Closing California's Climate Gap: Understanding SB 535 Funding Allocations to Disadvantaged Communities

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Executive Summary

Low-income communities of color, here referred to as Disadvantaged Communities (DACs), are the most affected population by climate change. This can be seen on a global and regional scale; safe drinking water, food security, and economic adaptation become greater risks, which lead to an unsafe living environment. Disadvantaged communities do not exhibit sufficient financial and technical capacities to manage these risks associated with a changing climate. California SB 535 is the first attempt at the state policy level to address the everwidening climate gap that is appearing as a result of inequality and climate change. The intent of SB 535 is to level the playing field for disadvantaged communities in California, as designated by CalEnviroscreen 2.0 (a mapping system that identifies DACs based on income, population, and pollution levels) to be able to adapt to the affects of climate change equally to other communities. The Greenhouse Gas Reduction Fund was designed to incentivize pollution reduction by large industry. The profits from a reduction in CO2, if allocated efficiently, could lead to improving the communities the pollution affects most. SB 535 has the potential to be a model for the rest of the country in effectively addressing the climate gap. This research is focused on how the money from the Greenhouse Gas Reduction Fund will be allocated to disadvantaged communities most affected by climate change. This study includes a casestudy of two of the twelve state agencies that will receive money from the Greenhouse Gas Reduction Fund; The California Department of Forestry and Fire Protection (CalFIRE) and The California Department of Community Services and Development (CSD) both of whose allocations are to go 100% to disadvantaged communities (DACs). My findings show that CalFIRE and CSD have had little to no change in their funding selection process and are outreaching to the same organizations. Based on these findings, I draw the conclusion that larger community-based

organizations (CBOs) and areas that have shown improvement based on past funding projects, will get SB 535 allocations over smaller CBOs. For future state appropriations, I recommend a broadened base for outreach, a two-tiered appropriation process, a network for partnerships, and for agencies to more affectively incorporate community input. SB 535 is a groundbreaking policy in the sense that it directly addresses the climate gap. However, based on my findings, there is still work to do in terms of making an impact directly in the communities that need it most.

Guide for Acronyms and Allocations

ARB: Air Resources Board

CalFIRE: California Department of Forestry and Fire Protection

CBO: Community-based organization CSBG: Community Services Block Grant

CSD: California Department of Community Services and Development

DAC: Disadvantaged community DOF: Department of Finance

GGRF: Greenhouse Gas Reduction Fund

GHG: Greenhouse Gas emissions

LIHEAP: Low-Income Home Assistance Program

OEHHA: Office of Environmental Health Hazard Assessment

WAP: Weatherization Assistance Program WCI: Worker's Compensation Insurance

Introduction

There is little question surrounding the growing economic divide in the United States today. There is also little question that the affects of climate change will be and are being felt across the United States. There is still a question of how populations will be affected by climate change differently. An issue that is often overlooked in the climate change discussion is how the current economic structure strands certain populations with worse conditions than they face without climate change. The same industries that pollute enough to change the chemical makeup of our atmosphere dominate low-income communities of color (in this study I will refer to these communities as 'disadvantaged communities' or DACs). These communities are characterized by crowded, poorly constructed houses, liquor stores rather than grocery stores, unusually high rates of asthma and respiratory diseases, poor school systems, and a lack of municipal accountability to its community. The same industries that are the main contributors to climate change are placed in communities that are seen as 'less valuable' in terms of property and income. The environmental quality of where one lives and income are intrinsically linked.

The affects of climate change have lead to more extreme weather patterns, heat island affects in metropolitan areas, and rising sea level. In communities that start off at a disadvantage, these affects can be more extreme. With rising temperatures, pollution is more intense and sickness becomes rampant. It is DACs who carry the weight of climate change due to their previous living environment. Climate change exacerbates the affects that already cause harm these communities. The intention of the Global Warming Solutions Act and SB 535, championed by Senator Kevin de Leon, is to funnel money from the Greenhouse Gas Reduction Fund into projects within communities who will feel the affects of climate change in California first and worst. I see SB 535 as a solution to this climate gap, if implemented correctly. The purpose of this study is to find out; how the money is allocated, how state agencies interact with DAC

members, and what organizations will most likely receive the funding. SB 535 has the potential to be a sustainable solution in addressing the climate gap in California. The purpose of this study is to find out how.

California is the perfect place to start when it comes to addressing the intersection of wealth and pollution. Los Angeles alone is one of the largest emitters of CO2 emissions on the planet, has the world's 8th largest economy, and the largest county population in the United States, a change in California policy can have a substantial impact on how other economies interact with CO2 emission--- if a change is good for California, perhaps it is good for other economies. Environmental policy has worked here in the past as seen in the 1970s with the Clean Air Act. The Clean Air Act sets numerical limits on the concentrations of a basic group of air pollutants and provide reporting and enforcement mechanisms and it was quite affective. Between 1970 and 2006; carbon monoxide emissions fell from 197 million tons to 89 million tons, nitrogen oxide emissions fell from 27 million tons to 19 million tons, sulfur dioxide emissions fell from 31 million tons to 15 million tons particulate emissions fell by 80%, lead emissions fell by more than 98%. In 2011, the Public Policy Institute of California (PPIC) Survey on Californians and the Environment showed that 45% of citizens in Los Angeles consider air pollution to be a "big problem", and 47% believe that the air quality of Los Angeles is worse than it was 10 years ago. Once policy change does not make pollution disappear.

In 2013, the Los Angeles-Long Beach-Riverside area ranked the 1st most ozone-polluted city, the 4th most polluted city by annual particle pollution, and the 4th most polluted city by 24-hour particle pollution. Not only is Los Angeles one of the most polluted cities in the world, it is also one of the most inequitable. Among the largest metropolitan areas in the country, Los Angeles has the highest poverty rate and ranked 9th most unequal city in the country. 50% of the

homeless population is African American, while 9% of the general population of Los Angeles is African American. Most of the pollution that Los Angeles suffers from pollution is concentrated in low-income, disadvantaged, communities of color such as Pacoima, Boyle Heights, and Wilmington. This is all to draw attention to the fact that there is a direct correlation between pollution, disadvantaged communities of color, and income-levels below the poverty line in California.

I will be tracking where the money from the cap-and-trade fund goes and how agencies prioritize and decide which communities get what resources. I will look at how the SB 535 Coalition interacts with each agency, how the agency's outreach addresses the needs of the disadvantaged communities as defined by CalEnviroScreen 2.0, how community organizations have influenced the agency's decision, and how the agency is engaging with the community. This will give me a cross section for how the community members who will receive funding for projects and how the state agency that gives the funding for the projects communicate. In looking at this cross-section, I hope to create a model to better understand how state funding actually funnels down to communities that need it most.

Background

SB 535

In 2006, Governor Schwarzenegger decided it would benefit California's economy to address greenhouse gas emissions (GHG). AB 32 was signed into California law in 2006 with a goal of reducing GHG emissions to 1990 levels by 2020. The measure put the California Air and Resources Board (CARB) in charge of implementing the emissions reduction. CARB published the *AB 32 Scoping Plan* to address how California can meet these standards. The plan includes a mix of regulations including Low Carbon Fuel Standards, Advanced Clean Car Standards, and Cap and Trade. There were two trailer bills attached to AB 32 that address the inequitable distribution of GHG emissions on disadvantaged communities.

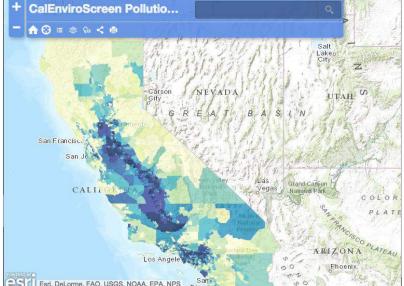
One of these trailer bills was AB 1532. Signed into law in 2012 under Governor Jerry Brown, AB 1532 creates the Green House Gas Reduction Fund that stores the profits from Cap and Trade auctions to be used for disadvantaged communities. SB 535 came as an attachment of AB 1532. SB 535 stipulates that 25% of the proceeds from this fund must go to projects that benefit disadvantaged communities most vulnerable to climate change and a minimum of 10% of the funds must be used for projects located within disadvantaged communities. The California Air Resources Board will hold auctions quarterly. These allocations are to be a part of the California State Budget and every three years the investment plan will be reassessed. The Greenhouse Gas Reduction Fund will limit emissions from sources of 85% of California's GHG emissions, establish the price signal needed to drive long-term investment in cleaner fuels and greater electricity, and gives entities flexibility to implement lowest-cost options to reduce emissions. An auction system is included where allowances can be purchased from the State.

CalEPA was given the task of identifying what constitutes a disadvantaged community and where they are in California. These include areas disproportionately affected by

environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation and areas with concentrations of people that are of low income, high unemployment, low levels of home ownership, high rent burden, sensitive populations, or low levels of educational attainment. CalEPA is using CalEnviroscreen to identify disadvantaged communities based on burden of pollution, and population characteristics. CalEnviroScreen is a screening methodology that can be used to help identify California communities that are disproportionately burdened by multiple sources of pollution. The communities are assessed for environmental burdens based on twelve factors and given a score. Overall CalEnviroScreen scores are calculated from the scores for two broad groups of indicators: Pollution Burden and Population Characteristics. The pollution indictors include; Air Quality/ Ozone and fine particles, diesel particulate emissions, drinking water contaminants, pesticide use, toxic releases from facilities, traffic density, cleanup sites, groundwater threats, hazardous waste sites and facilities. impaired water bodies, and solid waste sites and facilities.



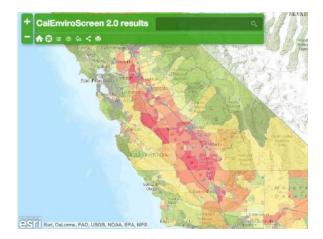
This map shows only the combined Pollution Burden scores:



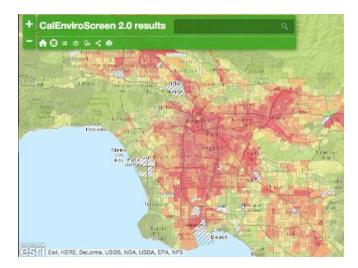
This map shows the combined Pollution and Population scores of Northern California:



Combined scores of the Central Valley:



Combined scores of Southern California:



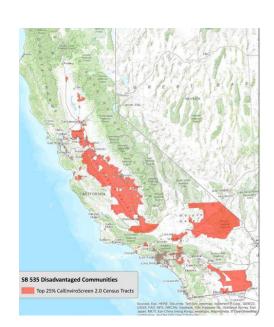
The list of disadvantaged communities was finalized in September of 2014. Based on the CalEnviroscreen methodology¹, the two areas with the greatest amount of disadvantaged communities were Los Angeles and the Central Valley.



Los Angeles



Central Valley



 $^{^{1}\} http://oehha.ca.gov/ej/pdf/ApproachesnIdentifyDisadvantagedCommunitiesAug2014.pdf$

Twelve State agencies including the Strategic Growth Council, Air Resources Board, California State Transportation Agency, High Speed Rail Authority, California Department of Forest and Fire Protection, the Department of Resources Recycling and Recovery, and the Department of Fish and Wildlife will be given proceeds from the fund to allocate money to projects in disadvantaged communities.

These agencies must consider how best to maximize the benefit of investments to communities while meeting with statutory requirements and how to determine whether proposed projects that achieve the goals of AB 32 would also benefit disadvantaged communities. Each agency is responsible for administering programs within each community. Agencies must consider how to design programs, select projects for funding, and implement projects with the rest of the agency that are directed by executive priorities and supported by staff expertise. This is a big step since the Clear Air Act is that it does not only address the problem of GHG emissions, but also the systemic issue of inequality that exacerbates the affects of climate change in disadvantaged communities.

If conducted fairly, this policy has the potential to be a model for how cities around the world can address inequity and GHG emissions simultaneously. The issue of inequity and pollution that catalyzes the affects of climate change are unwaveringly intertwined on the local and global scale. I want to make sure that this policy is implemented in a way that benefits the long-term sustainability of the disadvantaged communities it targets. For my senior comprehensive project, I will be asking how state agencies are engaging with disadvantaged community members and organizations regarding SB 535 project funding within Los Angeles County.

Community Wants Pre-SB 535 Funding

Community organizations who have been involved in Urban Forestry and weatherization projects in the past come to the SB 535 funding process with pre-existing expectations for how each agency should allocate funding. In early February, after the application process for both CalFIRE and CSD had opened but before the allocations have been announced, the Liberty Hill Foundation hosted a roundtable discussion regarding SB 535 funding where community organizations reflected on the needs that still need to be met within urban forestry and energy efficiency in low-income housing units and what gaps SB 535 funding can fill. These wants reflect on what the community organizations want CalFIRE and CSD to focus on in allocating funding.

The roughly 35 community-based organizations that were involved in the roundtable discussion agreed on some common ground wants regardless of the agency or projects the organization focused on. The first requirement for state agencies to take into account when allocating funding is that DACs must receive substantial focused funding to transform historic burdens into future benefits. The second requirement of DACs to state agencies is that the investments must benefit DACs in a significant and measurable manner and do no harm to the community. The third requirement is that programs and projects incorporating authentic community engagement should receive the funding priority. The fourth requirement is to bring GGRF money to LA's environmental justice communities by actively involving community leaders and CBOs in typically municipal projects. The last overall requirement of the SB 535 coalition that the funding be invested in Clean Up Green Up communities such as Boyle Heights, Pacoima, and Wilmington.

The SB 535 Coalition then split up the groups based on funding priorities. The Engery Groups² focused on those who applied for CSD funding. According to Romel Pascual, the Director of Partnerships of Los Angeles Department of Water and Power, the disadvantaged communities in Los Angeles are being out-organized by communities in the Bay area. In order to maintain the SB 535 funding that has been allocated to Southern California and use the resources efficiently, Pascual calls for coalition building as a city, as the county of Los Angeles, and making sure that people are well-organized. Pascual calls for leveraging the resources to ensure it gets to the communities it needs to. Partnering with the Department of Water and Power could meaning using the utility as a leverage point. Pascual points to the fact that large resources coming into the county is not new, but that there needs to be a better established ecology of partnerships in order to ensure that the resources from SB 535 funding are getting to where they need to get to. The key to using the resources efficiently, suggests Pascual, is using \$20 million in resources by thinking years down the road how the impact will be felt. The Energy group discussed how to further community, non-profit, and government collaborations at two main levels—a project level and a policy level—in order to bring Greenhouse Gas Reduction Fund (GGRF) resources to Los Angeles' most impacted neighborhoods.

The Energy group discussed specific strategies to ensure that the GGRF supports the CSD projects that will make the greatest impact on DACs. The coalition members wanted to make sure that funding focuses on new opportunities to bring solar and energy efficiency to low-income communities in the City of LA. The City of LA has not historically received state support for low-income solar and energy efficiency weatherization programs. The coalition sees

² The main organizational participants were Christina Baggao, Kerry Doi (Pacific Asian Consortium in Employment; Elsa Barboza (Strategic Concepts in Organizing & Policy Education), Lidia Castelo, Adewale OgunBadejo (GRID Alternatives), Jorge Madrid (Environmental Defense Fund); Gordon Snead (SBCC Thrive LA); Jim Stewart (Sierra Club CA Energy Climate Committee), Stella Ursua (Green Education Development), Romel Pascual, Director of Partnerships at LADWP, was the local agency representative and the group was facilitated by Colleen Callahan (UCLA Luskin Center for Innovation) and Michael Kadish (GRID Alternatives).

the GGRF as a new opportunity. The non-profit organization, and SB 535 coalition member GRID Alternatives was recently selected by the State to administer the low-income, single-family home portion of the pilot program led by the California Department of Community Services and Development. GRID Alternatives is starting to take applications from low-income owners of single family homes in LA. The CBOs represented in the group could help community members learn about this new opportunity for a subsidized solar system that will save homeowners money on their electricity bills. This could also lead to the job creation benefits, job training elements and associated partnerships.

Another way the energy group discussed to ensure that funds from GGRF were going to the right places was through CSD's energy efficiency and weatherization program The Pacific Asian Consortium in Employment (PACE), and SB 535 member is an administrator of this weatherization program. PACE representatives talked about opportunities to help low-income homeowners and renters save money on their utility bill while creating good, green jobs. There was strong interest amongst the group in emphasizing energy efficiency measures. For example, if GRID Alternative finds that an applicant does not have the right roof for their program, this is a great opportunity to steer that household toward energy efficiency program opportunities.

The Urban Greening group³ created a list of priorities in order to affectively assess how the funding allocated from CalFIRE could positively impact disadvantaged communities. Among those priorities are coalition building at the statewide and regional level (SB 535 Quad;

Members of the SB 535 Coalition whose focus was urban greening included Carlos Campero (LA Conservation Corps), Steven Counts (LA County Bicycle Coalition), Tori Kjer (Trust for Public Land), William Koons (City of Carson, Beautification Committee), Peter Massey (Tree People), Veronica Padilla (Pacoima Beautiful), Richard Parks (Redeemer Community Partners), Laura Radcliff (Mountains Recreation and Conservation Authority), Alvaro Sanchez (Greenlining Institute [SB 535 Coalition]). All participants of the Urban Greening group had already submitted funding requests to CalFIRE or were preparing for the next round of funding for 2015-2016. The agency representative was Elizabeth Skrzat, Policy Director of City Plants and the facilitator was Daniela Simunovic of the Liberty Hill Foundation.

California ReLEAF) around future SB 535 projects, advocacy around improving application guidelines, and the process. Another priority for Urban Greening CBOs how the high volume of applications (500+) submitted to CAL FIRE will be objectively assessed by CAL FIRE and how will be prioritized. The coalition spoke to the fact that urban projects in Disadvantaged Communities (DACs) should achieve be multi-beneficial such as Storm water capture, groundwater recharge, along with urban greening. A concern the coalition had surrounding funding allocations was that CalEnviroscreen does not identify park poor communities. The organizations are looking to ensure the mapping and analysis of the communities is equitable. The coalition also is looking to build political support for the programs funded by the GGRF. The organizations also found the guidelines for CalFIRE funding unclear and are looking to improve upon the guidelines.

There was a another group of CBOs that discussed issues that crossed over multiple funding categories⁴. The main concerns this group discussed were the unintended consequences of the projects, which could include displacement, negative health exposure from transit or composting, and greater electrical generation. The group focused on a comprehensive and cross-cutting approach as the most effective way for projects to be implemented. An example the group pointed to as a success was Living Streets. The groups also wanted to ensure that health equity and land use was a priority in where agencies choose to allocate funding.

⁴ This group included Ruben Aronin (Better World Group), Rachel Bennett (Prevention Institute), Malcolm Carson (Community Health Councils), Linda Escalante (Natural Resources Defense Council), Lizzeth Hernandez (Strategic Actions for a Just Economy), Bryan Moller (LA County Bicycle Coalition), Laura Muraida (Strategic Concepts in Organizing & Policy Education), Monika Shankar (Physician's for Social Responsibility-LA), Stephanie Taylor (formerly of GREENLA). The state agency representative was Derek Mazzeo, the External Affairs Liaison LA Mayor Garcetti's Office)

Literature Review

Environmental Justice

The SB 535 policy is rooted in a larger global issue that encapsulates environmentalism and inequality. Environmental justice, as it is called, is rooted in the belief that all people, regardless of race, ethnicity, gender, or income, have the right to a clean and healthy environment in which to live, work, go to school, play, and pray (Pastor, Equity Issue Brief, 5). It encompasses both substantive and procedural rights. The environmental justice movement posits that the distribution of environmental harms and benefits should be fairly apportioned among all communities (Bonorriss, iv). Study after study, however, has shown that low-income communities of color disproportionately bear the health and environmental burdens—and, concurrently, do not experience the benefits—that come from planning and development (Pastor, Equity Issue Brief, 5). Procedurally, people potentially affected by environmental decisions should have a meaningful say in the decision-making process regardless of race, income, ethnicity, age, or any other factor that might marginalize them (Bonorriss, iv). The environmental justice movement is concerned not only with the effectiveness of a policy or program at producing outputs, but also at influencing intermediate outcomes, and ultimately at helping to achieve long-term impacts (Callahan, 12).

Environmental Justice works to close the income gap and level the political playing field. This inequity is demonstrated under a number of categories. One example is industrial pollution. Studies have shown that race, regardless of income, is the dominant factor in an individual's likely proximity to industrial pollution (Pastor, *Equity Issue Brief*, 7). Community members who live near these facilities may not see the harmful effects at first because these same manufacturing, warehousing, and industrial facilities provide much-needed jobs which also

releasing toxics that contribute to both air and water pollution that the community intakes every moment. Another example of an environmental justice campaign is the goods movement. Dieselrun vehicles (ships, trucks, trains) release hazardous particulate matter into surrounding neighborhoods (Pastor, Equity Issue Brief, 8). This not only affects the communities that the vehicles run through, but also harms the driver who has to intake these toxins hour after hour. Low-income communities of color disproportionately suffer from health conditions such as respiratory problems, cardiovascular difficulties, and cancer and are more concentrated in centers of goods transit such as major freeways, ports, and railyards (Pastor, Equity Issue Brief, 8). Urban sprawl is another topic that the environmental justice movement is working to address. This example of inequality comes in concentrated poverty among people of color in urban cores, while more affluent white Americans settled in the suburbs (Pastor, Equity Issue Brief, 7). This leads to a "ghettoization" of communities of color and environmental circumstances that are not as healthy in cities as they are in the less concentrated, wealthier suburbs. This is directly related to the environmental justice issue of smart growth and displacement, where cities and regions encourage compact development to reduce the environmental and health effects of urban sprawl and auto dependence. This leads to an increasing desirability of living in urban neighborhoods, which may increase real estate prices beyond the reach of low-income residents already living there and displace existing communities. This gentrification also leads to transportation inequity, which stems from a lack of affordable homes near workplaces due to an income-housing imbalance (Pastor, Equity Issue Brief, 7). This is all to say that income inequality and environmental issues are inextricably linked. The study and understanding of this linkage is known as environmental justice.

The current definition of environmental justice according to the Environmental Protection

Agency is, "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies" (Pastor, Equity Issue Brief, 7). From a state position, the "EPA's goal is to provide an environment where all people enjoy the same degree of protection from environmental and health hazards and equal access to the decision- making process to maintain a healthy environment in which to live, learn, and work" (Pastor, Equity Issue Brief, 8). Environmental justice issues have never been so important as right now. People of color live in closer proximity to toxic air emissions from large industrial facilities than more affluent white communities. Low-income whites are actually less likely to be close to a toxic release facility than high-income African Americans. Race dominates income in explaining proximity to hazards (Pastor, Equity Issue Brief, 13). This is an issue that needs to be addressed. The ultimate goal of environmental justice is to close the income and color gap and covers both negative environmental outcomes and positive environmental benefits. Environmental justice is not just about getting bad things out of a community, but also about adding good things. The EJ gap can therefore be addressed either by reducing environmental exposure, or by increasing community resilience (Callahan). Environmental justice goes beyond just reducing overall harms or increasing overall benefits to reducing inequalities in harms and benefits (Callahan). Efforts to reduce these disparities could lead to environmental improvements that benefit all Americans. Addressing inequality, particularly in terms of income, helps improve environmental sustainability overall (Pastor, Equity Issue Brief, 18). Environmental justice works to achieve a more sustainable community for every single member.

Climate Gap

A subsection of environmental justice addresses the intersection between low-income communities and poor environmental quality with regards to the community's vulnerability to the affects of climate change. That is to say, communities targeted by environmental justice efforts are more likely to suffer from the effects of climate change than wealthy communities with better environmental quality. This difference is known as the climate gap, "the disproportionate and unequal impact the climate crisis has on people of color and the poor" (Pastor, THE CLIMATE GAP, 5). Low-income communities and communities of color are indeed likely to be most vulnerable to the consequences of global warming (Pastor, THE CLIMATE GAP, 5). An example of this gap in play is heat waves, which will be felt with more force in distressed communities where shade trees and air conditioners are scarce (Ibid). African Americans in Los Angeles are nearly twice as likely to die from a heat wave than other Los Angeles residents, and families living below the poverty line are unlikely to have access to air conditioning or cars that allow them to escape the heat. Another instance of the effects of the climate gap is that communities of color and the poor will breathe even dirtier air. For example, five of the smoggiest cities in California also have the highest densities of people of color and low-income residents (Pastor, THE CLIMATE GAP, 4). These communities are projected to suffer from the largest increase in smog associated with climate change (Ibid). Economic consequences of the climate gap on low-income communities of color are twofold; communities of color and the poor will pay more for basic necessities and there is likely to be fewer job opportunities for communities of color and the poor (Pastor, THE CLIMATE GAP, 4). Lowincome and minority families already spend as much as 25 percent of their entire income on just

food, electricity and water—much more than most Americans (Ibid). An increase in any of these necessities could put a family into bankruptcy. The climate crisis may dramatically reduce or shift job opportunities in sectors such as agriculture and tourism, which predominantly employ low-income Americans and people of color (Ibid). A loss of a job within one of these sectors, which are most vulnerable to climate change, could also put a family into bankruptcy. In short, the climate gap refers to economic impacts on consumers, loss of job opportunities for low-skill workers, urban heat islands, and the preparation for extreme weather events within low-income communities of color (Pastor, *THE CLIMATE GAP*, 6).

California is a microcosm for this economic sink that is happening around the United States (Ibid). California state policy has the potential to exacerbate this inequality rather than relieve it. Market-based regulatory approaches could lead to unexpected and inequitable consequences for the most impacted communities. Proposed policy changes and modifications that could also better maximize local health benefits (Pastor, *FACING THE CLIMATE GAP*, 4). It all depends on how the policy is implemented and what this study is meant to clarify.

Policy Suggestions

In order for SB 535 to be an effective piece of environmental justice policy, policymakers need to look to past policy implementation success as well as past policy failure. The conversation around effective environmental justice policy seems to focus around the idea of community engagement and the importance of including disadvantaged communities in the conversation.

Civic Engagement

There is a need to promote empowerment and civic engagement in order to empower communities. Communities are resilient, and community members most impacted by climate gap are most equipped to design solution, which actively diminish the climate challenge (Callahan, 14). Authentic community participation requires an earnest investment in resources and community-based partnerships to get people involved early in the process (Pastor, *Equity Issue Brief*, 5). Engaging community members in the policy process enables affected populations to have a voice in decision making by being in a positions of leadership.

The best way to get people involved is to get people involved early, provide them with resources so they can fully participate, and ensure that outcomes reflect participation and local needs (Ibid). Policymaking should be a collaborative experience between policymakers, community based organizations, and community members. There is a need to respect and build on community knowledge and combine community wisdom with academic and policy-making expertise has the potential for deep impact (Pastor, FACING THE CLIMATE GAP, 2). Every part of this collaboration is necessary, for one party cannot act alone to make the difference. Lowincome communities of color often lack authentic ways to wholly address environmental injustices and find themselves on the outskirts of final decision-making processes that affect their neighborhoods and health. EJ communities generally have less power than developers and industrial polluters (Ibid). This is where policymakers and community-based organizations are crucial for including disadvantaged communities in something they have never been included in before. Planner and developers have just as much to learn from community members, as community members have to learn from planners and developers. Meaningful engagement has the potential to empower these communities, de-concentrate burden, and build trust between planners and communities—all of which form the basis for more equitable and sustainable

regions.

An example of a planning initiative on a regional level is focusing on green infrastructure — which includes landscaping, establishing parks and gardens, restoring ecosystems, planting street trees, creating vegetative sewer and stormwater management systems, building green schools, installing smart grid electricity systems, and investing in renewable energy sources (Carr, 23). One step is open space and urban greening. Policymakers, developers, community-based organizations, and community members can create an urban environment in which all residents are within 1/2 mile of open space. Open space develops and sustains natural wildlife habitat to conserve and enhance biodiversity, passive and active recreation, and stormwater control (Gold, 50). In a highly dense community this could greatly benefit the environmental quality of the region at large. However, this is a product of a decision that is region specific. Perhaps the community needs to focus resources more on the creation of green jobs than pollution levels. This is why research that is region specific and talking directly to community members is key to understanding what disadvantaged communities need most.

Collaborative Policy Process

Advocates for environmental justice policies have identified a few key steps that policymakers need to consider when crafting effective policy. One is to develop policies that close the gap between the economic disparities faced by people of color and the poor, and the rest of the population (Pastor, *FACING THE CLIMATE GAP*, 42). Policies must take into account how low-income families and people of color will be affected and what more can be done to help them adjust to major economic shifts (Ibid). This includes research to identify which greenhouse gas source sectors hold the most pollution reduction promise without

economic disruption (Ibid). Policies also need to be able to address inevitable job shifts and retraining needs to maximize opportunities for low-income communities (Ibid). Policies need to be able to anticipate how revenue generated from climate policy will help high-poverty neighborhoods absorb the higher prices for energy and other basic necessities (Ibid). Target or focus pollution reduction, mitigation, and community revitalization resources in overburdened areas (Callahan, 27).

Conversation Gap

Another necessity of climate justice policy on disadvantaged communities is to close the conversation gap (Pastor, *FACING THE CLIMATE GAP*, 22). That is to say to capture the specific vulnerabilities of different neighborhoods using local expertise, community wisdom, and other contextual information are important to supplement technical knowledge (Ibid). As I have addressed above, all policy decisions should be made with direct consultation of community members. Without the key ingredient of community participation, tensions could arise between advocates that share the goals of protecting the planet and protecting the poor (Ibid).

Ground Truthing is the use of community knowledge to form an efficient solution and is an important tactic for making change within a DAC. A ground truthing project was recently conducted in Southern California where residents from six communities within Los Angeles County collaborated with research and agency staff to check regulatory databases and emissions inventories against the facts on the ground. Some of their reflections on this data compilation and ground truthing are that: There are more hazardous facilities and sensitive receptors than exist in regulatory databases; Numerous sensitive receptors are located too close— as specified by CARB—to hazardous facilities; Locational errors of polluting sources often occur; and Air

pollution levels exceed safe standards—recommended by the State of California (Pastor, *Equity Issue Brief*, 21). This information that could completely redirect a policy ensured that researchers and planners accounted for the cumulative impacts of toxic facilities through local knowledge and helped build trust between agency officials, researchers, and community members—a key ingredient to engaging communities in meaningful ways and translating their needs into both local and regional policy. Ground truthing is a necessary tool to gather information from community members in order to connect all parties to the environmental injustice at hand.

EJ Policy Success

There are a few cases where these policy suggestions outlined above have been effectively implemented within California and have lead to an improvement in environmental quality within a disadvantaged community. One example is Oakland's "Urban Releaf" community based program to cool Oakland's temperature through tree-planting, youth workforce development, and urban forestry. This program as created in response to the Heat island Effect. Heat Islands are created in urban neighborhoods that have few or no trees and an abundance of dark or cement surfaces that cause increases in temperatures above those of surrounding areas. In addition to compromising human health and comfort, heat islands contribute to increased air pollution and greenhouse gas emissions and are predicted to have more severe effects in the coming years as extreme heat events become even more frequent (Pastor, FACING THE CLIMATE GAP, 13).

Urban forests and residential tree-plantings can alleviate heat island effects while also contributing to climate change adaptation and mitigation strategies. For example, shade trees can

reduce residential cooling costs by 30 percent, and 100 healthy large trees remove 300 pounds of particulate matter and ozone, and 15 tons of carbon dioxide from the air each year. Despite the economic, public health, and environmental benefits that trees provide to communities, many neighborhoods across the nation – particularly low-income neighborhoods of color – are bare expanses of cement and asphalt without protective tree canopies (Ibid).

Urban Releaf focuses its tree-planting and education work in East and West Oakland, areas often referred to as the "flatlands" because of their geographic and socio-demographic distinction from the nearby hills that are predominantly higher-income neighborhoods. The organization has also worked in low-income communities of color in nearby Richmond. Since 1999, Urban Releaf has planted 15,600 trees and connected with over 4,000 youth through the Urban Forestry Education program (Pastor, *FACING THE CLIMATE GAP*, 14).

The organization's success in improving the physical and socio-economic environments in Oakland and Richmond can be attributed to its holistic approach to address the communities' concerns. "The health issues don't just involve air quality. The health issues also involve issues of poverty, issues of food, issues of education, and issues of unemployment. Being an organization of color, we are besieged with those social ills...a lot of the young people that we deal with, they have arrest records, they may have issues around housing, drugs, or jobs," Shakur, the program director describes (Ibid). When asked how she engages residents in her work, she answers, "I say, do you want clean air in your community? Do you want jobs? Do you want shade? Well, then sign on!" Residents in the neighborhoods that Urban Releaf works in are especially impacted by poor air quality due to the confluence of freeways, industrial land uses, and ports. As a result, the rates of asthma hospitalizations are two to three times greater for children under five years of age who live in North, West, and East Oakland as compared to the

rest of Alameda County. Unemployment is also a big concern in Oakland and Richmond, with unemployment rates of 16.3 and 17.6 percent, respectively, which are well above the Bay Area average of 10 percent (Pastor, *FACING THE CLIMATE GAP*, 16). High unemployment rates can diminish neighborhood social networks and impair a community's ability to collectively organize and solve problems, which in turn inhibit local-level resilience to extreme events, such heat waves and other weather changes that are expected to become even more frequent from the effects of climate change (Pastor, *FACING THE CLIMATE GAP*, 16). Urban Releaf addresses this economic and environmental gap by incorporating the local community into each project and creating local environmental leaders. In this case, people of color are the first to get information rather than the last.

In collaboration with researchers from UC Davis, UC Berkeley, and the USDA Forest Service Center for Urban Forestry Research, Urban Releaf is part of the Oakland Watershed Restoration and Protection Study (Ibid). Urban Releaf has managed to bridge the gap between disadvantaged community needs and public officials. Policymakers are happy to advocate for it and public officials are happy to sponsor this program because the program has measurable results. Preliminary results from the project show that planting 1,800 trees in the watershed prevents nine million gallons of contaminated water from entering the nearby San Francisco Bay. Decreasing stormwater runoff also mitigates the risks of flooding from extreme storm events (Ibid).

In order to address the problem of pollution in Los Angeles, policymakers must look at where the problem begins, who it affects most, and how to create a realistic solution that directly benefits the communities the problem harms the most. Policy in Los Angeles must reduce adverse cumulative *environmental health* impacts in overburdened communities through improvements in zoning, land use planning, monitoring and enforcement, and mitigating

hazardous land uses and mobile emissions (Ibid). It must continue and expand stakeholder engagement and participation in environmental decision-making (Ibid).

Downfall of EJ Policies

Without following certain policy steps mentioned above, or taking into account certain community concerns, policies may even exacerbate inequalities between affluent and poor neighborhoods by instituting greenhouse gas reduction policies that clean up the air in some places while unintentionally leaving the most vulnerable behind (Pastor, THE CLIMATE GAP, 19). Careful studies should be conducted to assess which climate policies would hold the greatest benefits for communities that suffer most from local air pollution (Ibid). An example of an environmental justice policy gone wrong is the Regional Clean Air Incentives Market (RECLAIM). The program was a market incentive program that targeted air pollution within Los Angeles (Pastor, THE CLIMATE GAP, 22). Facilities determined for themselves the most cost effective approach, including emissions trading, to reduce emissions of oxides of nitrogen (NOx) and oxides of sulfur (SOx), two major sources of air pollution in the Los Angeles area (Ibid). The results were not what the policy was designed to do. The policy resulted in an increase in nitrogen oxide emissions in Wilmington, California, while region-wide emission levels declined (Pastor, THE CLIMATE GAP, 21). The flexibility in trading lead to the majority of the emission credits purchased by four oil companies: Unocal, Chevron, Ultramar, and GATX to avoid the cost of installing pollution-reduction technologies. The trading program led to a situation where workers and local residents of these communities were unnecessarily exposed to benzene (Pastor, THE CLIMATE GAP, 21). This shows that policy follow-through and accurate targeting of those communities most in need is necessary to make effective change in the climate gap.

Cap-and-Trade

A consequence of current market incentive based environmental justice policy, including SB 535, is Cap-and-Trade. Like a well-intended policy such as RECLAIM caused uneven levels of pollution, environmental justice advocates argue that that a "cap-and-trade" system to regulate stationary emitters of greenhouse gases could create uneven reductions in co-pollutants and squander the potential associated health benefits at localized scales (Pastor, FACING THE CLIMATE GAP, 3). Cap-and-trade is a market-based compliance mechanism that aims to limit GHG emissions. Companies that emit more than their allotted allowances have to purchase more permits and/or "offsets" (emissions reductions offsite). Companies that emit less than they are allotted can trade or sell their allowances. As the cap declines, this theoretically creates an increasing motivation for companies to reduce their GHG emissions by greening their operations (Troung, 501). Certain regulatory schemes, like cap-and-trade, run the risk of further concentrating the burden of co-pollutants like particulate matter (PM), sulfur dioxide, and volatile organic compounds (Pastor, Equity Issue Brief, 21). In the case of RECLAIM, it lead to further concentration of pollution in the poorer areas while letting industries bypass emissionreduction obligations. It also allowed polluters too much leeway to avoid cleaning up on-site pollution through the use of offsets (Troung, 501). RECLAIM serves as an example for what critics fear when they say the enforcement of market system is not feasible and that the market is inevitably gamed; cap, meaning everyone equally gains from regional reduction in Greenhouse Gas; trade, meaning reducing pollution is more efficient in some areas than others (Pastor, Minding the Gap). In order for the trade to take place, some areas must cause more pollution

than others, which means that some areas are affected more greatly by pollution than others. Where reductions take place is left up to the market (Ibid). Cap-and-trade program thus signals to polluters that they could continue polluting at the cost of the lives and welfare of community residents on their fence lines. Communing to pollute in certain areas over others might lead to "hot spots," areas with heavy localized emissions, such as Wilmington, CA as a result of RECLAIM (Troung, 503). While regional air improves, the air in some neighborhoods gets dirtier (Pastor, *THE CLIMATE GAP*, 20). This leads to the economic burden shifting to other sectors, such as healthcare (Pastor, *Minding the Gap*, 21). The creation of hotspots could lead to an increase in local co-pollutant emissions, even if net reduction statewide. With cap-and-trade, there is no guaranteed reductions at any one source; Polluters can decide whether to reduce emissions or pay to pollute (Pastor, *THE CLIMATE GAP*, 20). Giving polluters the choice to continue polluting does not price in all externalities such as health and co-pollutants. This could lead to greater harm in disadvantaged communities rather than benefit.

Policymakers cannot assume that all climate change strategies are health- and equitypromoting (Pastor, *Equity Issue Brief*, 21). Not all strategies treat communities equally. Critics
agree that the California cap-and-trade program as an illustration of how a program can create
environmental winners and losers. There is an "eco-divide" that is created. This refers to how
pollution disproportionately harms low-income communities and how environmental responses
have ignored or worsened conditions for those communities (Troung, 96). In the case of
RECLAIM in Southern California, inland facilities were allowed—to purchase credits from
coastal facilities (where pollution was highest) as well as other inland facilities but coastal
facilities were prohibited from making out-of-zone buys (Pastor, *Minding the Gap*, 11). There
was some inefficiency but it is not administratively complex and it could be justified by the

associated environmental benefits. The trades were coupled with limits on overall allowance allocations and use of offsets in such zones to ensure that the total quantity of emissions allowed in the zonal market amounted to a net reduction of sufficient size (Pastor, *Minding the Gap*, 12). There was an imposition of surcharges on allowances or fees in highly impacted areas, with the funds being returned for environmental and other improvements in those same areas (Ibid). The point here being that there was no regulation of how many trades were being made and where the profits from the trades were going.

In order for cap-and-trade to be a sustainable way to make environmental justice change in California, CARB needs to create a mechanism for monitoring allowance allocations and trades or fee payments. As has been shown in the past, an unconstrained market system will, at a minimum, fail to realize the full benefits of co-pollutant reduction and, at a maximum, worsen the current pattern of inequality (Pastor, *Minding the Gap*, 14).

A market-based solution may be helpful, but it does not appear to be the answer in solving the climate gap. Cap-and-trade is industrially efficient and less costly for some firms to participate in, but has the risk of exacerbating the climate gap rather than reducing in. It also creates hotspots of pollution in the very locations where pollution was supposed to be reduced in. Perhaps auctioning permits/establishing fees to close the climate gap would be a more effective market solution (Pastor, *THE CLIMATE GAP*, 22). This would eliminate the need for emissions trading in comparison to free-allocation programs because industry is likely to buy only what it needs (Ibid). It would decrease financial incentives to keep old polluting facilities open by eliminating the grandfathering of old facilities. This in turn decreases the problem of overallocation and excessive banking and trading of emission credits (Ibid).

National Conversation

In order to understand the importance of SB 535 in California, we must look at comparable policy around the country. On a national survey level, the major trends in climate justice concerns focus on community participation and education mechanisms. This includes policy that alters land use planning techniques such as buffer zones, to improve environmental conditions, reduce potential health risks, and prevent environmental degradation in at-risk communities (Bonorriss, iv). There are a few emerging themes that have arisen recently on a state-by-state basis that address climate justice within their own region. Washington D.C. and Montana have begun to tackle climate justice through children's issues by reacting to the fact that poverty is correlated with race and ethnicity in the U.S., and poor children are more likely to suffer from inadequate food, housing, and health care (Bonorris, viii). Maryland and Delaware have passed policy that directly addresses climate injustice within their area (Bonorris, xi). Theses policies are reacting to the fact that poor people will disproportionately suffer from climate change, heat waves, water shortages, increases in food and fuel prices, inundation of low-elevation neighborhoods and a host of predictable and episodic threats, as well as having less financial resources to adapt to these risks (Ibid). Maryland is planning to cut its GHG emissions by 25% by 2020, but may not disproportionately impact an environmental justice community. Delaware has crafted a Climate Change Action Plan, which was written in consultation with community groups (Ibid).

Indiana and Washington D.C. have addressed inequality through dietary options. This is in reaction to the fact that the urban poor may have limited access to fresh fruit and vegetables

while being overserved with nutritionally deficient fast food restaurants (Ibid). Maryland and Montana has elected to create policy that addresses climate injustice in the form of monitoring ewaste. This is in reaction to the fact that the computer chip industry exposes mostly minority, mostly women workers in the Silicon Valley to highly toxic working conditions (Bonorris, xi). Massachusetts, New York, and Rhode Island have all invested in mapping and GIS technology as part of the EPA's Toxic Release Inventory, which helps local leaders and decision makers assess threats to communities. Missouri has begun to tackle its destructive mining industry, which often leaves devastating environmental consequences behind in the form of sludge and rubble (Ibid). Poor communities may consider themselves faced with accepting environmental degradation as the price for jobs (Ibid). Massachusetts and New Mexico have created policy that focuses on open space and recreation as a reaction to the unfair distribution of environmental benefits. Poor people of color may be less likely to live and play near green, open spaces (Ibid). Schools have been another topic of policy change in Massachusetts, Ohio, and Connecticut in reaction to the fact that schools, particularly in poor areas, may be close to unhealthy environs. Massachusetts has also taken policy measure to address smart growth, meaning planning more densely populated neighborhoods, often in urban areas, that are less dependent on automobiles. This kind of development often leads to gentrification, however is a step for addressing climate change (Ibid).

Hawaii and Kentucky have begun to address their transportation system, with policy that is in reaction to automobile and truck exhaust that can be a serious source of pollution, and public transit may ill serve poor communities where households cannot afford cars (Ibid).

California, Texas, and Idaho have challenged climate justice through policy that addresses water management, quality and delivery. In these states an adequate supply of clean water to one's

residence is now widely considered a fundamental human right (Bonorris, xii). California and Washington D.C. have altered their land use regulations. Zoning regulations and general plans can control housing density, industrial development, placement of point source pollution sources, traffic, and green space — all environmental harms or amenities that may degrade or improve the quality of residential life.

As the wealth gap widens, there is a growing disparity between the effects of environmental policies on the ecological haves and have-nots (Troung, 508). This is slowly becoming a part of the national conversation around how to tackle climate change. More emerging trends around the country deal directly with climate injustice rather than with the environmental consequences of pollution at large. That being said, some policies currently in place exacerbate the climate gap or do not target what is truly needed within a community. For example, bus services needed by low-income residents have been reduced while the investments in high-speed rail and rail-to-airport connections — which are more likely used by higher income "choice riders" — have been growing. There has been a national expansion of refineries that avoid regulations and continue polluting our air (Troung, 496).

In order for national environmental justice policy to be effective, decision makers and policy-makers must take into account the process-based concerns of increasing the likelihood of tilting substantive outcomes in the direction of more equitable distribution of environmental risks and rewards; and, improving the functioning of democratic processes in affected communities, the breakdown of which contributed to the disproportionate degradation of those communities in the first place (Bonorriss, xii). There are leaders on a national policy level that have taken steps to address inequality as well as the effects of climate change. Connecticut and New Jersey, for example, have addressed the issue of compliance and enforcement where environmental

pollution laws may be unevenly enforced in poorer communities with little political power (Ibid). North Carolina and New Jersey have looked into policies that have cumulative/secondary effects, that is to say even if a new project viewed in isolation appears to carry no EJ ramifications, it can have EJ implications down the line (Ibid). Arizona, California, Delaware, Idaho, and West Virginia, all acknowledge that democratic decision-making and community participation are an important part of the policymaking process and that low income and minority citizens are likely to be underrepresented in environmental decision- making. New Mexico and Washington state understand that language is a barrier when it comes to environmental justice and that participation in environmental decision-making is stymied if affected individuals do not speak English. Hawaii and Illinois have implemented mini-National Environmental Policy Acts that require that state decision makers consider the environmental effects of state actions with significant impact upon the environment (Ibid). The affected community is given a chance to comment on the process, and to suggest mitigation of such impacts. The policy is unevenly enforced in poorer communities with little political power (Bonorriss, xii). California and Delaware have addressed the placement of power plants, which have traditionally been sited disproportionately in communities of color and low-income neighborhoods (Ibid). Numerous scholars have shown that hazardous and solid waste facilities, industrial plants, and low level radioactive waste facilities tend to be disproportionately concentrated in low income communities and communities of color (Ibid). California and New Jersey have reacted to the fact that low-income communities may lack the economic or political clout to fight decisions, or be forced to pursue hazardous facilities for job creation and tax contributions (Ibid).

An example of a successful environmental justice policy outside of California is the Green Impact Zone, an initiative in one of Kansas City, Missouri's most distressed

neighborhoods, which has struggled for decades with "abandoned homes, an unemployment rate that's as high as 53 percent in some census tracts, and gun violence that takes many young lives"; this program, however, envisions these neighborhoods as containing "a center of green jobs, retrofitted energy-efficient homes, a green transportation system, and hopeful residents." Championed by Representative Emmanuel Cleaver (D-Missouri), the Green Impact Zone establishes a 150-block area where funding from the city, grants established under the American Recovery and Reinvestment Act (ARRA), and other federal funding programs will be funneled to implement the program (Carr, 34). The program implements the weatherization for 2,500 homes, which will create jobs for area residents in energy audits and weatherization, and reduce utility costs for families; green infrastructure, including park, public space, and streetscape improvements, and a bus rapid transit system; energy and water conservation, including a "green sewer" demonstration project and a smart electric grid; and a job training and placement program for ex-offenders in green building, park restoration, and transit work. The initiative also includes community policing and services, and health and wellness programs (Ibid).

The program has followed all of the policy steps outlined above included being supported by a "neighborhood organization-based outreach program and regional public, not-for-profit, private, and civic leadership support programs. Kansas City Power and Light company has committed \$24 million as part of a federal stimulus project for the smart grid system. The center has plans to include a Climate Sustainability Center in the zone, which would involve "the construction of a 'living campus' that is powered by renewable energy and fosters green jobs and training (Ibid).

When it comes to climate change and climate justice, it is indeed California who leads the way with SB 535, a policy that directly targets disadvantaged communities that are more affected

by climate change and funnels money to projects in order to mitigate the effects.

California

No other state has the comprehensive mechanism to address the climate gap than California. SB 535 is the first policy to directly address the needs of disadvantaged communities most vulnerable to climate change. Based on the politics around climate change at the federal level, it is going to have to be the states that address these populations themselves through policy. Climate justice policy is necessary in California because it is home to the most environmentally unjust places in the country. Take the ExxonMobil Refinery in Torrance, for example, which affects nearly 800, 000 people within six miles and emits 2.5-3 million tons of CO2 per year.

The effects of climate change are more than ozone layer erosion, heat waves, sea level rise (Pastor, *Minding the Gap*, 16). There is a climate gap, and unequal impact the climate crisis has on people of color and poor in the U.S (Ibid). The story of who lives near polluting facilities and who is affected by climate change in California goes something like this; Californians are affected by higher insurance premiums, medical costs, lost productivity due to illnesses caused by air pollution. Climate policy needs to tailor regulations to address climate gap or those suffering will suffer even more (Pastor, *Minding the Gap*, 17). 62% of nearby residents are people of color as compared to 38% white. In California there are more renters, lower per capita incomes, and lower household income near polluting facilities. Some neighborhoods lie within range of several facilities; not all facilities emit the same amount of pollution. African Americans are drastically overrepresented in the High Emission group of neighborhoods (Pastor, *Minding the Gap*, 11). Poverty generally rises with the level of emissions and communities of color tend to be situated near the facilities with the highest emission, or clusters of facilities whose

combined emission add up. Anglo/mixed communities tend to live around facilities with less emissions of beyond range. Inequity can arise due to small set of facilities or one sector. Failure to take action could exacerbate existing inequalities (Ibid).

In 2012, the U.S. Census Bureau found that California had the nation's highest poverty rate. Based on the costs of basic necessities, burden of taxes, and availability of support programs, California ranks seventh highest for income inequality in the country (Troung, 494). Unequal health outcomes are directly relatable to toxic environments and socioeconomic disparities between neighborhoods (Ibid). It is not surprising that these disparities exist considering five of the ten most ozone-polluted metropolitan areas in the United States (Los Angeles, Bakersfield, Visalia, Fresno, and Sacramento) are in California. Five of the smoggiest cities are also the locations with the highest projections of ambient ozone increases associated with climate change, as well as the highest densities of people of color and low-income residents (Pastor, THE CLIMATE GAP, 13). These areas have higher than average rates of respiratory disease, cancer, and other preventable illnesses, all tied to pollution (Troung, 495). Pollution can also be attributed to failing school systems, lack of access to healthy food options, and record levels of unemployment (Ibid). This is not by coincidence that the residents in this area suffer from economic, environmental, and infrastructural inequality. Low-income communities are economically locked out of these resources. California's communities of color and poor residents are more likely to suffer extreme heat waves and breathe dirtier air. Residents of these communities already have poorer access to health care and healthy foods (Ibid). At the same time, they pay more for basic necessities and have less access to well-paying jobs. As a result, lowincome communities and communities of color in California are less able to bear the burdens of a changing climate (Troung, 497).

Methodology

Agencies for Assessment

In order to conduct a more comprehensive assessment of the policy, this research is focused on two of the twelve California state agencies allocating funds. This research focuses on the funding processes of the California Department of Forest and Fire Protection (CalFIRE) and the Community Services Department (CSD). Both agencies' allocations will be complete by the end of May, which allows for a more complete cycle of funding allocations in comparison to the other agencies. CalFIRE and CSD's funding focus are not fraught with controversy, that is to say projects that fall under their scope of funding are generally seen as beneficial from a political perspective. This will allow for a clearer understanding of how funding trickles down to disadvantaged communities. The allocations for both agencies will go 100% to DACs; this will give the research a "best case" scenario example to estimate how effective agency outreach is when 100% of agency funding is meant for DACs. This research is grounded in the goals of the SB 535 Coalition, under the analysis of the Liberty Hill Foundation. CalFIRE and CSD projects align with the goals of the SB 535 Coalition.

I interviewed representatives from both state agencies, CBOs who have applied for SB 535 allocations, attended community workshops and webinars to collect primary research in order to understand how the SB 535 funding allocation process function.

Juncture of Research

In order to assess how affective SB 535 policy in addressing the direct needs of disadvantaged community members, I must first understand how past state allocations for CalFIRE and CSD have been decided and look at successful models of community engagement.

I will frame my research around the current concern of CBOs pre-application and how the CBOs interact with the application process. The main concerns of DACs when it comes to environmental justice are urban heat islands, local preparedness for extreme weather, the threat of wildfires, the challenge of water quality and quantity, the spread of infectious diseases, and issues associated with sea level rise (Pastor, *FACING THE CLIMATE GAP*, 14). SB 535 does address all of these concerns and I will be tracking the funds that are meant to address urban heat islands, and local preparedness for extreme weather.

Evaluation Strategy

In order to understand the effectiveness and impact on the communities it targets, I will be evaluating the implementation of SB 535. To do this effectively, I will follow a few steps. An evaluation can be defined as assessment through objective measurement and systematic analysis. It is used to measure a policy or program's outcomes—and impacts, to assess whether a policy or program is remedying the problems it originally sought to address, and to determine what is helping or hindering effectiveness (Pastor, *FACING THE CLIMATE GAP*, 14). It is meant to improve the effectiveness of policies and programs in other communities and in future efforts

I will conduct a process evaluation, meaning I will assesses how well a program is being implemented and ask what processes are working, what are not working. I will also check how well program plans are being implemented and what process changes might be needed.

In order to truly understand the success or failure of a policy or program, evaluators must consider the political, economic, institutional, environmental and geographic context. After compiling and crafting this literature review of policy suggestions, the debate of cap-and-trade, SB 535 in a global, national, and California context, I feel prepared to accurately conduct a

policy evaluation of SB 535 with regards to funding allocated to the Community Services

Department (CSD) for weatherization, and California Forestry Industry Regulatory Environment

(CalFIRE) for urban forestry (Pastor, *FACING THE CLIMATE GAP*, 18).

SB 535 Background

SB 535 is an example of an environmental mandate that creates solutions and investments to counter longstanding issues in education, employment, and economic development. It is only the start of what California needs to do to address the deep environmental racism of the past and create viable, sustainable communities in the future, but it is the first in the nation to directly address the affects of climate change on the most vulnerable communities (Troung, 510).

Coalition for Clean Air organized an alliance to cosponsor the legislation in order to get it passed. This alliance included Center on Race, Poverty and the Environment; the California Environmental Justice Alliance; the Ella Baker Center for Human Rights; the Greenlining Institute; the California NAACP; and the Natural Resources Defense Council. SB 535 is a community benefits trust fund, a fund that would invest monies generated by the cap-and-trade program in ways that would provide direct benefits to underserved communities (Troung, 511).

It was introduced and pushed forward by Assembly member Kevin de Leon. Leon maintained a strong commitment to environmental justice and clean air for his heavily polluted East Los Angeles district (Troung, 512). The first community benefits trust bill Assemblyman Leon introduced was AB 1405. It was quickly vetoed by the then Governor Schwarzenegger. It was reintroduced as SB 535 and passed in 2012. It took four years — from the introduction of AB 1405 to the passage of SB 535 — for the policy to become law. As a testament to its need and success, over 200 organizations supported the bill. It was a mix of environmental, environmental justice, health, business, labor, immigrant, housing, and transportation sectors, faith organizations, and local elected leaders (Troung, 513).

AB 32 designated ARB as the lead agency for its implementation. It required ARB to prepare a Scoping Plan, or a set of measures to reduce California's GHG emissions, improve the environ- ment, reduce dependence on oil, diversify energy sources, save energy, create new jobs, and enhance public health (Troung, 502). The activities undertaken would not disproportionately harm low-income communities and would consider overall societal benefits, including reductions in other air pollutants, diversification of energy sources, and other benefits to the economy, environment, and public health. The language in AB 32 ultimately allowed ARB the discretion to design a market-based mechanism (Ibid).

ARB created two subcommittees — the Economic and Allocation Advisory Committee ("EAAC") and the Economic and Technology Advancement Advisory Committee ("ETAAC")— to advise the State on the implementation of AB 32 (Troung, 504). The breadth and coverage of California's program makes it the world's most comprehensive cap-and-trade program. The program involves 350 businesses, representing 600 facilities. These facilities are responsible for 85% of state's GHG emissions. In 2015, it will cover the fuels sector, including the distributors of transportation, natural gas, and other fuels. The cap was set in 2013 at 2% below the emissions level forecast for 2012. The cap declines in 2014 by 2% and declines 3% annually from 2015 to 2020 (Ibid). SB 535 requires that at least 25% of cap-and-trade auction revenues be invested in programs that benefit disadvantaged communities, and that at least 10% of the funds be invested within those geographic areas.

AB 1532, the trailer bill to SB 535, mandated a public process to determine how the monies from AB 32 would be allocated. Under AB 1532, the Department of Finance ("DOF") must develop a three-year plan. It identified priority investments for the programs to receive auction proceeds. The Plan must (1) identify near-term and long-term GHG-emission-reduction goals

and targets; (2) analyze gaps in current State strategies for meeting GHG-reduction goals; and (3) identify priority investments that facilitate GHG reduction (Troung, 504).

In response to the policy implementation and to assure it was done equitably, a coalition was formed known as the SB 535 Coalition. The SB 535 Quad leads the coalition; Greenlining Institute, the Asian Pacific Environmental Network (APEN), the Coalition for Clean Air, and Public Advocates. The Coalition created over 20 webinars, online surveys for community leaders about what investments would have the greatest effect in their communities, and encouraged leaders to submit letters to shape the plan.

The coalition has over 200 supporters and successfully overseen the implementation of climate investment laws. The Coalition has five priority sectors as part of the three-year investment plan; energy, freight, housing, transit, urban forestry. The key principles the Coalition looks for in assuring state agencies allocate funding to the communities that need it most include outreach that seeks DACs and addressing the factors that make the community a DAC. The coalition's goals for Summer-Fall 2015 include ARB public workshops, adoption of final guidance, and monitoring how each agency rolls out SB 535 funding based on the program and the improvement the agency is focusing on.

The Coalition's Urban Forestry Committee ensured that community partners had their applications in by November 3rd, and that the 60 urban forestry projects that were invited to submit a full application submitted everything by February. 20-45 projects will be funded and announced in April 2015. The committee plans on addressing the quantification method for GHG emissions for CalFIRE's next round of funding as well as working to raise awareness to broaden the applicant pool. Communities must understand the multiple benefits this funding can provide,

including green jobs, cleaner water, and better health. In order to do this, the committee will ask for \$15 million more to be allocated to urban forestry, for a total of \$33 million for FY 2015-2016.

The coalition's energy committee has similar goals and achievements surrounding CSD's funding process. Their main objective is to involve more members of the SB 535 Coalition in CSD's provider network. It is a great achievement that GRID Alternatives will be providing solar to smaller unit low-income housing, but that is just one of the 44 providers under CSD in the Los Angeles region alone. Within the coalition there are 27 organizations who's focus is energy and weatherization. The committee's objective is to make room for new CBO interaction with CSD. This is part of their three-pronged plan to increase access to services for CSD users, integrate DACs into a green economy, and measure the total success of these programs.

The three-year Investment Plan is designed to be the State's guide for investing cap-and-trade revenues; however, the Plan does not guarantee funding for the programs it prioritizes (Ibid). The Coalition assures that decision makers will continue to prioritize the disadvantaged communities it was designed for. Out of three main sectors, transportation, renewable energy, and natural resources, it is unclear how much of the cap- and-trade revenues must be invested in each pot (Troung, 516).

The statute also gives CalEPA some criteria for identifying disadvantaged communities — such communities may be (1) areas disproportionately affected by pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation; or (2) areas with a concentration of people who are of low income and suffer from high unemployment rates, low levels of homeownership, high rent burden, or low levels of educational attainment.

CalEPA's Office of Environmental Health Hazards Assessment ("OEHHA") created a screening methodology to help identify the areas dis- proportionately harmed by environmental and socioeconomic burdens. CalEnviroScreen guides investments under SB 535 but also helps the State and other stakeholders identify areas that have the most need for assistance.

SB 535 was to be implemented beginning with the 2013–2014 budget cycle. The funding allocations were delayed when the Governor borrowed the cap-and-trade funds. This angered environmental and environmental justice advocates, who argued that the Governor's conduct would delay climate change action. The Governor reasoned that the need for these funds was not urgent (Troung, 519).

SB 535 was intended to fulfill the promise of evening out economic and environmental disparity, by offering disadvantaged communities some resources to address existing environmental problems and ensuring that all would enjoy the benefits of a rapidly transforming clean-energy economy (Ibid). Co-benefits of the policy include: maximizing economic, environmental, and public health benefits to the state; fostering job creation by promoting instate greenhouse gas emissions reduction projects carried out by California workers and businesses; complementing efforts to improve air quality; directing investments toward the most disadvantaged communities and households in the state; providing opportunities for businesses, public agencies, nonprofits, and other community institutions to participate in and benefit from statewide efforts to reduce greenhouse gas emissions; and lessening the impacts and effects of climate change on the state's communities, economy, and environment (Troung, 520).

2014–2015 estimates that cap-and-trade revenues will be \$850 million — \$225 million of which would be directed to programs that benefit disadvantaged communities. The challenge is

whether the State will create greener, more sustainable communities for the wealthy few, or make such improvements a reality for those who need them most.

The SB 535 Coalition has a few suggestions for how the coalition envisions how the funding could lead to a more sustainable and equitable distribution of environmental resources and pollution (Troung, 522).

- Making the process inclusive, transparent, and accountable. ARB and DOF should ensure transparency, accountability, and the robust participation of disadvantaged communities in the process of developing and implementing an investment plan.
- 2. Investing in high-priority needs. The benefits of SB 535 investments should specifically address high-priority needs of disadvantaged communities. ARB should develop metrics to quantify and track the co-benefits to disadvantaged communities (e.g. improvements in housing, transit, job, and public-health outcomes).
- Ensuring that the benefits of the investments outweigh the burdens. The benefits of SB
 investments in disadvantaged com- munities must significantly outweigh the burdens that the projects may impose on those communities.

There are major implications of SB 535 considering California is the ninth-largest economy in the world. As a result, California's emission-reduction programs will likely be viewed as models for other jurisdictions and bodies considering the creation or adoption of cap-and-trade programs. California is already working closely with British Columbia, Ontario, Quebec, and Manitoba through the Western Climate Initiative ("WCI"), a collaboration among jurisdictions seeking to work together on emissions trading programs and policies, to develop harmonized cap-and-trade programs that will deliver cost-effective emission reductions (Troung, 522).

WCI., Inc. will help jurisdictions successfully implement cap-and-trade programs. WCI will develop a compliance-tracking system for allowances and offset certificates; administer allowance auctions; and conduct market monitoring of both allowance auctions and allowance/offset certificate trading. As WCI scales up, SB 535 will be a model for developing a more inclusive carbon-trading program (Ibid).

The pressure to get it right is coming from many levels. We know the world is watching. The country is watching. California voters, who supported this program, are watching. The best way to handle pressure like that is to succeed by following the policy successes and failures that have come before this progressive climate justice policy on a national and state-wide level (Ibid).

California needs a policy like SB 535 more than any other state. Working families spend a disproportionate amount of their incomes on the costs of goods, utilities, and health care. These costs can grow as a result of climate change and may increase in coming years. Therefore, programs and policies that help reduce those costs — for example, free or low-cost financing programs for working families for energy-efficient or renewable-energy products have great influence (Troung, 525). It is up to policy makers and state agencies involved in allocating the funds to interact with disadvantaged communities and community-based organizations and learn the most efficient way to address the climate gap within DACs.

Findings

	California Department of Community Services	California Department of Forestry and Fire Protection (CalFIRE)
	And Development (CSD)	
Funding	FY 2014-2015 \$75 Mil	FY 2014-2015 \$18 Mil
CBOs Involved in Study	GRID Alternatives	City Plants Greenlining Institute
	Asian Pacific Environmental Network (APEN)	Urban Forest Council
	Pacific Asian Consortium in Employment (PACE)	
CBO Reps Interviewed for Study	Mari Rose Taruc, State Organizing Director for APEN	Nancy Hughes, Executive Director of Urban Forest Council
		Liz Skrzat, Policy Director for City Plants
		Alvaro Sanchez, Environmental Equity Manager at Greenlining Institute
Focus Areas	Based on 50 providers	Northern California Bay Area Central Valley Inland Empire Los Angeles
		Orange County San Diego
Project Focus	Low-Income Home Energy Assistance Program (LIHEAP)	Urban Forestry
	Community Services Block Grant (CSBG)	
	Weatherization Assistance Program (WAP)	
Agency Reps Interviewed for Study	Jason Wimbley, Chief Deputy Director	Glenn Flamik, Regional Urban Forester for Northern California
		James Scheid, Regional Urban Forester for the Bay Area
		John Melvin, State Urban Forester

CalFIRE and CSD Case Studies

Past Funding

SB 535 presents a new set of guidelines and recommendations that agencies must adhere to when reviewing applications. Changes to the usual funding processes for CalFIRE and CSD may have to be made in order to adhere to the different requirements of SB 535. The difference between agencies' past funding process and current SB 535 funding process will show how much the agency is following the stipulations of SB 535 and how much of an impact the new funding process will make.

Grants awarded by CalFIRE in the past have focused on advancing goals besides GHG reduction. The CalFIRE grant process outside of SB 535 funding involves the city agreeing to the grant project. Trees are a 50-year investment, and therefore CalFIRE urges the city to consider where the city wants to be in 50 years.

The funding from past CalFIRE grants came from Prop 12 and 84, says John Melvin, State Urban Forester for California. These appropriations allowed CalFIRE to award matching fees for community organizations based on their income, but were focused on state parks and public water safety generally, rather than within a specific region. Projects funded by CalFIRE in the past have not focused on a geographical area like the SB 535 appropriations. As a consequence, CalFIRE is able to offer less technical assistance for projects with the guidelines SB 535 appropriations must follow. Glenn Flamik, the Regional Urban Forester for Northern California, sites the fact that SB 535 has distanced CalFIRE from providing a more hands-on experience for communities. In the past, Flamik comments that CalFIRE would help community members apply for funding if they needed assistance. CalFIRE does not have the ability to do that now. Before

SB 535, CalFIRE was about to run out of federal and state funding and therefore SB 535 came at a crucial time.

CalFIRE needs the SB 535 allocations in order to continue funding current projects in areas that may not be covered under CalEnviroscreen's data. CalFIRE has had to change the focus of its projects to more DACs, which may cuase less support for the local communities because regional experts are not familiar with the new regions SB 535 funding is meant to benefit.

John Melvin sites the fact that SB 535 funding is groundbreaking in the sense that the annual budget for CalFIRE from the U.S. Forest Service is \$1.5 million. CalFIRE was granted \$19.1 million from the GHG Reduction Fund. Melvin comments that California is way ahead of the curve in Urban Forestry. Money for urban forestry itself is groundbreaking, however the process forces funding in regions CalFIRE is unfamiliar with and therefore the funding may not be groundbreaking in the communities that are meant to receive it.

There are a few community-based organizations that work in DACs and have been a part of the CalFIRE funding process before and after the SB 535 allocations. Nancy Hughes, Executive Director of the Urban Forest Council, has received grants from CalFIRE in the past. She mentioned that CalFIRE does not usually give grants to DACs, which speaks to the change CalFIRE has to make in order to rework its funding process based on regions rather than purely on applications. Hughes has received funding for East Hollywood, Bakersfield, and El Cerrito. The most recent grant she received from CalFIRE was in partnership with the local government commission. In comparison to CSD, CalFIRE is making more changes in its funding process to accommodate the stipulations SB 535 requires.

The Department of Community Services and Development has three grant programs that SB 535 appropriations fall under; weatherization in low-income buildings, solar installations in

low-income developments, and efficiency upgrades in multi-family developments. Two of these programs are focused on low-income residents. One is known as Low-Income Home Energy Assistance Program (LIHEAP) and is a block grant from the Federal government for energy assistance, weatherization, and emergency energy money for residents who cannot pay their energy bills. The second grant which focuses on low-income residents is the Community Services Block Grant (CSBG), that supports a broad range of locally determined services, including employment services, education, income support/management, housing, emergency services, health and nutritional services. The third funding category is the Weatherization Assistance Program (WAP), which measures may include weather-stripping, insulation, caulking, water heater blankets, refrigerator replacement, electric water heater repair/replacement, heating and cooling system repair/replacement, compact fluorescent lamps, and thermostat repair/replacement.

CSD uses foundations and local providers in allocating its services within these three categories. There are a total of 50 providers within Los Angeles county alone that are allocated funding from CSD. The funding from SB 535 will most likely go to these same providers because the projects CSD focuses on are already encompassed within CalEnviroscreen's map for DACs.

Civic Engagement

A key factor in how effective the funding mechanisms for SB 535 are is based on how the state agency interacts with the community where the funding is targeted. An important measurement in how the state agency is interacting with the community is if community organizations know how to apply for the appropriations. Communities most impacted by climate

gap are most equipped to design solution, and outreach is the first step in getting the communities involved.

Workshops

CSD and CalFIRE hosted many workshop across the state in an effort to advertise that SB 535 funding could come to each community. However the key is to host workshops in the communities that need it most and get the community meber who are most involved in the community to attend. Unfortunately this is where CalFIRE and CSD struggled to really connect with each community via workshops.

CalFIRE hosted seven workshops across California and two webinars in the last year; one workshops for each regional focus and two in the Inland Empire. CalFIRE has regional urban forestry experts in Northern California, the Bay Area, the Central Valley, the Inland Empire, Orange County, and San Diego. However, the position for regional urban forestry expert for Los Angeles County is currently vacant. Flamik, the regional expert of Northern California, pointed to the fact that in terms of outreach, CalFIRE mostly tapped on organizations that they had worked with in the past. The regional experts in the Inland Empire and Orange County shared the Los Angeles County region; it is likely that most of the outreach done in Los Angeles County was via e-mail or through information on the CalFIRE website. This is most likely the reason the communities in the San Joaquin Valley recorded the lowest attendance of all regions for the CalFIRE workshops.

Based on outreach efforts thus far, John Melvin comments that the San Joaquin Valley poses the greatest challenge for participation in SB 535 appropriations as a vulnerable DAC. The San Joaquin Valley had the least amount of community participation at the workshops compared to the other six regions. Glenn Flamik also commented that there was not "great turnout" at the

workshops in Fresno and Stockton even though those areas have more DACs than the Bay Area according to CalEnviroscreen. Despite CalFIRE's outreach efforts, the workshops are still not reaching every disadvantaged community. This is due to the fact that CalFIRE is targeting the regions it knows best and the regions it has worked with in the past. The communities in the San Joaquin Valley have not participated in CalFIRE Urban Forestry funding in the past and therefore the traditional workshops may not be an effective way to garner community support and input on projects funded by SB 535.

CSD conducted informational workshops in Los Angeles, Fresno, and Sacramento over the past year. Jason Wimbley, Chief Deputy Director of the Department of Community Services and Development, also pointed to the appropriation information on the CSD website and the resources already available at the local level. CSD will continue to participate in workshops even after appropriation recipients are announced in order to clarify any questions or concerns regarding the funding guidelines. The CSD workshops have not been effective in garnering support from different communities that may need SB 535 funding. Three locations is not enough to understand each community's needs for weatherization in low-income housing units. CSD did not effectively outreach to DACs. Relying on the applicants to understand the funding process via the website is also not a form of outreach that allows CSD to effectively assess the greatest needs of the community.

Overall, CalFIRE held effective workshops that outreached to communities that had already received funding in the past. As the SB 535 coalition meeting concluded, "CalFIRE community engagement was well done and most of the success can be attributed to the amount of workshops CalFIRE held." CSD did not hold effective workshops for outreaching to DACs.

Current Contacts

Workshops for both agencies were held in locations where past contacts were present. It is the case that both agencies are outreaching to past projects, regions, or to CBOs that have already proven to be effective in their community. It is the case that both CalFIRE and CSD are focusing on continuing with current contacts rather than outreaching to new DACs

According to Glenn Flamik, the Regional Urban Forestry Expert for Northern California, the outreach CalFIRE conducts for requests for proposals is based on contacts the agency already has. CalFIRE's main grant base prior to SB 535, are disadvantaged communities. Flamik comments that SB 535's targeted funding is not new for CalFIRE, and that allows for him to alert organizations like Canopy, an urban forestry community based organization in East Palo Alto, who can then network with other community-based organizations in Northern California to lesser known organizations' projects funded. Flamik comments that beyond networking with current contacts and community workshops around the appropriations, there is not much else CalFIRE could have done to outreach to the community. James Scheid, the Regional Expert for Urban Forestry in the Bay Area, commented that the outreach CalFIRE conducts for the prerequest for proposals is all based on sending e-mails, information on the website, and from the series of workshops CalFIRE hosted. While it is beneficial that organizations that have been funded by CalFIRE in the past are the target for outreaching, this limits outreach to other communities or reaching out to other organizations that may not be a part of CalFIRE's network yet. Continuing work with an organization like Canopy, while productive for East Palo Alto, excludes other organizations that have never worked with CalFIRE before. In terms of outreach, there is more CalFIRE could have done outside of their current contacts.

According to Flamik, the guidelines for SB 535 appropriations are surprising in that 100% of the funds CalFIRE gives out must go to disadvantaged communities. He comments that other communities CalFIRE has worked with before will not appreciate being excluded from the appropriations. That is to say, that most of CalFIRE's current contacts are not within the CalEnviroscreen map of DACs. It is the case that CalFIRE's outreach efforts were not 100% in DACs.

Jason Wimbley, Chief Deputy Director of CSD, acknowledged that CSD will purposely seek organizations that they already have a contract with, based on a previously established network of CBOs to administer services. Wimbley sites that SB 535 poses little change in how the CSD conducts outreach of community partners. CSD has a longstanding relationship with DACs and a network of CBOs to administer services. The main tactic CSD will use to outreach to communities is to award projects to organizations with whom the CSD already has a contract with. CSD is looking to fund the same organizations they have funded in the past. The main difference, says Wimbley, is the requirement at the local agency level. Most of the organizations the CSD works with are connected to local governments and community members and are known in the area for their resources. Wimbley comments that the connections are a mix of organization types that make host other services beyond the focus of the project targeted for SB 535 funding. Like CalFIRE, CSD is looking to fund organizations that have proven successful based on past funding allocations. By limiting appropriation allocations to organizations the agencies have worked with before, CSD excludes a whole population of small CBOs that conduct a majority of the groundwork with very little resources.

The main attribute CSD looks for in an application remains the amount of resources it can leverage. This may be an indication that CSD will bypass the local agency level, afterall that

aspect is not part of their normal funding process, and merely go straight to the organizations who have the greatest resources to leverage. Most of the organizations CSD works with are connected to city or state government and are already well-established in the area. CSD is not looking for applications from organizations that are just beginning a project to better their community. Both CalFIRE and CSD are looking for applications that are "safe," that is to say well-established financially and have proven to produce success in the past based on their current contacts.

Outreach Process Under SB 535

CSD and CalFIRE have already seen some of the results of their outreach efforts. SB 535 does limit the region where funding can be allocated, which may limit the amount of normal outreach conducted in the region. The biggest adjustment, Flamik of CalFIRE comments, is that not everyone within his region can apply for the funds. James Scheid, Regional Urban Forester for the Bay Area, also commented that the strongest advocates for the projects are not necessarily in disadvantaged communities. That is to say that the funding needed may not all fall in the DACs as defined by CalEnviroscreen. It is the case that SB 535 funding cannot include regions the agencies has funded before, that do not fall within the CalEnviroscreen map. It is a challenge for CalFIRE to explain and justify to past grantees that DACs around them qualify for funding, but that their region does not.

Scheid commented that there should be more room in the guidelines for non-profits and communities to grow together and hopes that these appropriations will result in the emergence of new groups based on the nature of funding and the comprehensive outreach CalFIRE has done.

Based on conversations with John Melvin, James Scheid, and Glenn Flamik, CalFIRE is supportive of funding community based organizations with SB 535 funding rather than cities

because cities are quick to let trees and natural sustainability get cut from their regular funding cycle. Scheid comments that CBOs are the heart of why funding exists for urban forestry in the first place because they can lobby local and state government to increase the funding for urban forestry projects. It is the case that CalFIRE wants all the CBOs they work with to receive funding from SB 535, disadvantaged or not.

Based on a conversation with Mari Rose Taruc, State Organizing Director for Asian Pacific Environmental Network, CSD has made little change in its outreach process under SB 535 funding. The outreach to CBOs outside of the already established CBO network is limited.

APEN is trying to find CBOs within the SB 535 Coalition that CSD could use as a provider rather than the 50 providers CSD committed to using currently. CBOs do not have access to the providers CSD is using or where they are located, which limits CSD's outreach and interaction with the communities it is stipulated to serve under SB 535. Without transparency in services provided, CSD communities will not know what they can apply for under SB 535 and CSD will not know what projects are most necessary within each community.

Outreach Challenges

Due to the changes CSD and CalFIRE have had to make to their outreach strategy, both agencies have come against challenges in how and where to outreach affectively. The greatest challenge for CalFIRE in outreaching to communities about applying for SB 535 funding, according to John Melvin, are finding ways the organizations can keep track of their Greenhouse Gas quantifications. There is no regulatory authority on the projects that do get funding. Melvin comments that with regulating GHG emissions, the "carrot works better than the stick for community projects," that is to say that organizations must understand the regulating mechanisms on their own in order to keep track of them. In the case of SB 535 funding, the

guidelines for oversight are based on the community organization's request for proposals rather than based on what the organizations needs. It is the case that CalFIRE is finding it difficult to explain to CBOs how to calculate and report their GHG savings, especially without consistent oversight.

CalFIRE has also come across outreach challenges in Los Angeles County without a regional expert. Los Angeles County may be overlooked in comparison to the other regions CalFIRE covers; outreach efforts to smaller community-based organizations were not as comprehensive for this round of funding as they were in the Bay Area or San Diego, sites John Melvin. It is the case that Los Angeles County did not receive the same amount of outreach as the other six regions CalFIRE oversees.

According to Nancy Hughes, the Executive Director of the Urban Forest Council, the best thing CalFIRE can do to support CBOs with applying for SB 535 funding is by putting out a clear list of criteria necessary to apply. John Melvin also commented that he had been in touch with the SB 535 coalition and that CalFIRE is incorporating their ideas. It is the case that CalFIRE is actively working to address its outreach gaps.

James Scheid points to San Jose as the area of greatest need within his regional expertise.

Scheid says the challenge with San Jose is dealing with such different cultures and languages while trying to create solidarity for urban forestry in the area. Scheid tries to "bridge the cultural divide with trees," by funding projects such as a community nursery that can be used for learning about the importance of trees even in an urban setting.

Another challenge Scheid points to is that CalEnviroscreen does not take into account all the communities that may need funding. The Central Valley and Southern California are the targets

of most of the funding for SB 535, sites Scheid, and so he feels his region is not fairly accounted for and organizations are discouraged from applying for SB 535 funding at all.

Glenn Flamik of Northern California also sites that the DACs in his region are not necessarily applying for SB 535 funding. Based on the outreach Flamik has already conducted, it is a mystery why the DACs are not applying for funding. Flamik points to the fact that the word is not out to all communities yet, that is to say not all communities within the Northern California region know they are eligible for SB 535 funding yet. This lack of participation may be a result of regional experts outreaching to the same communities and CBOs they have worked with before, or because they have not made the process clear enough for DACs to participate.

The main concern Liz Skrzat of City Plants voiced is regarding organizations that have never applied for funding before. There are a few smaller organizations based in Los Angeles Skrzat is aware of that are applying and she is not sure how they will do considering the competition or larger, more experienced organizations. This concern was also expressed during the SB 535 roundtable discussion in February. The main concern felt by all organizations was that small groups will not be able to play as much as big groups (\$150,000 min.). The organizations also expressed concern for the kinds of tracking mechanisms in place and the balance between enough data collection from CalFIRE that would be helpful, but not a burden. Based on the lack of regional expertise in Los Angeles, and a lack of understanding how to effectively assess GHG reduction, it is the case that CalFIRE will not outreach to smaller CBOs in Los Angeles effectively enough for them to apply for funding.

CSD has not come across any challenges with outreach because they have been using the network of providers that is already in place. GRID Alternatives, an SB 535 Coalition member, is a provider of solar for CSD, however that is the only known CBO providing services under

CSD. It is unknown who the providers of weatherization services are under CSD. The challenge for outreach with CSD is for CBOs, because community members can access services CSD provides, but CBOs cannot. It is the case that CSD is not outreaching to organizations besides who it has worked with before. This limits the DACs that will apply for SB 535 allocations.

Outreach Successes

Despite major changes in how CalFIRE interacts with communities applying for funding, CBOs recognized CalFIRE's success in connecting with some DACs even in this first round of SB 535 funding for FY 2014-2015. From a community-based organization perspective, both Alvaro Sachez from the Greenlining Institute and Liz Skrzat from City Plants are very pleased with how CalFIRE has conducted their outreach efforts. Skrzat, the policy director of City Plants, sites that CalFIRE did an excellent job of outreaching to community-based organizations surrounding urban forestry. Skrzat gives CalFIRE the credit especially considering how difficult it is to outreach with such a new project.

Collaborative Policy Process

Effective policy that directly impacts disadvantaged communities involves policymakers, developers, community-based organizations, and community members. DACs must be involved in the implementation of SB 535 allocations in order for the projects to be most effective. DACs that receive substantial focused funding can transform historic burdens into future benefits.

If it the task of CSD and CalFIRE to ensure that investments benefit DACs in a significant and measurable manner and do no harm to the community.

Community Asks

Community-based organizations, based on the SB 535 roundtable discussion hosted by the Liberty Hill Foundation and a webinar hosted by APEN, have asked for CSD and CalFIRE to prioritize funding for projects that incorporate authentic community engagement. The coalition calls on CSD and CalFIRE to actively involve community leaders and CBOs in municipal projects and that funding be invested in Clean Up Green Up communities such as Boyle Heights, Pacoima, and Wilmington.

Within the network of CBOs organizing around SB 535, the coalition has asked for coalition building at the statewide and regional level (SB 535 Quad; California ReLEAF) around future SB 535 projects, advocacy around improving application guidelines, and the process. The coalition also is looking to build political support for the programs funded by the GGRF.

The greatest concerns CBOs have regarding CSD and CalFIRE focus around how the agencies are prioritizing projects and communities that may be left out of the CalEnviroscreen map. CBOs are concerned about how the high volume of applications (500+) submitted to CAL FIRE will be objectively assessed by CalFIRE and how will be prioritized. The Urban Forestry CBOs are most concerned about the fact that CalEnviroscreen does not identify park poor communities. The organizations also found the guidelines for CalFIRE funding unclear and are looking to improve upon the guidelines.

Who can Apply

CSD and CalFIRE have monetary restrictions on the amount of projects they are able to fund. Based on outreach and their policy implementation process, it is possible that the agencies are limiting applicants from accessing SB 535 funding.

CalFIRE has seven grant programs, one of which is urban forestry and the focus of SB 535 funds. The urban forestry grant program deals uniquely with urban areas and meets 100% of the requirements for SB 535. It is also the program that focuses on DACs. The areas that will receive funding from SB 535 are all based on the CalEnviroscreen methodology. The application process for projects funded within each area is very selective. Flamik of Northern California has received many applications so far, but commented that there is only a limited time organizations can apply which limits the applicant pool.

It is clear that some community-based organizations will have an easier time applying than others. The main obstacles for smaller CBOs in the application process are the minimum fee, and a lack of experience and resources to apply for so much money. The agencies enforce a minimum fee that organizations must adhere to in order to have assurance that projects will actually get done. The problem is that by ensuring an organization can fund a large project with many resources, excludes organizations who may be making the most change on the ground level, but do not have the resources to apply for a multi-million dollar grant. Pacoima Beautiful is an example of a community-based organization that is making great progress through the Clean Up Green Up Project but does not plan to apply for funding because the executive director, Veronica Padilla, does not see Pacoima Beautiful on the same level as City Plants, for example. The San Joaquin Valley is another example of an area that does not have the resources to tap into the power of its own potential and has completely disengaged from the funding process, says Nancy Hughes.

Liz Skrazt's main concern surrounding the allocation process was how smaller organizations, that have never applied before, would fare with such intense competition from larger groups. Sanchez speaks to the fact that the grandeur of the application process discourages

smaller groups from applying. As Sanchez points out, this would mean it is the same players who are getting all the funding at the expense of the smaller, possibly more impactful, organizations. The bottom line is that smaller organizations do not have the resources to apply for funding on such a massive scale.

Flamik points to the fact that the DACs in his community may not even know they are eligible to apply yet because the process has most likely not reached every community yet.

DACs in Northern California are not necessarily applying for SB 535 funding, and Flamik is mystified. Flamik also highlights that not everyone can apply; in fact only projects that directly impact or take place in DACs are considered. This means that many of the past applications for funding in Northern California would not be applicable for this pot of money. It is Flamik's hope that the appropriations will encourage the emergence of new projects. However if the same organizations are applying, there is no room for innovation or allowing new organizations to surface. It is the case that a lack of outreach and large grant sums discourage smaller CBOs from applying for SB 535 allocations.

Criteria

CalFIRE and CSD have funding processes in place for how to decide what projects receive SB 535 funding. The criteria are meant to limit the amount of projects that can receive funding. CalFIRE has created measures to ensure that the criteria do not limit applicants. CalFIRE will not consider public commentary in deciding which projects to fund, but will just look at the application. There will be nine reviewers, each of whom will give the application a score. That score will then be averaged and the highest average scores will be awarded the appropriation. CalFIRE's final selection will be made in May. The letters for which projects are invited to submit a proposal will be announced within the next two weeks. Nancy Hughes commented that

everyone who applied is waiting anxiously for the announcement of who will be invited to submit a proposal. The application process is organized very differently in the Bay compared to Southern California due to the difference in community populations. Glenn Flamik in Northern California is not certain when the funding will be coming out and is still unsure as to how the funding will impact the communities in his region.

CalFIRE has a hardship loan mechanism in place to encourage smaller CBOs to apply; a 25% advance of the total grant amount. The grants are based on a reimbursement basis. If an organization cannot reimburse the amount, CalFIRE offers a hardship loan that gives the organization a 25% advance of the total grant amount. CalFIRE's grant process for disadvantaged communities has a suggested match requirement rather than a required match the organization must contribute to the project. CalFIRE is looking to make sure projects benefit the communities directly through partnerships, community stewardship, and an assurance that the community follows best practices for tree maintenance. This hardship loan is more of a gesture than an equal incentive for small CBOs to apply for multi-million dollar appropriations. It is not enough for many organizations to still apply and is an amount small organization cannot risk paying back. Small CBOs, especially those connected to urban forestry, simply do not have the resources to to clear a space to plant a tree, plant a tree, and take care of the tree in the future. This process alone is multiple thousands of dollars that a small CBO does not have.

John Melvin points to the San Joaquin Valley as the least competitive region when it comes to grant applications. In an effort to garner more participation from the San Joaquin Valley, CalFIRE created a different grant pool focused on smaller amounts of money that organizations with less resources can pull from. Melvin sites the fact that this dual grant system creates a subcompetition for applicants. No big companies apply to the smaller grants and so the dual-pool

system creates a healthy competition for beginning projects. The grant has the same amount of competition, just for a smaller amount. A normal grant size from CalFIRE is around \$50,000. The small grant maximum is \$30,000. This allows areas like the San Joaquin Valley to participate in CalFIRE's funding mechanism.

Alvaro Sanchez of the Greenling Institute pointed to the enormity of SB 535's funding mechanism as discouraging some organizations from applying. Sanchez suggests there be two tiers of applicants; one with the minimum of \$100,000 for the larger organizations and one with a smaller minimum as to widen the bracket of who is able to apply. Sanchez's main concern for CalFIRE funding allocations for Spring 2015 is that there is not enough technical assistance for smaller funding needs and that the same players will be the ones who get all of the funding.

The main concerns Liz Skrazt from City Plants expressed regarding the CalFIRE allocation process also revolves around the amount of money DACs would have to spend in order to create an impact. She agrees with Sanchez in that DACs do not have the resources to apply for the bigger pots of money that the SB 535 allocations are expecting from community-based organizations. Skrazt believes there should be a smaller pot of money for smaller applicants who do not have the resources and experience of larger organizations. It is the case that CalFIRE is addressing the equity gap the allocation process creates based on the resources of the CBO. CalFIRE has agreed they will disclose all applications after awards are given.

CSD's criterion for funding was not obtained for this study. This may be due to the fact that CSD is continuing to work with the same providers they have, and so do not need criteria for allocating funding. Based on a conversation with Mari Rose Taruc, it is clear that the CSD criterion for the retrofit program benefits homeowners over renters. Landlords are not willing to make the change to retrofit a home for renters. There is therefore an equity gap in who can

participate in the retrofit program offered by CSD in the sense that only homeowners can participate. It is the case that CSD had not made funding allocation criterion inclusive for all populations.

Application Priorities

Based on grant processes in the past and SB 535 stipulations, CalFIRE and CSD have key factors and priorities they look for in project applications. These priorities are crucial for all parties applying for SB 535 funding to know. These priorities have the potential to once again limit certain CBOs from applying for funding.

In each project, CalFIRE is looking for organizations who have partnerships within the community already and who are established within the community they serve. Both Melvin andScheid list the main priorities CalFIRE looks for in applications as partnerships, deliverables, regional influence, the total amount of GHG reduction, the amount of matching funds the organization is able to spend, and how much local support the organization already has. The goal of these priorities is that they will lead to longstanding projects within the community. Flamik is unsure as to who will be invited to submit a proposal, however most of the applications are from organizations CalFIRE has worked with in the past with a few exceptions of new applicants. These priorities lend themselves to organizations that CalFIRE has worked with in the past. CalFIRE is looking for organizations who have partnerships within the community already and who are established within the community they serve.

CSD has a similar list of priorities when it comes to allocating funding; the population the project will affect, the cost of energy, and the climate the project will create within the community. The main priorities CSD looks for in an application, says Wimbley, is the amount of resources the organization can leverage, the population the project will affect, the cost

of energy, and the climate the project will create within the community. The projects will be facilitated by local agencies, who will submit a proposal as to how the project will affect carbon levels in the community. Individuals can apply individually to the regional office of SB 535 appropriations. It is the case that allocation priorities for CSD and CalFIRE do not lend themselves to small CBOs with limited resources. There is no shift in the organizations that CalFIRE and CSD will focus on and allocate funding to, especially for this first round of SB 535 funding.

These priorities should be shared with CBOs in an effort to increase community engagement efforts. Based on the SB 535 workshop and the SB 535 webinar, communities agree that there is an increased need for transparency as to why projects get prioritized and selected by the City. Communities expect that the city will share the information for who is applying for what funding. There is not yet a method to measure the benefits these projects have on DACs and how the funds can be maximized. It is the case that CBOs want a clarified version of what CalFIRE and CSD are looking for in their applications.

Changes in Allocation Process

In order to adhere to SB 535 stipulations, CalFIRE and CSD have had to limit the scope of their allocation process and focus on projects in strictly disadvantaged communities. This has led to limiting some projects while allowing for others to occur.

Within CalFIRE's Bay Area region, Oakland, San Jose, and East Palo Alto are the hardest areas hit by environmental issues. In his six years working at CalFIRE, this is the first time Scheid has experienced such innovative projects coming out of CalFIRE. Grants used to be focused on strictly tree planting in the Bay Area, but SB 535 presents an opportunity for cities or non-profits to apply for funding in order to balance out what is already in place rather than

merely maintain projects that have already been established. It is the case that stricter allocations could lead to more creative project selections.

For the Community and Services Development Department, the main difference in the grant process with SB 535 versus the normal grant process is the requirement at the local agency level. The CSD has had to reevaluate its approach in measuring the success of a project, such as the impact of weatherization on GHG emissions and the cost savings to community members. The CSD is now entering the renewable energy sector and is working with the Air Resources Board and local utilities to measure the impact of the projects the CSD funds. Another adjustment the CSD has made is the emphasis put on workplace development and training in "green jobs." The changes CSD has made to accommodate SB 535 are all internal organizational changes in order to better evaluate the SB 535 projects and so not require much structural change outside of the funding process CSD already has in place.

The SB 535 process has not resulted in any adjustments to the normal funding process for CalFIRE in Northern California so far, cites Flamik. The overall process may not seem to need any adjustments, however not adjusting the normal funding process may exclude those organizations who have never applied for funding from CSD or CalFIRE. Organizations who have never applied for CalFIRE funding before may not know if they qualify for funding. Without a change in the state agencies' funding allocation process, there is not room for organizations to grow together or to find a new way to use the resources as efficiently as possible. Nancy Hughes calls on CalFIRE to, at the least, provide a clear list of criteria to apply for SB 535 funding. It is the case that CalFIRE and CSD have not made drastic changes in the way they conduct business or who they provide funding to based on SB 535 guidelines.

City Plants has received funding from CalFIRE in the past, and is pleased with the allocation process. City Plants' current projects directly aligns with the goals of CalFIRE's SB 535 allocations. City Plants is very familiar with the mechanisms already in place in order to receive funding from CalFIRE. It is possible these mechanisms do not work for organizations that have never applied for grants from CalFIRE before. It is the case that City Plants is comfortable with CalFIRE's funding allocation process because they have received funding from CalFIRE in the past.

Nancy Hughes sees the benefit of SB 535 appropriations to CalFIRE, as CalFIRE normally ignores DACs. SB 535 is a turning point for who can be concerned about urban forestry and a good step for DACs, which are normally ignored by CalFIRE. SB 535 appropriations have forced CalFIRE to use a different definition of disadvantaged than has been used in the past. It is the case for CSD and CalFIRE than changes in their allocation process have lead to positive changes in the funding allocation process.

Conversation Gap

As it stands, CalFIRE and CSD remain separate entities from the communities where SB 535 funding is allocated to. In order to close the conversation gap, there is a need to respect and build on community knowledge and combine community wisdom with academic and policymaking expertise, which in turn has the potential for deep impact SB 535 is the platform for closing the gap between inequity and climate change (Pastor, *FACING THE CLIMATE GAP*, 2).

Community and Government

From a CBO perspective, there should be two levels of interaction between non-profit and government--project and policy--in order to bring Greenhouse Gas Reduction Fund (GGRF) resources to Los Angeles' most impacted neighborhoods. This will capture the specific vulnerabilities of different neighborhoods using local expertise, community wisdom, and other contextual information and synthesize it with supplement technical knowledge to implement projects in the areas that need it most. All policy decisions should be made with direct consultation of community members. Without the key ingredient of community participation, tensions could arise between advocates that share the goals of protecting the planet and protecting the poor (Ibid).

Community Wants for Future of SB 535

Based on the SB 535 roundtable discussion and webinar, the CBOs organizing around SB 535 created some goals for how the future of the allocation process should move forward. The GGRF is predicted to increase in revenue for FY 2015-2016. The organizations recommend that another \$15 million be allocated for urban forestry and \$55 million for low-income energy programs. This will allow for greater investments in DACs across the state. The other goal the organizations decided on was to invest in capacity building of community and small agencies to secure funding from the GGRF. This will close the gap between projects funded in the past, and projects that need to be funded based on SB 535 stipulations.

Taruc of APEN cited direct asks of CSD for the future of funding in DACs. The most important piece of information that CBOs need to know in the future is where the money will be distributed throughout the regions. With the list of providers not public it is difficult to assess which projects CBOs, within SB 535 regions, could apply for.

Recommendations

Broaden Base of Outreach

Groundtruth

Based on the findings of this study, there is a need for both CalFIRE and CSD to broaden the base of their outreach efforts to areas beyond where they have collected applications in the past. Both agencies are outreaching to the same communities they have allocated funding to in the past. This is limiting to other communities that are eligible for SB 535 funding, but may not be aware of how they could create a positive impact in their community. Groundtruthing has proven to be an affective method to garner support, involvement, and assistance from local communities with the policy process. Getting agency representatives into the areas will allow for more understanding of the communities' specific needs and state agencies can therefore tailor workshops to be specific to each region. This will prevent the issue of translating to CBOs how to measure and report GHG reductions, because the state agency will have an understanding of where most of the communities GHGs are coming from based on community interaction and participation through groundtruthing. Affective groundtruthing by state agencies will also eliminate the reservations CBOs may have regarding their eligibility for applying.

More regional experts

The most affective way for agencies to instate a groundtruthing program is by hiring more regional experts. For this round of funding, it is the case that CalFIRE overlooked the Los Angeles region in terms of outreach due to a temporary lack of a regional expert. There is a clear need for a greater number of experts to understand the affects funding would have on the ground. More regional experts allows for a greater amount of information to be collected from the region

experts represent. This will lead to a more efficient use of funding because regional experts will know exactly where funding within the area is most needed. With a greater number of regional experts, state agencies can act as a mentor role for CBOs and guide CBOs directly through the application process.

Two-Tiered Appropriation Process

Based on the findings of this study, there is a need for both CalFIRE and CSD to make their funding application more accessible to all potential applicants. There is a concern that smaller organizations will not be able to compete for funding with larger organizations that have more resources and experience. The greatest obstacle for smaller organizations is the minimum fee that they must pay the state agency in order to be considered for SB 535 funding. CalFIRE has come across this issue during its normal grant cycles. CalFIRE's solution is a two-tired allocation system. CalFIRE created a different grant pool focused on smaller amounts of money that organizations with less resources can pull from; one fund's minimum is \$50,000 while the other fund is \$30,000. Melvin sites the fact that this dual grant system creates a sub-competition for applicants. This would eliminate intense competition between unequal organizational structures and encourage smaller CBOs to apply for SB 535 funding that they are eligible for.

Another way for the appropriation process to be more equal is by getting foundations involved in the funding process. By partnering smaller CBOs with foundations whose focus is environmental justice, state agencies can eliminate the concern smaller organizations have of a minimum fee. This will also expand the agencies' community support network for the projects they fund.

Collaborative Allocation Process

Large and Small CBOs

Based on the findings of this study, there is a need for dynamic partnerships between community organizations, state agencies, and community members. As demonstrated in the past, community stewardship is highly affective in empowering a community to implement state appropriations. An affective method of enrolling stewardship into a community is for state agencies to match larger organizations with smaller CBOs. Application priorities such as partnerships, deliverables, regional influence, total amount of GHG reduction, total amount of matching funds, and how much local support the organization already has, make it difficult for smaller CBOs to participate. Partnerships would be beneficial for all parties involved, especially considering CalFIRE is looking for organizations who have partnerships within the community already. Larger organizations could subcontract smaller CBOs and walk through the application and implementation process in order to give them an understanding of the application process for other grants they may apply for.

City and CBOs

Another partnership that would encourage smaller CBO applications is more involvement from the city. There is a need for greater transparency as to why certain projects get prioritized over others at the city level. With the list of providers private, it is difficult to assess which projects CBOs, within SB 535 regions, could apply for. Funding allocations would be more efficient if CBOs knew what the city was looking for in terms of projects to fund. CBOs would benefit from partnering with the city and vice versa in order to eliminate miscommunication between what community members think the city needs versus what representatives at the city

level think the city needs. These partnerships will also pool resources on the community and city level.

CBOs and State Government

Based on the findings for this research, there is a need for two levels of interaction between CBO and government--project and policy--in order to bring Greenhouse Gas Reduction Fund (GGRF) resources to Los Angeles' most impacted neighborhoods. That is to say, a partnership between smaller CBOs and the state agency who is allocating the funding would allow for a direct connection between the policy intentions and the projects on the ground that make the impact in the community. This will capture the specific vulnerabilities of different neighborhoods using local expertise, community wisdom, and other contextual information and synthesize it with supplement technical knowledge ¹³⁶ to implement projects in the areas that need it most. This is a necessary partnership to facilitate in order to allow for the most efficiency possible in state funding allocations.

Conclusion

This project has shown that despite the stipulations of SB 535 to allocate 100% of appropriations to disadvantaged communities, CalFIRE and CSD will likely allocate funding to communities and projects they have funded in the past. This conclusion is based on how both agencies are outreaching to familiar communities, how the application requirements exclude smaller CBOs, and the lack of partnerships on the CBO, city, and state level. Outreach for both CSD and CalFIRE included workshops and networking within regions they had participated in before. This excludes some DACs on the CalEnviroscreen map that may not know they are eligible for weatherization and urban greening projects in their area. The minimum fee and priorities for applying for SB 535 funding creates an inequity in the nature of CBOs who are able to apply. Smaller CBOs without the resources or experience cannot afford the minimum fee and cannot compete with larger CBOs who have experience with multi-million dollar appropriations. As it stands, CalFIRE and CSD are insular with regards to partnering with CBOs and assisting in the application process. This once again excludes smaller organizations from interacting with the state agencies and perpetuates the gap between the community and state level of policy implementation.

In the case of SB 535 appropriations, it is the responsibility of state agencies, such as CalFIRE and CSD, to reach DACs that are in the most need of funding. It is the responsibility of the CBOs within DACs to hold the agencies accountable to fund projects that are more needed within the community. In this case, the SB 535 Coalition has acted as a tracking network to ensure the priorities SB 535 set out to achieve are implemented. Based on this research, greater interaction between state agencies and DACs will result in a more efficient use of resources.

The inequality gap is only growing in the United States today and will continue to grow as the affects of climate change become more extreme. There is not time for resources to be

allocated to disadvantaged communities who do not need it most. In order to encourage smaller community-based organziations who are more plugged into the needs of disadvantaged communities to apply for SB 535 appropriations and to hold state agencies accountable to the reality of needs within each community, I recommend for state agencies to; groundtruth with DACs, hire more regional experts, create a two-tired appropriation process, and encourage organizational partnerships at the community, city, and state level.

Next Steps

This research did not fill the entirety of the gap between government funding mechanisms and disadvantaged communities. A continuation of this research should include more interviews within the Department of Community Services and Development and the CBOs that intend to apply for future weatherization projects. I was not able to contact the regional providers of CSD, an importance piece of information in understanding how and where appropriations will be allocated.

This research focused on two state agencies that represent the best case of allocations; 100% to disadvantaged communities. Future research should include the ten other state agencies that will be allocating less funds from the GGRF to DACs. It would be important to compare outreach strategies, application priorities, and networking strategies between state agencies to understand which agency is allowing for the most impactful change within a DAC, regardless of the amount of funding that is allocated.

This research was conducted before the allocations were announced for CSD and CalFIRE. Future research should include a map of where funding was allocated in comparison to the CalEnvirscreen map that represents where funding needs to be allocated. This process should

be done for every state agency involved with SB 535 funding. The patterns analyzed between the two maps will give a holistic understanding of the communities and projects state agencies are prioritizing.

This research only analyzes the first round of funding from SB 535 for FY 2014-2015. Future research should compare allocations between three to five years in order to assuredly address misallocations in the funding process. With the right implementation, SB 535 has the potential to close the climate gap in California.

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Appendix A: Community Based Organizations Involved with SB 535 Funding

Asian Pacific Environmental Network (APEN)

http://apen4ej.org/who-we-are/mission-and-vision/

APEN brings together a collective voice to develop an alternative agenda for environmental, social and economic justice. Through building an organized movement, they strive to bring fundamental changes to economic and social institutions that will prioritize public good over profits and promote the right of every person to a decent, safe, affordable quality of life, and the right to participate in decisions affecting our lives. APEN holds this vision of environmental justice for all people. Their work focuses on Asian and Pacific Islander communities.

Canopy

http://canopy.org/about-canopy/who-we-are/

Canopy was created in 1996 to support the Palo Alto's urban forestry programs and engage residents in learning about their importance and how to care for them. Canopy became an independent 501(c)3 in 2002 and has extended its programs to neighboring communities of East Palo Alto and Menlo Park and to Mountain View through its affiliate Mountain View Trees. Canopy counts on hundreds of volunteers annually to plant, care for, and survey Palo Alto and East Palo Alto's City trees. Their programs focus on tree planting, education and outreach, and urban tree care.

City Plants

http://www.cityplants.org/index.php/about-us-1/about-city-plants

City Plants is a public-private partnership between the City of Los Angeles, local non-profit organizations, community groups, residents, and businesses. City Plants is a unique hybrid organization under LA's Board of Public Works with a non-profit 501(c)3 arm and foundation through Community Partners. Donations to the foundation are tax deductible to the extent allowed by law. We do not rely on any direct funding from LA's General Fund. City Plants is a continuation of LA's former tree planting program, Million Trees LA. LADWP continues to support tree planting as an energy efficiency program and remains City Plants' largest sponsor of citywide tree-planting efforts. Through this partnership, City Plants is able to provide free shade trees for residents and property owners in the City of LA, along with important information on where to plant those trees to maximize energy efficiency in homes or businesses. The programs focus around providing shade to save energy and making trees a form of green infrastructure for the city and in LA residents' backyard. The mission is to expand and maintain LA's green canopy, with particular focus on low-canopy communities; to promote healthy living; and to create jobs.

Work with SB 535 from Interview with Liz Skrazt:

City Plants' current projects directly align with the goals of CalFIRE's SB 535 allocations. City Plants runs Los Angeles' tree planting arm. One of the main focuses of City Plants is energy efficiency. City Plants will give trees to constituents to take care of. They

emphasize to the constituents how tree planting saves energy and improves air quality. The communities City Plants mostly works with are within cities and the transit corridor. City Plants also has an 'Adopt-a-tree' program where anyone in the city is eligible to take care of a tree, although City Plants focuses on 'low canopy areas,' meaning communities with little tree coverage. The main communities City Plants focuses on in Los Angeles are South Los Angeles, Northeast Los Angeles, Downtown Los Angeles, and Central Los Angeles. These are the communities where City Plants focuses extra money. City Plants also partners with other community organizations for many of their projects. The Los Angeles Corps, Northeast Trees, Los Angeles Beautification Team, and Tree People are just a few of the organizations City Plants works with. City Plants often acts as an overarching vision supervisor to organizations' local projects. As Skrazt puts it, City Plants often "oversees money we sometimes never touch," but the money goes to the "overall vision" of GHG reduction and urban greening. City Plants oversees everyone from paying the non-profits to contracting the sub-contractors. Which contractors receive funding from City Plants depends on the neighborhood. The major corridors City Plants focuses on are all involved with the Bureau of Sanitation.

Coalition for Clean Air

http://www.ccair.org/about-us.html

The Coalition for Clean Air (CCA) is California's only statewide nonprofit dedicated exclusively to advocating for healthy air. The mission is dedicated to restoring clean, healthy air to California by advocating for effective public policy and practical business solutions. They use a unique collaborative model brings all interested parties together to find cooperative solutions to California's most pressing air quality issues. For over 40 years, the CCA has made significant improvements to California's air by: advocating innovative policy solutions within state and federal legislative and regulatory avenues, encouraging the early adoption of new technologies, advising businesses on regulatory compliance and clean air practices, empowering allies with technical and policy expertise, and educating decision-makers and the public on air pollution solutions

Greenlining Institute

http://greenlining.org/issues-impact/

The Greenlining Institute works to bring the American Dream within reach of all, regardless of race or income. They work on a variety of issues because they recognize that economic opportunity doesn't operate in a vacuum. These issues are not in separate silos, but are interconnected threads in a web of opportunity. The main focus of the Institute's projects include; Bridges to Health, Democratizing Philanthropy, Economic Equity, Energy, Environmental Equity, Claiming our Democracy, and Telecommunications and Technology.

Work with SB 535 from Interview with Alvaro Sanchez:

The Greenlining Institute does not work with community members directly, but has mostly interacted with state agencies depending on the committee. All of the Greenlining Institute's outreach efforts around SB 535 have functioned through the SB 535 Quad. However the Institute has had direct experience ensuring that the work CalFIRE does around the funding

garners, "the kind of opportunity we want to create." This includes making sure guidelines are funded and that the kinds of projects CalFIRE promised to fund become reality. The guidelines they adhere to are the Air Resources Board's wants. They assure that all the projects funded reduce greenhouse gas emissions, create multiple benefits including jobs, and business opportunities.

GRID Alternatives

http://gridalternatives.org/learn

At GRID Alternatives believes that a successful transition to clean, renewable energy needs to include everyone. They are working across the United States and in Nicaragua to make renewable energy technology and job training accessible to underserved communities. GRID Alternatives is a 501(c)(3) certified non-profit organization that brings together community partners, volunteers and job trainees to implement solar power and energy efficiency for low-income families, providing energy cost savings, valuable hands-on experience, and a source of clean, local energy that benefits us all. Since 2004, we have installed more than 12 MW of clean, renewable power for over 4,000 families, preventing the release of 340,000 tons of greenhouse gasses over the systems' lifetimes and providing more than \$110 million in energy cost savings. More than 15,000 volunteers and job trainees have also received hands-on solar installation experience to-date. They are based in Oakland, California and currently have ten regional offices and affiliates serving all of California, Colorado, New York, New Jersey, Connecticut, Washington D.C., Virginia, Maryland and Delaware. We also have staff on the ground in Nicaragua.

Liberty Hill Foundation

http://www.libertyhill.org/aboutus/approach

Liberty Hill advances social change through a strategic combination of grants, leadership training and campaigns. Liberty Hill is first to identify community leaders at the frontlines of change. We invest in changemakers and equip them with the skills and relationships they need to build power and advance social justice. With a near 40-year track record, Liberty Hill is uniquely positioned to bring together forces for change and forge a common agenda for equality and opportunity in Los Angeles. Charity is important. But Liberty Hill creates lasting change by reforming policies, introducing new standards and safeguards and advancing equality and opportunity for every Angeleno. Liberty Hill invests in community organizing -- the process of bringing people together and helping them realize their power. Through organizing, people transform their own lives and learn the power of collective action, laying the foundation for lasting social change. Liberty Hill identifies leaders on the ground, strengthens their work through grant investments and intensive on-the-job training, and builds strategic alliances so they can advance a common agenda for change.

Clean Up Green Up Campaign:

 $\underline{https://cleanupgreenup.wordpress.com/about/about-us-la-collaborative-for-environmental-health-and-justice/}$

The Clean Up Green Up campaign aims to transform Los Angeles communities most impacted by industrial pollution into vibrant and healthy places for families to live. Specifically, the campaign proposes to create "green zones" in the City of Los Angeles that will: Protect public health by using planning tools to mitigate pollution in these heavily impacted communities, invest in economic development with financial and planning incentives to retain jobs and create new green enterprises, reduce existing environmental hazards through streamlined inspection and enforcement, and expand public-private partnerships to leverage outside resources

Pacoima Beautiful

http://www.pacoimabeautiful.org/about-us/history

Currently the organization is working on keeping community members of all ages engaged in the environmental justice movement through three community organizing initiatives; Clean Up Green Up (CUGU), Complete Streets and the Pacoima Wash Vision Plan. Clean Up Green Up would help connect residents and industrial businesses in Pacoima, Boyle Heights, and Wilmington with the City of Los Angeles. The businesses in these areas would learn how to abide by existing environmental regulations and learn how to access resources and possible incentives. The end result would create cleaner industries and overall improved environmental conditions for business and residents alike.

The goal of the Complete Streets initiative is to educate the community about our streets and how we can create streets that are safe for everyone. They have participated in walkability assessments with Community Health Councils and UCLA CORICA Center for Health Equity to assess the quality of our streets. They have also created tools such as a walkability guide, partnered with pedestrian/bike/transit advocacy groups and continue to advocate for improvements to our street infrastructure.

Through the Pacoima Wash Vision Plan, park space would be created in the park-poor neighborhood of Pacoima. A greenway that includes a bike path will connect Pacoima to other parts of Los Angeles and provide increased opportunities for mobility and improved health.

These initiatives when realized will have increased the quality of life of the residents of the Northeast San Fernando Valley while addressing issues of equity in a community that has long suffered from negative environmental impacts. Today, Pacoima Beautiful reaches over 10,000 community members in the Northeast San Fernando Valley.

Pacific Asian Consortium in Employment (PACE)

http://www.pacela.org/about-us

PACE is a non-profit community development organization founded in 1976 to address the employment and job training needs of the Pacific Asian Islander communities. PACE has since expanded into a variety of service areas, all tailored to meet the growing and changing needs of the multi-ethnic communities in Los Angeles County. Now, in addition to job training and employment services, significant PACE programs encompass: business development; early

childhood education; financial education and asset building; housing and rehabilitation services; weatherization and energy-conservation programs; and affordable housing development.

Public Advocates

http://www.publicadvocates.org/mission-and-history

Public Advocates Inc. is a nonprofit law firm and advocacy organization that challenges the systemic causes of poverty and racial discrimination by strengthening community voices in public policy and achieving tangible legal victories advancing education, housing and transit equity. They spur change through collaboration with grassroots groups representing low-income communities, people of color and immigrants, combined with strategic policy reform, media advocacy and litigation, "making rights real" across California since 1971.

Urban Forest Council

http://www.caufc.org/Mission

The Council's vision is to create a "thriving and prosperous California communities transformed by healthy trees and green spaces." They function under a mission of

"Advancing smart investment in urban and community trees, parks, and green spaces through outreach and education, community-based activities, and collaborative action."

The California Urban Forests Council (CaUFC) was founded in 1968 as the first urban forest council in the nation. They are professionals associated with municipalities and public works, urban planning and design, arboriculture and the nursery industry, and community-based and public health organizations. We support seven Regional Councils across California that act as the backbone of our organizations. Together, as a coalition, they are dedicated to the expansion and perpetuation of sustainable urban and community forests to enhance the quality of life for all Californians. They coordinate educational workshops, host an annual conference, run a certified urban forestry program, support seven regional councils, and manage the Invest From the Ground Up programs.

Work with SB 535 from Interview with Nancy Hughes:

The city government commission does not have a role and so it is up to community organizations to maintain the trees. Hughes points to the fact that there is a need for cities to institutionalize a project so that there is consistency and momentum on a topic can be built. Hughes sees the SB 535 appropriations as an opportunity to create management plans for urban forestry. She also has an understanding that we cannot "plant our way out," of the income and environmental gap that exists today. Hughes sites the fact that we need to care about what we have when it comes to where appropriation money should go. Hughes also sees the San Joaquin Valley as being disengaged from the funding process. Her tactic is to translate how trees can help the community for people who have much more to worry about than trees.

Urban Releaf

http://www.urbanreleaf.org/about/history-mission

Urban Releaf is an urban forestry non-profit 501(c)3 organization established in Oakland, California to address the needs of communities that have little to no greenery or tree canopy. We

focus our efforts in under-served neighborhoods that suffer from disproportionate environmental quality of life and economic depravity. Urban Releaf is committed to the revitalization of communities through: Tree planting and maintenance, environmental education and stewardship, empowering residents to beautify their neighborhoods, and mentoring and employing at-risk and hard-to-hire youth and adults.

Appendix B: Interview/ Workshop Details

Interview Questions Regarding Community Involvement in SB 535:

- 1. What is your agency's involvement with AB 32?
- 2. How long has the agency been involved in work relating to emissions reduction or climate change?
- 3. Has working to reduce emissions been a hindrance to state projects?
- 4. How much money is your agency receiving as part of SB 535?
- 5. How much of those funds will be going to disadvantaged communities?
- 6. Where are most of your current programs based?
- 7. What current projects would the state agency like to see the funding go to?
 - a. Where do these current projects take place?
- 8. How will CalEnviroScreen's definition of disadvantaged community affect your current project location?
- 9. Has the agency talked with members of the SB 535 coalition regarding locations for SB 535 funding?
- 10. What are the criteria which you use to determine whether a project has had sufficient community engagement?
- 11. How are they weighted in comparison to other criteria?
- 12. How have public comments affected the agency's decision to fund projects?
- 13. What previous models, best practices did you use for community engagement in sustainable development programs to shape the development of your program?
- 14. To what extent will your agency engage the community where projects have been approved?
- 15. What did/do you plan to do to engage the community? (webinars, public participation workshops, public comment solicitation, multi-lingual?)
 - a. What geographic locations
 - b. What time of day
 - c. How did you publicize the meetings
 - d. Did they work through local CBOs?
- 16. What are the difficulties you have encountered in trying to engage the communities?
 - a. Have you learned anything about how to do it better for future grant circles?
- 17. Are there some previous grantees or pending applicants with whom I could talk to about their experience working with your agency?

Interview Details:

Interviewee	Date	Title	Agency/ Organization
John Melvin	2/10/15	State Urban Forester	CalFIRE
Nancy Hughes	2/13/15	Executive Director	Urban Forest Council
James Scheid	2/18/15	Regional Urban Forester,	CalFIRE
		Bay Area	
GGRF Roundtable	2/20/15		Hosted by UCLA Labor Center
Discussion			and Liberty Hill Foundation:
			SB 535 Stakeholders
Jason Wimbley	2/25/15	Chief Deputy Director	CSD
Glenn Flamik	2/23/15	Regional Urban Forester,	CalFIRE
		Northern California	
Alvaro Sanchez	2/27/15	Environmental Equity	Greenlining Institute
		Manager	
Liz Skrzat	3/11/15	Policy Director	City Plants
SB 535 Coalition	3/23/15		Hosted by SB 535 Quad:
Webinar			
			Coalition for Clean Air
			Public Advocates
			Greenlining Institute
			APEN
Mari Rose Taruc	4/9/15	State Organizing Director	Asian Pacific Environmental
			Network (APEN)

Appendix C: Liberty Hill SB 535 Allocation Summary



Change. Not Charity. Summary of SB 535 Grant Programs

FY 2014/15

California Senate Bill 535
mandates that 25% of State
proceeds from the Cap-andTrade program must go to
projects that provide a
benefit to disadvantaged
communities (DACs), with
10% of the funds to be spent
on projects located within
DACs. This overview of
grant programs supported
by the FY 2014/15
Greenhouse Gas Reduction
Fund has been prepared to
inform community-based
organizations and others in
understanding current
opportunities to comment
on emerging State

program parameters,

Transportation and Sustainable Communities

- Affordable Housing and Sustainable Communities (SGC)
- •Low Carbon Transportation (ARB)
- •Transit and Intercity Rail Capital (CalSTA)
- •Low Carbon Transit Operations (Caltrans)
- •High Speed Rail (HSRA)*

Natural Resources and Waste Diversion

- Urban and Community Forestry (CAL FIRE)
- Waste Diversion (CalRecycle)
- Wetlands and Watershed Restoration (DFW)*

Clean Energy and Energy Efficiency

- Low Income Weatherization Program (CSD)
- Agricultural Energy and Operational Efficiency (CDFA)
- Energy Efficiency in Public Buildings (CEC)*

^{*} These grants will likely have little applicability satisfying the minimum benefits to DACs established in SB 535.