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Urban Oil Afterlives: Reckoning with Risk and Responsibility in the Los Angeles City Oil Field

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**Urban Oil Afterlives: Reckoning with Risk and  
Responsibility in the Los Angeles City Oil Field**

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Institute for the  
Study of  
Societal Issues

## **Urban Oil Afterlives: Reckoning with Risk and Responsibility in the Los Angeles City Oil Field**

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For over a century, Los Angeles (LA) has been the site for the extraction, refining, and consumption of vast quantities of petroleum. Yet as active drilling wanes, as land becomes increasingly scarce, and as affordable housing shortages reach record levels, cities must confront the legacies of oil production. In Vista Hermosa, a neighborhood a mile north of downtown LA, residents have sought to decommission hundreds of wells in one oil reservoir, the “LA City Field.” According to residents, the wells buried alongside their homes, schools, and parks are dangerous despite not producing oil for decades. Law co-produces urban infrastructures like oil wells, and with those infrastructures, new kinds of uncertainty and risk. This article analyzes the foundational role of law in creating this legacy of deserted urban oil wells; the work of residents to make visible Vista Hermosa’s petroleum past; and the effects of rapid real estate development in the neighborhood.

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## Introduction

In October 2023, advocates representing a coalition of 108 groups gathered for a press conference in the Vista Hermosa Nature Park. Against the backdrop of downtown Los Angeles, they demanded that California Governor Gavin Newsom make “polluters pay.” They called on Newsom to sign the Orphaned Well Prevention Act (AB 1167), a new law which aims to ensure that fossil fuel companies clean-up their oil and gas wells. The bill’s author, Assemblymember Wendy Carrillo, acknowledged the community residents who have been “risking their lives by inhaling methane evaporating from the at least 200 uncapped oil wells that are located in this surrounding community,” including in the very park hosting the press release.

For over a century, Los Angeles (LA) has been the site for the extraction, refining, and consumption of vast quantities of petroleum. With 68 named oil and gas fields and over 12,000 wells, no place on earth has so many wells so close to so many people. State and local authorities have recently passed new laws constraining urban oil production. These limits come after years of mounting pressure from frontline communities living next to oil operations and emerging California-specific research on the negative health impacts of wells (González *et al* 2022, 2023, Shamasunder *et al* 2018, 2023). The City of Los Angeles, Culver City, and LA County, for example, have banned new oil drilling activities while the state legislature has, in addition to AB 1167, mandated a 3200-foot buffer zone between new wells and “sensitive receptors” such as homes, schools, and hospitals. Despite these recent reforms, Californians will continue to be entangled with hydrocarbons long after production ends, particularly through the thousands of oil wells that remain embedded in the landscape. Through these wells and the legal, financial, and political systems that produce them, oil will shape the world far beyond the dismantling of fossil fuel production (Szeman 2016).

Research, advocacy, and policy responses have largely focused on active production—a narrow window of time in the full life cycle of oil wells. However, wells have significant environmental, financial, and public health impacts even when they are not actively productive. In California, oil production peaked decades ago and has been declining ever since. Yet many wells are not decommissioned after production ends—they remain “idle.”<sup>1</sup> In California, that means that they have not been active for at least two consecutive years but are not “plugged and abandoned” in accordance with current state regulatory standards. State leaders anticipate that as California decarbonizes its economy, an increasing number of wells will become idle. Where operators desert wells (often through bankruptcy), the state regulator can declare them to be “orphan wells.” As a result, responsibility for cleanup shifts from the operator to the state. In California, that authority lies with the California Geologic Energy Management Division (CalGEM), formerly the Division of Oil, Gas, and Geothermal Resources (DOGGR). In the LA Basin, unplugged wells are particularly problematic because they are located within densely populated urban areas. As production wanes throughout the LA Basin, as land becomes increasingly scarce, and as affordable housing shortages reach record levels, cities must confront the legacies of oil production.

This article contends that law coproduces urban infrastructures, and with those infrastructures, new kinds of uncertainty and risk, which dramatically shape the possibilities for creating and sustaining livable communities. Empirically, I look to the residents of Vista

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<sup>1</sup> A note on terminology: I use “decommissioned,” “remediated,” and “capped” to refer to wells that have been “plugged and abandoned” (the technical term in California)—i.e., closed by their operator or by the state according to regulatory standards. I favor “decommissioned” because it reflects more common understandings of the term. “Deserted” wells, on the other hand, have not been decommissioned by the operator; this term refers to wells which the operator has failed to maintain and/or meet legal obligations, including some “idle” and all “orphan” wells.

Hermosa—a diverse, historically working-class neighborhood just a mile north of downtown Los Angeles—and their efforts to decommission hundreds of wells in one oil reservoir, the “Los Angeles City Field.” The oil field contains some of the oldest wells in the LA Basin; most wells there are idle and many are also presumed to be long deserted by operators. For over a decade, Vista Hermosa neighbors have filed complaints to state and local officials about rotten smells and illnesses that they attribute to long-forgotten wells buried alongside their homes, schools, and parks. Through this work residents make visible the neighborhood’s petroleum past and its implications for just, safe, and equitable redevelopment.

First, I build upon anthropology’s infrastructure scholarship to outline the foundational role that law has played in creating this legacy of densely-clustered, deserted oil wells. I consider the US property law system as well as the regulatory schema governing the operation and decommissioning of wells in LA—namely, state oil and gas regulations and local land use rules. Second, I examine the ongoing advocacy of a small network of neighbors who created the Vista Hermosa Community Group; I focus here on how they make the subterranean city’s wells known and perceptible through their “Vista Hermosa Oil Well Tour.” Third, I show the persistent risks of urban oil wells by examining the decommissioning history of two orphan wells capped in Vista Hermosa in 2016. These well remediations reveal three sorts of uncertainties that continue to shape risk in the oil field: gaps in well data, gaps in ownership histories and chains of title, and the proliferation of partially-responsible authorities. Finally, I show how rapid real estate development in the area is compounding the risks of environmental harm, displacement and gentrification, as well as the exclusion of existing residents from decision-making processes. In particular, I consider the impacts of neighborhood densification and the shifting of responsibility for well decommissioning from public authorities to private developers. In addition to the oil

well tour, I draw on material from 18 months of ethnographic fieldwork in the LA area, including in-depth interviews of Vista Hermosa Community Group members, state regulators, and local environmental justice organizations, participant-observation of the Vista Hermosa Community Group events, and document analysis.

### **The Legal Underpinnings of Oil Infrastructures**

The legacies of drilling and the legacies of law are directly intertwined; together, they define the distribution of oil wells in Los Angeles. Scholars establish that legal regimes enacted through contracts and financial institutions (Appel 2019), property (Holston 1989), municipal rules and regulations (Anand 2017), lawsuits (Sawyer 2022, Sizek 2021), and corporate social responsibility (Barry 2013) shape infrastructure. I suggest two analytical interventions, however, to expand ethnographically and historically-grounded approaches to law and infrastructure. First, I focus on the *decommissioning* of infrastructures rather than on their development, operation, repair, or failure—the topics most commonly explored in the infrastructure scholarship. Second, I show how law coproduces the long-term risks of these “idle” infrastructures. In particular, the problem of deserted wells cannot be understood without analyzing two related spheres of law: the unique property regime of the United States (US), which grants individual owners subsurface rights to land, and the jurisdictional distribution of power between local governments and the State of California over land use, on the one hand, and oil and gas regulations, on the other.

#### *Property Interests in Land*

The current oil well problem facing residents of the LA City Field is structured by the property law system. This starts with the dispossession of land from the Gabrieleño-Tongva, Chumash, and Acjachemen Peoples who have lived in, and managed, the greater LA Basin, known as Tovangar, for thousands of years. Under Spanish, Mexican, and US rule, land was stolen for missions and military outposts, ranchos, and towns (Cleland 1941, Fischer 2015).



Under the settler-colonial legal system, private individuals were granted surface and subsurface mineral rights. Colonial charters conveyed mineral rights along with the land although they required that a share of precious minerals be paid to the English Crown (Priest 2021, Pisani 1998/1999). Similarly, other early land laws in the US such as the Land Ordinance of 1785 included mineral rights; the result was that most lands that held minerals (at least in eastern states) were sold to private individuals as agricultural lands (Libecap 1978). Western frontiers, including California and Nevada, saw greater legal wrangling over land laws (including mineral rights) as a result of the gold and silver rushes (Ellison 1926, Libecap 1978, 2019). Ultimately, however, the development of oil and gas deposits across the US largely occurred on private lands, whose owners held title to both surface *and* mineral rights. While private individuals in other countries were also granted mineral rights, the United States is unique because of the sheer number of people who own mineral rights. As Jerolmack (2021:17) notes in his ethnography of fracking in Pennsylvania, “The United States is in fact the only country in the world where private individuals own a majority of the subsurface estate.” Nearly everywhere else, national governments retain ownership over oil and gas resources (Sabin 2004).

The American exception is also an expression of the idealized link between property and personal freedom. As Holston (2008: 115) notes, “It is the property right, above all other rights, that insures an individual’s freedom.” In the United States, private ownership of even the subsoil is the entrenchment of such freedom (Jerolmack 2021). Property is also a critical mechanism through which power and capital is consolidated (Gupta 2023, Harris 1993, Park 2021). In the context of drilling in the LA Basin, property played an essential role in the expansion of the oil industry and concomitant process of racialized urban exclusion (Cumming 2018, González 2022).

Here I aim to underscore the long-term effects of this property regime that enabled private individuals (along with corporations and municipalities) to own subsurface rights. As Sabin (2004: 206) notes in his history of the early California oil market, individual ownership of subsurface rights resulted in “[p]rivate competition for access to common oil pools” and thus “frenzied drilling and extraction across the country.” The courts applied the common law doctrine of “rule of capture” to wild animals, then to oil: simply put, the first person to take possession of oil owns it (Yergin 1991). The result was a literal race to the bottom: people sought to drill and capture oil before others did. Huber (2013: 45) notes that “[P]rivate property owners—sometimes hundreds of them—believed they had reasonable ‘property rights’ to an oil pool beneath the surface [...] the only rational response to this situation was to pump as much oil, as quickly, as possible.” The spatial consequence was that in the LA City Field, and elsewhere, early wells were drilled very close together as people sought to beat their neighbors and other leaseholders to the oil from the subsurface reserves.

Another significant effect of the unique US property system is the possibility of “split estates.” This is where two or more different owners have interests in a given piece of land: on the one hand, a possessory surface interest in that land, and on the other hand, an interest in what comes from that subterranean land. These interests are commonly severed through grants or leases, whereby a private fee owner conveys the surface to another party while reserving the underlying minerals, or vice-versa: conveying the minerals and reserving the surface estate. While Jerolmack contends that freehold title—whereby a single owner holds both the surface and subsurface rights—is the most common form of property ownership in the United States, he points out that millions of landowners have split estates, and therefore do not own mineral rights under their property. Thus, the right of individuals to own the surface *and* subsurface of land also

means that individuals can own the surface *or* the subsurface. Jerolmack argues that fragmented property rights have fundamentally shaped the fracking industry in Pennsylvania. I take this observation in a different direction with regards to the LA City Oil Field: split estates can exacerbate the challenge of identifying subsurface owners (and even the very existence of wells) with major, long-term consequences for urban redevelopment.

### *Regulations*

Law also distributes risk and responsibility—often through regulations. By regulations, I mean the different legal pathways through which oil wells are directly, or indirectly, governed. In California, legal authority over oil wells is held by two principal entities: i) the State of California through CalGEM, the Department of Conservation’s division dealing with oil, gas, and geothermal and ii) the local government, in this case, the City of Los Angeles (and to some extent, LA County).<sup>2</sup> CalGEM has explicit jurisdiction over oil and gas activities: it issues well permits, sets rules for drilling, production, and maintenance, and regulates the decommissioning of wells. In the next section I draw upon ethnographic data, interviews, and legal doctrine to describe the emergence of the state-level regulatory regime in the early 1900s and how it has been trying to catch up, on a *post hoc* basis, with oil operators ever since.

While the State of California has jurisdiction over *oil and gas matters*, local cities and counties have *land use* authority. In other words, local governments can create laws so long as they do not contravene state or federal laws. This gives local authorities enormous power to pass laws and regulations concerning land use. The city can use its land use authority to determine where oil and gas activities take place and ensure they are performed according to local health

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<sup>2</sup> Federal regulations (such as the Clean Air Act and the Clean Water Act) are also relevant, however, authority for their enforcement is often delegated to regional agencies.

and safety codes. For example, in 2022 the LA City Council prohibited all new oil and gas drilling activities and made existing activities a nonconforming use in all zones of the city.

In practice, this jurisdictional divide between local and state governments spawns a huge array of different entities with some decision-making responsibility for some aspect of wells, especially in urban areas. At the municipal level, decommissioning wells may involve Council Districts, the City of Los Angeles Emergency Management Department, the Mayor's Office of Homeland Security and Public Safety, the Department on Disability, the Department of Transportation, and the Los Angeles Unified School District. From the City of Los Angeles Public Works, alone, there may be several divisions involved in decommissioning wells. At the state level, besides CalGEM, there is also the California Environmental Protection Agency, the California State Water Resources Control Board, the South Coast Air Quality Management District, and the California Coastal Commission. County-level agencies like the Los Angeles County Public Health and private entities like telecommunication companies can also be involved.

The result of this regulatory landscape is an extraordinary number of different authorities with some element of responsibility; this leads to both a surplus—and deficit—of oversight over oil wells. The effect is summed up best by Richard Park, the president and founder of Redeemer Community Partnership, a Christian non-profit based in the neighborhood of West Exposition Park, who describes the regulatory regime as “illusionary.” He told me to imagine “a glass window with the hole in the middle [...] each shard represents a regulatory agency that has a very narrow purview.” The oil industry always talks about how regulated they are, in the sense that there are lots of rules and lots of different agencies, but according to Park, “The end result is

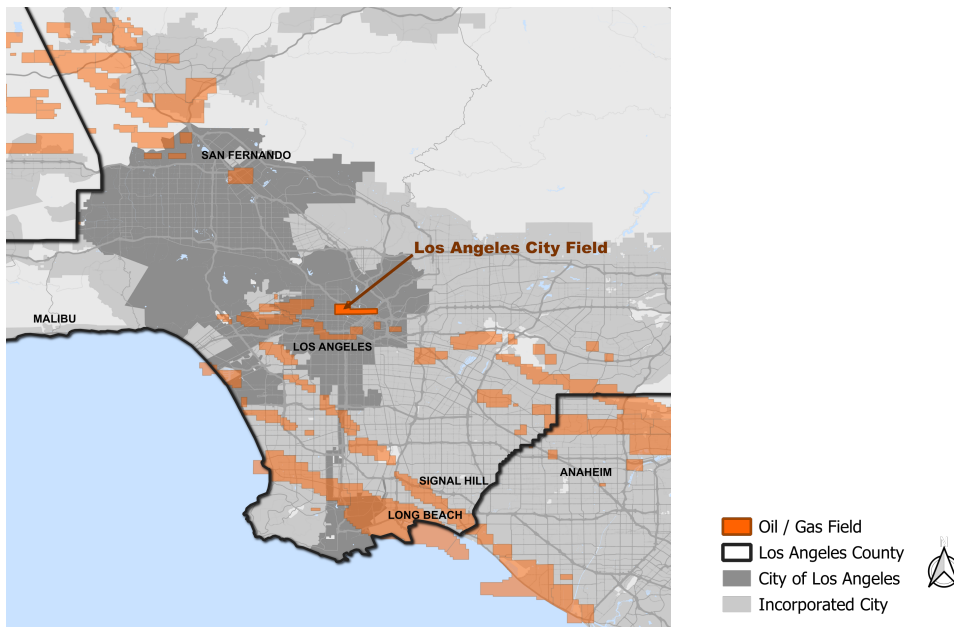
that no one really has a view of what’s happening.” Split estates can make this even more complicated by layering on different owners to specific properties.

What are the consequences of this regulatory surplus/deficit and how do residents living amongst these wells navigate this complex terrain? I analyze the ways that residents of one neighborhood, Vista Hermosa, organize to decommission wells and confront the regulatory and property regimes that shape the impacts of oil infrastructures today. Here I focus on one key organizing effort that they developed starting in 2021: the “Vista Hermosa Oil Well Tour.” I describe my own experiences of joining a tour in May 2022 and explain how this recurrent tour helps to reveal the problem of deserted urban wells and the stakes of decommissioning the field.

### **Touring Subterranean Los Angeles**

One early Saturday morning, I headed to the corner of Court Street and North Boylston Street for a Vista Hermosa neighborhood tour. It’s a friendly residential area northeast of Downtown Los Angeles with a mix of modest mid-century bungalows, a few heritage homes in the Queen Anne style, and rapidly expanding clusters of new “luxury” apartments. A high school athletic field sits to the east of Boylston Street, and the 101 and 110 freeways are just down the block. Travel one mile in any direction and you’ll encounter iconic LA spots like Dodger Stadium, the Disney Concert Hall, Echo Park Lake, and Chinatown. It’s also close to Yaanga, the largest of the ancestral Gabrieleño-Tongva villages, which connected present day downtown Los Angeles to the greater LA Basin through a vast network of trails. Around the corner from Court and Boylston is the Vista Hermosa Nature Park—the site of the AB 1167 press release and the first public park built in downtown LA in over a century. Completed in 2008, the park features meandering trails, lushly-shaded lawns, and one of the most photographed park benches in Los Angeles—a testament to the spectacular views.

What’s not obvious is that the tour meets in the heart of the Los Angeles City Field—a four-mile-long subterranean scar comprised of hundreds, if not thousands, of oil wells that stretch from Dodger Stadium west past Vermont Avenue. Unlike other parts of metropolitan LA where pumpjacks and refineries dot the urban landscape, there’s little apparent evidence that we stood (as our guides reminded us) in one of the most prolific oil basins in the world (Figure 1).



**Figure 1:** Map of the Oil and Gas Fields in the LA Basin (FracTracker Alliance)

I first heard about the tour through the Los Angeles hub of the Sunrise Movement, a nation-wide youth climate justice group. By way of Instagram, Sunrise LA invited people to join “[a]n interactive tour of LA’s forgotten oil wells and their health and environmental impacts.” I joined 40 tour participants—mostly twenty-something-year-olds involved in Sunrise or other local groups. Hugo Soto-Martínez, a labor organizer who at the time of the tour was running for the LA City Council, also joined. He has since been elected as a councilmember for the neighboring District 13—also located in the LA City Oil Field—on a progressive platform, which includes “capping and cleaning our district’s 500+ urban oil wells that are currently spewing toxic fumes and making our communities sick.”

Leading the tour were the three main organizers of the Vista Hermosa Community Group: Rosalinda Morales, Danny Luna, and Brenda Valdivia.<sup>3</sup> For over a decade, they had been calling upon city officials, oil operators, state regulators, and—as new apartments sprung up—developers to plug the wells underneath their neighborhood. In the course of that advocacy, they joined their local neighborhood council, surveilled and double-checked the work of developers and their consultants, generated media attention, and knocked on the doors of every entity responsible for oil wells—a bewildering patchwork of public authorities. The group also established the Vista Hermosa Oil Well Tour:

The [tour] was created and is run by the local community which seeks action. It was created out of lack of equity, responsibility, safety, and care for the low-income Angelinos [*sic*] who live on top of the Los Angeles Oil Field. [...] Vista Hermosa is a densely populated community and is targeted for even higher density. 100+ years later, the lack of care is evidenced by the largest amount of [deserted] uncapped oil wells we live on top of.<sup>4</sup>

Rosalinda Morales introduced herself, Luna, and Valdivia: “We are all born and raised here. My family has lived here for 65 years and three generations, so we know this area very well, and are committed to cleaning up our area. We are the people who have to live here daily and live with [the wells.]” Through the tour and other events, residents shared their personal stories about living in a neighborhood haunted by oil production: “horrible smells,” toxins in the soil, “strange” cancers, and respiratory and autoimmune diseases. The environmental justice literature emphasizes that the environmental, health, and safety disproportionately impacts of oil

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<sup>3</sup> People’s real names are used throughout the article.

<sup>4</sup> Posted to the Sunrise-LA Instagram account, dated May 11, 2022.

and gas impact low-income and racialized communities (González 2023, Pulido, Kohl and Cotton 2016, Walker 2009, Shamasunder 2018, 2023). Yet residents have been repeatedly reassured by public officials and developers that where they live, work, and raise their families is safe.<sup>5</sup> At the same time, the neighborhood has been experiencing tremendous change as single family homes and small multi-unit dwellings are replaced by much larger, denser apartments. The neighbors have been changing too—since the 1930s and 1940s, the neighborhood has been “extremely heterogenous” in terms of the race/ethnicity and income/occupation of its residents.<sup>6</sup> While the broader Echo Park area (which encompasses Vista Hermosa) is still predominantly Latine and Asian, residents say that Vista Hermosa, and Echo Park more generally, has become wealthier and whiter (I have not verified this).

The Vista Hermosa Community Group joined forces with Dan Dudak and Chris McCullough—two retirees from the state’s oil and gas production regulator, CalGEM, formerly known as DOGGR until it was renamed in 2020 (throughout the article I refer to the regulator as “CalGEM” and “DOGGR,” using the name employed at the relevant time). Dudak is the former Deputy Director of the regulator’s Southern District while McCullough is the former Acting Deputy Director. Between the two of them, they boast over 75 years of experience with the state

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<sup>5</sup> For example, the South Coast Air Quality Management District determined that the two Firmin Street wells discussed below did not pose immediate dangers. “Firmin Street Orphan Wells Project” South Coast AQMD website. Accessed September 20, 2023.

<https://www.aqmd.gov/home/news-events/community-investigations/firmin-street-orphan-wells..>

<sup>6</sup> I rely on descriptions by federal agents working for the Home Owners’ Loan Corporation (HOLC), who described the demographics as being mostly Black, Mexican, Russian and Polish Jewish families as well as a “few” Asians. According to more recent reporting by the LA Times, Echo Park is today predominantly “Latino” (64.0%) and “Asian” (18.8%). See the Mapping Inequality website. Accessed September 10, 2023.

<https://dsl.richmond.edu/panorama/redlining/#loc=13/34.065/-118.34&city=los-angeles-ca&area=D34>; “Echo Park” LA Times website. Accessed November 1, 2023.

[https://maps.latimes.com/neighborhoods/neighborhood/echo-park/.](https://maps.latimes.com/neighborhoods/neighborhood/echo-park/)



regulator. They are passionate and approachable—collaborating for several years with the Vista Hermosa Community Group after meeting Morales during the decommissioning of the two Firmin Street wells (discussed below), and volunteering hours of their time to meet with me on multiple occasions. In 2021, they started a consulting business specializing in urban oil field decommissioning. Dudak and McCullough were on hand at the tour to share their expertise as former regulators. Combined with the powerful personal testimony from Valdivia, Morales, and Luna, the tour presented a compelling case for the ongoing impacts of oil in LA, including in areas where active production is, by and large, long over.

Dudak began by describing how city planners originally laid out the City of Los Angeles, sectioning off residential development and selling thousands of residential lots, including on Court and Boylston. In 1892, Edward Doheny struck oil in the area, spurring one of the first “major land booms in the city” (Testa 2005). Within just two years, 80 wells could be found in an area under half a square mile. By 1897, there were more than 500 producing wells (Testa 2005). During this period, people often dug wells since oil drilling was not yet established. Property owners sold or leased their mineral rights in hopes of striking it rich. For fifty to sixty years, people produced oil in the LA City Field absent modern regulations.<sup>7</sup> As Dudak explained, there were no state regulations for operating or decommissioning wells until 1915:

Prior to 1915 there were already thousands and thousands of wells that were drilled throughout the LA City Field and the LA Basin. When these wells would stop flowing, property owners would basically fill the wells with dirt and whatever was on their property and then build a home on or next to the well. Today a lot of those homes still

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<sup>7</sup> While there were no state-level regulations, cities imposed all sorts of rules based on their ability to control land use, including rules to manage traffic, sound, and waste.

exist, sitting on top of those wells that were produced in the late 1800's and early 1900's. It wasn't until 1915 that regulations established that once a well was produced it had to be decommissioned. The [decommissioning] standards back in 1915 were less stringent than they are nowadays but today, as we stand here, there are literally thousands of these old wells under structures all over the City of Los Angeles, and especially the LA City Field.

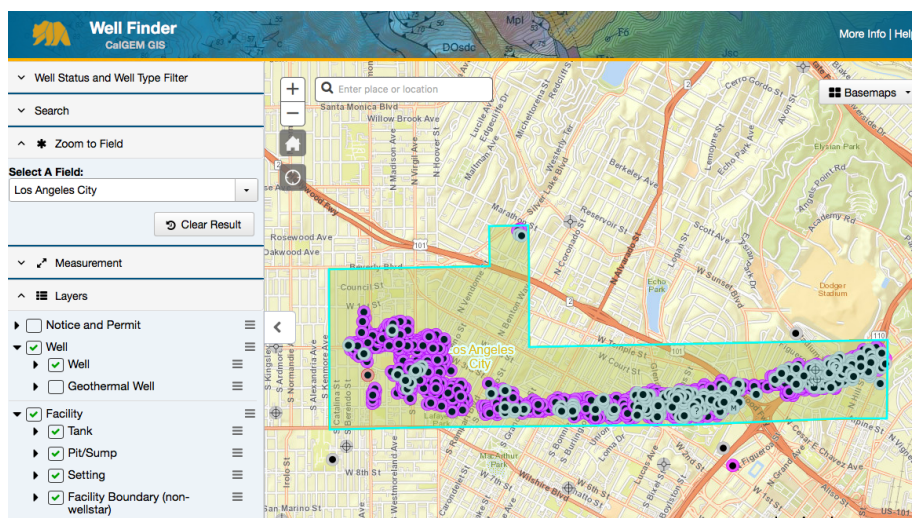
Most of those wells, however, are invisible. In the LA City Field, wells are largely idle and buried: although the above-ground machinery has long been dismantled, the wellbore remains unplugged, tucked alongside the houses constructed after the initial drilling frenzy. While regulatory standards have changed over time, currently, if a well is “plugged and abandoned” it means that the surface equipment (like the pumpjack) is removed along with any contaminated soil or surface materials. The well is plugged by pouring cement into the wellbore, thereby separating and sealing the oil or gas reservoir and preventing leakage into the groundwater or the air. Unplugged—or inadequately plugged—wells pose potential environmental, health, and safety risks. They can leak methane, benzenes, sulfates, arsenic, and chloride into the air and aquifers. Methane, one of the most common and dangerous gasses to leak from wells, is particularly troublesome. In addition to being poisonous and a potent greenhouse gas, it can cause explosions and fires when trapped in enclosed spaces—a problem for LA, with its thousands of miles of pavement and other impermeable surfaces. Indeed, the tour guides made special mention of a major explosion at discount store Ross Dress for Less in LA's Fairfax District in 1985. A spark emitted by an employee punching his timecard ignited methane that had built up in the store's basement, possibly from improperly capped wells (Masters 2016). The explosion hospitalized 23 people, led to the re-routing of the LA Metro, and remains, as one

PBS article notes, “[A] powerful reminder of the natural forces hidden deep beneath the city’s pavement” (Masters 2016).

To connect what was being told (that there were potentially dangerous oil wells beneath us) with what we saw (a seemingly typical urban scene), Luna circulated printed maps from CalGEM’s Well Finder application and links to the search results so people could view the maps on their phones (Figure 2). Well Finder is a free online application designed to display “California’s oil and gas industry information from a geographic perspective.” The application shows the location of wells, thereby creating a visual window into subterranean California. Users can search wells according to their unique American Petroleum Institute number, enter an address to identify nearby wells, or zoom out to see entire fields (Figures 3). Throughout the tour, Luna held up the maps and pointed to otherwise invisible oil sites. As I did countless times during my own fieldwork, Luna reconciled our present location with the map’s bright dots: purple indicated idle wells, green were active wells, and gray were plugged wells.



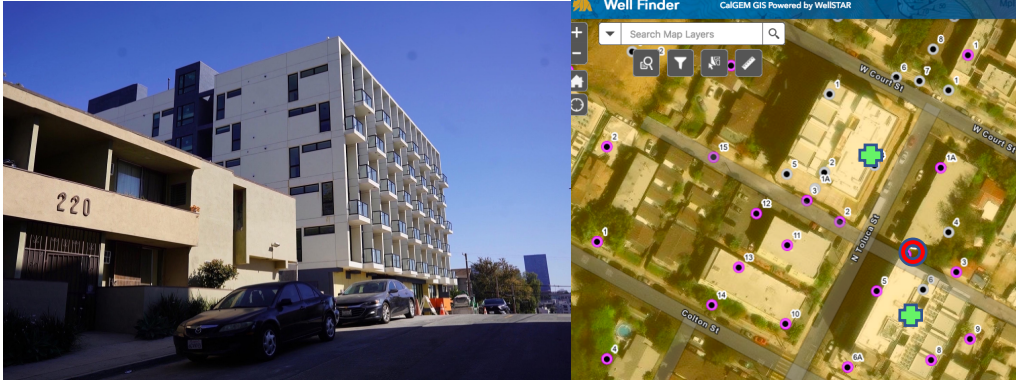
**Figure 2:** Danny Luna holds up a map of the Los Angeles City Field (author’s photo).



**Figure 3:** Los Angeles City Field (CalGEM, Well Finder).

At each of the tour’s half-dozen stops, the guides described how a century of oil production continued to shape their neighborhood. Our first stop was at 317 N Boylston Street. We peered up at a steep lot filled with dirt and dead grass. Luna pointed to evidence of oil production—a yellowed storage tank accompanying one of the very last active wells in the field. The pumpjack was hidden from this vantage point, tucked behind the house. If Luna hadn’t pointed it out, we’d never have noticed it. Directly beside the lot was a new luxury apartment building, which according to Luna and Morales, was built over unplugged wells (I was unable to confirm this).

Just up the block, near the corner of Colton Street and Toluca Street, Luna and Morales took us to a modest, two-story apartment building. They pointed to the floor of its carport: beneath it was an idle well covered by a cement slab that Luna likened to a Band-Aid (Figures 4 and 5). Directly beside it and across the street were two apartment buildings under construction.

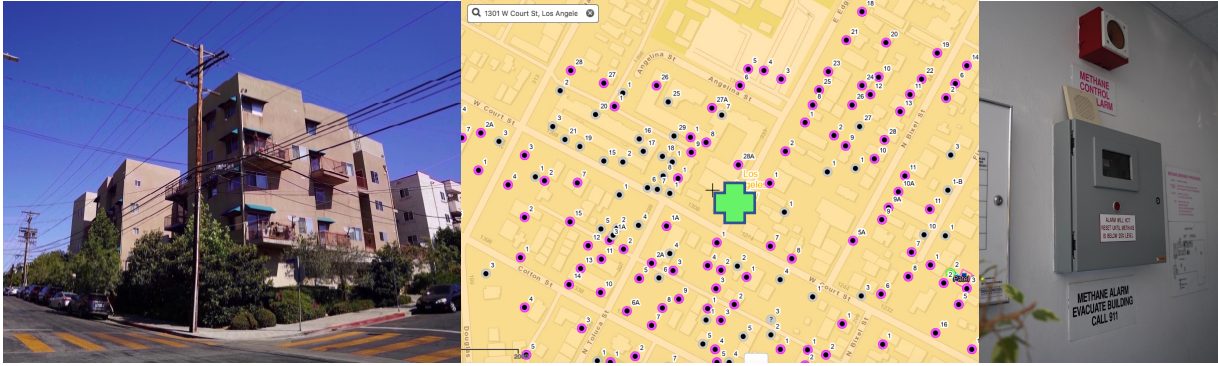


**Figure 4:** External view of 220 N Toluca Street beside one of two new apartment buildings on this block (author’s photo).

**Figure 5:** Screen shot of the block: the red circle indicates the idle well and the green crosses identify the new apartments (CalGEM Well Finder).

The discreet methane detection infrastructures that can be found at nearby buildings suggest the unique subterranean traits of this neighborhood. On the tour, we headed to 1301 Court Street (Figures 6, 7, and 8) where we crowded into an apartment foyer. There were dozens of wells under the block, but the only indication of an oil field was a methane detector and alarm—a reminder that we were standing in one of the city’s “Methane Zones.” In the new apartments around the area there were discreet devices alongside external building doors labeled “Methane Alarm – Evacuate Building – Call 911” or buttons labeled “LA City Fire.”<sup>8</sup>

<sup>8</sup> While the detector is an important health and safety device, according to our guides, it is in shockingly limited use (and rarely monitored by the responsible entity, the Los Angeles Fire Department) across the hundreds of buildings in the LA basin that are built over oil fields and wells.



**Figure 6:** External view of 1301 Court Street (author’s photo).

**Figure 7:** Screen shot of 1301 Court Street (see the green cross in the middle of the image) and surrounding blocks that we traversed (CalGEM Well Finder). According to former CalGEM officials, this is also one location where CalGEM maps do not indicate all known wells (photo documentation indicates that multiple wells are present).

**Figure 8:** Methane detector and alarm in the building (author’s photo).

The tour powerfully revealed the risks that the majority of Angelenos cannot see. The wells are hidden below ground, unmarked, and often their very existence is unknown. In fact, it was only at the end of our two-hour tour that we stopped at an obvious spectacle of urban oil—a production site at 122 Belmont Avenue. We saw a few pumpjacks nodding earnestly, faded oil tanks, and chain link fences with signs warning against trespassing. Immediately, we pulled out our phones and cameras. These are the images that capture what many people think of as LA and the city’s enduring role in the oil and gas industry. Yet, idle wells—especially those which are invisible and deserted—raise the stickiest questions about the afterlives of oil, their impacts, and risks. Below, I show how idle wells pose the toughest risks and uncertainties for residents.

### **Oils Wells: A Modern Risk**

Scholars point out that contemporary society faces a new order of risks that stem from chemical, nuclear, climate, ecological, and biological threats (Beck 1992, 1995, 1999, Giddens 1990, Luhmann 1993). Risks of this new “reflexive modernity” are unprecedented, unbounded, and impossible to calculate (Beck 1995). While my findings reinforce the significant social science research into contamination, toxicity, and nuclear fallout that echo the new kinds of

contemporary threats Beck imagines (Choy 2012, Fortun 2001, 2012), I propose that wells raise other crucial issues about risk, especially uncertainty. In particular, the widespread distribution of wells across huge swathes of the country makes wells a much more dispersed and sleepy kind of risk. While they do not pose the earth-shattering threats associated with nuclear power, the sheer numbers of wells and their intimate proximity to millions of people pose real concerns. To demonstrate how risk associated with wells is distinct from the way most social scientists have portrayed the risks of infrastructure, I draw on Ortwin Renn's (2008) three-part description of risk, which analyzes "outcomes," "context," and "uncertainty."

First, oil wells share "outcomes" with other late industrial infrastructures, including negative environmental, health, and safety effects. The *financial* pitfalls of oil wells, however, have garnered the most widespread press—as oil production declines, wells may be orphaned, leaving taxpayers on the hook for billions of dollars of cleanup. Yet the issue has only recently garnered the attention of legislators and policy-makers. Significant uncertainty surrounds oil wells in the LA City Field. Even assuming that risks can be managed by decommissioning work (an assumption that I'll return to), I'm struck by a serious albeit basic problem: the precise locations of wells, and even their very existence, are often unknown in old fields. This is the result of both limited surveying and recording practices but also the property law regime's rule of capture and split estates (discussed more below). This basic uncertainty makes locating and capping wells incredibly difficult. As I describe in the article's final section, uncertainty over the existence of wells has critical implications for the development of new, safe housing.

Another element of risk—the *context* in which the risk materializes—is slippery too. Renn (2008: 50) asks, "Can the risk be quantified at all? Can people choose whether to take the risk? What are the benefits of taking it?" To understand the context of risk and the uncertainty

facing Vista Hermosa residents, I turn to decommissioning histories. In particular, I examine two orphan wells, both located on Firmin Street, that were decommissioned by DOGGR in 2016 following a decade of complaints and organizing by neighbors.

### *The Firmin Street Wells*

Firmin Street is a narrow residential cul-de-sac in Vista Hermosa that swiftly slopes uphill, ending at a small apartment parking lot. In the span of this short, 750-foot street, there are 16 documented idle wells. At the end of the block, squeezed behind a modest bungalow, is also one of the last active wells in the LA City Field—Luna and Morales pointed it out on the first stop of our tour. In 2016, the state’s oil and gas regulator, then called DOGGR, hired a contractor to decommission two idle wells in the front yards of neighboring residential properties. The closure of these wells, “Patel 1” and “Rogalske 10,” is a tremendous feat. The victory was recounted during our oil well tour, in local press, and at several other events that I attended. In addition to the stories shared by residents and former regulators, I turn to the online well records available through two DOGGR/CalGEM databases: “Well Finder” and “Well Star.”<sup>9</sup>

One well, “Patel 1,” was known to the property owner and regulators. Between 2011-2016, DOGGR files reveal odor complaints from neighbors, a declaration from DOGGR that Patel 1 was deserted by its operator, and a bid from a contractor to decommission the well. For several years nothing happened, but in 2014, the complaints about Patel 1 led to the discovery of *another* buried idle well across the street. That year, Roger Majano bought a lot with two rental houses; according to Majano, the property records did not indicate the existence of any oil well whatsoever. However, in April 2015, Majano contacted DOGGR. His tenants were complaining

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<sup>9</sup> *DeSmog* published an excellent article about the plugging and abandoning of these two wells: Marissa Pianko, 2020. “California Lagged in Capping Century-old Oil Wells Leaking under Homes of LA Residents Plagued by Illness and Odors.” *DeSmog* website, February 13. Accessed September 20, 2023.



about a smell, and they feared it could be gas, possibly coming from Patel 1 across the street. Concerned that “[w]e will be putting all neighboring patrons in danger,” he asked, “What can we do to seal off and remove this well?” A DOGGR staff member responded saying that his neighbor Rosalinda Morales (our tour leader) had already reached out. Six months later, Majano emailed DOGGR again. This time, he thought the odor was coming from *his* property: “I’m still having the rotten egg smell at my property and [I] can seem to source the problem. I’m noticing some sulfur acid build up under my concrete and I’m really concerned.” DOGGR field staff confirmed the staining in the yard and an “overwhelming” odor near the house’s front steps. No concrete actions, however, were taken.

The problem was that DOGGR did not recognize the existence of any oil well on Majano’s property. Although an idle well is identified by the Well Finder map, DOGGR found this insufficient. According to internal DOGGR emails, these “historical” wells are based on “historical maps”—the precise location was thus unreliable. Without *physical* proof, “the Division is not responsible for locating the well, nor is the Division responsible for mitigating any environmental concerns associated with the odors.” Instead of hiring a consultant to verify the well’s presence by locating “subsurface features” (as DOGGR recommended), Majano took a jackhammer to his front yard. Sure enough, he found a wood-framed borehole just seven feet from the house’s entrance, which was later identified as Rogalske 10.

The 1903 State Mining Bureau registry shows that by 1915, Rogalske 10 was “buried-idle.” And yet, one hundred years after it stopped producing oil the well was still not decommissioned; external infrastructures were removed but the well-bore was not plugged. In the course of that century, a sprawling metropolis emerged because of—and, in many areas directly alongside—oil production. As a result, Rogalske 10 was mere feet from a house.

Majano's discovery spurred inspections, and by January 2016, DOGGR sought contractors to decommission both Patel 1 and Rogalske 10. Although the original contract was canceled because of a budget shortfall, the DOGGR-led (and financed) work finally began in 2016 and was completed a couple months later, at a total cost of more than a million dollars.

*Risk and Uncertainty: Data, Property, and Authorities*

These two stories of well decommissioning in the LA City Field point to several critical features of the ongoing legacy of oil production in the area, and particularly their persisting risks and uncertainty. These highlight the limitations of the regulatory regimes at both local and state levels.

First, they show the major gaps in knowledge production and dissemination. For early oil fields such as these, basic details such as the drill dates, the depth of wells, and the presence of casings are all unknown. While it seems absurd that DOGGR did not act on the basis of their own records, the former DOGGR Southern District Deputy Director, Dan Dudak, points out the serious limitations of the materials. For example, they are based on old surveying techniques that are not as reliable as today's techniques. Additionally, the names of city streets changed and other important physical markers shifted or disappeared. As a result, wells may not exist as recorded in DOGGR materials. While they are usually within one hundred yards of a recorded location, in a densely populated neighborhood like Vista Hermosa, with intricate infrastructural and jurisdictional entanglements (pipes, wires, property lines, regulatory authorities), one hundred yards is enormous. Another observation by Dudak stands out even more starkly: there are potentially hundreds of wells with *no* records. Their existence, let alone their precise location, is unknown. There is in fact, no real way of knowing, other than by picking up a sledgehammer and starting to dig—however, as discussed below, what you are actually looking for is not clear.

DOGGR/CalGEM is not the only governmental entity with major gaps in their oil records. In June 2018, the LA City Controller (the city's elected auditor and chief accounting officer), Ron Galperin, completed a "Review of the City of Los Angeles' Oil and Gas Drilling Sites." He concluded that the City failed to establish monitoring and enforcement and found that "the City's management of information related to oil and gas drilling sites requires significant improvement."<sup>10</sup> For example, the City Controller noted that "[m]ultiple City officials expressed concerns about the accuracy of the well locations on DOGGR's maps and cautioned about the potential impact of inaccurate data and previously unknown well sites interfering with new construction projects initiated by developers."<sup>11</sup> Moreover, while the Los Angeles Fire Department (LAFD) maintains its own inventory of oil and gas wells, the report points to "significant discrepancies" with the DOGGR inventory.<sup>12</sup> It is unclear which is complete.

CalGEM, the City, the LAFD, and the developers face gaps in knowledge, in contrast to at least some of the neighborhood residents such as Morales and Luna. As Morales told me, "We live here, we know where [the wells] are at." Throughout the tour and other actions, Morales, Valdivia, and others share how their bodies have become attuned to wells and their chemical byproducts by way of their own senses and the manifestation of physical ailments. Residents, some coming from families who have been in the neighborhood for generations, express corporal apprehension and attunement (Shapiro 2015, Stewart 2011). Morales and Valdivia, for instance, have spoken at numerous public events about the negative health effects they've faced living besides wells. Neighbors also produce other kinds of information and visual representations: for example, when a developer denied the existence of wells on another site on

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<sup>10</sup> See page 33 of Galperin's 2018 report.

<sup>11</sup> *Ibid.*

<sup>12</sup> *Ibid.*

Firmin Street, Luna (a photographer by trade) took aerial photographs of the site with a drone and superimposed them on the 1903 Mining Bureau map to show the location of wells.

According to neighbors, the developer ignored these photographs.

The possibilities of split estates and incomplete records also mean that identifying the specific owners responsible for well cleanup can be difficult. For example, CalGEM records show that the owners of wells in the LA City Field were often individual property owners who bought homes with wells that were owned by other individuals or small independent energy companies. Take Rogalske 10 as an example. As reported in local news, Roger Majano, “said neither the seller nor the title company [...] told him about the easement for an oil well” when purchasing the property (Lank 2016).

Finally, uncertainty is shaped by the overlapping or ambivalent jurisdictional boundaries. As mentioned above, decommissioning wells involves state, municipal, and county authorities. This jumble of responsible entities creates uncertainty, especially for residents. Who is responsible? For example, in regards to setback rules, municipalities, the state legislature, *and* CalGEM have authority to enact rules. When it comes to decommissioning wells, municipalities lack authority to set rules for remediation but they can pass land use regulations that deal with the surface. This is a jurisdictional quagmire whereby determining responsibility and then coordinating action becomes extremely time-consuming, expensive, and undefined. For example, decommissioning the two Firmin Street wells involved at least sixteen public and private entities.

Compounding this jurisdictional uncertainty are basic questions about the potential dangers of oil wells and whether they are the source or cause of a particular concern, like odors or illness. For example, the Task Force investigating the Ross Dress for Less explosion initially concluded that the gas was “biogenic” in origin, possibly from decaying organic matter, rather

than from hydrocarbon accumulations. Similar to Majano's experience, without identifying a specific well (or even hydrocarbons generally as the cause), key authorities, like DOGGR/CalGEM, disclaim responsibility. In this way, the uncertainties produced in the LA City Field—gaps in data, gaps in property records, and complex regulatory patchworks—shape the distribution of risk. In particular, the uncertainties exacerbate environmental and safety risks for residents—the people who will most directly face the consequences of leaky wells. They also raise financial risks that the city and state are starting to grapple with. These uncertainties also can be seen as possibly benefiting other entities, including oil operators, state regulators, and developers, by obfuscating responsibility.

Examining the uncertainties embedded within the LA Field and the decommissioning regime makes it understandable why so few wells in the LA City Field and elsewhere are decommissioned. In addition to the everyday work of lodging complaints, seeking assistance, and organizing neighbors, a spectacular event was needed to propel action. For LA City Field residents, the Porter Ranch disaster in 2015-2016 allowed them to gain traction to close the two Firmin Street wells. For 111 days, SoCal Gas's Aliso Canyon natural gas storage facility—located near Porter Ranch, a community about 25 miles northwest of Vista Hermosa—leaked uncontrollably, emitting an estimated 109,000 metric tons of methane. Eight thousand households were temporarily relocated, and residents continue to report ongoing health problems. Porter Ranch revealed the risks of urban fossil fuel infrastructures, normally hidden from view and unknown to the LA residents. It was the largest methane leak in US history and the elephant in the room when it comes to urban fossil fuel matters. As one state oil and gas regulator told me, "No one wants a Porter Ranch on their hands."

For many Angelenos, living alongside oil wells presents daily, mundane risks that don't usually rise to the level of a "disaster" (Nixon 2011). To mitigate such risks, some people stopped gardening, became wary of homegrown produce, and prohibited their children from playing in the dirt in their backyard. It's hard to say that residents are *choosing* to take risks—but the City and developers are. And yet these current environmental, health, and safety risks are only part of the broader concerns raised by residents I spoke to who are worried about impacts due to changes in the neighborhood. In the final section, I consider decommissioning in the context of the ongoing real estate boom in the LA City Field and LA's housing crisis.

### ***Beyond Oil Wells: Housing, Densification, and Accountability***

In 2018, a third oil well on Firmin Street was decommissioned just half a block from Patel 1 and Rogalske 10. Instead of being decommissioned by DOGGR, the well was capped in the course of constructing a 64-unit mixed affordable and supportive housing development known as "Firmin Court." Neighbors strongly opposed the project for several reasons: they argued it was unsafe given the possibility of undocumented buried idle wells, not truly "affordable," and not serving the neighborhood's existing long-term residents (by offering, for example, priority). The Vista Hermosa Community Group organized multiple protests and rallies while the building was under construction. The developer, Decro Group, dismissed these complaints as mere NIMBYism ("Not In My Backyard"). By December 2022, the building was completed, and tenants were moving in.

Firmin Court highlights the compounding challenges of decommissioning wells in urban areas. On the one hand, the transformation of neighborhoods like Vista Hermosa from mostly single-family homes and modest apartments to market-rate, "luxury" rental units creates opportunities for well remediation. With multiple lots cleared for new construction, potentially difficult-to-access wells can be capped. City authorities can also tie permitting approvals to

decommissioning. On the other hand, new developments potentially exacerbate existing risks in two ways: by shifting the responsibility of locating and decommissioning orphan wells to developers and by increasing the density of the neighborhood.

### *Shifting Responsibility*

If an owner or operator fails to seal wells, it is left to public authorities to decommission wells at taxpayers' expense. In California, that entity is CalGEM. Yet, as we've seen with the two Firmin Street wells, CalGEM is under-resourced. In the last five years, on average, the state government has earmarked only two million dollars annually for CalGEM, which is enough to clean up approximately eleven wells per year—a miniscule number. These costs can run into hundreds of thousands of dollars per well in densely-packed urban environments.

Instead of the state organizing and funding decommissioning, it is shifting responsibilities to developers. The trouble is that on top of the informational uncertainties we saw with the Firmin Street wells, developers (and even cities) are not incentivized to locate and decommission wells. In fact, according to Dan Dudak, “There’s an economic *disincentive* to [decommission] wells, period, for development. The only benefit to [decommissioning] wells is health and safety and the environment. There’s really no other economic benefit.” He adds, “The due diligence to find such a well becomes very great. It would take a tremendous amount of effort.” As Chris McCullough adds, developers “are hiring someone to do it as cheap as possible so they can get their sign-off, and most of the people they are hiring haven’t seen these old late 19<sup>th</sup> century wells without casings, so they don’t even know what they are looking for.” A “sign-off” from CalGEM—whereby they attest to whether there are wells on the property according to its records and assessments and whether they are decommissioned to current standards—is technically optional: it’s a liability program. Not participating in the Construction Site Well Review Program

means assuming liability for wells on the property. It is then up to the local jurisdiction to give the go-ahead for construction. Yet “standards” and “expertise” to locate undocumented buried idle wells do not really exist, especially at the city level. When I asked Dudak and McCullough why such standards do not exist they returned to the issue of uncertainty. How do you develop standards for hidden, unknown wells? How do you determine when you must stop digging to find a well? If a well doesn’t have a metal pipe (the casing), how do you even identify it? Dudak illustrates the trouble:

You could dig twenty feet below surface and not find a well. That doesn’t necessarily mean a well isn’t there. So what do you do? Do you say you have to dig to fifty feet? You didn’t find a well at fifty feet, okay, but wells are thousands of feet deep in many cases and there could just be a hole in the ground with *no casing whatsoever*, hundreds of feet down before you start getting into the productive zones and see any sort of casing. And a hole in the ground is hard to find. A hole that has been buried for *a hundred years* [...] what does that look like?

Not surprisingly then, there are disagreements about whether wells exist and whether developers have done enough to locate them. With the new Firmin Court building, the Vista Hermosa Community Group contends that there are eight wells under the property—not just the one that Decro decommissioned. Decro denies this, saying their consultant “thoroughly combed the property to see if there was any evidence, any traces of oil, or any substances that might have alerted us to the existence of another well. No such evidence is ever found” (Decro Group 2022). And yet, the President of Decro, Ted Handel, acknowledges that “locating oil wells, especially in the LA Oil Field, is a very imprecise art” (*Ibid*). Firmin Court is not the only suspect development. At three different stops along the oil tour, we observed new apartment buildings at



various stages of construction, which (according to our local guides) were on top of oil wells, some decommissioned and some not.

### *Densification*

Already, the area is among the most densely populated parts of Los Angeles, and even the entire country.<sup>13</sup> And density is increasing. Since decommissioning work adds costs to a project, it requires developers with deep pockets and projects that maximize density. While densification increases LA's housing stock and may help achieve sustainability (Cavicchia 2022), an oil field presents unique challenges. Besides potentially exacerbating inequality, gentrification, and displacement (Kotsila *et al* 2020), Vista Hermosa residents and partner organizers argue that densification adds more people to an unsafe neighborhood. Beyond uncertainty about the existence or precise location of wells, leakage is a geologic risk. According to CalGEM, "there is no guarantee [that wells] will not leak in the future" (CalGEM, "Frequently Asked Questions"). Similarly, as Dudak emphasized:

Once penetrated by a wellbore, the geologic strata and caprock that took millions of years to form and hold the oil and gas (and water) resources in place can never be restored to its original condition. And the wellbore that was drilled through that strata and caprock will always remain a path of least resistance that may cause remaining hydrocarbons and other fluids to migrate along the wellbore and pollute drinking water zones or come to the surface. In our decades in the industry, we have seen many wells that were properly

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<sup>13</sup> See the Echo Park density, which includes Vista Hermosa in this map. Note that other neighborhoods over the LA City Field are even more dense. For example, Koreatown has the highest density in LA. "Population Density" LA Times website. Accessed September 20, 2023. <https://maps.latimes.com/neighborhoods/population/density/neighborhood/list/>.

abandoned leak immediately after they were plugged, and other wells leak many years or decades later.

Regardless of the best efforts to remediate oil fields and abandon wells, the wells themselves are never actually “removed.” As such, there will always be a risk of leakage from wells, whether they are plugged and abandoned to current standards or not. For this reason, CalGEM recommends never building on top of wells unless you maintain access, by directionally drilling another access point, or modifying the footprint of the structure to allow equipment to reach the well from a public road, should it start leaking. But this is expensive and takes more space. Where developers (and cities) aim to maximize density, this guideline would be impracticable since it may reduce the building’s footprint. Ultimately, it’s up to the local authority (not CalGEM) to require access points, which the City of LA does not require.

Although cities surely care about health and safety, they also face competing pressures like the need for more housing and revenue-enhancement. According to the city’s 2021-2029 Housing Element Plan, Los Angeles “has experienced the most severe housing crisis of any major city in the United States for some time now.” Even where a new project adds affordable housing (like Firmin Court), critics emphasize that it must be *safe* housing. The main law for ensuring that new developments are not exposed to hazardous sites is the California Environmental Quality Act (CEQA)—a state law passed in 1970 to avoid or minimize damages to the environment by requiring projects to disclose and mitigate their environmental impacts. Environmental advocates are alarmed by the exemptions from CEQA for affordable housing projects.<sup>14</sup> This past September, for example, Los Angeles City Planning proposed an

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<sup>14</sup> The Affordable Housing Streamlining Ordinance incorporates the streamlining provisions of Mayor Bass’s Executive Directive 1 into the Los Angeles Municipal Code. See the Affordable Housing Streamlining Ordinance Fact Sheet, Los Angeles City Planning website, accessed

amendment to the Los Angeles Municipal Code, which would exempt 100% affordable housing projects from CEQA review. Environmental groups, as well as the Vista Hermosa Community Group, argue that this effectively removes environmental checks and balances from a neighborhood teeming with subterranean risks.

Here, we see how everyday concerns of regulation, revenue, and housing development are in tension with what Masco (2021: 6) calls “embedded forms of violence.” Masco contends that petrochemical emissions, plastics, and radioactive fallout that “have become so large, so long-lived, varied and embedded that they exceed human sensory perception as well as the reach of existing governmental administrative instruments and social theory” (*Ibid*: 6). While Masco underscores the planetary reach of nuclear power/weapons and climate disruptions, the risks of oil wells play out at highly dispersed, local levels, across millions of sites across the US. Unlike nuclear material, wells are rarely imagined as forever problems; yet long after all other infrastructure is removed from the surface of an oil property, the wells remain, providing a conduit for dangerous liquids and gasses to migrate from deep within the Earth. Vista Hermosa residents also demonstrate that forces that cannot be seen, like invisible oil wells and their attending risks, are perceived by the people most directly affected by such risks. In fact, residents’ sensory perception is key to their advocacy. As neighborhoods within the LA City Field face increasing densification, residents and public officials will have to navigate questions over who neighborhoods and cities are for and how to balance different urban priorities and risks.

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October 1, 2023. [https://planning.lacity.org/odocument/8db5f950-7948-481d-8f3d-e397d2dad2b6/ED\\_1\\_-\\_FAQ\\_Sheet\\_AD.pdf](https://planning.lacity.org/odocument/8db5f950-7948-481d-8f3d-e397d2dad2b6/ED_1_-_FAQ_Sheet_AD.pdf). See also Cal Code Regs title 14 § 15194.

The oil well tour marks the existence of wells and the very real impacts on people who live amongst them. Vista Hermosa has organized the tour for anyone who is interested, including politicians, activist groups, and community interest groups. When I asked about people's responses to the tour, Morales said that they often express disbelief; the common refrain being:

“I've lived in LA my whole life and never knew.” [...] When people take the tour for the first time [...], it's pretty daunting when you see how densely populated it is here and how we are literally on top of these wells. It's [...] the initial shock that people go through. And then it's like okay, let me tell you about it now.

Telling people about it, however, means inviting them to sharpen their senses to the neighborhood *beyond* the wells and their attending risks. The tour and other advocacy work highlight Vista Hermosa as a racially and ethnically diverse community with a rich history and as home for multiple generations of families who are also under threat from other forces, like increasing housing costs, and what Morales calls “historical negligence.” In this way, the Vista Hermosa Oil Tour invites participants into the neighborhood to see the larger political, economic, and social forces that both enliven, and burden, residents.

In August 2022, Sunrise LA and the Vista Hermosa Community Group organized a protest and rally “to raise awareness about the uncapped and orphaned oil wells underneath [the] community.” It targeted Decro for failing to cap all the “known” wells under Firmin Court, thereby “[placing] the entire community in harm's way.” The event brought together approximately fifty housing rights advocates, climate justice organizers, “big green” organizations, democratic-socialists, and neighbors. People gathered to not only draw attention to oil wells but to challenge status quo views on who the city actually serves (politicians,

developers, oil companies) and to organize with and celebrate who it should be serving—everybody else, especially residents who continue to be exposed to the risks of oil wells.

Decommissioning debates are located within the broader histories of exclusion from housing, land use, and participation in decision-making processes. As a redlined area, the neighborhood was marked as blighted and its residents, deemed “subversive racial elements and lower income groups,” were denied credit to buy homes.<sup>15</sup> Moreover, the demolition of nearby neighborhoods in the late 1950s and 1960s—such as the Chavez Ravine for Dodger Stadium and the “slum clearances” of Bunker Hill—shape the urban and social landscape. Today, real estate listings beckon developers to this “gentrifying neighborhood” with “incredible views of the Downtown skyline” and “a rapidly changing [...] look and feel [...] similar to [...] Echo Park and Silverlake.” Yet Morales emphasizes that she’s not “against development.” When I asked what kind of development she envisions, she mentioned a young man who grew up in the area and owns land that he hopes to develop. It was his empty lot that hosted the rally; his fence on which organizers affixed the posters, “Cap the Wells” and “People over Profits” and “Community Health over Developer Wealth.” He is committed to capping *all the wells* on the lot and he pledges to work with, and for, *all the residents*. What this looks like in practice is yet to be seen.

## Conclusion

The Vista Hermosa Community Group has helped to put idle and orphan wells on the public radar. In December 2021, the US Secretary of the Interior, Deb Haaland, visited neighborhoods in the LA Basin facing the legacies of oil production. In a press conference held

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<sup>15</sup> “Los Angeles, CA D34” Mapping Inequality website. Accessed September 10, 2023. <https://dsl.richmond.edu/panorama/redlining/#loc=14/34.068/-118.311&city=los-angeles-ca&area=D34>. See also Cumming 2018.

at the Vista Hermosa Natural Park, Haaland emphasized the need for urgent action and announced that the Bipartisan Infrastructure Law was earmarking \$16 billion for “legacy pollution cleanups.” California is reportedly eligible for almost \$61.5 million. At the state level, Governor Newsom’s 2022-23 budget also proposed a \$200 million General Fund over two years for CalGEM to plug deserted wells and facilities.

The recent federal and state actions to mitigate risks and redistribute responsibility for decommissioning oil wells are significant, yet still fall short. According to the financial think tank Carbon Tracker (September 27, 2023 press release), “decommissioning California’s oil and gas infrastructure might exceed all future net cash flows from production by up to \$21 billion.” While AB 1167 is an important step towards ensuring the state receives funds from oil companies to cover decommissioning costs, it does not help where companies are *already* bankrupt. As numerous commentators including FracTracker (September 27, 2023 press release) and Carbon Tracker note, most unplugged wells are “all but orphaned already.”

At the local level, the Vista Hermosa Community Group raises another issue: beyond the size and availability of funds is the concern over who will directly benefit from them. While \$20 million will reportedly go to cleaning up orphan wells in LA, Morales and Luna question whether the money will primarily serve real estate developers, or even oil operators. This skepticism about decommissioning funds highlights the ever-present contestation over Los Angeles, who it serves, and who it does not.

I’ve identified how law has inadvertently structured the persisting risks of oil wells in Los Angeles. I’ve also shown how, in practice, law has distributed decommissioning responsibilities in ways that impede the work, especially when drilling activities and decommissioning are spread out over decades. The LA City Field complicates understandings of risk by demonstrating

how urban infrastructures, property regimes, and regulations coproduce uncertainty, especially for the people living in their midst. Lawmakers and political leaders have tried to mitigate risks and impose responsibility by expanding regulations at the local and state level. However, successful action requires being able to foresee risks over the long term—in this case, across geologic time (Folkers 2021). As the Vista Hermosa community organizers show, wells will continue to be entrenched in the deep fights over the city (above and below ground), the multifaceted legal system that governs it, and its future for many, many generations.

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