What Comes Next?

Envisioning the Future of Oil Sites in Los Angeles

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Abstract

The city and county of Los Angeles are currently planning the phaseout of oil and gas drilling in the region after passing ordinances that declare oil and gas drilling non-conforming land uses within their jurisdictions. The goal of this study is to understand what community leaders and activists who have been involved in this issue think about how the phaseout should occur, particularly in terms of cleanup, ownership and use of land, and how communities living near oil sites should be able to participate in the closure and redevelopment of the site in their neighborhood.

To understand their goals and visions, twelve semi-structured interviews were conducted over the course of several months. The main findings from these interviews is that regulatory agencies need to ensure that oil operators are paying for the thorough cleanup of sites and that resident engagement is critical in determining a new land use that prioritizes serving community needs. While there are a number of ways that both the local and state governments can change to better serve these needs, the study highlights investment in regulatory enforcement, high levels of community engagement around potential land uses, and collaboration between government and community-based organizations as some of the best ways to accomplish these goals.

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Personal Statement

This project would not have been possible without the tireless efforts of the many people in Los Angeles who have been working for years to end oil drilling in Los Angeles, in particular the STAND-LA coalition which has fought for a decade for this ordinance to pass. I feel very lucky to have been able to listen and learn from my participants and I am also incredibly grateful for Professor Shamasunder who has guided me through this study with invaluable advice and encouragement. To anyone in my life who has supported me throughout this past year, it has meant so much to me.

Introduction

After over a decade of organizing efforts, the Los Angeles City Council has voted to completely phase out the drilling of oil and gas within city limits by declaring oil and gas drilling a nonconforming land use and requiring all existing oil sites to cease operations within twenty years (Smith 2022). This legislative action is a testament to the long fought campaign by the STAND-LA (Stand Together Against Neighborhood Drilling - Los Angeles) coalition which centered the negative health impacts that many Los Angeles residents, particularly low-income BIPOC communities, have experienced because of their proximity to oil drilling (Oil Drilling in Los Angeles 2016). Moreover, this move comes at a time of increased interest nationally and globally into finding ways to transition away from fossil fuel extraction and towards a cleaner, more sustainable economy to combat the climate crisis. In Los Angeles, many prominent climate organizations in the region, including the National Resources Defense Council and the Sierra Club, publicly backed STAND-LA ("Supporters & Allies n.d.). This phase of the campaign culminated in December 2022, when the Los Angeles City Council voted unanimously in favor of a complete phaseout of oil and gas drilling and the mayor signed the ordinance into law (Smith 2022).

Now that the legislation has passed through the City Council, it raises questions about its implementation and next steps. This study focuses on understanding community goals and visions for the phaseout process through interviews with community leaders and organizers from key organizations that have been a part of the campaign to win this legislation. This study will learn what people, who work with the frontline communities that have been most impacted by oil drilling in LA, think about in terms of the cleanup, ownership, use, and community involvement in the redevelopment of oil sites in their neighborhoods. These are all critical components in the

redevelopment process and could potentially cause significant shifts in the environment of a neighborhood. Moreover, the impact of this legislation is that 26 oil and gas fields will eventually close and their land will be available for another use. This land can either be redeveloped by the people who historically have had power in land development, such as city officials and developers, or there could be a concerted effort to integrate the wishes and goals of community members in terms of spaces and uses that they would be interested in seeing built in their neighborhoods.

Learning the priorities of community organizers and leaders in terms of what could happen with the closure of the oil sites in the city is important data for the city to have as they plan this phase out. While the city should hear directly from community members living near oil sites, this study provides an account of the opinions of community leaders that is analyzed in an academic manner which can be used as a source of organized community knowledge. Additionally, community-based organizations can use these findings to advocate for their goals around clean-up, redevelopment, and community involvement to the city as many of their voices are compiled in this one study. This research is rooted in the principle that frontline community knowledge and interests around land redevelopment matters because they have been living with the consequences of neighborhood oil drilling, understand their neighborhood and its needs in a meaningful and personal way, and they will live with the repercussions of how this phaseout is put into practice (Corburn 2002).

This paper begins with an exploration of the historical context of oil in Los Angeles and community organizing against oil drilling both in the past and present. That is followed by a review of the literature around the health impacts of oil sites, different well statuses, site cleanup, and community engagement in land-use decision making. The methods section describes the interview process used to gather data, and the data results and analysis section examines the main conclusions from these interviews and their implications for how the city could engage with communities around their goals and visions for the sites in their neighborhoods. This study aims to answer the question:

The city and county of LA have passed ordinances declaring oil and gas drilling a nonconforming land use, however it is unclear what factors frontline communities prioritize in cleanup and redevelopment and how they would like to be involved. What do community leaders and organizers envision as the future of the former oil and gas sites in their neighborhoods in terms of cleanup, ownership, use, and community engagement?

Background

The Historical Context of Oil Drilling in Los Angeles

The production of oil has been a consistent feature of the Los Angeles landscape for many years. This history begins with the initial discovery of oil in what is now known as the Echo Park neighborhood by Edward Doheny in 1892 (Chiland 2019). From this point on, there was a dash among many to locate the oil fields in the region and harness them as a source of wealth production. A crucial characteristic of oil in Los Angeles is that it is fairly painless to extract because it is close to the Earth's surface, making it a profitable form of extraction that companies capitalized on (Mehta 2016). There were different waves of discoveries and interest in oil over the next few decades and by the 1920s, Los Angeles was producing approximately 20% of the world's oil supply (Quam-Wickham 2015; Schnalzer 2021).

Los Angeles developed the infrastructure necessary for the oil industry to thrive in an urban environment, such as expanding both the Los Angeles and the Long Beach ports and building suburban neighborhoods near oil sites for oil workers and their families (Quam-Wickham 2015; Sabin 2004). However, even as many profited from the expansion of the oil industry in Los Angeles, there was also always some form of backlash from local residents. In the 1920s, working at an oil site meant considerable risk to one's health and safety with one in four workers suffering from an injury or death on the job (Quam-Wickham 2015). Moreover, the vast quantity of natural gas and oil being extracted from the ground and the many accidents transpiring at these sites polluted wide swathes of the city, affecting the air, soil, agriculture, and ocean ecosystems (Quam-Wickham 1998). Some residents, such as in Lomita and Hawthorne, organized around the incorporation of their neighborhoods into cities as a way to regulate the oil industry through new local policies. Unionized workers and federal oil board referees negotiated

stronger contracts with better working conditions and more efficient methods of extraction with varying levels of success (Quam-Wickham 1998). Both residents and workers often turned to local and state governments for support in regulating the oil industry to better protect their health and the environment. The industry responded to the government's restrictions on drilling with criticisms of government interference and an investment in a political lobbying arm that would grow in prominence at the state level by the early 1930s (Quam-Wickham 1998). These different avenues of reform advocacy utilized by local residents underscores the public pushback against oil drilling in the Los Angeles area that has been present since the initial stages of the industry's development.

The Present Day Struggle to End Oil Drilling

The fight to end oil drilling in Los Angeles in the 21st century is rooted in the evolution of these original concerns, with the same community-driven efforts as were seen a century ago. Los Angeles is currently the largest urban oil field in the country and many communities in the city experience negative health impacts from oil and gas drilling (Sadd and Shamasunder 2015). At the same time, this is in particular an issue of environmental injustice because 72.9% of people living near an oil production facility in the city of LA are people of color and 44.5% of people living near oil production are below 200% of the poverty level (Sadd and Shamasunder 2015). Moreover, many of these communities of color are more vulnerable to increased risk from other health impacts from air pollution and other environmental hazards, contributing to an increased cumulative burden when their exposure to oil sites is factored in as well (Sadd & Shamasunder 2015).

The modern-day campaign to cease the production of oil and gas drilling in LA began in late 2010 with the effort to close the Allenco site in the University Park neighborhood in South Central LA. A community coordinated campaign that included submitting 350 complaints to the South Coast Air Quality Management District, pressuring elected officials, and publishing scientific research on the health impacts of living near an oil site, led to the end of production at the site in November of 2013 (Greene and Meade 2020; Sahagun 2013). This victory launched the citywide campaign which would be coordinated by the STAND-LA (Stand Together Against Oil Drilling Los Angeles) coalition. The coalition is made up of two co-chair organizations, PSR-LA (Physicians for Social Responsibility Los Angeles) and CBE (Communities for a Better Environment), one strategic partner, the Liberty Hill Foundation, and five other member organizations including Redeemer Community Partnership, the Holman United Methodist Church, Esperanza Community Housing Corporation, SCOPE (Strategic Concepts in Organizing and Policy Education), and Black Women for Wellness ("About Us" n.d.).

The mission of STAND-LA has been intrinsically linked to ending oil and gas drilling because of its public health impacts since its inception ("About Us" n.d.). The initial policy position of the coalition was that, based on scientific research on the health impacts of living near oil drilling, the City should implement a 2,500-foot setback to protect the health of Los Angeles residents (Wong 2017). However, in the fall of 2020, Los Angeles City Councilmember Krekorian announced his plan to support the passage of an ordinance that would declare all oil and gas drilling a non-conforming land use within the city, which expanded the goal of the coalition from a setback to a complete phaseout (Mulkern 2022). STAND-LA was ultimately successful in this endeavor, with the Los Angeles City Council voting unanimously in support of declaring oil and gas drilling a non-conforming land use in December 2022 (Mulkern 2022).

Literature Review

The following literature review will explain the present circumstances in which Los Angeles is preparing to phase out oil and gas drilling. As described in the background section, campaigns for the end of drilling have been part of the disputes around the oil industry since the 1920s. The latest iteration of this campaign, spearheaded by the STAND-LA coalition, was focused on an environmental justice and public health message that called for the end of neighborhood oil drilling in LA as a way to protect the health of frontline communities who are predominantly low-income and BIPOC (Black Indigenous People of Color). Although the Los Angeles City Council's decision to phase out is a tremendous victory for STAND-LA and their allies, the next phase of this process brings with it new challenges. In particular, what will happen with the land of current sites of oil and gas drilling? How will the city mandate the cleanup of this land and who will be responsible for ensuring it is cleaned to a safe level? Moreover, after the land is ready for a new use it is imperative to think about who will have the resources and the ability to purchase the land and redevelop it. These are complex, multi-faceted questions and this literature review attempts to build the political and legal context for how these uncertainties might be addressed. The review begins with an explanation of the health impacts of oil drilling and how in particular, it is an issue of environmental injustice in Los Angeles. Then, the process of closing an oil site and potential complications are discussed. The review ends with an investigation of community engagement in land-use decision making.

Health Impacts of Living Near Oil Drilling

The STAND-LA campaign to end oil drilling in Los Angeles was framed as a community response to the health impacts of living near oil sites ("About Us" n.d.). This argument is dependent on scientific research that supports the claim that living near oil sites is harmful to

health. In 2017, a literature review of this subject was compiled by Nicole Wong for use by STAND-LA. The findings suggest that if a household is within 1,500 ft of an active oil well then the health impacts are much greater than households at a farther distance. However, toxic chemical presence and health impacts have also been recorded at farther distances and many researchers have presented findings that demonstrate that setbacks are often ineffective in protecting health (Wong 2017).

There are a number of reasons that the health of people living near oil sites are impacted by drilling. Firstly, the process of drilling involves hazardous chemicals that can leak into the environment around the site, particularly into the air, water, and soil. For instance, volatile organic compound emissions, which are critical in the formation of smog that worsens air quality, are emitted the most by the oil industry out of all industrial sources in California ("Health and Safety" n.d.). Residents who are exposed to poor air quality can suffer from asthma, which is a common symptom near oil sites, and other concerning conditions related to heart and lung function (Sadd and Shamasunder 2015). Children and elderly residents are often more vulnerable to health impacts. Health impacts encompass respiratory, skin, head, nose, and eye issues (Wong 2017). Other chemicals that have been linked to cancer, birth outcomes, and endocrine disruption have also been measured at oil sites including benzene, which has no safe exposure level, and nitrogen oxides. And while many of these chemicals are part of routine uses at sites, other dangerous substances can infiltrate a neighborhood when there are spills or explosions ("Health and Safety" n.d.; Sadd and Shamasunder 2015). Noise pollution is also an issue that can influence sleep quality, stress, long-term cardiovascular health, and children's cognition (Wong 2017).

One of the main concerns with recent oil drilling in the region is the shift in the form of extraction used by the oil industry. Because so much oil was uncovered in the 20th century, by the turn of the century many of the traditional conventional styles of oil extraction were no longer viable. Oil companies turned to unconventional modes of extraction that use "steam, water, and/or chemical injection, hydraulic fracturing, acidization, and gravel packing" to get to oil that is deeper under the surface and farther away from the well site (Wong 2017). In these operations chemicals that have been previously labeled as "carcinogens, reproductive toxins, and endocrine disruptors" are inserted into a well to stimulate the process (Sadd and Shamasunder 2015). The issue with this progression is that the new forms of drilling are not an improvement, but rather a step backwards in terms of the health and safety of nearby residents.

Additionally, the infrastructure necessary to transport and process the oil also pollutes the city. Trucks and trains that move the oil also emit pollutants into the air and the processing of oil at refineries presents another slate of toxic chemicals that all compound to contribute to a cumulative impact of emissions for neighborhoods with high industrial activity (Sadd and Shamasunder 2015). Not only are BIPOC communities more at risk of health impacts from oil drilling, they are also at a higher risk of other air pollution impacts because their neighborhoods host the movement of products such as oil through freeways and major highways. Cumulative impact refers to the compounding of many different sources of pollution in one neighborhood and in Los Angeles, the communities most likely to experience a high cumulative burden are low-income, BIPOC, and have high numbers of children. For example, South Los Angeles, which has many active oil wells, has low birth-weights which are only worsened by the presence of chemicals from oil drilling (Sadd and Shamasunder 2015). The oil industry contributes to the cumulative burden of frontline communities through drilling, processing, and transporting oil.

Environmental Racism in Oil Drilling in LA

While oil drilling is pervasive across this state and throughout the city of Los Angeles, the distribution of wells, their activity, and their impact is not evenly felt by residents. Many people do not know that Los Angeles is the largest urban oilfield in the country, with 68 oil fields in the Los Angeles Basin, because the oil drilling is often "hidden in plain sight" (Johnston and Shamasunder 2022; Sadd and Shamasunder 2015; Witt 2022). This is a practice that began in the 1960s with the use of "aesthetic mitigation" to disguise oil rigs and other equipment to make it blend into the neighborhood (Witt 2022). 759 of the 1,071 active oil wells in LA city are within 1,500 ft of a sensitive receptor such as a home, school, church, or hospital meaning that many people are living out their daily lives very close to oil drilling and might not be aware of it (Sadd and Shamasunder 2015). A commonly cited example of this is the oil derrick that operated on the grounds of Beverly Hills High School for many years behind the walls of a painted shed that was called the Tower of Hope. Oil operators implemented quieter equipment, electric power instead of diesel, and other forms of shielding to hide the ongoing drilling for oil from neighbors (Witt 2022).

Residents in low-income and BIPOC neighborhoods experience diesel-powered generators and derricks operating in the open very close to their homes. Additionally, a Community Health Councils Issue Brief reported that, "South LA and Wilmington sites are on average 260 to 315 feet closer to sensitive uses than oil sites in the West LA and Wilshire areas" (*Oil Drilling in Los Angeles*, 2016). Moreover, Wilmington hosts approximately half of LA's active wells which demonstrates that Wilmington residents are experiencing a much higher concentration of drilling than other parts of the city. Wilmington is a predominantly Latino community, (86.6%), and many households make less than \$40,000 a year which is considered low in LA County, making it both a low-income community and a BIPOC community ("Wilmington" n.d.). In many similar communities, there is a higher density of people and a greater proportion of children and elderly residents than in the rest of the city and this increases risk from nearby oil sites (Sadd and Shamasunder 2015).

Many environmental justice organizations have argued that the differences in the placement and use of oil drilling in BIPOC communities versus affluent white communities is an example of environmental injustice that must be remedied by the city. In 2015, three of these organizations filed a lawsuit against the city for these discriminatory practices and for failing to mandate that oil operators undergo the environmental review process known as CEQA (California Environmental Quality Act) that would ensure oil projects have the same standards across the city ("Los Angeles Sued" 2015). The final settlement agreement between the two parties included new regulations from the city to better enforce the protection of frontline communities ("Court Rejects" 2019). Moreover, when the City Council voted to completely phase out oil and gas drilling, Council President Paul Krekorian stated, "This may be the most important step towards environmental justice that this council has taken in recent memory" demonstrating that members of the the City Council recognize that their decision to end oil drilling in Los Angeles has an environmental justice focus (Smith 2022).

How an Oil Site is Closed

Considering that the City and County have decided to phase out oil and gas drilling in the region, an important aspect of this research is how oil sites in Los Angeles will be closed, cleaned, and redeveloped. There are several steps to the process of closing an oil site including decommissioning, which refers to the process of cleaning and sealing the wellbore, clearing all equipment from the site, and restoring the well pad to its original condition (Raimi et al. 2021).

The term plugged and abandoned is used to describe a well that has been cleaned and sealed. In California, the California Geologic Energy Management Division (CalGEM) oversees the decommissioning of oil sites ("State Oil and Gas Well" n.d.). Following decommissioning, the site is assessed for potentially hazardous materials, particularly looking for soil contamination. Cleaning up the site so that it is free of any contamination is called remediation, and this step can look very different depending on the level of contamination and history of the site ("Understanding Petroleum" 2022). There are a number of potential agencies involved in the remediation process in California; in particular the State Water Resources Control Board and the Regional Boards are responsible for ensuring the cleaning of polluted sites through the Petroleum Underground Storage Tank Program and the Site Cleanup Program ("The Water Board's Site Cleanup Program" 2022). The Department of Toxic Substances Control also plays a role by setting standards for chemical levels, assisting with Environmental Site Assessments, and running their Site Mitigation and Restoration Program ("3-Step Process" n.d.). These two stages of clean-up, decommissioning and remediation, are critical in creating a site that can be redeveloped for a new use. Because in California there are many agencies involved with these processes, there are not clear guidelines that can be found on one website or in one place about the different steps and their parameters. This information must be compiled from many different sources, making it difficult for those who are unfamiliar with the intricacies of the procedures to understand.

The Issue of Idle Wells

Decommissioning is a process that is very specific to each well, particularly dependent on if the well is active, is idle, has been abandoned and in which case, if it is an orphan well. A well is deemed idle in California if it meets two criteria: a lack of usage for two years or more and an improper or unfinished plugging and abandonment process. CalGEM states on their website that there are approximately 35,000 idle wells in California ("Idle Well Program" 2019). One reason that there are so many idle wells in California is because operators will choose to designate their unused wells as idle to avoid the cost of decommissioning the well (Heye 2022). Because decommissioning can be very costly to the oil company, operators will choose instead to have idle wells that are in flux between active and decommissioned. This is beneficial to them because either they can restart production at the well if oil prices rise and it becomes advantageous to produce oil, or they can wait until their company is financially insolvent and then the cost of decommissioning is placed onto the state because the operator can no longer pay for the closure of the well (Heye 2022). This tactic is relevant to the case of Los Angeles because a full phaseout of oil and gas drilling would include proper plugging of all wells and so oil operators will become responsible for decommissioning their idle wells and having enough funds to do so.

Health Impacts Near Idle Wells

The practice of creating idle wells instead of properly plugging and abandoning is harmful because idle wells present a health risk to residents living near the site. In a 2021 study, the researchers found that residents who lived downwind and close to idle wells in the study had lower lung function compared to others in their neighborhood, meaning that even a non-active idle well can have detrimental impacts to nearby residents (Johnston et al. 2021). One potential source that could be leading to this lower lung function is methane emissions from the idle wells, which was documented in an air monitoring study in South Los Angeles in 2021 (Okorn et al. 2021). There are also examples of idle wells causing contamination of soil and water, another source of potential harm for residents (Heye 2022). The indication of fugitive emissions is evidence that idle wells, while not active, can still have detrimental impacts on the neighborhood near the well site and need to be addressed within the phaseout process.

Orphan Wells

One form of an abandoned well is an orphan well, which is an unplugged abandoned well that has no solvent owner, making it a ward of the state. Oil well owners are required by California law to pay for a bond before beginning operations with the well as a way to ensure that there is money available for the eventual decommissioning of the well. However, this money is often not enough to pay the full price of plugging and abandoning a well (Boomhower, Shybut, and DeCillis 2018). An insolvent owner is one that cannot pay for the price of abandonment and the bond money does not cover it fully, making the state responsible for the funding of the well closure. Most of California's orphan wells are onshore wells, making this a more pressing concern for Los Angeles officials who must tackle the closure of both orphan wells and currently active wells in the coming years (Boomhower, Shybut, and DeCillis 2018). In February 2023, CalGEM released their Final Orphan Well Screening and Prioritization Methodology which, "ranks and prioritizes the state's more than 5,300 orphan, deserted, and potentially deserted wells for potential state abandonments" (Final Orphan Well Screening 2023). The report states that this new methodology was written in preparation for a new level of commitment to properly closing orphan wells which is being funded by both state and federal investments. The 2022-2023 state budget apportioned 100 million dollars for this issue over the next two fiscal years (Final Orphan Well Screening 2023). However, one assessment from the California Council on Science & Technology from 2018 estimated that the state might need to spend up to 500 million dollars to properly decommission all the orphan wells in the state (Boomhower, Shybut, and DeCillis 2018). Abandoned and orphan wells are a concern of the

state because they, like idle wells, can leak oil or other toxic chemicals, such as benzene and methane, into the nearby environment, which can cause harm to the groundwater and the air quality (Kang et al. 2016). One statistic from Columbia University claims that the abandoned wells in the US emit as much greenhouse gasses as 2.1 million passenger vehicles (Raimi et al. 2020). The landscape of orphan wells in California is concerning because it is an area where only significant state investment can lead to safety for residents living near orphan wells.

There are many reasons, some of which are described above, why idle, abandoned, and orphan wells are studied in the United States. In addition to the negative health and environmental impacts, unused wells can also lower property values near a site which can contribute to a smaller amount of funding available for public services (Raimi et al. 2021). Another factor in the expanded growth of interest is the reduction in oil and gas production in past decades, which has caused an expansion in the number of unused wells (Roh 2022). A joint paper between Resources for the Future and the Center on Global Energy Policy at Columbia University advocates that the need to decommission orphan wells could be seen as an opportunity to increase job availability within the oil and gas sector. They argue that if a federal program was created to plug 500,000 wells this could generate up to 120,000 jobs (Bordoff, Raimi, and Nerurkar 2020). These pressing concerns have played a role in the overall increase in interest, both academically and from the government, into idle, abandoned, and orphaned wells in California.

Uncertainty Around the Cost of Decommissioning

Despite increased interest, the cost of decommissioning is still a difficult number to identify. In the Legislative Analyst's Office 2022-2023 Budget analysis, CalGEM reported the average cost of decommissioning an orphan well to be \$111,000 per well. However, the report

also stated that CalGEM has spent approximately \$2 million on 11 deserted wells, which would put the price of one decommissioning process at \$181,818 per well, around \$70,000 more than their own department's estimate (Roh 2022). The funding for these projects is collected through fees on oil and gas operators. The Legislative Analyst's Office also proposed that the state consider adding additional money to this project in the budget, as well as increasing emphasis on the polluter pays principle, and securing federal funding through the Infrastructure Investment and Jobs Act which should dispense \$4.7 billion around the country specifically to plug, remediate, and restore well sites (Roh 2022). Typically, a polluter pays principle establishes the polluting entity as the party responsible for paying for the prevention of harm, both to the environment and to people, because of their actions. However, with an orphan well this is not possible because the owner is insolvent and so the Office instead suggests that other oil and gas operators should contribute to the funding of these decommissioning processes instead of all taxpayers that currently pay for decommissioning because their taxes go into the General Fund that is used for orphan wells (Roh 2022). Another cost analysis performed in 2021 found that decommissioning an abandoned oil and gas well costs on average \$76,000 for both plugging and surface reclamation. The researchers emphasized that this average can vary greatly depending on many different aspects of the well and what state it is in. Decommissioning is more expensive if it includes site restoration, is a deeper and older well, if it produces only natural gas, and if the well site has changes in elevation (Raimi et al. 2021). The discrepancies in cost is a relevant detail in the phaseout of oil and gas drilling in Los Angeles because of the data that must be gathered on each well to understand the cost of decommissioning. Moreover, the increase in funding, at the federal and state levels, for decommissioning could support the city of LA's phaseout plans, both with currently active or idle wells, as well as orphan wells.

The Added Complication of Various Types of Ownership

A further complication in closing down an oil site are the different competing rights of ownership. In the United States, individuals can hold the rights to the minerals that are under their property. Parties, such as oil companies, can purchase, or more commonly, lease a person's mineral rights in order to drill for the minerals under their property. This is productive for the mineral rights holder because if the company is able to extract minerals, then the holder is paid royalties based on a predetermined percentage that is listed in the lease. Some of these mineral rights holders are unhappy about the phaseout of oil and gas drilling in Los Angeles because they will be losing money that they gain from their leases and royalties (Raby and Partch 2021). It can be difficult to trace mineral rights holders because some holders do not sell their mineral rights when they sell their surface property which creates split deeds that become increasingly more complicated. Some ways to assuage the loss of funds from drilling for the mineral rights holders include supporting them in some manner in a Just Transition Fund, such as a short-term supply of money, or to buy out their mineral rights (Raby and Partch 2021). The city must carefully navigate the claims of mineral rights holders to avoid legal issues that could slow down the phaseout of certain sites.

Ownership of oil and gas sites are muddled to a greater extent by the use of Joint Operating Agreements between landowners and oil operators. In a Joint Operating Agreement, one party is designated the operator of the site, meaning that they are responsible for the drilling practices occurring on the site. The other party, or in some cases multiple parties, are typically the landowner who is hoping to profit from their land investment through drilling operations (CourthouseDirect.com Team 2018). In the case of Los Angeles' phaseout, this is an important complexity to recognize because in some instances, the oil operator is not the same as the landowner and so after the decommissioning and remediation processes are complete, the landowner must determine a new use for the land. For the sites where the operator and landowner are the same company, the land is more likely to be sold because the sole purpose of the land for the company was to extract oil and gas. Information about the numbers of separate owner and operator sites are not publicly available and could be a useful addition in Los Angeles to discern how likely these different circumstances are.

If An Oil Site is Not Cleaned - Risk of Brownfield Status

The risk in not promptly cleaning an oil and gas site after the oil operator decides to cease their drilling is that the site could become a brownfield. According to the EPA, there are over 450,000 brownfields in the United States and the EPA's Brownfields and Land Revitalization Program attempts to clean and reuse these sites. A brownfield is any site that is contaminated or potentially could be contaminated by a "hazardous substance, pollutant, or contaminant" which includes former oil and gas sites because of the possibility of contamination of the soil from drilling operations ("Overview of EPA's Brownfields Program" 2023). However, the term brownfield encompasses a much wider variety of sites than oil and gas wells, often they are found in core urban areas and industrial suburbs that have a history of manufacturing (BenDor, Metcalf, and Paich 2011). While most brownfields have moderate levels of potential contamination, there is a subset of sites that are highly contaminated and are deemed Superfund sites on a National Priorities List and there is separate legislation associated with their cleanup and redevelopment (McCarthy 2002). In the 1980s, the US EPA began to focus more on the redevelopment of brownfields as a way for urban areas, particularly industrial cities who had many residents leaving for the suburbs, to renew urban core areas and improve economic development (BenDor, Metcalf, and Paich 2011).

There are a number of obstacles that can present a challenge to completing a brownfield redevelopment project. A survey of cities published in a report from the United States Conference of Mayors in May 2006 stated that Cleanup Funds, Liability Issues, and Environmental Assessment were the three most prescient barriers. Cleanup Funds was the most pressing concern of cities, with 86% of respondents listing it as an obstacle (Recycling America's Land 2006). They also recorded a number of additional supportive services that cities believe would be useful in brownfield redevelopment including training in technology and performing a community needs assessment. Concerns with liability is a widely researched topic in this field, both in terms of financial backing but also for legal responsibility of cleanup. Banks do not want to be held accountable for the property and so often require extensive environmental assessments before they provide a mortgage to a project developer (BenDor, Metcalf, and Paich 2011). BenDor, Metcalf, and Paich point to a 1990 American Bankers Association survey which, "found that 62.5% of U.S. lending institutions had rejected loan applications solely because of the possibility of environmental liability" (BenDor, Metcalf, and Paich 2011). Moreover, the actual cost of cleanup is often difficult to determine because of the complicated nature of environmental standards. To properly remediate to the legal level will usually take multiple funding streams, including grants, loans, and private funding. Groups looking to redevelop a brownfield must look at state and federal sources of funding and regulation in order to understand the process they are undertaking, which makes it an endeavor that not many are willing to engage in (BenDor, Metcalf, and Paich 2011).

The Specificities of Oil and Gas Sites as Brownfields

One consideration in redeveloping oil and gas sites is how they differ from other brownfields. For instance, oil and gas sites are exempt from CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) through a "petroleum exclusion" passed in 1988 that allows the waste from crude oil production to be managed to a less stringent degree than other waste with similar hazardous substances as petroleum (Kelly 2021). This allows for issues such as abandoned oil and gas wells that emit toxic chemicals into the air to harm nearby communities without penalties towards the oil operator. There are many other examples of exemptions for the oil industry; hydraulic fracturing is not regulated by the Safe Drinking Water Act, many wells are not controlled by limits for air pollutants from the Clean Air Act, and the industry can shield the amount of toxics they produce because they are not required to report them under the Emergency Planning and Community Right to Know Act ("Free Pass" 2009). These kinds of exemptions signify the ways in which the oil industry has capitalized on their political and economic power to remove themselves from many of the laws that restrict the ability of sites to pollute past a certain level and to be more transparent about their procedures and the impacts of their actions.

The federal Environmental Protection Agency (EPA) does recognize the challenges inherent in oil and gas brownfields, which they call petroleum brownfields, and so there are specific resources for these cases. The EPA Office of Brownfields and Land Revitalization and the EPA Office of Underground Storage Tanks are the two main sources of information and resources for localities looking to redevelop a petroleum brownfield ("Solid Waste" 2022). While these offices offer many grants for cleanup of sites, there are eligibility requirements that limit the application of the funding. These include the site lacking a viable responsible party that could pay for its cleanup and the group that receives the funding must not be liable for the petroleum contamination. In California, there are many oil sites that do not have a responsible party, however the sites in LA that will be closed under this new legislation might not fall under this purview because they currently do have viable owners. Even the definition of what constitutes a petroleum brownfield can vary between the EPA and state requirements ("Solid Waste" 2022). These discrepancies can make it difficult for organizations or individuals that are unfamiliar with these regulations to understand where to look and how to apply for the correct source of funding if they are interested in redeveloping a brownfield.

Community Involvement in Brownfields

A significant part of how brownfields are redeveloped is how communities are engaged in the process. Superfund legislation, which occurred before brownfield legislation, was passed with community involvement in mind; there is the potential to create Community Advisory Groups, focus groups, and other chances for impacted residents to voice their opinions. When policy around brownfields began to develop from Superfund, community involvement was a major issue in the process (Ellerbusch et al. 2011). Engaging with an impacted environmental justice community is important whether or not it was an injustice in intent, when residents lived near the hazardous site before it was sited, or injustice in outcome, when residents moved to the area after the siting of the hazardous use or facility (Baden and Coursey 2002). However, cities also experience competing interests between environmental justice communities and private interests that see a profitable redevelopment project (McCarthy 2002). McCarthy argues the cities should recognize that "community members are uniquely qualified to contribute sitespecific knowledge during site assessment, workers trained for cleanup through governmentsponsored programs, employees for new businesses" (McCarthy 2002). In this way, community participation in the redevelopment process is not only seen as the morally right behavior but also beneficial for the long-term success of a site. Despite these advantages, many projects do not invest enough to significantly involve residents (McCarthy 2002).

Community Involvement in Land-Use Decisions

Including citizens in governmental processes has been a long-standing consideration in the United States. This part of the review will focus on how communities in this country have been able or kept out of participating in decisions related to contaminated land clean-up and reuse. Community involvement in environmental decision making has been thought of as a positive addition to decision making. Scholars recognize that community members are the ones who will live with the final product of a decision and can also understand how different aspects of the environment both physically and also culturally will affect the project (Ellerbusch et al. 2011). However, because frontline BIPOC and low-income communities are the main communities negatively impacted by oil drilling in LA, it is important to consider how these communities in particular will be considered in the decision making process of the redevelopment of the oil sites. Historically, communities with environmental justice issues in their neighborhoods have struggled to play a significant role in land-use decisions (Corburn 2017). Understanding how this will play a role in this policy phaseout in LA is valuable in recognizing how to effectively engage in community participation with different communities in the city.

To begin, the literature recognizes that there are a number of different levels of community involvement. One way to categorize different levels of citizen participation is through usage of Sherry Arnstein's Ladder of Citizen Participation, which she first wrote about in 1969. A crucial caveat to the use of the phrase "citizen participation" is that in some of these processes, residents who are not American citizens are also able to participate. Arnstein argues that the study of citizen participation is important because it is a way for groups with less political power to "induce significant social reform which enables them to share in the benefits of the affluent society" (Arnstein 1969). However, not all citizen participation gives citizens effective power which is demonstrated by the use of a ladder framework that lists citizen control, delegated power, and partnership at the top of the ladder and manipulation and therapy at the bottom. In the middle in the category of degrees of tokenism from bottom to top is informing, consulting, and placating (Arnstein 1969). These categories are crucial to consider when discussing citizen participation so that there is a more nuanced understanding of how the kind of participation is affecting the capability of the citizens to add or change the topic of discussion. For instance, in land redevelopment citizen control could look like full community ownership of land and discretion about its use. On the other hand, informing or consultation could simply suggest neighborhood meetings with the new owners about their plans but no requirement that their input is considered and addressed. This research project will consider how different communities in LA would like to participate in the redevelopment process and how these tools of citizen participation can engage community members in the manner that they prefer.

One reason that community members might struggle to participate in land-use decision making is in the difference between local and authoritative knowledge. In this framework, knowledge encompasses "perceptions, experiences, and values" of either the residents living near the contested site or those individuals participating in the redevelopment as part of their role with the government, a developer, or another outside stakeholder (Lehigh, Wells, and Diaz 2020). In the case of oil sites, there is the potential for a considerable distance between local and authoritative knowledge because of the many regulations that are necessary to consult in the cleanup and selling of the land. It is a complex and nuanced process that many residents will not understand, and their ability to participate could be compromised if there is not a concerted effort to bridge the knowledge gap. If the gap is not tackled as an issue then the priorities of government officials and private developers will be heard more than the goals of community members. What Ashwood et al. suggest instead is grounded knowledge, which examines how community members think about their own knowledge and connect it with the knowledge of others (Ashwood et al. 2014). The STAND-LA coalition and the many relationships that they have built in the last decade of organizing could be useful in preparing community members for establishing shared grounded knowledge to relate to each other in discussions of the redevelopment of oil sites.

Community Involvement in Combating Environmental Injustice

Environmental justice communities, such as the frontline communities living near oil sites in LA, have a particularly difficult experience becoming involved in land-use decision making because of the many barriers both presently and historically that environmental justice communities have faced in these circumstances. Patricia Salkin lists geographic, procedural, and social equity as three categories that environmental justice emphasizes in land-use decisions that have not always been awarded to environmental justice communities. However, community participation in developing land use plans is one of the ways to center environmental justice goals that Salkin highlights (Salkin 2004). In 2016, the California legislature passed Senate Bill 1000 which necessitates every city and county to include an Environmental Justice element within their General Plan meaning that now Los Angeles County and City also have Environmental Justice elements for their Plans (Early and Eng 2017). These Plans and the process of writing and executing them is one opportunity to involve environmental justice communities in determining land use in the region.

As was described in Background, the STAND-LA coalition has been a pivotal part of pushing for the closure of oil sites in Los Angeles and has done this with a specific public health and community focus ("About Us" n.d."). This reflects the values and priorities of other campaigns that fall within the environmental justice movement, which strives to alleviate the disproportionate burden of environmental harm and toxic exposure that low-income communities and communities of color face (Corburn 2017). Some methods used by environmental justice campaigns include recording both the past and present discriminatory practices, utilizing community-engaged research, and including measures of cumulative impact that demonstrate how low-income communities and communities of color experience a multitude of exposures and pressures that work in combination with each other (Corburn 2017). Each of these approaches was employed by the STAND-LA coalition, meaning that their campaign to end oil drilling used an environmental justice framing which is an important aspect to recognize because it situates the campaign within a broader movement. Understanding the fight to end oil drilling in Los Angeles as an environmental justice cause creates a specific framing for thinking about site closures and redevelopment.

This review focused on the two main topics of oil sites and community participation because this study connects these issues while thinking about the future of oil sites in Los Angeles. Delving into topics such as land ownership, clean-up, and community participation in this review was geared towards creating an understanding of the challenges that both the city and its residents will face in the implementation of the oil and gas drilling phaseout. There are many competing interests and visions for how this phaseout could occur and this research builds a narrative for who impacted frontline communities are in Los Angeles and how community engagement can be pursued around land use decision-making.

Methods

This research question will be addressed with qualitative methods, specifically semistructured interviews. This data collection was approved by Occidental College's Human Subjects Institutional Review Board on November 10th, 2022. While the project is primarily meant to accomplish the UEP Senior Comprehensive Project, it also aims to uplift the voices of impacted Los Angeles communities living near oil sites who have goals and hopes for the redevelopment of the site in their neighborhood when it closes. The objective of this research project is not only to elevate the perspectives of impacted communities, but also to consider them alongside the city's policy of phaseout to see where the city and community members are in agreement, and where there are gaps or disagreements about how the process of decommissioning, remediation, and redevelopment should unfold.

Semi-structured interviews were conducted with community members who have played a role in the campaign against oil drilling in Los Angeles, primarily STAND LA membership. The semi-structured format has been chosen for its ability to be both flexible but also create opportunities for more analysis than an open-ended interview (Leech 2002). For instance, some staff members work more in community organizing, while others have stronger qualifications in policy analysis and their specific focus is reflected in the angle of questions asked in the interview. I interviewed staff members with experience in four areas: cleanup, ownership, use, and community involvement. The list of interviewees included community organizers who have engaged in community vision processes around land development, policy analysts that can speak to subtleties in cleanup regulations and policies, and legal experts that know how to interpret disputes around responsibility and liability in cleanup (Chart 1). They were contacted through email and some of the names and emails were collected through a snowball sample.

Name of Role in Organization **STAND** Member Participant Organization Participant 1 (did Staff at Communities for a Better Environment Yes not disclose name) Alex Size Southern California Conservation Director at the No Trust for Public Land Andrés Gonzalez Yes (Strategic Program Manager for Environmental Justice at Liberty Hill Partner) Ashley Hernandez Wilmington Youth Organizer at Communities Yes for a Better Environment Damon Nagami No Senior Attorney in the Nature Program and Director of the Southern California Ecosystems Project at the National Resources Defense Council Hugo Garcia Campaign Coordinator for Environmental Yes Justice for Esperanza Community Housing John Fleming Senior Scientist at the Climate Law Institute at No the Center for Biological Diversity Maro Kakoussian Climate Justice Organizing Manager at Yes Physicians for Social Responsibility Los Angeles Michele Pritchard Senior Director for Strategic Initiatives at the Yes (Strategic Partner) Liberty Hill Foundation Nicole Levin Campaign Representative for the Beyond Dirty No Fuels Campaign for the Sierra Club

Chart 1: List of Participants and their Job Title

Richard Parks	President and Founder of Redeemer Community Partnership	Yes
Tianna Shaw- Wakeman	Program Lead, Environmental Justice for Black Women for Wellness	Yes

Results and Data Analysis

In total, from January-February 2023, 12 interviews were conducted ranging from half an hour to an hour in length. The interviews all took place over Zoom, were recorded, and their transcripts were uploaded to Taguette, a software system designed to tag text for content. Each transcript was coded and the list of codes was developed through picking of important topics and phrases from the research question and interviews. All participants are current staff members at organizations in Los Angeles that have been actively involved in the campaign to end oil drilling (Chart 1). The interviews were structured around four main concepts: cleanup, ownership, use, and redevelopment of land (Appendix 1). The responses of the interviewes to questions about these four topics will be explored. The three main findings that will be discussed below are listed in Chart 2:

1. Lack of enforcement of the polluter pays principle

2. Centering community-driven land uses

3. Engaging the community to learn their ideas for redevelopment

Chart 2: Main Ideas Represented with a Participant Quote
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Lack of Enforcement of the Polluter Pays Principle	"Agencies are like we're not responsible for that, it's that agency. And then that agency is like, well we're not responsible for it" (Levin 2023)
Centering Community-Driven Land	"I think what matters is, how can we center the

Uses	people that have been harmed for over 100 years by racist redlining and zoning codes that should not have been written, protecting oil drilling rather than people" (Hernandez 2023)
Community Engagement around Redevelopment	"Co-governance structure that brings the community to the table from the very beginning and makes sure that the city is working with the community to come up with solutions together" (Kakoussian 2023)

Strong Emphasis on the Polluter Pays Principle

The cleanup of oil sites refers both to the decommissioning of the oil wells and the remediation of the site itself so that it is safe to be reused. One concept that stood out from many of the interviews was an emphasis on the polluter pays principle. Eight of the twelve respondents specifically used both the words "polluter" and "pay" when discussing who should be responsible for funding the cleanup of the site, while the other four also emphasized that the operators pay for the cleanup while not using that particular language. For instance, Michele Pritchard stated, "It is in California law that the operator is responsible for properly plugging and abandoning the wells and remediating the property to a certain standard which is defined in State code" which although does not use the exact language of "polluter pay" conveys the same message as Richard Parks saying, "I think that any government agency should require the polluter to pay for the cleanup of the drill site" (Parks 2023; Pritchard 2023). This was a clear boundary of each of the interviewees; *they all felt strongly that the operator of the site should pay for the decommissioning and remediation process*.

While achieving the polluter pays principle was the primary objective of most of the interviewees in questions concerning the cleanup of sites, many were skeptical that the operators would properly clean the site without increased supervision and enforcement by relevant agencies at the city, county, and state levels. Participant 1 quipped that the oil industry does not

clean up sites out of the goodness of their heart, rather because there is a financial obligation and so this obligation must be significant and emphasized by regulators. They commented that, "We're anticipating that a lot [oil operators] will just kind of walk away and declare bankruptcy" (Participant 1 2023). Hugo Garcia, who has worked on closing the AllenCo oil site, said that "Behind the scenes, circumstances are that AllenCo [site operator] does not want to be on the hook for clean up and the money that would be involved with that" (Garcia 2023). *Because the interviewees do not believe that the oil operators would pay for the cleanup of the site without intervention, they rely on the regulatory agencies at the state and local level responsible for ensuring the cleanup of potentially hazardous sites to force the operator to fund the cleanup process.*

Enforcement Failure of Regulatory Agencies

A concern rooted in the past experiences of participants that was common, although not shared by all, was that state and local regulatory agencies had failed at securing the funds for cleanup and the proper level of cleanup from oil operators at past closed oil sites and that this could continue to happen with the eventual closure of all oil sites in the city. Maro Kakoussian declared that, "We need to get CalGEM to actually do their job. And then the City of LA needs to create a policy like a program to ensure that it's actually happening" (Kakoussian 2023). The emphasis on regulators enforcing laws was also coupled with the notion that they are not currently doing this to the best of their abilities. Tianna Shaw-Wakeman stated, "It does appear to me that...certain departments within LA, have more power than they are currently using to be able to either keep operators from breaking rules slash also punishing and finding operators who do break rules" (Shaw-Wakeman 2023). Part of the enforcement problem is understanding which agency is responsible for each step of the cleanup process. Nicole Levin described this issue by saying, "agencies are like we're not responsible for that, it's that agency. And then that agency is like, well we're not responsible for it" (Levin 2023). This passing of ownership of the different obstacles makes it difficult for the public to understand who they should be looking to in order to keep the oil operator accountable.

Additionally, Andrés Gonzalez called this problem of agencies failing to enforce cleanup "strategic incompetence," meaning that when governmental agencies want to enforce particular regulations they will do so, but in the case of remediating land, such as in the cases of Exide and Clean Up Green Up, the agencies will not thoroughly complete the necessary tasks (Gonzalez 2023). The fear is that if the oil operator does not pay for the full cleanup cost, then either the state or the new owner of the site is forced to fund the cleanup of the site before it can be reused. This makes it difficult for community groups or other nonprofit organizations to purchase the site because they are more likely to have limited funds as compared to developers that might have the extra money available to pay for more cleanup.

Cleanup Should Happen to the Highest Standard

A similar concern of some participants was the level of cleaning that will happen at each site. There are different standards of clean that a site can achieve, and the level that a site is cleaned to impacts what type of redevelopment can occur. Participant 1 noted that, "We are hoping to see drill sites clean to a level that could accommodate housing or parks, you know something that would actually serve the community" (Participant 1 2023). However, much like the apprehensions about oil operators paying for the cleanup, there is also the worry that operators must be forced to clean up to the highest standard. This is especially because cleaning to a higher standard is more costly, as Alex Size remarks, "Depending on which threshold you have to meet, there are substantial differences in cost" (Size 2023). Damon Nagami also noted,

"They're [oil operators] not going to do the gold plated remediation, they're going to do as little as possible. So you need to make sure the agencies are in there holding their feet to the fire and making sure they clean up to the level that they're supposed to" (Nagami 2023). This harkens back to the earlier argument that regulators must enforce cleanup rules better, *in this case regulators must more stringently enforce cleanup standards*.

An example of insufficient cleanup hindering community use on land can be found at the Jefferson Drill Site. Richard Parks, who has been working with Redeemer Community Partnership to close down the Jefferson site, described how the city did not specifically state the level to which the site needed to be remediated to the oil company, which he believes should have been the highest - residential standard - so that housing can be built on the site. He states that in this case, "unfortunately it was the city who allowed the polluter to avoid paying to clean up their mess" (Parks 2023). Because of this, the site has not been properly remediated and the costs for fixing this problem will fall on the new owner of the site. This situation demonstrates why the participants were so adamant that local and state agencies need to better enforce cleanup fees and standards. *Inadequate enforcement by local and state government agencies is a barrier for community-based land ownership models, which is discussed later to be the goal of all of the participants.*

Lack of Clarity Around Multiple Potentially Responsible Parties

One point of confusion was if the oil operator and the owner of the land are different, is there a shift in who is responsible for paying for the cleanup. This is a more complicated situation than when the owner and operator are the same entity, and the answers from the participants reflected the nuance of the circumstances. Their lack of clear understanding about this topic suggests that this could be a point of contention or gray area in implementing the phaseout policy. For instance, Andrés Gonzalez argued that, "I always really lean towards the oil companies and the ones who have extracted it to take on the cost. But I would also say that it is on the landlord to also own up to some of these costs, especially when they've been reaping profits" (Gonzalez 2023). This comment started in alignment with the polluter pays principle, however the second part shows some hesitation that other actors might also be involved in paying for the cleanup. On the other hand, Maro Kakoussian said that, "My opinion would be that the oil operator, the one that's causing the harm, is responsible for cleaning up the harm" which is more directly affiliated with the polluter pays principle (Kakoussian 2023). Alex Size was the only participant who has direct experience with this issue through his work with the Trust for Public Land and he clarified that there is no clear answer to this question but rather that it depends on the leasing agreement between the oil operator and the land owner when the operator began to lease the land. In this agreement, the land owner and the operator will decide who is responsible for the site remediation, both financially and in terms of hiring contractors and coordinating with the government (Size 2023).

Another aspect of sites with a different land owner and operator that was worrying to some participants was the potential situation in which the operator leaves the site but the owner does not want to sell. In this case, the owner has the power to determine the new use for the site. Richard Parks remarked on this possible turn of events that, "Whether those sites get repurposed for a community use or not is really going to depend on the ownership structure of those sites and what the owners want to do" (Parks 2023). An example of a site like this is the AllenCo site where the Archdiocese owns the site and AllenCo Energy operates the site. A few of the participants discussed the reticence of the Archdiocese to work with local organizations to close this site in the past. *In these instances, community organizations must mobilize around* pressuring the Archdiocese or another owner to sell or reuse the land in a way that benefits the community. Alex Size acknowledged that although the property owner has the legal right to determine the new use of the land or who they might sell the land to, one of the most effective ways for the community to pressure the land owner to redevelop in a way that is beneficial for the community is to have a united voice that pushes one agenda and goal (Size 2023).

How a Lack of Trust Limits Partnership between CBOs and the Government

Throughout the interviews participants consistently maligned past practices of regulatory agencies in not getting oil companies to pay for cleanup, fix site violations, or to abandon idle wells. Maro Kakoussian claimed that, "Our regulatory agencies have failed the community because of the way it's been structured...it's designed that way so that you have the same practices in place that protect the oil companies to continue to do what they're doing" (Kakoussian 2023). This type of language signaled a lack of trust between communities, community organizations, and government. At the same time, some participants, including Michele Prichard, Participant 1, Ashley Hernandez, and Damon Nagami also mentioned positive experiences with the city and county in planning the ordinance. Participant 1 summarized this complicated relationship between communities and the government by saying,

There's a good faith effort by city officials to host webinars and meetings with community members but there's still sometimes that lack of trust, and it doesn't go anywhere, and I think city officials maybe compensating organizers and community-based organizations for their time, and really understanding what the communities wants and needs are, and what threats they're under and what they want to see moving forward. I think that could go a long way as well (Participant 1 2023).

This demonstrates that some are hopeful that they could be on a new path in terms of their relationship with local government, but that they are still wary of past mistakes that have left frontline communities vulnerable to negative health impacts.

Focus on Community-Centered Land Use

Chart 3: Id	deas for	Redevelo	pment of S	Sites
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Community Land Trusts	"That's why you have things like Community Land Trustsstart to hold land in communities for community purposes" (Nagami 2023)
Affordable Housing	"There's also attention in our communities around affordable housing" (Participant 1 2023)
Green Space	"Green space in a community that's very park poor" (Pritchard 2023)
Public Land Ownership	"I think that would be the preferable path, where the city purchases the land for public use for public good and works with the community living adjacent to the land to co-develop a vision for the future use of the land" (Kakoussian 2023)
Private Developer Ownership	"Maybe attract a developer that has some kind of a social conscience that would agree to a level of affordable units" (Garcia 2023)
Industrial	"We do not need more industry just to have more industry. We need spaces for our communities to thrive" (Hernandez 2023)

The participants were in agreement that community-centered land uses should be

prioritized in the redevelopment of these oil sites (Chart 3). Many spoke to the harms felt by the frontline communities living near the sites as a reason that the new use of the site should center community goals and wishes. Ashley Hernandez argued that, "I think what matters is, how can we center the people that have been harmed for over 100 years by racist redlining and zoning codes that should not have been written, protecting oil drilling rather than people" (Hernandez 2023). Others echoed her sentiment that many communities near oil sites have suffered because of their proximity and that new uses that do not continue to harm their communities should be prioritized. Participant 1 hopefully said, "This is the exciting part of the work right, is actually reaping the fruits of our labor and actually getting to create what we want to see" (Participant 1). Getting to the point where all the LA oil sites will be shut down is a goal that STAND-LA

coalition members and allies have been working towards for approximately a decade. Now, they have the opportunity to build something beneficial and wanted by the community in the place of a site that has caused significant harm.

Envisioning Reparations and Rematriation in Redevelopment

Some also spoke about broader themes of reparations, rematriation, and justice in thinking about how this land should be treated post-cleanup. Andrés Gonzalez discussed including both reparations and repatriation in thinking about the land in his response: "I would love to see a process where some type of exchange of those harms is undone…rematriation isn't talking about the return of something, it's talking about the return of a relationship" (Gonzalez 2023). One of the examples of rematriation he provided is a Land Trust, which is discussed later as a community-centered ownership model. In a similar vein, Maro Kakoussian argued that, "When we talk about reparations…addressing the roots of the causes of climate change…then that means looking at what the best use of this land can be for the community that's living around it" (Kakoussian 2023). These ideas suggested that in the minds of some of the participants, these oil sites in LA represent a history of environmental racism and that creating community uses of land is a part of repairing these harms.

Discussions like this have placed the STAND-LA coalition within the broader environmental justice movement. It is important to recognize the connections between specific campaigns and larger movements because organizers and activists, such as these participants, learn from the actions of others in social justice movements. Andrés Gonzalez and Tianna Shaw-Wakeman discussed how the STAND coalition could partner with other movements and organizations. Andrés Gonzalez pointed to the movement to redevelop the river as a struggle that STAND could learn from, stating that, "I think we can…understand from our comrades who are working around the LA River, and how they're thinking...on the river as a whole, and navigating the tensions between private entities as well as public agencies" (Gonzalez 2023). He saw the LA River project as an example of how an aspect of the environment can be thought of in its entirety not just in parts. Often the oil sites in Los Angeles are thought of individually, based on each one's circumstances, however Gonzalez is arguing that it could also be beneficial to think of all the land of these sites together and to base campaigns on that framework (Gonzalez 2023). Tianna Shaw-Wakeman also connected the work on ending oil drilling in Los Angeles with other movements, "How it relates to all of the other incredible social justice advocacy that's happening concurrently... all of the other aspects of justice and racial justice and equity that play a role in the work we do" (Shaw-Wakeman 2023). These comments demonstrate the ways in which the participants are thinking about their own work and how it is associated with the work of other movements. Moving forward, these connections could be useful when the participants are faced with problems that they have not worked on before because the campaign is moving into a new phase with the implementation of the ordinance.

Potential Community-Centered Land Uses

The main uses of the land that were highlighted by the participants were green space and affordable housing. These are issues that many felt, in conversations with constituents, are important to their communities and that the addition of these uses would benefit them in some way. Ashley Hernandez spoke strongly against another industrial use on the land, saying that "These sites need to be sites that can be reused and enjoyed by the community. We do not need more buildings just to have buildings. We do not need more industry just to have more industry. We need spaces for our communities to thrive" (Hernandez 2023). Parks and green spaces were discussed in the context of South LA and Wilmington being park poor areas of the city. Hugo

Garcia also brought up the need for affordable housing and services for the unhoused community including mental health and drug use treatment (Garcia 2023). From a different angle, Maro Kakoussian mentioned community-owned solar projects, food farms, or resiliency hubs as other options for land use (Kakoussian 2023).

However, what was overwhelmingly important for the participants was that these uses would be decided not by them, the government, or a developer, but by the communities that have been impacted by the drill site in their neighborhood. While these uses above were mentioned by the participants as potential options, they were clear that community members should determine the use and that these uses were ones that they had heard community members bring up in past conversations. The participants were in agreement about the driving mission behind the redevelopment which is community-centered land use, however there was a more diverse debate over the way in which this kind of use could be achieved, these options are discussed below.

Public Land Ownership Option

Public ownership of land was an option for some of the participants to achieve these community-based land uses. Maro Kakoussian, for example, argued for "public purchasing of the land...and then working with the community to co-develop a vision for the future use of the site" (Kakoussian 2023). She saw public purchasing as an opportunity for the government and impacted communities to collaborate on a redevelopment process that centers community visions backed by the resources of the government. Similarly, John Fleming said that, "It [former oil site] can be held in trust for a community in order to still be in service to that community" (Fleming 2023). Damon Nagami also brought up the option of a land conservancy held by the state, such as the Santa Monica Mountains Conservancy as a public land ownership option that could increase green spaces in the region. He was more skeptical of the city purchasing land

because the Parks Department is underfunded and it would be a significant project that a City Council Member would have to really push through (Nagami 2023). Similarly, Ashley Hernandez did not see a public ownership of land as feasible based on the present circumstances of the sites being owned by private entities (Hernandez 2023). Nicole Levin also brought up the issue that if the government pays the oil operator for the land, then taxpayer money is going to oil companies that have hurt communities (Levin 2023).

Each of the participants who thought that it would be difficult to get public land ownership of sites brought up different valid hesitations about the process. Their apprehensions should serve as caution if this path were to be followed because there are obstacles in the way. *At the same time, dedicating public funds to community-centered land uses is a significant way to avoid the issue of community-based organizations or other non-profits having to raise enough funds to compete with private developers for the purchasing of sites.*

Community Land Trust Model

The Land Trust concept was also brought up by eight of the participants as a way to secure power for the neighborhood residents in determining uses and in decision-making processes. A Community Land Trust is an ownership structure in which a Land Trust, a nonprofit organization, purchases land and then operates its use in a community-driven and centered manner. For instance, the Los Angeles Neighborhood Land Trust buys land to build parks in park-poor areas of the city and develops the park based on a community development model ("Project Updates" 2022). Many of the participants were intrigued by this option because it is more autonomous than the public option, which would involve negotiating with the government about different aspects of the site. It is also inherently local and community centered as opposed to private development whose bottom line is profit-driven and developers are not necessarily rooted in the community. Participant 1 explained this distinction by saying, "there are different mechanisms you can use to make sure that a piece of property isn't just passed around like an asset...but actually just preserved and used by the community and designed and shaped by the community" (Participant 1 2023). Ashley Hernandez also brought up the option of, "If the city of LA is willing to give this piece of land to the Land Trust there's definitely another set of opportunities and alternatives that could happen", so the city purchasing the land and giving it to a Land Trust organization is another opportunity for governmental partnership (Hernandez 2023).

Mixed Opinions on Private Land Ownership of Sites

Most were cynical of a future where a private developer is able to purchase the land and build housing or another type of building. Ashley Hernandez expressed frustration with developers saying, "You know we've seen time and time again in this community that people come in because they have money, and then they buy stuff, and it's that entitlement, it's that elitism...you have money...but you don't have to be here...because it's our neighborhood" (Hernandez 2023). Andrés Gonzalez went further and suggested that there is currently a burgeoning partnership between real estate companies and oil operators that would negatively impact the redevelopment of the sites if it were to materialize (Gonzalez 2023). Damon Nagami called a market-rate housing developer buying these sites as the "worst case scenario" because it could " drive up displacement, gentrification in the community and...squandering an opportunity for open space to be affordable housing" (Nagami 2023). The threat of gentrification and displacement was brought up by a few participants as a worry for when the site is redeveloped. These reactions to private development of land are understandable considering that returning the land back to the community is more in line with environmental justice values than private land ownership which is not inherently accountable to the community nearby.

On the other side, Michele Pritchard was optimistic that even if the cleaned up land was sold to a developer, the city or county of LA could negotiate with the developer to push for certain community uses or a higher number of affordable units if they are building apartments (Pritchard 2023). Participant 1 also believed that there could be requirements for the construction of a certain percentage of affordable units and the preservation of the community if a developer purchased the land (Participant 1 2023). Hugo Garcia saw opportunities to "work with developers and in some cases, force them [developers] to accept a certain amount of profit versus 100% non-affordable housing" so he took a community organizing approach to pressure developers to meet certain demands (Garcia 2023). These strategies are useful to develop in case the city does decide to allow private developers to purchase these sites because then communities and community-based organizations can demand certain stipulations to each purchasing agreement. However, Richard Parks' concern with mandating actions to developers is that if the developer is being forced to take these steps, such as community outreach, they could do it in a weak or inauthentic way that does not achieve the purpose of the mandate (Parks 2023). If this becomes the case, then again organizing campaigns can be harnessed to point out the flaws and adapt the requirements to be more effective.

Utilizing Community Plans and Rezoning as a Tool

Another larger-scale option considered by the interviewees was changes to zoning laws, Community Plan updates, or General Plans. Damon Nagami offered one alternative as, "I think you could potentially have a general plan that could say, okay, you have a former model drilling site, you need to have these kinds of community notifications and processes in place" (Nagami 2023). Rezoning or using Community or General Plans is a way to establish certain priorities and principles in the development of all the former oil sites, not only those with community organizing around the specific sites. Participant 1 thought that, "promote rezoning of maybe previously industrial or hybrid industrial drill sites through community plan updates...promote, you know, cleaner, healthier uses" (Participant 1 2023). Some of these priorities are mentioned in the Los Angeles County Just Transition Task Force which was also underscored by a few of the participants, such as Michele Pritchard, as a guiding document in this work. Michele Pritchard noted that one of the recommendations of the Task Force was

for both the city and the county to consider an amendment to the General Plan that would require any former oil drilling site to come into conformance with a certain set of principles around community safety, environmental justice, tribal governance, and so forth" suggesting that this is an idea that has been presented to the city as an option for the implementation of the phase out (Pritchard 2023).

Richard Parks also mentioned that, "some policy on rezoning the land for community use, such as parks, would be a way of recompensing...benefiting a community that has been harmed" (Parks 2023). *Rezoning is a useful option because it will set standards for all sites in the region. However, it is also a more significant commitment for the city to make because it is a long process to amend Community Plans.* Moreover, deciding what the sites will be rezoned as is complicated because different communities are in need of different uses so if all the sites were rezoned for residential, for example, then communities who would have liked to see a park or space for local businesses would not be able to have their vision enacted.

Communication vs. Participation in Community Engagement

A characteristic of community engagement that was important to some of the participants was informing communities about the complex process of closing down these sites. This is different than engaging with community members about choosing a use for the land, rather it involves keeping the public up to date on what is happening at the site near them. *Transparency and active communication from the government to residents about timeline, process of cleanup and other relevant information was key in the minds of many of the participants.* Nicole Levin discussed their experiences with the county as frustrating at times, stating, "I just think that the county...city is not necessarily meeting people where they're at" (Levin 2023). Barriers to achieving productive community engagement that participants had witnessed in the past included the complexity of the topics and difficulty in describing them to the public. Participant 1 brought up community webinars that were hosted by the STAND coalition as a way to disseminate knowledge about the ordinance and its implementation (Participant 1 2023). Ashley Hernandez also highlighted forums, door knocking, and billboards as other avenues of community members, such as in-person, virtually, and in the mail, is useful because it can help capture a wider group of people and offer different levels of participation that community members can choose from.

Community Visioning Processes

Community visioning workshops and meetings were frequently brought up by respondents as a way of engaging with the community around a potential use for the site. Some, such as Hugo Garcia and Richard Parks, had done this kind of work around the Jefferson and AllenCo sites. Hugo describes this process for AllenCo that took place a few years ago saying,

We've had several community meetings with residents and talked about that and identified areas that they would support. And we even did a community-wide University Park visioning at an elementary school. We also did a voting by dots on that kind of thing in an auditorium. So we let them put up what they wanted to see, it was a very democratic process. And we wanted to get the community's voice in there (Garcia 2023).

These past processes give examples of how community visioning processes could occur around each oil site in the city and county. This is a level of participation beyond sending out flyers or hosting a meeting to inform the community about what will happen at the site. Rather, with this process community members have the power to determine the new use of the site. Many of the organizations interviewed are looking to or have already started community visioning processes on their own with their constituents about what they would like to see happen with the oil sites in their neighborhoods. For some it is still early after the ordinance has passed to begin outreach work because they are still fighting for a shorter phase out period and against lawsuits from the oil industry that are attempting to stop the ordinance.

The Unclear Role of Government in Community Engagement

While community visioning processes were widely agreed upon by participants, what was less clear was who should be leading this kind of outreach, community-based organizations or the government. When pressed about the role of government in this process, Hugo Garcia argued that, "It would help if the city and the various departments would hire people from the community...do the community outreach and run the meetings with the city there to see what the community wants...because they know how the internal workings of the city work" (Garcia 2023). Maro Kakoussian also advocated for collaboration between communities and the government, specifically a "co-governance structure that brings the community to the table from the very beginning and makes sure that the city is working with the community to come up with solutions together" (Kakoussian 2023). Ashley Hernandez echoed these sentiments saying, "They really need to stand behind us and follow our leadership and work collaboratively with us....That's the goal, right, that we can work collaboratively, and create opportunities and spaces for our residents to be heard" (Hernandez 2023). These remarks demonstrate that communitybased organizations are looking for partnerships with local government in engaging communities. The potential for collaboration is promising considering governmental departments would be able to provide the resources to host events for community engagement while community-based organizations have the connections within the community to convince people to show up and be involved in a process like this.

Recommendations

There are a number of avenues that can be pursued to address the goals and challenges brought up by the participants. These recommendations are directed towards relevant local and state government entities, including the city and county government of Los Angeles, the State Water Control Board, the Department of Toxic Substances Control, and the California Geologic Energy Management Division (Chart 4).

Chart 4: Recommendation	ons
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Recommendation	Issue that it is Addressing	
Invest in government enforcement of cleanup	Concern that operators will not pay for thorough cleanup of sites	
Build new avenues through which communities can participate in picking a new land use for sites in their neighborhoods	Prioritizing community-centered land uses derived from engaging with the impacted community	
Interagency task force for cleanup	The current regulatory environment is unclear and involves many agencies who need more communication and accountability measures	
City should get involved in redevelopment: purchasing the land or helping to support a Community Land Trust to purchase the site	Achieving community-centered land uses	
City could rezone all oil sites with certain standards and conditions	Ensuring a high level of clean-up and a community-centered land use	

How to Increase Government Enforcement

One of the major concerns brought up by many of the participants was that even though laws exist that mandate the oil operator should pay for the proper cleanup of the site, the enforcement of these laws by the authorities is lacking. Some participants brought up past experiences with the government failing to protect communities from harm as a reason to be distrustful that the cleanup process, both in terms of collecting funds and in mandating the highest standard of clean, will occur successfully. This is not the first time in which regulatory agencies have been criticized by the environmental justice movement for its insufficient execution of their responsibilities. Regulatory failures have happened at all levels of government: nationally, at the state level, and locally. *In this case, all three levels of government are involved in some aspect of the cleanup process meaning that not only does each agency have to fulfill their part in the operation, they also have to coordinate with each other to share information and keep the proceedings running smoothly.*

There are concrete steps that government agencies in California could take to better enforce existing regulations. These include:

- 1. Direct resources towards increased staffing to monitor more sites. One of the concerns is that Los Angeles is going to close many sites in a relatively concentrated period of time and so if the system in place to regulate the closure of sites is already not functioning to the best of its ability, *then there will need to be increased capacity to handle the increase in site closures*. There has been a recent influx of money from the federal government related to cleaning up orphan wells. Bolstering staff members assigned to not only clean up orphan wells, but also other oil site cleanups could be one use of these funds.
- 2. Force operators to put funds aside for decommissioning and remediation. This was brought up by Participant 1 and John Fleming as a way to ensure that more funding is available for cleanup when the site is closed down. They also mentioned that operators are already meant to do that at the state level. However, the argument for increased bonding, as this process is called, is that the current system has been insufficient in providing enough funding for a thorough cleanup (Fleming 2023; Participant 1 2023). Knowing that all the sites in Los Angeles will be going through this process in the

relatively near future, there must be increased accountability measures to secure enough funding from the operator before the site begins the operation of shutting down. In the case of operators that have existing leases in Los Angeles and so have already paid their bonding requirements,

The lack of trust between community-based organizations and government agencies stems in part from the perception from community-based organizations that the government is not protecting them and enforcing regulations geared towards public safety. *One way to build more trust is to demonstrate to the organizations that the state is committed to a safe and thorough cleanup process by building up enforcement mechanisms*. These recommendations above provide a place for the state and city to start in establishing trust.

Involving Community Members in Clean-Up Accountability Measures

Another way to work towards more efficient and thorough cleaning processes, is to create Community Oversight Boards for community members to sit on to monitor the decommissioning and remediation of oil sites in Los Angeles. This was an option discussed by Andrés Gonzalez in his interview, although he cautioned that Community Oversight Boards can become more symbolic if not given sufficient power (Gonzalez 2023). These Boards, if developed properly and granted power, could serve as an accountability measure for the agencies in charge of guaranteeing that the site is cleaned properly because the agencies would regularly deliver updates and reports to the Board. Members of the Boards could include impacted community members, community-based organization members, and other community leaders. Some potential roles for the Boards include holding agencies and the oil operator accountable to certain timelines for decommissioning and remediation, participating in regular meetings with staff members for briefings on the site, and ensuring that soil testing is done regularly and thoroughly to guarantee clean-up to the highest standard.

Improving Collaboration Between Agencies

Not only should community members be involved in this process, there must also be better collaboration between the agencies that each play a role in the cleanup of a site. Hugo Garcia described a currently operating interagency task force that is made up of many different state agencies and community stakeholders to deal with the violations at the AllenCo oil site and to discuss how the site could be closed down (Garcia 2023). The creation of a task force was also brought up by Michele Pritchard as a way to make the complexities of the closure and redevelopment process more transparent and easier for the public to follow (Pritchard 2023). Because city, county, and state agencies and departments will all need to be involved at different moments in the cleanup and redevelopment process, a taskforce for site closures in the region that includes relevant government entities and community members who can bring the voices of the impacted community to government decision making seems like a useful addition. This task force could meet regularly to discuss where different sites are at in the cleanup and closure process and how each agency's responsibilities are being enacted at these sites. The members of the public could convey the concerns of the communities in these meetings because community members are the ones who are seeing the changes to the oil site on the ground and in their neighborhood.

Including Community Members in Decision Making

This taskforce and other agencies must also create communication strategies for informing the public of what is happening at each site. The participants named a number of different options including webinars, flyers, billboards, and in-person meetings that could be used by the government to let communities near oil sites know how the site will be closed down and what will happen to the land after it is cleaned. However, community engagement must not stop at communication, but rather should include the local government listening to community members in discussions about how they would like the land to be redeveloped and then attempts by the local government to create that development however possible. An important tool that should be used in this process are community visioning events. A critical aspect of this, as discussed by the participants, is for the government to partner with a community-based organization in the area of an oil site, if one exists, to reach out to community members to participate in the engagement process. Community-based organizations understand the neighborhood, its particular needs and differences, because they have been on the ground working with them while the government operates on a higher level. This partnership is consequential not only because it will improve the community engagement process, but also because it will continue to work to improve the relationship between communities and government in LA.

Determining Land Use

There are a few different paths that the city and county could follow in deciding what will happen to the sites after they are cleaned up. If they choose to take no action then the site would be sold to the highest bidder, which presumably would end with many developers purchasing these sites who might build housing or other new construction on the land. The downside of this path is that it does not prioritize a community-centered land use and instead allows the developer to determine the use of the land. If the city wants to push developers to include certain items or engage with the community in some ways, they could create a set of standards that all developers would have to follow when redeveloping an oil site. These standards could include mandating different forms of community engagement including hosting an in-person or virtual meeting or sending flyers and mailers to all homes nearby. They could also involve requirements for affordable units if the developer is constructing housing or a chance for local businesses if they are developing retail space. These options exist within the confines of the traditional land ownership model that currently exists.

Public land ownership and Community Land Trusts are two ways to take the land of these sites away from profit-driven land ownership. While there were mixed opinions among the participants about how possible it would be to have large-scale public land ownership of these sites, the opportunity for the city and county to collaborate with communities in this way is not a chance that should be missed. If facilitated correctly, public land ownership could be the way that many communities in LA, not just those communities with dedicated community-based organizations in their neighborhoods, can be a part of creating a community-centered land use at these sites. The Land Trust model is the highest level of community engagement and participation, but it requires significant amounts of funding, community buy-in to the project, and a dedicated non-profit organization that would run the Land Trust. This seems possible at some sites in Los Angeles but not all and so public land ownership serves as a useful option for all communities. The city could begin preparing for potential land purchases by dedicating more staff to finding grants and other funding opportunities as well as outreaching with community members, as described above.

Rezoning

Rezoning is also an important tool both for mandating cleanup standards and in setting aside this land to be redeveloped in certain ways. If all the oil sites in Los Angeles are rezoned to residential or open-space, then strict cleaning standards could be required for these newly zoned spaces. This is a way to cover all the sites in Los Angeles under the same cleanup guidelines and not have to negotiate for a high cleaning standard at each site. It also would ensure that none of the sites get redeveloped to a new industrial use which would place a similar burden on the nearby community that the oil site did. Rezoning could happen throughout the city and county or also only in specific Community Plans where the community's opinion on the matter is solicited and considered in the decision. Rezoning is one of the strongest options available for ensuring community-centered land uses that are specific to the needs of each community living near a site while also creating standards that can be applied to cleanup throughout the region.

Conclusion

The goal of this study was to understand what community activists who have been involved in the campaign to phase out oil drilling in Los Angeles consider to be their goals in the cleanup and redevelopment process of oil sites which will be closing in the region. When the STAND-LA coalition began its work in 2013, many people said that they had no shot in winning a battle against the oil companies of the region. The coalition members and their allies chose to focus on building the world that they wanted to see, including a full phaseout of oil and gas drilling at both the city and the county. Now, they can also begin to act upon their goals of what they want to see happen with the oil sites. This project illuminated what these goals are and some possible avenues of reaching them. Twelve community leaders and activists were interviewed about their thinking around the cleanup, potential uses, and ownership model of oil sites and how communities living near each of these sites should be engaged in the cleanup and redevelopment process.

While different participants had different strategies, the foundational goals of each of their proposed plans were the same. The main argument of the participants was for the city and county to prioritize thorough cleanup to the highest standard paid for by the oil operator, and the creation of community-centered land uses whose use is decided on by the community through community engagement processes. Some of the most important conclusions that can be drawn from their ideas is that government regulators need to improve enforcement of cleanup fees and standards, there needs to be partnerships between community-based organizations and the government to engage with community members about what use they want at the site near them, and that rezoning all oil sites, public land ownership or the Community Land Trust model are highly preferable as opposed to private developers purchasing the sites (Chart 4).

Limitations

For many of the participants, this conversation around the future of the sites could be considered premature because they are still fighting for the ordinance in court and are pushing for a shorter amortization period than twenty years. This study could have taken place more into the future when these two issues have been concluded and the participants and their organizations have had more time to sit down with their community and ask about potential land uses and strategies for redevelopment that they would prefer. Additionally, this research focuses broadly on each of the four topics listed in the research question (cleanup, land ownership, land use, and community engagement). Further research could be done in more depth into each of these topics because they each contain more nuance and depth than could be explored in the scope of this project.

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Appendix 1:

Interview Questions:

Do you consent to this interview being audio recorded?

Thank you for participating in this interview. It will take approximately a half hour and will address issues of redevelopment of oil and gas. As the city of Los Angeles drafts an ordinance declaring oil and gas a nonconforming land use, I am interested to learn what impacted communities in LA are hoping to see happen with the oil or gas site in their neighborhood specifically in terms of cleanup, ownership, use, and community involvement.

Beginning of each interview:

- Please state your name
- What is the name of your organization
- Please describe your roll with the organization and your position
- What is the role of your organization in oil and gas drilling in LA?
- Has your organization played a role in the phaseout policy process? What was it?
- Have you read the current draft policies about the phaseout of oil and gas drilling in LA?
- What do you think are important issues that the draft policy needs to tackle?
- If you have any, what are your primary concerns with the draft policy as it stands now? What are aspects of it that you think are useful and thorough?
- How would you change the current policy if you could? Are there things that you think are missing?

Ownership and Use:

- Would you like for the land to be owned in some way by the community? What are potential options for community ownership that you know about?
- If it is owned by the community, what do you want the land to be used for?
- How would the community be involved in planning for a potential use?
- If you do not want community ownership of the land, are there potential owners that you would like to see redevelop the land?
- Are there uses of the site that you are most hoping to see? Are there uses that you would really not want to happen?

Cleanup:

- How do you think the financing of the cleanup of the wells and the site itself should be regulated?
- Who do you think should be responsible for ensuring that cleanup happens to the proper level?
- Who do you think should pay for the cleanup of the site?
- What are other important considerations in cleanup that you hope the city thinks about?
- Have you ever been involved in a hazardous site cleanup process? What are some lessons that you took away from that experience that can be applied to the situation with oil and gas sites in LA?

Community Engagement:

- What does your organization want to see in terms of community engagement and participation in the cleanup and redevelopment process? What role does your organization want to play in this process?
- Has the city engaged your organization or your community in planning the drafting of the phaseout policy?
- What kind of engagement would you like to see from the LA city and county government to ensure community involvement in land use decision making?
- What are the barriers that make it difficult to participate in these kinds of decision-making processes?
- Do you think communities can use organizing strategies and tactics to influence local government decision-making? How and what types of strategies?
- What makes community participation difficult? How can local government facilitate an easier or more efficient process?