk factor, including the fact that some of its public-housing properties, which provide 1,500 units to residents who are highly vulnerable, face the threat of sea-level rise and storm-surge flooding.⁵⁷ Second, DNSI has also strengthened the neighborhood's resilience through its companion services, which in addition to more tangible benefits (e.g., economic development, respite from extreme heat, food security, etc.), have helped bind together the community's social fabric. And critical to these equitable outcomes has been that they are reached through a community-led process that puts residents' perspectives at the forefront of planning (see Part 1 of the series for further discussion of procedural equity).

Case Study 2: Louisiana Land Trust, Pecan Acres and Isle de Jean Charles, Louisiana

Background

For Louisiana, 2005 was a catastrophic year. Two hurricanes, Katrina and Rita, pummeled the state within weeks of each other. Together, they destroyed or damaged more than 200,000 homes in the state, causing the evacuation or displacement of over a million people.⁵⁸ To assist in the recovery effort, the state formed the Louisiana Land Trust (LLT), tasking it with purchasing homes damaged in the hurricanes from owners who opted to settle elsewhere. Unlike traditional community land trusts, the LLT was never intended to be a permanent owner of the land it acquired. Instead, it serves as a transfer mechanism, funded by the state Office of Community Development. It purchases property and prepares it for "recommercialization"—razing structures or rehabbing them, and then selling the parcel. In the years after Hurricanes Katrina and Rita, some 11,000 properties statewide were acquired and then sold this way, with proceeds from sales turned over to local municipalities. There is funding to acquire some 500 more, though many more properties are considered vulnerable to climate change. By utilizing a land trust operated in partnership with the state, officials relieved stretched-thin local governments from the cost and burden of maintaining abandoned and vacant properties until they could be sold to their ultimate owner. "The local government doesn't want to pay somebody to cut the grass," explains Pat Forbes, the executive director of Louisiana's Office of Community Development. "So, the LLT cut the

FIGURE 3.



Source: iStockphoto.com/Rainer Lesniewski

grass on these lots. It had a big impact on blight reduction."⁵⁹

More recently, the LLT has begun to serve an additional purpose. Beyond acquiring individual parcels, it has become a pivotal player in two largescale community resettlement projects that were prompted by climate change. The first is an inland neighborhood in Point Coupée Parish, just northwest of Baton Rouge. The second is a coastal community in Terrebonne Parish, whose inhabitants have been called the nation's first climate refugees (see Figure 3). 60

Pecan Acres Resettlement

Just outside the Pointe Coupée parish seat of New Roads, the neighborhood of Pecan Acres was first settled in the 1960s, on agricultural land that was essentially floodplain, thanks to its location between the Mississippi River to the north and an oxbow lake called False River to the south. The neighborhood's residents—Black Louisianans who had bought the lots from a local white farmer—would come to experience how unfit the land was for residential housing. Pecan Acres flooded 17 times

between 1990 and 2020, so often that it earned the nickname "Flood City."62 Heavy rains turned the canal that abuts the neighborhood into a torrent. Residents would move their furniture to their home's second floor,63 or prop it up in their backyards on foundation stones.64 Homeowners took to storing their clothes not in dressers but in plastic bags, the better to protect them during the frequent floods.⁶⁵ Mitigation efforts over the years-including dikes and pumps—failed.⁶⁶ The inundations meant the homes were effectively unsellable, which erased any equity the homeowners had accrued. Severe weather events, such as hurricanes, might prompt rebuilding funds from FEMA. But often the problem was just hard rain, which did not qualify residents for aid, especially if they did not carry flood insurance—a prerequisite for some federal aid—which had become prohibitively expensive for most residents, with annual premiums reaching \$6,000.67,68 In 2016, a slowmoving storm dumped more than 20 inches of rain across the Baton Rouge area, inundating as many as an estimated 75,000 structures.⁶⁹ Residents alerted one of their own-retired Army Lt. Gen. Russel Honoré, a Pointe Coupée native who had taken over the federal response to Hurricane Katrina—to their plight, and he in turn mustered support from state officials.⁷⁰ Ultimately, the state launched a project to resettle the entire neighborhood, an initiative estimated to cost up to \$12 million.71

Utilizing the Louisiana Land Trust, state officials drew upon federal disaster recovery funds from the U.S. Department of Housing and Urban Development's Community Development Block Grant program to purchase approximately 40 homes.⁷² While the buyout was voluntary, all residents had to agree to sell for the program to advance: Pecan Acres would be turned into wetlands, the homes

would be razed, and the land would be used to expand the floodplain near the canal, under the auspices of the federal Emergency Watershed Protection Program.

The initial relocation site was near downtown New Roads, within walking distance of shops and grocery stores. But after the landowner suddenly took the property off the market,⁷³ the LLT ultimately purchased a 23-acre tract of land two miles to the north and agreed to build homes for any residents of Pecan Acres who decided to move there.74 Central to the process was neighborhood participation. The state hosted meetings with the residents and looked to them for guidance on the architecture of the new homes, as well as on design elements of the subdivision itself.75 For instance, at one community charette in September 2019, residents examined renderings of architectural options—traditional vs. contemporary; colorful vs. neutral; an open porch vs. covered entry, etc.—and were encouraged to put sticky notes on whichever option they favored.⁷⁶ Residents also collectively named the new development, dubbing it Audubon Estates and its main street Heron Way. 77,78

While the new development is being built, Pecan Acres residents who meet income requirements (at or below 80 percent of the area median income) are eligible for temporary relocation assistance. Pecipients may receive a rental subsidy equal to 110 percent of the area's fair market rent value, which varies based on the number of bedrooms a home has, as well as money to pay for rental application fees, security deposits, moving expenses, and utility deposits. Pecan acres of the security deposits.

Construction on the new homes began in earnest in 2021, with completion expected by early 2022.⁸¹ Residents moving to Audubon Estates will be offered five-year forgivable loans on

their new homes. ⁸² While the new homes are on a plot of land that sits above the floodplain, the homes themselves will be elevated a further three feet, out of an abundance of caution. ⁸³ Moreover, builders are incorporating sustainable design principles, such as a detention pond to temporarily hold and slowly release stormwater runoff, bioswales (i.e., vegetated, channeled depressions in the land that capture, treat, and infiltrate stormwater runoff), and other green infrastructure. ⁸⁴

The construction mandates reflect the state's recognition that it must take multidimensional steps to increase resilience and to promote the safety of residents amid the impacts of climate change.

"I don't think there's any doubt we're seeing more frequent, more intense rain events, sea-level rise, and coastal land loss," Governor John Bel Edwards said in 2020. "We have to adapt to a changing environment."

Isle de Jean Charles Resettlement

In 2016, after three failed resettlement attempts dating back to 2002,86 Louisiana was awarded \$48 million to resettle the residents of Isle de Jean Charles, as part of the state's winning bid in the National Disaster Resilience Competition, administered by the U.S. Department of Housing and Urban Development. This made it the first community in the United States to receive government funding to move because of climate change.87 The resettlement project is a result of relentless challenges facing the Gulf Coast-fronting island, which has gradually been overtaken by rising seas, prompting the start of "a radical rethinking of the nation's coastal land use and development patterns."88 The island that in 1955 encompassed 22,400

FIGURE 4





Note: "Aerial photos of Isle de Jean Charles in Louisiana taken 45 years apart shows evidence of the effects of rising seas, sinking land, and human development. The wetlands adjacent to the Isle de Jean Charles community (about 60 miles south of New Orleans) have been disappearing rapidly since the photo on the left was taken in 1963. By 2008, after four major hurricanes, significant erosion, and alteration of the surrounding marsh for oil and gas extraction, open water surrounds the greatly reduced dry land."

Source: U.S. Global Change Research Program, United States Geological Survey94

acres⁸⁹ now spans just 320—a 99 percent loss of landmass—and is barely a quarter-mile wide.⁹⁰ (See Figure 4.) Where once more than 300 families called the island home, fewer than 40 remain, with each storm forcing out more residents.^{91,92} The exodus has caused family separation and the loss of sacred places, cultural sites, practices, healing plants, traditional foods, and lifeways.⁹³

Climate change, extreme weather, and unsustainable practices associated with water management and oil and gas production and extraction have accelerated the land loss. 95 The crisis is not new, and in fact local residents had been pressing for years for assistance with relocation. But it has taken decades to begin the process, "in part because no federal entity has the authority to coordinate assistance," according to a 2020 report by the U.S. Government Accountability Office. 96

Isle de Jean Charles is home to the Isle

de Jean Charles Biloxi-Chitimacha-Choctaw Tribe of Louisiana and members of the United Houma Nation. Though the residents are now often referred to as "climate refugees," their own ancestors were refugees of a different sort, having been dispossessed of ancestral lands farther east amid the Trail of Tears and forced onto the island in the early 1800s.97,98 Generations of families lived off the land and the sea, planting crops such as corn and rice, raising cattle, and fishing, oystering, and trapping. 99,100 It was the kind of place where everybody knew each other. They lived peacefully, in part, because the island was too disconnected—reachable only by boat for a century¹⁰¹—and commercially irrelevant for anyone else to care to move them off from it. 102

Eventually, encroaching salt water rendered the soil largely barren. Worse, oil companies dredged canals through the wetlands to make getting around the area easier, which only allowed in more salt water and set off a vicious cycle in which elevated salinity killed off reeds and marsh grasses, which in turn led to wider canals that let in more salt water, and so on. This compounded problems that began when Mississippi River flood control measures cut off the area's main sources of fresh sediment. Drawing a connection between the two eras of displacement, Albert Naquin, the chief of the Isle de Jean Charles band of Biloxi-Chitimacha-Choctaw Tribe, said, "At one time, it was man-made removal; now it's Mother Nature's removal."

From July to October 2016, in the wake of the federal grant award, which had been received with help from the Lowlander Center, a local nonprofit with long-standing relationships with the Tribe and other stakeholders (e.g., local scientists, researchers, and planners), ¹⁰⁵ Louisiana's Office of Community Development hosted two community meetings, surveyed the island, and conducted household interviews with Isle residents. ¹⁰⁶ At the time, the desire to relocate was not unanimous; 28 percent of residents were opposed. ¹⁰⁷ Residents were also canvassed on what they wanted in a new community. Among their preferences: a rural location with single-family homes, but within 25 minutes of grocery stores, schools, and healthcare services. ¹⁰⁸

"At one time, it was man-made removal; now it's Mother Nature's removal."

Albert Naquin

Chief of the Isle de Jean Charles band of Biloxi-Chitimacha-Choctaw Tribe

Subsequent meetings were held as the state narrowed its search for possible relocation sites, and three distinct areas of disagreement emerged among residents and state officials. ¹⁰⁹ First, who would be eligible to participate in the program? This would be based on when people lived on the island, including whether they had moved before Hurricane Isaac came through in 2012. Second, what would the state do with the island after people left? Many feared it would be turned into a resort. And third, where would the relocation site would be, and would people feel better off in their new housing? In particular, the state faced a dilemma: building too close to Isle de Jean Charles would leave residents exposed, building too far north would cause more disruption and might deter people from participating. ¹¹⁰

Ultimately, these fault lines were resolved, and in December 2018, the Louisiana Land Trust purchased 515 acres of sugarcane land near Schriever in Terrebonne Parish for \$11.7 million. 111,112 Construction has begun on 120 homes in what future residents have dubbed "New Isle," roughly 40 miles from Isle de Jean Charles. 113,114 The state will build homes for current residents, or those who moved away after Hurricane Isaac in 2012. For those who moved off the island before 2012, the state will provide construction-ready lots. 115,116

According to the state of Louisiana, "eligible families that participate in the Resettlement will enter into a forgivable mortgage on the property in The New Isle. One-fifth of the mortgage will be forgiven each year over the course of five years, during which time no payments are required, provided the resident maintains primary residency and the required insurance on the new property. After five years the resident will own the new property in full, provided these requirements have been met." ¹¹⁷

Even as early obstacles have been overcome, new controversies have emerged. According to the Government Accountability Office report, the mortgage requirements have been confusing to residents whose families have passed down property for generations without the need for such formalities. Moreover, those choosing to relocate to New Isle but who want to retain title to their land on Isle de Jean Charles must agree to not substantially improve their former dwellings. 118

The first homes in New Isle are expected to be ready for occupancy by fall 2021, with the remaining by spring 2022. The subdivision will reportedly include two bayous running through the property, along with wetlands, walking trails, a pasture, a market center, festival grounds and a community center. All but five of the island's 42 households had committed to move to New Isle as of April 2021, months before Hurricane Ida devastated the island. 119,120

Over the next century, sea-level rise caused by climate change could plausibly force tens of millions of people in the United States to move from their homes. 121 Shoreline counties hold nearly 50 million housing units. Under worst-case scenarios, between \$66 billion and \$106 billion worth of real estate will be below sea level by 2050, and \$238 billion to \$507 billion by 2100. 122 The use of the Louisiana Land Trust to facilitate land development for the resettlement of Isle de Jean Charles' and Pecan Acres' residents shows that CLTs can play a useful role in such projects, and that the transition can unfold relatively smoothly when the people closest to the threat play a leadership role in the planning process from the beginning.

Case Study 3: Sawmill Community Land Trust, Albuquerque, New Mexico

The arrival of the transcontinental Atchison, Topeka, and Santa Fe railways in 1880 prompted rapid growth in Albuquerque, enabling massive amounts of goods to be easily shipped in and out of the burgeoning city. 123 With access to a rail line and timber forests just 100 miles to the west, the American Lumber Company moved to increase its presence in the area. In 1903, it built a football-field-sized mill in the city, as well as woodworking factories on a 110-acre parcel just northwest of Albuquerque's then-boundaries and not far from what is now known as historic Old Town, established in 1706 and the city's first neighborhood. 124,125 A mile-long railroad spur was built to get the lumber to and from the steam-powered mill. 126 Not long after its opening, the mill had reportedly become the biggest lumber enterprise in the Southwest, employing roughly 850 people, many of whom settled in the neighborhood surrounding the mill, mostly living in adobe houses. 127,128

Although the mill's ownership would change hands over the years, the Sawmill neighborhood, as it came to be known, adjacent to Old Town and just northwest of downtown Albuquerque, saw one constant emerge: steady environmental degradation. Max Ramirez Jr. grew up in the neighborhood in the 1930s and 1940s, and would later recall waking up in his bed covered in a thin layer of sawdust. 129 The pollution was attributed to Ponderosa Products, a nearby particleboard company. The hazards weren't just airborne, though; they also seeped into the ground and into the water. Nitrates (can be harmful in drinking water, especially for babies¹³⁰), solvents (potential carcinogens, reproductive hazards, and neurotoxins¹³¹), and formaldehyde (eye, nose, throat, and skin irritant and a probable carcinogen¹³²) were all cited during later remediation efforts.¹³³ In the mid-1980s, a group of activists known as the Southwest Organizing Project mobilized residents of the Sawmill neighborhood to pressure local officials to enforce environmental regulations at Ponderosa. 134 Ramirez, a painter by trade, was on the vanguard, often picketing in front of the company. 135 He once organized a meeting in the neighborhood with government officials, and timed it to when the plant released its plume into the air, the dust settling on the clothes of those attending.¹³⁶ The pressure ultimately worked: The company eventually agreed to strengthen its pollution-mitigation efforts, spending almost \$2 million to reduce particulate emissions by 95 percent. 137

In 1992, residents learned that Ponderosa was looking to add to its footprint by purchasing a 27-acre parcel adjacent to its factory. ¹³⁸ They mobilized again, and the city of

Albuquerque eventually agreed to acquire the site and transfer its title to the Sawmill Community Land Trust, which was established in 1996. The land trust's formation was prompted in part by encroaching gentrification that was threatening longtime homeowners. Historic Old Town, a major tourist draw, was just a short walk away, making Sawmill a tempting target for developers. Residents were being squeezed out of their community as downtown was encroaching," recalls Connie Chavez, who grew up in the Sawmill neighborhood and who would eventually become director of the Sawmill Community Land Trust. "So, we picked up the banner of affordable housing." 140

The idea behind the land trust was to acquire, remediate, and hold land, and then build permanently affordable housing and other amenities. Its stated mission is to develop "vibrant, prosperous neighborhoods through the creation and stewardship of permanently affordable housing and sustainable economic opportunities for low- to moderate-income families," and it is guided by seven key principles:¹⁴¹

- 1) Provide permanently affordable housing.
- 2) Nurture an informed and empowered community.
- Promote community-driven economic development that creates good jobs and provides in-demand goods and services.
- 4) Support residents over the long term and advocate on behalf of the neighborhood.
- 5) Value and preserve history and culture.
- 6) Prudently steward resources.
- 7) Foster stability and the long-term well-being of residents.

New Mexico is one of the nation's poorest states. ¹⁴² In addition, housing affordability is a major challenge in Albuquerque, which is 49 percent Hispanic and where about a quarter of the state's people reside. ^{143,144} Among people with below-median incomes who experience housing problems, cost burden, a leading indicator of risk for homelessness, is by far the highest priority, far outranking crowdedness and quality. ¹⁴⁵ In fact, cost burden—when the cost of housing exceeds 30 percent of gross income—affects about two-thirds of households in the city with low or moderate incomes. Four-in-ten of these households are actually "severely cost-burdened," spending more than half

of their income on housing (rent and utilities for renters; mortgage payments, taxes, insurance, and utilities for owners). This amounts to about 18 percent (cost-burdened) and 16 percent (severely cost-burdened), respectively, of households in Albuquerque overall. Unaffordable housing and poverty are particularly acute challenges in Sawmill and other areas in and around downtown.

In the interest of preserving affordable housing, the trust retains title to its land and residential sales are made available primarily to those who make no more than 80 percent of the area's median income. 147 The CLT provides residents with a 99-year ground lease that includes restrictions of resale and the right of first refusal, although homeowners who do leave have the opportunity to receive a fair, formula-based return on their housing investment at resale (initial purchase price plus the cost of improvements plus up to 30 percent of appreciated value), helping them to build wealth. Homeowners must be first-time buyers with good credit, or those who have not purchased a new home within the last three years. 149 CLT staff also facilitate homebuyer and financial counseling. 150

Central to the neighborhood's effort was community engagement. Indeed, the CLT was born out of years of environmental health activism and community organizing under the auspices of the Sawmill Advisory Council. 151 Together, they hashed out a master plan—based on input from all residents, from senior citizens to children—that provided a template for much of what the trust would seek to achieve over the following two decades.¹⁵² In 2005, during the formation of an updated redevelopment plan for the neighborhood, organizers hosted a three-day community workshop to solicit input from residents. 153 As Chavez explains, the notion of community control is built into the DNA of the Sawmill CLT; nothing is built or sold without community approval. 154 Land trust homeowners automatically receive a vote on organizational decisions at community charettes and tenants and other stakeholders are also encouraged to weigh in.

Sawmill Community Land Trust Developments

After removing truckloads of contaminated soil from the 27-acre tract, the organization set about developing its first project: Arbolera de Vida ("Orchard of Life"). According to Debbie O'Malley, a co-founder and former executive director of the CLT, the development was based on neotraditional neighborhood design, incorporating homes with front porches, parks and playgrounds, community gardens, and settings that encourage multigenerational interaction,

Figure 5. Before/After: Sawmill Neighborhood





Note: (top) Vista view of industrial pollution in 1995. (Bottom) Sawmill Community Land Trust housing and playground.

Sources: Sawmill Community Land Trust;¹⁶⁰ Dekker/Perich/Sabatini¹⁶¹

including award-winning plazas (see Figure 5). 155,156 Today, it comprises 93 homes that range from single-family detached to duplexes and townhomes to apartments to live/work flex spaces. The last type, also available in a separate 60-unit complex—the Sawmill Lofts—was designed to accommodate artisans, so a common workroom and performance space is available. 157 The most recent project—Villa Nueva, Spanish for "New Village"—is a 46-unit apartment complex for seniors who earn 50 percent or less of the area's median income. In addition to housing, the complex provides a clubhouse with a lounge area, computers for community use, a gym, and a community garden and orchard, which are watered using above-ground cisterns that capture rainwater. Residents take day trips together and gather for regular onsite activities. 158 All of these amenities help foster a culture of community and social cohesion. Residents even report swapping services like baby-sitting and sharing resources like tools. 159

As Chavez points out, before the first sawmill was built over a century ago, the land was agricultural. The Sawmill development has evoked those roots through greenspace. "When the community was planning for that development, they wanted to be sure they retained the culture and history of the place, and that meant putting in gardens and orchards," she said. 162

Amid the construction for Arbolera de Vida, in an ironic twist, Ponderosa closed its doors in 2002, and in 2007, the 250,000-square-foot particle board plant was torn down. ¹⁶³ Partnering with a private developer, the Sawmill CLT acquired the seven acres the plant had sat on, creating one of the largest contiguous community land trusts (34 acres) in the country. ¹⁶⁴ With the new land requiring extensive remediation, the trust applied for and received a \$225,000 grant through the state's Brownfields Fund Program. ¹⁶⁵ Several projects are completed or underway on the new acquisition. The Artisan, the first phase of development, is a two-building, mixed-use complex with 62 affordable apartments and 16 ground-floor commercial spaces for small-business owners. Adding to these, a 58-unit apartment complex called Madera Crossing is planned. ¹⁶⁶

Among the many considerations that factored into the design of the Trust's developments, reducing the community's carbon footprint was an important one that played a role in ensuring that the Sawmill neighborhood was not strictly residential, but could become a work-live-play setting. The neighborhood now encompasses retail, restaurants, and a brewery, ¹⁶⁷ and plans are in the works for a \$10 million, 31,600-square-foot performing arts center. ¹⁶⁸ "We wanted to establish homeownership units in places where people could live and work in the same place, and not get into their cars and drive [away]," Chavez says. ¹⁶⁹

"When the community was planning for that development, they wanted to be sure they retained the culture and history of the place, and that meant putting in gardens and orchards."

Connie Chavez

Former Executive Director of the Sawmill Community Land Trust

Lessons from Sawmill

The city's acquisition and ownership transfer of the original 27-acre brownfield was critical to the Trust's origination, but its support did not stop there. The CLT received \$200,000 annually from the city in Community Development Block Grants, a formula-based program run by the U.S. Department of Housing and Urban Development to help develop thriving urban communities, ¹⁷⁰ which it used in part to subsidize the price of housing for homebuyers. ^{171,172} The city also provides contractors for emergency home repairs, such as roof repairs, furnace/HVAC repairs, or water heater replacements, for homeowners with low or moderate incomes. ¹⁷³ This collaboration has been critical to the CLT's early survival and to its success in cultivating a thriving community.

The story of Sawmill shows that CLTs can be a useful partner for states and/or localities seeking to redevelop previously contaminated industrial properties and also deliver both affordable housing and community amenities. Through its work, the Sawmill CLT has played a crosscutting role in increasing the resilience of its residents across a range of dimensions. First, it took the lead on remediating a serious environmental health hazard that threatened to contribute to a host of maladies, including cancer. Additionally, it has made a meaningful and growing contribution to the city's permanent stock of affordable housing—in an area with acute need—preventing displacement and freeing up household resources for families to save or divert to other priorities. And it has achieved these objectives while also strengthening the overall well-being and social cohesiveness—so important to coping with emergencies and other instances of trouble—of the neighborhood's residents through counseling services and shared amenities. Perhaps most importantly, all of this was conceptualized and executed through inclusive and intentionally community-driven processes.

The TFAH Climate Change and Health Case Studies Series is supported by a generous grant from The Kresge Foundation. Opinions in this report are TFAH's and do not necessarily reflect the views of the Foundation.

Endnotes

- 1 New Communities Inc. "New Communities Excerpt from Arc Of Justice." YouTube, September 30, 2015. https://youtu.be/Px-pvX-sGI48 (accessed September 10, 2021).
- 2 "Our History." In: *New Communities Inc.* https://www.newcommunitiesinc.com/new-communities.html (accessed September 10, 2021).
- 3 Semuels A. "Affordable Housing, Always." *The Atlantic*, July 6, 2015. https://www.theatlantic.com/business/archive/2015/07/affordable-housing-always/397637/ (accessed September 10, 2021).
- 4 New Communities Inc. https://www.newcommunitiesinc.com/ new-communities.html (accessed September 10, 2021).
- 5 Ibid.
- 6 Grannis J. Community Land = Community Resilience. Washington, DC: Georgetown Climate Center, January 2021. https://www. georgetownclimate.org/files/report/Community_Land_Trust_Report_2021.pdf (accessed September 10, 2021).
- 7 Balbus J, Crimmins AR, Gamble JL, et al. *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment.* Washington, DC: U.S. Global Change Research Program, 2016. https://health2016.globalchange.gov/ (accessed September 10, 2021).
- 8 Grannis J. Community Land = Community Resilience. Washington, DC: Georgetown Climate Center, January 2021. https://www.georgetownclimate.org/files/report/Community_Land_Trust_Report_2021.pdf (accessed September 10, 2021).
- 9 "New Homes in Development." In: *Homestead Community Land Trust*. https://www.homesteadclt.org/about-homestead/new-homes-in-development (accessed September 10, 2021).
- 10 "Collaborations." In: Aquidneck Land Trust. https://ailt.org/our-work/collaborations/ (accessed September 10, 2021).
- 11 "RI Green Infrastructure Coalition." In: *Rhode Island Green Infrastructure Coalition.* https://greeninfrastructureri.org/ (accessed September 10, 2021).
- 12 Grannis J. Community Land = Community Resilience. Washington, DC: Georgetown Climate Center, January 2021. https://www.georgetownclimate.org/files/report/Community_Land_Trust_Report_2021.pdf (accessed September 10, 2021).
- 13 Grannis J. "Community-Driven Climate Solutions: How Public-Private Partnerships with Land Trusts Can Advance Climate Action." William & Mary Environmental Law and Policy Review, 44(701), 2020. https://scholarship.law.wm.edu/wmelpr/vol44/iss3/3 (accessed September 10, 2021).

- 15 Mironova O. "How Community Land Trusts Can Help Address the Affordable Housing Crisis." *Jacobin*, July 6, 2019. http://www.jacobinmag.com/2019/07/community-land-trusts-affordable-housing (accessed September 10, 2021).
- 16 Grannis J. Community Land = Community Resilience. Washington, DC: Georgetown Climate Center, January 2021. https://www.georgetownclimate.org/files/report/Community_Land_Trust_Report_2021.pdf (accessed September 10, 2021).
- 17 Rivera S. "New Year, New Name: Nubian Square Is Making Room for Change." *Boston*, February 19, 2020. https://www.bostonmagazine.com/news/2020/02/19/new-day-nubian-square/ (accessed September 10, 2021).

- 18 Abraham Y. "Trust and Transformation in a Roxbury Neighborhood." *The Boston Globe*, July 24, 2014. https://www.bostonglobe.com/metro/2014/07/23/roxbury-neighborhood-once-monument-racism-and-neglect-undergoes-transformation/QcWotBYJZYGoZD3OU4u0lO/story.html (accessed September 10, 2021).
- 19 Foucaultspendulum. "Holding Ground, part 2." YouTube, December 9, 2010. https://youtu.be/TElaNRPBXP0 (accessed September 10, 2021).
- 20 Abraham Y. "Trust and Transformation in a Roxbury Neighborhood." *The Boston Globe*, July 24, 2014. https://www.bostonglobe.com/metro/2014/07/23/roxbury-neighborhood-once-monument-racism-and-neglect-undergoes-transformation/QcWotBYJZYGoZD3OU4u0lO/story.html (accessed September 10, 2021).
- 21 "History of DNI." In: *Dudley Neighbors Incorporated*. https://www.dudleyneighbors.org/history-of-dni.html (accessed September 10, 2021).
- 22 Medoff P and Sklar H. Streets of Hope: The Fall and Rise of an Urban Neighborhood. (Boston: South End Press, 1994).
- 23 Lepore J. "The Uprooted." *The New Yorker*, August 30, 2010. https://www.newyorker.com/magazine/2010/09/06/the-uprooted (accessed September 10, 2021).
- 24 Gray A. "Voters May Decide If Dudley Square Becomes 'Nubian Square'." *WBUR*, November 1, 2019. https://www.wbur.org/news/2019/11/01/nubian-square-dudley-square-election-boston (accessed September 10, 2021).
- 25 "Cape Verdeans." In: Global Boston. https://globalboston.bc.edu/index.php/home/ethnic-groups/cape-verdeans/ (accessed September 10, 2021).
- 26 Kannam J. "Community-Based Organizing for Educational Justice: A Case Study of the Dudley Street Neighborhood Initiative." *American Studies Honors Papers*, 7, 2016. http://digitalcommons.conncoll.edu/americanstudieshp/7 (accessed September 10, 2021).
- 27 "Dudley Neighbors Inc." In: Center for Community Land Trust Innovation. https://cltweb.org/resources/case-studies/dudley-neighbors-inc/ (accessed September 10, 2021).
- 28 Foucaultspendulum. "Holding Ground, part 2." YouTube, December 9, 2010. https://youtu.be/TElaNRPBXP0 (accessed September 10, 2021).
- 29 Grannis J. "Community-Driven Climate Solutions: How Public-Private Partnerships with Land Trusts Can Advance Climate Action." William & Mary Environmental Law and Policy Review, 44(701), 2020. https://scholarship.law.wm.edu/wmelpr/vol44/iss3/3 (accessed September 10, 2021).
- 30 "Board of Directors." In: *Dudley Street Neighborhood Initiative*. https://www.dsni.org/board (accessed September 10, 2021).
- 31 "Ché Madyun and the Dudley Street Neighborhood." In: *History & Culture, U.S. Department of the Interior,* October 14, 2020. https://www.nps.gov/mabi/learn/historyculture/che-madyun. htm (accessed September 10, 2021).
- 32 Foucaultspendulum. "Holding Ground, part 2." YouTube, December 9, 2010. https://youtu.be/TElaNRPBXP0 (accessed September 10, 2021).

- 33 "Dudley Street Neighborhood Initiative." In: *Community Uprooted: Eminent Domain in the U.S., Loyola University of Chicago.* https://www.luc.edu/eminent-domain/siteessays/bostonma/dudley-streetneighborhoodinitiative/ (accessed September 10, 2021).
- 34 "About us." In: Dudley Street Neighborhood Initiative. https://www.dsni.org/about-us (accessed September 10, 2021).
- 35 Kannam J. "Community-Based Organizing for Educational Justice: A Case Study of the Dudley Street Neighborhood Initiative." *American Studies Honors Papers*, 7, 2016. http://digitalcommons.conncoll.edu/americanstudieshp/7 (accessed September 10, 2021).
- 36 Foucaultspendulum. "Holding Ground, part 2." YouTube, December 9, 2010. https://youtu.be/TElaNRPBXP0 (accessed September 10, 2021).
- 37 "Dudley Neighbors Inc. (1988)." In: Roots & Branches: A Gardener's Guide to the Origins and Evolution of the Community Land Trust. https://cltroots.org/profiles/dudley-neighbors-inc (accessed September 10, 2021).
- 38 Ibid.
- 39 "Before & After Photos." In: *Dudley Neighbors, Inc.* https://www.dudleyneighbors.org/before-after-photos.html (accessed September 10, 2021).
- 40 "Community-Led Use of Eminent Domain." In: Community Uprooted: Eminent Domain in the U.S., Loyola University of Chicago. https://www.luc.edu/eminent-domain/siteessays/bostonma/community-leduseofeminentdomain/ (accessed September 10, 2021).
- 41 "Boston, MA: Eminent Domain in the Hands of the Community." In: Community Uprooted: Eminent Domain in the U.S., Loyola University of Chicago. https://www.luc.edu/eminent-domain/siteessays/bostonma/ (accessed September 10, 2021).
- 42 "About GBCLTN." In: *Dudley Street Neighborhood Initiative*. https://www.dsni.org/greater-boston-community-network (accessed on September 10, 2021).
- 43 "Dudley Street Neighborhood Initiative, Boston, Massachusetts." In: *Equitable Adaptation Legal & Policy Toolkit*, Georgetown Climate Center. https://www.adaptationclearinghouse.org/resources/dudley-street-neighborhood-initiative-boston-massachusetts.html (accessed September 10, 2021).
- 44 Loh P. "How One Boston Neighborhood Stopped Gentrification in Its Tracks." YES!, January 28, 2015. https://www.yesmagazine.org/issue/cities/2015/01/28/how-one-boston-neighborhood-stopped-gentrification-in-its-tracks (accessed September 10, 2021).
- 45 "Dudley Greenhouse." In: *Dudley Neighbors, Incorporated: The Community Land Trust.* https://www.dudleyneighbors.org/dudley-greenhouse.html (accessed September 20, 2021).
- 46 "About GBCLTN." In: *Dudley Street Neighborhood Initiative*. https://www.dsni.org/greater-boston-community-network (accessed on September 10, 2021).
- 47 Grannis J. "Community-Driven Climate Solutions: How Public-Private Partnerships with Land Trusts Can Advance Climate Action." William & Mary Environmental Law and Policy Review, 44(701), 2020. https://scholarship.law.wm.edu/wmelpr/vol44/iss3/3 (accessed September 10, 2021).
- 48 Ibid.

- 49 "Dudley Neighbors, Inc." In: Dudley Neighbors, Incorporated: The Community Land Trust. https://www.dudleyneighbors.org/ (accessed September 10, 2021).
- 50 Grannis J. "Community-Driven Climate Solutions: How Public-Private Partnerships with Land Trusts Can Advance Climate Action." William & Mary Environmental Law and Policy Review, 44(701), 2020. https://scholarship.law.wm.edu/wmelpr/vol44/iss3/3 (accessed September 10, 2021).
- 51 Commonwealth of Massachusetts. "Chapter 62: Section 6M. Community Investment Tax Credit." 192nd General Court." https://malegislature.gov/Laws/GeneralLaws/PartI/TitleIX/Chapter62/Section6M (accessed September 10, 2021).
- 52 "Community Investment Tax Credit." In: *LISC Boston*. https://www.lisc.org/boston/citc/ (accessed September 10, 2021).
- 53 "Background & History." In: *Massachusetts Association of Community Development Corporations*. https://www.macdc.org/citc (accessed on September 10, 2021).
- 54 Grannis J. "Community-Driven Climate Solutions: How Public-Private Partnerships with Land Trusts Can Advance Climate Action." William & Mary Environmental Law and Policy Review, 44(701), 2020. https://scholarship.law.wm.edu/wmelpr/vol44/iss3/3 (accessed September 10, 2021).
- 55 "Invest in Us." In: *Dudley Neighbors Incorporated*. https://www.dudleyneighbors.org/support-us.html (accessed September 10, 2021).
- 56 Grannis J. Community Land = Community Resilience. Washington, DC: Georgetown Climate Center, January 2021. https://www.georgetownclimate.org/files/report/Community_Land_Trust_Report_2021.pdf (accessed September 10, 2021).
- 57 "Climate Ready Boston." In: *City of Boston*, October 2013. https://www.cityofboston.gov/news/uploads/30044_50_29_58.pdf (accessed September 10, 2021).
- 58 Hori M and Bowman D. "Displacement Dynamics in Southern Louisiana after Hurricanes Katrina and Rita." Princeton University, April 2008. https://paa2008.princeton.edu/papers/81451 (accessed September 10, 2021).
- 59 Forbes P, Executive Director, Louisiana Office of Community Development. Interview with Trust for America's Health, July 12, 2021.
- 60 Davenport C and Robertson C. "Resettling the First American 'Climate Refugees." *The New York Times*, May 2, 2016. https://www.nytimes.com/2016/05/03/us/resettling-the-first-american-climate-refugees.html?searchResultPosition=4 (accessed September 10, 2021).
- 61 Cusick D. "40 Homes and 17 Floods. Now the Neighborhood Is Moving." *E&E News*, May 29, 2019. https://documentcloud.adobe.com/link/track?uri=urn:aaid:scds:US:5e82b65c-e9b2-45db-b4fb-6fd940b5d6a0 (accessed September 10, 2021).
- 62 Rddad Y. "This Neighborhood Flooded 17 Times in 30 Years. Now, It's Being Relocated 2 Miles Away." *The Advocate*, October 6, 2020. https://www.theadvocate.com/baton_rouge/news/communities/westside/article_66c1ea0a-0802-11eb-bbc2-e37800e32e7f.html (accessed September 10, 2021).
- 63 Ibid.

- 64 Cusick D. "40 Homes and 17 Floods. Now the Neighborhood Is Moving." *E&E News*, May 29, 2019. https://documentcloud.adobe.com/link/track?uri=urn:aaid:scds:US:5e82b65c-e9b2-45db-b4fb-6fd940b5d6a0 (accessed September 10, 2021).
- 65 Kasakove S. "This Is How the Climate Crisis Wipes an American Community Off the Map." *Vice*, November 14, 2019. https://www.vice.com/en/article/mbmdzb/this-is-how-the-climate-crisis-wipes-anamerican-community-off-the-map (accessed September 10, 2021).
- 66 Cusick D. "40 Homes and 17 Floods. Now the Neighborhood Is Moving." *E&E News*, May 29, 2019. https://documentcloud.adobe.com/link/track?uri=urn:aaid:scds:US:5e82b65c-e9b2-45db-b4fb-6fd940b5d6a0 (accessed September 10, 2021).

- 68 Kay J. "High Water Routs Inland Towns in Sign of Climate Change to Come." *Bloomberg Law*, November 12, 2019. https://news.bloomberglaw.com/environment-and-energy/high-waterrouts-inland-towns-in-sign-of-climate-change-to-come (accessed September 10, 2021).
- 69 The Advocate. "What Caused the Historic August 2016 Flood, and What Are the Odds it Could Happen Again?" August 5, 2017. https://www.theadvocate.com/louisiana_flood_2016/article_3b-7578fc-77b0-11e7-9aab-f7c07d05efcb.html (accessed September 10, 2021).
- 70 Cusick D. "40 Homes and 17 Floods. Now the Neighborhood Is Moving." *E&E News*, May 29, 2019. https://documentcloud.adobe.com/link/track?uri=urn:aaid:scds:US:5e82b65c-e9b2-45db-b4fb-6fd940b5d6a0 (accessed September 10, 2021).

71 Ibid.

- 72 Grannis J. Community Land = Community Resilience. Washington, DC: Georgetown Climate Center, January 2021. https://www.georgetownclimate.org/files/report/Community_Land_Trust_Report_2021.pdf (accessed September 10, 2021).
- 73 Kasakove S. "This Is How the Climate Crisis Wipes an American Community Off the Map." *Vice*, November 14, 2019. https://www.vice.com/en/article/mbmdzb/this-is-how-the-climate-crisis-wipes-an-american-community-off-the-map (accessed September 10, 2021).
- 74 "Louisiana Land Trust Resettlement Projects." In: *Equitable Adaptation Legal & Policy Toolkit, Georgetown Climate Center.* https://www.adaptationclearinghouse.org/resources/louisiana-land-trust-resettlement-projects.html (accessed September 10, 2021).
- 75 "Request for Qualification Statements Package." In: Louisiana Land Trust, 2019. https://www.lalandtrust.us/index.php?option=com_phocadownload&view=category&id=45:llt-rfq-for-pecan-acres-resettlement-program&download=230:llt-rfq-for-pecan-acres-resettlement-program&Itemid=2 (accessed September 10, 2021).
- 76 "Pecan Acres Resettlement." In: Louisiana Office of Community Development, February 10, 2020. https://cdnrestorela.s3.us-west-2. amazonaws.com/wp-content/uploads/2020/05/08142350/Pecan-Acres-Presentation-2-10-20.pdf (accessed September 10, 2021).
- 77 Kasakove S. "This Is How the Climate Crisis Wipes an American Community Off the Map." *Vice*, November 14, 2019. https://www.vice.com/en/article/mbmdzb/this-is-how-the-climate-crisis-wipes-an-american-community-off-the-map (accessed September 10, 2021).

- 78 Rddad Y. "This Neighborhood Flooded 17 Times in 30 Years. Now, It's Being Relocated 2 Miles Away." *The Advocate*, October 6, 2020. https://www.theadvocate.com/baton_rouge/news/communities/westside/article_66c1ea0a-0802-11eb-bbc2-e37800e32e7f.html (accessed September 10, 2021).
- 79 "Pecan Acres Sustainable Resettlement: Optional Relocation Assistance Program." In: *Louisiana Housing Corporation*, September 13, 2019. https://cdnrestorela.s3.us-west-2.amazonaws.com/wp-content/uploads/2019/10/10085635/Pecan-Acres-ORA-Policy.pdf (accessed September 10, 2021).

80 Ibid.

- 81 Forbes P, Executive Director, Louisiana Office of Community Development. Interview with Trust for America's Health, July 12, 2021.
- 82 "Louisiana Land Trust Resettlement Projects." In: Equitable Adaptation Legal & Policy Toolkit, Georgetown Climate Center. https://www.adaptationclearinghouse.org/resources/louisiana-land-trust-resettlement-projects.html (accessed September 10, 2021).
- 83 Rddad Y. "This Neighborhood Flooded 17 Times in 30 Years. Now, It's Being Relocated 2 Miles Away." *The Advocate*, October 6, 2020. https://www.theadvocate.com/baton_rouge/news/communities/westside/article_66clea0a-0802-11eb-bbc2-e37800e32e7f.html (accessed September 10, 2021).
- 84 "Request for Qualification Statements Package." In: Louisiana Land Trust, 2019. https://www.lalandtrust.us/index.php?option=com_phocadownload&view=category&id=45:llt-rfq-for-pecan-acres-resettlement-program&download=230:llt-rfq-for-pecan-acres-resettlement-program&Itemid=2 (accessed September 10, 2021).
- 85 Rddad Y. "This Neighborhood Flooded 17 Times in 30 Years. Now, It's Being Relocated 2 Miles Away." *The Advocate*, October 6, 2020. https://www.theadvocate.com/baton_rouge/news/communities/westside/article_66c1ea0a-0802-11eb-bbc2-e37800e32e7f.html (accessed September 10, 2021).
- 86 Davenport C and Robertson C. "Resettling the First American 'Climate Refugees.'" *The New York Times*, May 2, 2016. https://www.nytimes.com/2016/05/03/us/resettling-the-first-american-climate-refugees.html?searchResultPosition=4 (accessed September 10, 2021).
- 87 Flavelle C. "As This Town Slips Into Sea, a \$48 Million Rescue Runs Into Obstacles." *Bloomberg*, July 3, 2017. https://www.bloomberg.com/news/features/2017-07-03/louisiana-town-convulsed-by-relocation-as-climate-policy-shifts (accessed September 10, 2021).

- 89 "A Climate Migration Pilot Program Could Enhance the Nation's Resilience and Reduce Federal Fiscal Exposure." In: *U.S. Government Accountability Office*, July 2020. https://www.gao.gov/assets/gao-20-488.pdf (accessed September 10, 2021).
- 90 Setyawan K. "Isle de Jean Charles Residents View Future Homes for the First Time." *Houma Today*, April 7, 2021. https://www.houmatoday.com/story/news/2021/04/07/isle-de-jean-charles-residents-view-future-homes-first-time/4822656001/ (accessed September 10, 2021).

- 91 Boyd R. "The People of the Isle de Jean Charles Are Louisiana's First Climate Refugees—But They Won't Be the Last." Natural Resources Defense Council, September 23, 2019. https://www.nrdc.org/stories/people-isle-jean-charles-are-louisianas-first-climate-refugees-they-wont-be-last (accessed September 10, 2021).
- 92 "The Resettlement of Isle de Jean Charles: Report on Data Gathering and Engagement Phase." State of Louisiana Division of Administration, Office of Community Development. November 2016. https://isledejeancharles.la.gov/sites/default/files/public/IDJC-Final-Report-Update.pdf (accessed September 20, 2021).
- 93 Carter L, Terando A, Dow K, et al. "Chapter 19: Southeast." In: Reidmiller DR, Avery CW, Easterling DR, et al. (eds.). Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II. Washington, DC: U.S. Global Change Research Program, 2018: 743–808. https://nca2018.globalchange.gov/chapter/19/ (accessed September 10, 2021).
- 94 Carter LM, Jones JW, Berry L, et al. "Chapter 17: Southeast and the Caribbean." In: Melillo JM, Richmond TC, and Yohe GW (eds.). Climate Change Impacts in the United States: The Third National Climate Assessment. Washington, DC: U.S. Global Change Research Program, 2014: 396-417. https://data.globalchange.gov/report/nca3/chapter/southeast (accessed September 10, 2021).
- 95 Carter L, Terando A, Dow K, et al. "Chapter 19: Southeast." In: Reidmiller DR, Avery CW, Easterling DR, et al. (eds.). Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II. Washington, DC: U.S. Global Change Research Program, 2018: 743-808. https://nca2018.globalchange.gov/chapter/19/ (accessed September 10, 2021).
- 96 "A Climate Migration Pilot Program Could Enhance the Nation's Resilience and Reduce Federal Fiscal Exposure." In: *U.S. Government Accountability Office*, July 2020. https://www.gao.gov/assets/gao-20-488.pdf (accessed September 10, 2021).
- 97 Kaplan S. "'We're Searching to Reclaim What Was Lost': In Museum Archives, A Tribe Urgently Seeks Proof of its Past." *The Washington Post*, November 11, 2017. https://www.washingtonpost.com/news/speaking-of-science/wp/2017/11/11/were-searching-to-reclaim-what-was-lost-in-museum-archives-a-tribe-urgently-seeks-proof-of-its-past/ (accessed September 10, 2021).
- 98 Comardelle C. "Preserving Our Place: Isle de Jean Charles." *Nonprofit Quarterly*, October 19, 2020. https://nonprofitquarterly.org/preserving-our-place-isle-de-jean-charles/ (accessed September 10, 2021).
- 99 Ibid.
- 100 Kolbert E. "Louisiana's Disappearing Coast." The New Yorker, March 25, 2019. https://www.newyorker.com/magazine/2019/04/01/ louisianas-disappearing-coast (accessed September 10, 2021).
- 101 Kaplan S. "We're Searching to Reclaim What Was Lost': In Museum Archives, A Tribe Urgently Seeks Proof of its Past." *The Washington Post*, November 11, 2017. https://www.washingtonpost.com/news/speaking-of-science/wp/2017/11/11/were-searching-to-reclaim-what-was-lost-in-museum-archives-a-tribe-urgently-seeks-proof-of-its-past/ (accessed September 10, 2021).
- 102 Kolbert E. "Louisiana's Disappearing Coast." *The New Yorker*, March 25, 2019. https://www.newyorker.com/magazine/2019/04/01/louisianas-disappearing-coast (accessed September 10, 2021).

- 104 Lydersen K. "Gulf of Mexico Threatens Native Americans' Way of Life in Louisiana." *The Washington Post*, July 20, 2009. https://www.washingtonpost.com/wp-dyn/content/article/2009/07/19/AR2009071901819.html (accessed September 10, 2021).
- 105 Carter L, Terando A, Dow K, et al. "Chapter 19: Southeast." In: Reidmiller DR, Avery CW, Easterling DR, et al. (eds.). Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II. Washington, DC: U.S. Global Change Research Program, 2018: 743-808. https://nca2018.globalchange.gov/chapter/19/ (accessed September 10, 2021).
- 106 "The Resettlement of Isle de Jean Charles." In: *Louisiana Office of Community Development*, May 2017. https://isledejeancharles.la.gov/sites/default/files/public/IDJC-Final-Report-Update.pdf (accessed September 10, 2021).

108 Ibid.

109 Flavelle C. "As This Town Slips Into Sea, a \$48 Million Rescue Runs Into Obstacles." *Bloomberg*, July 3, 2017. https://www.bloomberg.com/news/features/2017-07-03/louisiana-town-convulsed-by-relocation-as-climate-policy-shifts (accessed September 10, 2021).

110 Ibid.

- 111 "The Resettlement of Isle de Jean Charles." In: *Louisiana Office of Community Development*, November 28, 2016. https://isledejean-charles.la.gov/sites/default/files/public/IDJC-Final-Report-Update.pdf (accessed September 10, 2021).
- 112 "State of Louisiana Buys Land for Isle de Jean Charles Resettlement." In: Isle de Jean Charles Resettlement, Louisiana Office of Community Development. https://isledejeancharles.la.gov/article/state-louisiana-buys-land-isle-de-jean-charles-resettlement?fbclid=IwAR2wW1JBa_xP99aG77FS6IiXQccSi3h3fiLk-2dW60TxrsOvh-VEX51zRNUo (accessed September 10, 2021).
- 113 "Frequently Asked Questions." In *Isle de Jean Charles Resettlement*. https://isledejeancharles.la.gov/frequently-asked-questions (accessed September 20, 2021).
- 114 Parker H. "Efforts to relocate island residents inch forward." *Houma Today*, January 16, 2020. https://www.houmatoday.com/news/20200114/efforts-to-relocate-island-residents-inch-forward (accessed September 20, 2021).
- 115 Setyawan K. "Isle de Jean Charles Residents View Future Homes for the First Time." *Houma Today*, April 12, 2021. https://www.houmatoday.com/story/news/2021/04/07/isle-de-jean-charles-residents-view-future-homes-first-time/4822656001/ (accessed September 10, 2021).
- 116 "How to Apply." In: *Isle de Jean Charles Resettlement*. https://islede-jeancharles.la.gov/how-to-apply (accessed September 10, 2021).
- 117 "Resettlement of Isle de Jean Charles: Background & Overview." In: Louisiana Office of Community Development. https://isledejean-charles.la.gov/sites/default/files/public/IDJC-Background-and-Overview-6-6-19.pdf (accessed September 10, 2021).
- 118 "A Climate Migration Pilot Program Could Enhance the Nation's Resilience and Reduce Federal Fiscal Exposure." In: *U.S. Government Accountability Office*, July 2020. https://www.gao.gov/assets/gao-20-488.pdf (accessed September 10, 2021).

- 119 Setyawan K. "Isle de Jean Charles Residents View Future Homes for the First Time." *Houma Today*, April 7, 2021. https://www.houmatoday.com/story/news/2021/04/07/isle-de-jean-charles-residents-view-future-homes-first-time/4822656001/ (accessed September 10, 2021).
- 120 Baurick, T. "On Sinking Isle de Jean Charles, Ida Shredded the Few Remaining Homes." *The Times The Times-Picayune*, September 4, 2021. https://www.nola.com/news/environment/article_b3ce8e12-0d0f-11ec-8b3e-efcab7617cd6.html (accessed September 2021).
- 121 Fleming E, Payne J, Sweet W, et al. "Chapter 8: Coastal Effects." In: Reidmiller DR, Avery CW, Easterling DR, et al. (eds.). Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II. Washington, DC: U.S. Global Change Research Program, 2018: 322-352. https://nca2018.globalchange.gov/chapter/8/ (accessed September 10, 2021).

- 123 Dodge WA. "Historic and Architectural Resources of Central Albuquerque, 1880-1970." U.S. Department of the Interior, 2012. https://www.downtownacd.org/wp-content/uploads/2013/08/Central-Downtown-History-REVISED.pdf (accessed September 10, 2021).
- 124 "The Logging Companies." In: *Zuni Mountain Railroads Cibola National Forest, New Mexico.* http://npshistory.com/publications/usfs/region/3/cibola/cultres6/sec2.htm (accessed September 10, 2021).
- 125 "Old Town Albuquerque." In: *Neighborhood Guide. Visit Albuquerque.* https://www.visitalbuquerque.org/about-abq/neighborhoods/historic-old-town/ (accessed September 10, 2021).
- 126 "The Logging Companies." In: Zuni Mountain Railroads Cibola National Forest, New Mexico. http://npshistory.com/publications/usfs/region/3/cibola/cultres6/sec2.htm (accessed September 10, 2021).
- 127 Dodge WA. "Historic and Architectural Resources of Central Albuquerque, 1880-1970." U.S. Department of the Interior, 2012. https://www.downtownacd.org/wp-content/uploads/2013/08/Central-Downtown-History-REVISED.pdf (accessed September 10, 2021).
- 128 Metcalf R. "Sawmill District Enjoying Renaissance." *Albuquerque Journal*, February 18, 2014. https://www.abqjournal.com/354227/sawmill-district-enjoying-renaissance.html (accessed September 10, 2021).
- 129 Jojola L. "Ponderosa Plant Demolition Begins." *Albuquerque Journal*, May 3, 2007. https://www.abqjournal.com/news/metro/559508metro05-03-07.htm (accessed September 10, 2021).
- 130 "Nitrate in Drinking Water." In: Contaminants in Water, Minnesota Department of Health. https://www.health.state.mn.us/communities/environment/water/contaminants/nitrate.html#HealthEffects (accessed September 10, 2021).
- 131 "Organic Solvents." In: Workplace Safety and Health Topics, Centers for Disease Control and Prevention, November 2, 2018. https://www.cdc.gov/niosh/topics/organsolv/default.html (accessed September 10, 2021).

- 132 "Formaldehyde and Cancer Risk." In: Cancer-Causing Substances, National Cancer Institute, June 10, 2011. https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet#can-formaldehyde-cause-cancer (accessed September 10, 2021).
- 133 "Phase I Environmental Site Assessment: Casa Grande/El Vado Motel." In: *City of Albuquerque*, November 6, 2009. https://www.cabq.gov/planning/documents/ExhibitHPhaseIESAIntera.pdf (accessed September 10, 2021).
- 134 Marquez B. Constructing Identities in Mexican American Political Organizations. (Austin, TX: University of Texas Press, 2003.)
- 135 Jojola L. "Ponderosa Plant Demolition Begins." *Albuquerque Journal*, May 3, 2007. https://www.abqjournal.com/news/metro/559508metro05-03-07.htm (accessed September 10, 2021).
- 136 Martinez P. "Sawmill Advocate 'Very Committed' to Neighborhood." *Albuquerque Journal*, June 3, 2021. https://news.yahoo.com/sawmill-advocate-very-committed-neighborhood-140500466.html (accessed September 10, 2021).
- 137 arquez B. Constructing Identities in Mexican American Political Organizations. (Austin, TX: University of Texas Press, 2003.)
- 138 O'Malley D. "Testimony of Bernalillo County Commissioner Debbie O'Malley." New Mexico Senate Subcommittee on Superfund, Toxics and Environmental Health, July 24, 2013. https://www.epw.senate.gov/public/_cache/files/a/4/a44d7a07-3dd7-4239-a986-8c545b63458d/01AFD79733D77F24 A71FEF9DAFCCB056.72413subcommitteehearingwitnesstestimonyomalley.pdf (accessed September 10, 2021).
- 139 Greenstein R and Sungu-Eryilmaz Y. "Community Land Trusts." *Lincoln Institute of Land Policy*, April 2005. https://www.lincolninst.edu/publications/articles/community-land-trusts (accessed September 10, 2021).
- 140 Chavez C, Former Executive Director, Sawmill Community Land Trust. Interview with Trust for America's Health, August 16, 2021.
- 141 "Guiding Principles." In *About Us. Sawmill Community Land Trust.* https://www.sawmillclt.org/about-us/guiding-principles/ (accessed August 19, 2021).
- 142 "2019 Poverty Rate in the United States." In: *U.S. Census Bureau*, September 17, 2020. https://www.census.gov/library/visualizations/interactive/2019-poverty-rate.html (accessed September 10, 2021).
- 143 "QuickFacts: Albuquerque city, New Mexico." In: *U.S. Census Bureau*, July 1, 2019. https://www.census.gov/quickfacts/fact/table/albuquerquecitynewmexico,US/PST045219 (accessed September 10, 2021).
- 144 "QuickFacts: New Mexico." In: *U.S. Census Bureau*, July 1, 2019. https://www.census.gov/quickfacts/fact/table/NM,US/PST045219 (accessed September 10, 2021).
- 145 "2018-2022 Consolidated Plan, 2018-2019 Action Plan." In: *City of Albuquerque*, 2018. https://www.cabq.gov/family/documents/albuquerque-consolidated-plan-2018-2022.pdf (accessed September 10, 2021).
- 146 Ibid.

- 147 Kamerick M. "Community Land Trusts Providing an Avenue for Affordable Housing." *Albuquerque Business First*, October 17, 2004. https://www.bizjournals.com/albuquerque/stories/2004/10/18/focus1.html (accessed September 10, 2021).
- 148 Georgetown Climate Center. "Case Study: Sawmill Community Land Trust - Albuquerque, New Mexico." Georgetown University, July 25, 2020. https://www.adaptationclearinghouse.org/ resources/case-study-sawmill-community-land-trust-albuquerque-new-mexico.html (accessed September 10, 2021).
- 149 "Homebuyer Application Form." Sawmill Community Land Trust. https://www.sawmillclt.org/sawmill-homes-for-sale/ homebuyer-application/ (accessed September 20, 2021).
- 150 Kamerick M. "Community Land Trusts Providing an Avenue for Affordable Housing." *Albuquerque Business First*, October 17, 2004. https://www.bizjournals.com/albuquerque/stories/2004/10/18/focus1.html (accessed September 10, 2021).
- 151 "History." In: About Us, Sawmill Community Land Trust. https://www.sawmillclt.org/about-us/history/ (accessed September 10, 2021).
- 152 Kamerick M. "Community Land Trusts Providing an Avenue for Affordable Housing." *Albuquerque Business First*, October 17, 2004. https://www.bizjournals.com/albuquerque/stories/2004/10/18/focus1.html (accessed September 10, 2021).
- 153 "Sawmill/Wells Park Community Metropolitan Redevelopment Area Plan." In: *Community by Design*, August 2005. https://documents.cabq.gov/planning/UDD/SawmillWellsParkMRA-Plan.pdf (accessed September 10, 2021).
- 154 Chavez C, Former Executive Director, Sawmill Community Land Trust. Interview with Trust for America's Health, August 16, 2021.
- 155 O'Malley D. "Testimony of Bernalillo County Commissioner Debbie O'Malley." New Mexico Senate Subcommittee on Superfund, Toxics and Environmental Health, July 24, 2013. https://www.epw.senate.gov/public/_cache/files/a/4/a44d7a07-3dd7-4239-a986-8c545b63458d/01AFD79733D77F24A71FEF9DAFCCB056.72413subcommitteehearingwitnesstestimonyomalley.pdf (accessed September 10, 2021).
- 156 "Completed Projects." In: *About Us, Sawmill Community Land Trust.* https://www.sawmillclt.org/about-us/completed-projects/ (accessed September 10, 2021).

- 159 Kamerick M. "Community Land Trusts Providing an Avenue for Affordable Housing." *Albuquerque Business First*, October 17, 2004. https://www.bizjournals.com/albuquerque/stories/2004/10/18/focus1.html (accessed September 10, 2021).
- 160 "Vista View of Pollution in 1995." In: *Photo Gallery, Sawmill Community Land Trust. https://www.sawmillclt.org/photo-gallery/page/3/# (accessed September 10, 2021).*

- 161 "Sawmill Park." In: What We Create, Dekker/Perich/Sabatini. https://www.dpsdesign.org/what-we-create/sawmill-park (accessed September 10, 2021).
- 162 Chavez C, Former Executive Director, Sawmill Community Land Trust. Interview with Trust for America's Health, August 16, 2021.
- 163 Jojola L. "Ponderosa Plant Demolition Begins." *Albuquerque Journal*, May 3, 2007. https://www.abqjournal.com/news/metro/559508metro05-03-07.htm (accessed September 10, 2021).
- 164 "Completed Projects." In: *About Us, Sawmill Community Land Trust.* https://www.sawmillclt.org/about-us/completed-projects/ (accessed September 10, 2021).
- 165 O'Malley D. "Testimony of Bernalillo County Commissioner Debbie O'Malley." New Mexico Senate Subcommittee on Superfund, Toxics and Environmental Health, July 24, 2013. https://www.epw.senate.gov/public/_cache/files/a/4/a44d7a07-3dd7-4239-a986-8c545b63458d/01AFD79733D77F24A71FEF9DAFCCB056.72413subcommitteehearingwitnesstestimonyomalley.pdf (accessed September 10, 2021).
- 166 "Completed Projects." In: *About Us, Sawmill Community Land Trust.* https://www.sawmillclt.org/about-us/completed-projects/ (accessed September 10, 2021).
- 167 Chavez C, Former Executive Director, Sawmill Community Land Trust. Interview with Trust for America's Health, August 16, 2021.
- 168 O'Leary DD. "Plans for Proposed Sawmill Center for the Arts Unveiled." *The Paper*, June 8, 2021. https://abq.news/2021/06/ plans-for-proposed-sawmill-center-for-the-arts-unveiled/ (accessed September 10, 2021).
- 169 Chavez C, Former Executive Director, Sawmill Community Land Trust. Interview with Trust for America's Health, August 16, 2021.
- 170 "CDBG: Community Development Block Grant Programs." In: *Programs, U.S. Department of Housing and Urban Development.* https://www.hudexchange.info/programs/cdbg/ (accessed September 10, 2021).
- 171 Kamerick M. "Community Land Trusts Providing an Avenue for Affordable Housing." *Albuquerque Business First*, October 17, 2004. https://www.bizjournals.com/albuquerque/stories/2004/10/18/focus1.html (accessed September 10, 2021).
- 172 Georgetown Climate Center. "Case Study: Sawmill Community Land Trust - Albuquerque, New Mexico." Georgetown University, July 25, 2020. https://www.adaptationclearinghouse.org/ resources/case-study-sawmill-community-land-trust-albuquerque-new-mexico.html (accessed September 10, 2021).
- 173 "2018-2022 Consolidated Plan, 2018-2019 Action Plan." In: *City of Albuquerque*, 2018. https://www.cabq.gov/family/documents/albuquerque-consolidated-plan-2018-2022.pdf (accessed September 10, 2021).



1730 M Street, NW, Suite 900 Washington, DC 20036 (t) 202-223-9870 (f) 202-223-9871