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# Machines in the Valley: Community, Urban Change, and Environmental Politics in Silicon Valley, 1945-1990

Jason A. Heppler  
*Stanford University*

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Machines in the Valley:  
Community, Urban Change, and Environmental Politics  
in Silicon Valley, 1945–1990

by  
Jason A. Heppler

A DISSERTATION

Presented to the Faculty of  
The Graduate College at the University of Nebraska  
In Partial Fulfillment of the Requirements  
For the Degree of Doctor of Philosophy

Major: History

Under the Supervision of Professor Patrick Jones

Lincoln, Nebraska

May, 2016

Machines in the Valley:  
Community, Urban Change, and Environmental Politics  
in Silicon Valley, 1945–1990

Jason A. Heppler, Ph.D.

University of Nebraska, 2016

Advisor: Patrick Jones

Using Silicon Valley as a case study, this dissertation examines how activists influenced by the environmental movement reconfigured urban culture in the American West. *Machines in the Valley* argues that the spatial influences of the region's urban development gave rise to modern environmentalism that arose to criticize growth, but along the way failed to ultimately shape growth policies. While high technology sought to introduce a new urban form predicated on "clean and green" industries and an environmental urbanism, the premise of "clean" industry proved elusive.

High technology industrialization emerged as a key component of economic and urban development in postwar era, particularly in western states seeking to diversify their economic activities. Industrialization produced thousands of new jobs, but development proved problematic when faced with competing views about land use. The natural allure that accompanied the thousands coming West gave rise to a modern environmental movement calling for strict limitations on urban growth, the preservation of open spaces, and pollution reduction. These views on land use lay at the center of these conflicts. Conflict over the Santa Clara Valley's land use tells the story not only of Silicon Valley's development, but Americans' changing understanding of nature and the environmental costs of urban and industrial development during the postwar era.

The dissertation makes three contributions. First, it challenges the "Rise of the Right" narrative that argues for the collapse of growth liberalism in the

1970s. Instead, Silicon Valley demonstrates that a suburban liberalism was forged in high-tech regions. Furthermore, the suburban liberal character of Silicon Valley challenges the view of suburbs as bastions of conservatism. The suburbanites of the Valley maintained a belief in the role of government, quality-of-life, civil rights, and environmental quality in their communities. Second, it brings “nature” into the story of Silicon Valley, arguing for the concept’s role in the shaping of the region. Third, the study expands the story of Silicon Valley beyond the usual narratives of key figures of the technology industry. By focusing on the development of Silicon Valley in the postwar era, this study uncovers the ways the political economy of Silicon Valley was laid after World War II.

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For Margo and Lena

Imagine your own future:

You can see a web of parks throughout the cities replacing the freeways and streets that once dominated. You can see agriculture become diversified again, with a great variety of crops grown together, replacing the old reliance on mass produced single crop operations that are highly dependent on pesticides, machines, and cheap farm labor....

More fruits and vegetables have insects on them instead of poisons. They can be brushed off or swallowed accidentally without harm...

Economists rethink growth and know that "growth for the sake of growth is the ideology of the cancer cell" as Edward Abbey pointed out...

There is less spectator sport and more participating...

People are healthier. Fewer coronaries strike the people because walking and bicycling and swimming keep them fitter...

Many of the people who were producing automobiles have been shifted into the housing or building industry. Their main job is restructuring the urban wastes to planned cities, restoring land to good agricultural use, building high-quality clustered dwellings at the edges of the good agricultural land, using recycled materials from the old buildings. People ride the short distance to their work and have a chance to farm a little in the sun. There are legs and arms and abdomens where the flab was, and the air is once again transparent...

The job of the garbage man and junk man is elevated to the stature of recycling engineer, looping systems in such a way that materials cause no environmental deterioration...

Advertising serves to inform, not to over stimulate, and is believable again...

So much for one view of the future—more Utopian than likely, unless people want it that way...

The thing people must realize above all is that the solution to our environmental crisis involves simple, small measures by many people in accelerating sequence.

—Friends of the Earth, "Projections for a Tenable Future," 1970

We found that the things that needed the most attention were those close to people—physically as well as emotionally. In seeking to translate people's yearning for natural beauty into practical programs, the primary challenge is the environment where most people live and work—our cities and the suburbs and countryside around them.

—Laurence Rockefeller, *Beauty for America*, 1965

More than ever before, scholars, scientists and planners are concentrating on the natural and the human environment. The most hopeful sign of all, however, is that this is not a revolution imposed from above but one rising from the bottom. In every city and in thousands of towns and obscure neighborhoods, there are housewives and homeowners banding together to fight, block by block, sometimes tree by tree, to save a small hill, a tiny brook, a stand of maples. The fight to preserve the spectacles of nature—the majestic rivers, the remote mountains, the wild canyons—is 100 years old. The struggle to save the modest beauty of men's own backyards is new and promising.

—Ben Bagdikian, "The Rape of the Land," *Saturday Evening Post*, June 18, 1966.

## Acknowledgments

No dissertation is completed under the common misconception of the “lone scholar” working in the archives. Every scholarly project is a project of collaboration, and I have many to thank for helping finish this one. I had the good fortune of working on and completing this dissertation under two communities. First, I started this dissertation at the University of Nebraska-Lincoln under the watchful and prodding eyes of Douglas Seefeldt. The roots of my project stem from an early historiographical paper I wrote on urban history and new economies in the American West, which jump-started my interest in western cities. When Doug left to join Ball State University, Patrick Jones graciously agreed to supervise my dissertation. Patrick has been the advisor we all hope for, pushing me to think more clearly and sharply. His ever-persistent guiding has helped craft this work into something much better than it otherwise would have been.

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Rensink, Mikal Eckstrom, Pablo Rangel, Nathan Sanderson, and Shayla Swift: you have my undying gratitude. The time we spent together, and continue to spend together, remain the most rewarding moments I've had in my life. You are all amazing and lifelong friends.

My thinking about digital humanities was further molded by my time at the Center for Digital Research in the Humanities (CDRH) at UNL. To Katherine Walter, Laura Weakly, Karin Dalziel, Keith Nickum, Brian Petlig-Zillig, and Liz Lorang, you have my thanks for our numerous discussions about digital methods and the opportunity to work and learn with all of you.

I completed this work among my second scholarly community. At the start of 2013 I joined Stanford University's History Department as their Academic Technology Specialist, where my contact with a wide variety of people and disciplines—the Department of History, the Department of English, Stanford University Libraries, the Center for Spatial and Textual Analysis (CESTA)—helped shape and refine my thinking and approaches to digital history. I am especially indebted to my numerous conversations with Mark Algee-Hewitt, Nicole Coleman, Elijah Meeks, Nick Bauch, Cameron Blevins, Carlos Seligos, Mike Widner, Maria Santos, Zephyr Frank, Gabriel Wolfenstein, Geoff McGee, Molly Taylor-Poleskey, Erik Steiner, Karl Grossner, Paul Zenke, and the graduate students in my Digital History Reading Group. I also want to thank Kären Wigen, Richard Roberts, and Paula Findlan for their ever-important support, advice, and encouragement.

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There's a group of historians I need to thank from afar—those #twitterstorians on Twitter, who were constant companions while writing and revising. Several of us kept each other in check, offered encouragement, gentle prodding, and

maybe some slight competition under the hashtags #GraftonLine, #WritingPact, and #TeamPhinisheD. L.D. Burnett and Shane Landstrom, thanks for introducing me to the crews.

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## Introduction: The Nature of Landscape

A geographer speaks as though his knowledge of space and place were derived exclusively from books, maps, aerial photographs, and structured field surveys. He writes as though people were endowed with mind and vision and no other sense with which to apprehend the world and find meaning in it. He and the architect-planner tend to assume familiarity—the fact that we are oriented in space and at home in place—rather than describe and try to understand what “being-in-the-world” is truly like.<sup>1</sup>

—Yi-Fu Tuan

The subtle, intangible, but soul-deep mix of landscape, smells, sounds, history . . . that constitute a place, a homeland.<sup>2</sup>

—Charles Wilkinson

Wallace Stegner felt developers betrayed his homeland. From his house in the Santa Cruz foothills, the Stanford creative writing professor lamented the changes occurring to the Santa Clara Valley in 1965, condemning the urban sprawl that had overtaken the former farmland. “The orchards that used to be a spring garden of bloom down the long trough of the Santa Clara Valley,” he wrote, “have gone under so fast that a person absent for five years could return and think himself in another country. . . . The once-lovely coast hills reaching down the Peninsula below San Francisco have been crusted with houses in half a lifetime, the hilltops flattened, whole hills carried off to fill the bay, the creeks turned into concrete storm drains.”<sup>3</sup> In Stegner’s lifetime, the valley had transformed

<sup>1</sup>Yi-Fu Tuan, *Space and Place: The Perspective of Experience* (Minneapolis: University of Minnesota Press, 1997): 200–201.

<sup>2</sup>Charles Wilkinson, *The Eagle Bird: Mapping a New West* (New York: Pantheon, 1992), 137–138.

<sup>3</sup>Wallace Stegner, “The Clouded Skies of Lotus Land,” *St. Louis Post-Dispatch*, September 26, 1965, quoted in Michael Friedly, “‘This Brief Eden’: A History of Landscape Change in California’s Santa Clara Valley” (PhD Thesis, Duke University, 2000), 5. Stegner’s novel *All the Little Live Things*, was written based on the Santa Clara Valley. The novel’s character, Joe Allston, lamented the bulldozers, subdivisions, and scars that cut into the Earth. Remarking on the work of the fiction’s land developer, Allston said that the hills were “mutilated and ruined” and “only a land butcher

from prime agricultural land to a place known for urban sprawl, traffic jams, and manufacturing facilities. Stegner felt so betrayed by the changes to the land that he wished to be buried not in California—the place that had so deeply shaped his writing and identity—but in his summer home of Vermont.<sup>4</sup>

Like many living in the Santa Clara Valley, Stegner was a newcomer to this place. Born in 1909 in north-central Iowa, he came to California to teach in the creative writing program at Stanford University. In Stegner's imagination the Santa Clara Valley had fallen far from its once pristine grace. He wrote of "a park-like oak forest reaching southward from a clean bay" when the Ohlone people occupied the region. "The climate was mild and benevolent," Stegner wrote of this place, "the bay full of shellfish. The creeksides tangles grew wild berries and the oaks provided the wherewithal for unlimited acorn flour." He not only celebrated this imagined pre-European landscape, but the post-European one as well. As fields of wheat and fruit groves planted by Spanish missionaries began to transform the Bay Area into an agricultural landscape, Stegner celebrated these as "a glory" in which pears, prunes, apricots, cherry blossoms, and apples were an improvement to the land. Looking from the window of his home, the land he witnessed was now more asphalt than plowed field. New economies defined new landscapes in the Santa Clara Valley. "This brief Eden," as Stegner referred to the Valley, fell to the original sin of industrialization.<sup>5</sup>

Frederick E. Terman interpreted the landscape differently. The Stanford University provost and dean of engineering—often referred to as the "Father of Silicon Valley"—saw suburbanization and expansion of industry in the Santa

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could have proposed and carried it out. . . . There would be no restoring what he had ruined. It reminded me too painfully; it made me sick to look." Stegner, *The Little Live Things*, (New York: Viking, 1967), 14–15.

<sup>4</sup>Jackson J. Benson, *Wallace Stegner: His Life and Work* (New York: Viking, 1996), xii. See also Friedly, "'This Brief Eden'," 4–5.

<sup>5</sup>Benson, *Wallace Stegner*, xi. On the area's historical ecology, see William S. Cooper, "Vegetational Development upon Alluvial Fans in the Vicinity of Palo Alto, CA," *Ecology* 7 (January 1927): 11.

Clara Valley not as signs of degradation, but rather signposts towards a new prosperous future for Stanford, for Santa Clara County, for California, and for the nation. Rather than representing encroaching sprawl, the nascent Stanford Industrial Park and the lands around the university, were, in the words of one booster, a “pleasant place” of “broad lawns, employee patios, trees, flowers and shrubs, walls of glass, recreational clubs” that stood in contrast to the “smoke—stacks, noise, coal cars, soot and other things” found in the industrial East and Midwest.<sup>6</sup> The landscape appeared campus-like and suburban, amenities that reflected the values of Stanford and surrounding suburban communities. Although complaints of traffic and air pollution had become common by the mid-1960s, Terman dismissed these criticisms. The Industrial Park had done much for the Bay Area’s economy, and Terman felt congestion and air pollution were “really a pretty small price to pay.”<sup>7</sup>

These competing visions of the Santa Clara Valley landscape reflected widely-held and conflicting ideas about the future of a political project called Silicon Valley. The Valley represented a new feature of the American West, an economic and political project marrying a pastoral idealism with the building a new high tech urbanism. In the face of postwar residential growth and industrial development, the Santa Clara Valley’s landscape changed remarkably. The arrival of machines in the Valley—bulldozers and computers—transformed the landscape once again, and in the process sparked important discussions with national implications about creating an idealized high-tech metropolitan region that balanced a vision of the California Dream with the high tech suburbs.

Silicon Valley also represented an important national project in post-World War II America as the urban industrial model of the Northeast and Midwest that

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<sup>6</sup>Quoted in John M. Findlay, *Magic Lands: Western Cityscapes and American Culture After 1940* (University of California Press, 1993), 130.

<sup>7</sup>Terman, quoted in Findlay, *Magic Lands*, 141.

had dominated the organizing principle of American society from the late 19th century began to decline. As the old industrial cores of the Rust Belt decayed, discourse about what to do with this flagging industrial economy emerged in the 1960s and 1970s. How would America rebuild its economy, communities, and spirit of innovation? A moment of possibility emerged for Silicon Valley, pointing to the significance of the local becoming nationally significant.

The engineers, scientists, academics, and other knowledge professionals who congregated into the suburbs led to a convergence of ideals and attitudes about natural beauty, open space, livable and sustainable cities, and access to leisure. These political causes animated both liberals and conservatives, who found common ground—if not common goals—for their region. The San Jose city council Republican Virginia Shaffer, for instance, based her anti-growth politics on homeowner interests—levying criticism against inadequate city services, rising tax burdens for suburbanites, as well as the rapid pace of growth for growth's sake. Less than ten years after Shaffer's election, Democrat Janet Gray Hayes' ascent to the San Jose mayor's office reflected a continued criticism of the city's growth orientation. These suburbanites catalyzed grassroots environmental political activity for a range of causes, rooted in a belief that their region was unique among the nation's high-tech suburbs. Santa Clara Valley activists who got their start in the fair housing movement of the 1950s found themselves becoming open space advocates by the 1960s, arguing that these places mattered for creating livable and equitable cities. Open space and environmental movements organized throughout the Peninsula, reacting to changes in the land by working through traditional channels of political power. Their activity was felt through many policies and laws later adopted by the federal, state, and regional governments, including stricter regulations on high-tech pollutants and open space and growth control

laws.<sup>8</sup>

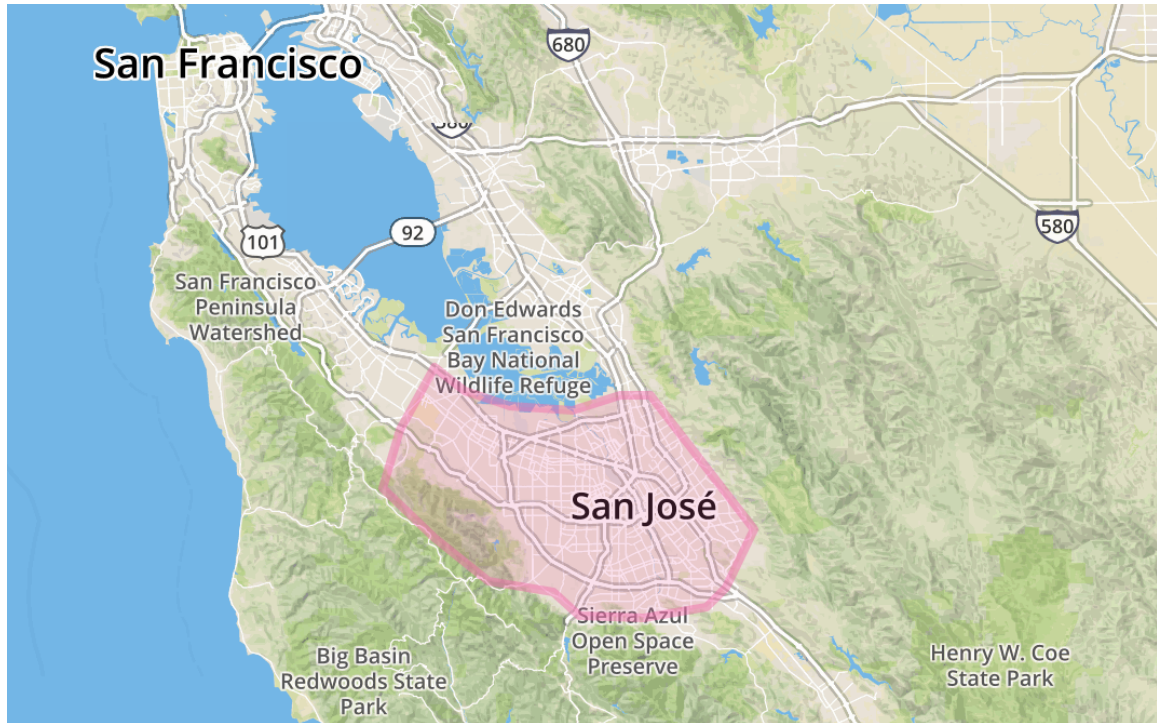
Suburban activists pursued environmental causes for open space, leisure, and protection from pollution, which largely reflected the class identity and priorities of affluent suburban liberals. These suburban environmentalists enjoyed what they did—working jobs at research and development labs, earning a better-than-average paycheck, living in affluent homes and exclusive communities, and enjoying leisure time and access to open space—because of federal policies emerging from pro-growth New Deal liberalism and the Cold War military-industrial-academic complex. Environmental activists achieved many victories, including widespread protection of wilderness areas, shifting the growth priorities of city councils and planning commissions, and forming an environmental politic that influenced the outcomes of local and national elections. Yet their failings underline the political forces that constrained their activities. Furthermore, their neglect, willful or otherwise, of issues surrounding race and gender highlights the limits of their vision for a high tech urbanism predicated on freedom from the problems decaying postwar American cities.<sup>9</sup> Environmental campaigns to offer quality-of-life benefits largely served the affluent suburbs rather than the inner cities or barrios. Silicon Valley's small yet influential populations of Latinos, African Americans, and Asian Americans dealt with a different side of Silicon Valley—one far more segregated, discriminatory, polluted, and hazardous to human health.

The story told here is about a particular place and an expression of envi-

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<sup>8</sup>On the emergence of environmentalism from within American suburbs, see Christopher C. Sellers, *Crabgrass Crucible: Suburban Nature and the Rise of Environmentalism in Twentieth-Century America* (Chapel Hill: University of North Carolina Press, 2012); Adam Rome, *Bulldozer in the Countryside: Suburban Sprawl and the Rise of American Environmentalism* (New York: Cambridge University Press, 2001); Joseph L. Arnold, *The New Deal in the Suburbs: A History of the Greenbelt Town Program, 1935–1954* (Cleveland: Ohio State University Press, 1971);, Andrew R. Highsmith, *Demolition Means Progress: Flint, Michigan, and the Fate of the American Metropolis* (Chicago: University of Chicago Press, 2015).

<sup>9</sup>On the decline of American cities, see Robert M. Fogelson, *Downtown: Its Rise and Fall, 1880–1950* (New Haven: Yale University Press, 2001); Thomas Sugrue, *The Origins of the Suburban Crisis: Race and Inequality in Postwar Detroit* (Princeton: Princeton University Press, 1996).



**Figure 1:** The boundaries of Silicon Valley.

ronmental politics limited by the cultural orientation of its proponents. I do not venture into efforts of the San Francisco Bay's conservation, fights over the Bay Area Rapid Transit (BART) transportation system, or open space battles beyond Santa Clara County. My focus is on a specific valley, the Santa Clara Valley, where the core of Silicon Valley emerged among growth and corporate interests. Silicon Valley is an amorphous, ever-changing place that has undergone continuous reshaping since its beginnings in the 1940s as high technology firms expanded throughout Santa Clara, San Mateo, and San Francisco counties on the Peninsula. I define Silicon Valley by its economic and industrial activity in semiconductor plants, microcomputer manufacturing, and software development. The borders of Silicon Valley today could easily extend northward into San Francisco, whose high-tech industry is rapidly growing, and as far south as Morgan Hill and as far to east as Fremont or Oakland. But for the majority of the history examined ahead, the bulk of high tech industrial activity largely occurred in Santa Clara

County. For the purposes of this study, Palo Alto borders Silicon Valley at the northern end of the county and San Jose bounds it to the south (see Figure 1). Between and including these two cities, the greatest concentrations of high tech manufacturing took place. Here is where the landscape changed so dramatically, and the visions espoused by Stegner and Terman initiated the greatest conflict.<sup>10</sup>

This study is largely focused on local history. Yet it also attempts to examine these changes at various scales: neighborhood, city, region, and nation. Heeding Andrew Needham's call that the history of suburbanization must look beyond cities to understand how suburban growth affected places beyond their borders, I suggest we can best understand the history of Silicon Valley not only from its unique local contexts but also by seeing how the valley shaped both regional and national political trends. Although any one of the cities of Santa Clara County—which numbered 14 municipal corporations by the 1990s—would work well for analyzing the trends in environmental politics, by thinking about these changes as a regional level reveals how metropolitan places shaped one another across space. In Silicon Valley, several centers of high tech activity emerged to serve new businesses and their affluent employees—Palo Alto, San Jose, Santa Clara, Mountain View, Sunnyvale.

Silicon Valley became a gold standard for its suburban form of high-tech urbanism, cited by journalists, scholars, critics, and pundits throughout the country as an example of a friendly business climate, suburban retreat, and economic powerhouse. Places as varied as Atlanta, Georgia, Philadelphia, Pennsylvania, Cleveland, Ohio, Omaha, Nebraska, Bangalore, India, Mission Hills in the Guangdong Province of China, and Shenzhen, China, have all looked to Silicon Valley

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<sup>10</sup>I am comprising a database of Silicon Valley tech companies between 1940 and 1990, which currently numbers close to 2,000 companies culled from archival sources, city directories, and industrial pamphlets and guidebooks. The bulk of these companies are located in the northern end of Santa Clara County. See Chapter 2 for more discussion about the spread and location of these companies. The full database is online at [https://github.com/hepplerj/machinesvalley/blob/gh-pages/data-files/sv-companies/sv\\_companies.csv](https://github.com/hepplerj/machinesvalley/blob/gh-pages/data-files/sv-companies/sv_companies.csv).

as a vision for their futures—sometimes even going so far as to model their architectural designs after the Spanish villa and ranch aesthetic of Stanford University. Across the United States, places borrow the “Silicon” moniker to describe the “Silicon Forest” of Oregon, the “Silicon Desert” of Arizona and the Southwest, and “Silicon Prairie” to variously describe similar suburbs in the Midwestern states, Texas, or Wyoming—markers of place meant to represent regions grounded in high tech.<sup>11</sup> Silicon Valley represents not only an example of a modern city, but also an alluring model for promoting economic and urban revitalization through technological industrial growth.

That promise has been consistently applied to cities in the American West. Electronics became a key component of the West’s new economy as it shifted away from its historical extractive industries of mining, lumbering, and agriculture towards service, tourism, and knowledge work.<sup>12</sup> Throughout the West electronics manufacturers established headquarters, manufacturing facilities, and research offices, often courted by pro-growth advocates in city governments. These new industries pointed to the West as the leader of the nation’s economic future predicated on a Cold War defense industry.<sup>13</sup> Western cities were not replicating the steel age industries of the Midwest and East, with their smokestacks and

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<sup>11</sup>See, for example, Margaret O’Mara, “Silicon Valleys,” *Boom: A Journal of California* 1 (Summer 2011) <http://www.boomcalifornia.com/2011/06/silicon-valleys/>; Gordon B. Dodds and Craig E. Wollner, *Silicon Forest: High Tech in the Portland Area, 1945–1986* (Portland: Oregon Historical Society Press, 2000); Heike Mayer, “Planting High-Technology Seeds: Tektronix’s Role in the Creation of Portland’s Silicon Forest,” *Oregon Historical Quarterly* 106, no. 4 (December 2005): 568–593; George Ernest Webb, *Science in the American Southwest: A Topical History* (Tucson: The University of Arizona Press, 2002); Stuart W. Leslie, “Regional Disadvantage: Replicating Silicon Valley in New York’s Capital Region,” *Technology and Culture* 42, no. 2 (April 2001): 236–264; Gordon B. Dodds, Craig Wollner, and Marshall M. Dodds Lee, *The Silicon Forest: High Tech in the Portland Area, 1945–1986* (Portland: Oregon Historical Society Press, 1990).

<sup>12</sup>Joseph E. Taylor III, “The Many Lives of the New West,” *Western Historical Quarterly* 35, no. 2 (Summer 2004): 141–165; Carl Abbott, *Metropolitan Frontier: Cities in the Modern American West* (Tucson: University of Arizona Press, 1995); Carl Abbott, *How Cities Won the West: Four Centuries of Urban Change in Western North America* (Albuquerque: University of New Mexico Press, 2008); Carl Abbott, *The New Urban America: Growth and Politics in Sunbelt Cities* (Chapel Hill: University of North Carolina Press, 1981), 15–56.

<sup>13</sup>Kevin J. Fernlund, ed., *The Cold War American West, 1945–1989* (Albuquerque: University of New Mexico Press, 1998).

large industrial structures that aided the earlier urban industrial age. Fueled by government policies promoting research and development, home ownership, and new jobs, these cities embraced pro-growth policies that attempted to balance pastoralism with industrial expansion. The courting of white-collar, middle-class Americans led to explosive growth in new urban centers in the West.

High-tech industrial development was widely welcomed and considered a preferred alternative to the dirty industry of the Northeast and Midwest. The so-considered “clean” industries held the appearance of suburban areas with broad lawns, trees, low-rise buildings, and hidden parking lots. Thanks to strict building guidelines laid out by Stanford University as well as city regulations on new construction, new high technology industries appeared more like a college campus than an industrial manufacturer or research center. But the promise of clean industry proved elusive as smog, radiation, water contamination, intense energy and water usage, traffic congestion, and rising housing and utility costs became common features of living in the Valley.

The reliance on high-tech industrialization masked environmental hazards. Throughout the Rust Belt, the environmental effects of industrialization left very visible signs of potential threats to air and water quality. High tech industrialization promoted itself as a clean and modern alternative to the older, smog-producing form of industrialization, yet came with its own costs. Electronics manufacturing relied particularly upon liquid and gas chemicals, which were often stored on-site, shipped in on freight, lightly regulated by federal or state rules, and were potentially invisible hazards to human health. By removing the green hue with which high-tech industries colored their activities, quality-of-life and social justice environmentalists targeted high tech industry and debated with boosters and industrialists about the industry’s impact on communities.

This work focuses on the grassroots politics produced by environmental

degradation, suburbanization, and the interplay between local and national interests in the emergence of “environment” in American politics. California thinks of itself as a trendsetter constantly reflecting and recreating the California Dream. Ideas about pastoralism and the promise of high tech industrialization represented an attempt to create this “good life,” which played out on the landscape through competing conceptions of community and a broader conversation over the future of American economy, society, and innovation. By bringing the environment, broadly construed, into the story of Silicon Valley and connecting it to the politics of growth, development, and community, I examine the ways in which people interacted and reacted to changes in their communities.

Although this study is tightly focused on a specific region, it has greater bearing on our understanding of the inherent tension within land use regimes and Americans’ growing awareness of environmental issues during the postwar era. The study of Silicon Valley offers us a chance to examine the emergence of a mid-twentieth-century economy in the American West whose effects dominate in the twenty-first. Technological innovation, market forces, waves of migration, government investment and regulation, and fragmentary politics defined the American political economy in the postwar era. Few of the industrialists, suburbanites, politicians, and activists in the pages ahead may have identified themselves as environmentalists, but Silicon Valley’s political history demonstrates the ways in which “the environment” became an ever-present issue in American postwar politics.

The grassroots approach of this work reveals that environmentalists often cared less about the standard political affiliations of Republican and Democrat and more about their identities as homeowners and taxpayers. Environmental historians have often considered environmental history to be the domain of Democratic politics, and environmental issues often laid at the feet of the liberal political

agenda. However, environmental politics between the 1950s and the 1970s often belied political affiliations. Suburban residents concerned with environmental issues were often unified in their vision of aesthetics, health, protection of children, pollution, and toxics. The history of Silicon Valley also is at odds with the conventional narratives of the 1970s “Rise of the Right” accounts and that suburbs primarily fostered a conservative political culture. Suburban liberalism continued to persist alongside the New Right in northern California. Rather than a rejection of the liberalism evident in southern California’s Orange County, Santa Clara County liberals fostered government intervention to serve their political interests.<sup>14</sup> These suburban liberals, in some ways, anticipated the “New Democrats” under Bill Clinton in the early 1990s.<sup>15</sup> Yet the variety of suburban liberalism of Silicon Valley underscores the limits of its adherents’ vision. Their priorities for quality-of-life improvements largely revolved around middle-class homeowners and high tech industry. The goals of environmental, feminist, labor, and racial justice activists went largely ignored.

By underscoring the local grassroots movements in environmentalism, the study reveals the variety of distinct and overlapping, evolving and organic local politics that intersected at regional, state, and national environmental discussions. Environmentalism, then, is a local experience, and those local struggles became a primary driver for national change. Yet, much of the environmental activism in Silicon Valley was reactionary rather than pace setting. The origins of an ecolog-

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<sup>14</sup>On the rise of the New Right and suburban politics, see: Kevin M. Kruse and Thomas Sugrue, eds., *The New Suburban History* (Chicago: University of Chicago Press, 2006); Lisa McGirr, *Suburban Warriors: The Origins of the New American Right* (Princeton: Princeton University Press, 2001); Kevin M. Kruse, *White Flight: Atlanta and the Making of Modern Conservatism* (Princeton: Princeton University Press, 2005); Matthew Lassiter, *The Silent Majority: Suburban Politics in the Sunbelt South* (Princeton: Princeton University Press, 2006); Robert O. Self, *American Babylon: Race and the Struggle for Postwar Oakland* (Princeton: Princeton University Press, 2003).

<sup>15</sup>Bill Clinton and other “New Democrats” also adopted Silicon Valley as a poster for the “New Economy.” See Sara Miles, *How to Hack a Party Line: The Democrats and Silicon Valley* (University of California Press, 2002). On the role of suburban liberals shaping American politics, see Lily Geismer, *Don’t Blame Us: Suburban Liberals and the Transformation of the Democratic Party* (Princeton: Princeton University Press, 2015).

ical consciousness and energy for political action in Santa Clara Valley suggests ideologies that predated much of the nation's eventual environmental sentiments in the 1970s.<sup>16</sup> These politics emerged out of a combination of interests, animated by the rapid growth of the technological economy, raising questions for people living in the community.<sup>17</sup>

Writing about environmental politics in the Bay Area also offers us ways to think about local politics. It might, as Richard Hofstadter once said, have "something to say that might help us."<sup>18</sup> The story here is, ultimately, about the practice of politics in postwar America. Around kitchen tables, within ad hoc coalitions, in letter campaigns and newspaper editorials, people talked about the changing environment around them. Amenities and cultural ideals about the Bay Area—climate, atmosphere, suburban, middle-class—had attracted newcomers and delighted old-timers. But the rise of industry, the influx of new residents, the explosion of suburban development, and the devastation of orchards led both groups to question what sort of changes they were welcoming to the Valley. Some of these organizations were short-lived, such as the Citizens Committee on Regional Planning or United Palo Altans, while others existed much longer to continue influencing California politics, such as California Tomorrow and the Committee for Green Foothills. These environmental organizations emerged directly from environmental changes occurring in Santa Clara Valley.

Simultaneously, entrepreneurs, urban planners, university administrators, and city leaders offered an alternative vision to the landscape: one that was in-

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<sup>16</sup>I am not alone in suggesting the Bay Area anticipated the broader environmental movement. Historian Margaret O'Mara has noted that the Bay Area became "home to some of the environmental movement's most important early battles and precedent-setting land-use planning measures." Margaret Pugh O'Mara, *Cities of Knowledge: Cold War Science and the Search for the Next Silicon Valley* (Princeton: Princeton University Press, 2005), 139.

<sup>17</sup>The importance of suburbs in fostering environmentalism has been argued by other historians, in particular Sellers, *Crabgrass Crucible*, and Rome, *Bulldozer in the Countryside*.

<sup>18</sup>Hofstadter quoted in Christopher Lasch, "Consensus: An Academic Question," *Journal of American History* 76 (September 1989): 458.

creasingly urban and industrial rather than rural and agricultural—but no less idealized. Often times support for growth was couched in the language of national defense: Cold War defense spending poured into Stanford University, for example, which eagerly sought out military contracts in research and development. Stanford administrators responded to citizens critiques of land development programs by dismissing their concerns as less important than national defense concerns. Unplanned urban growth and economic development characterized much of Santa Clara Valley in the latter half of the twentieth century. California voters became increasingly aware of the environmental considerations urban growth and industrial development had for the region, leading to political activism, new environmental regulation laws, and community referendums.<sup>19</sup>

The pages ahead fill a void in the history of the American West by bringing nature and high tech urbanism closer together. Historians of the West have noted the importance of the “information revolution” to coastal California’s development, but have done little to dive into its history. William Robbins noted almost two decades ago the “explosive expansion of the high-tech sector” that there existed “a new rural West—centered in the information revolution” were transforming urban prosperity and suburban poverty.<sup>20</sup> Earl Pomeroy’s posthumously published *The Far West in the Twentieth Century* includes a brief history of the semiconductor industry and its outgrowth from military investments.<sup>21</sup> John Findlay was among the first western historians to place Silicon Valley into histor-

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<sup>19</sup>On the rise of the modern environmental movement, see Samuel P. Hays, *Beauty, Health, and Permanence: Environmental Politics in the United States, 1955-1985* (Cambridge: Cambridge University Press, 1987), 13-19; Hal Rothman, *Saving the Planet: The American Response to the Environment in the Twentieth Century* (Chicago: Ivan R. Dee, 2000), 131-159; Ted Steinberg, *Down to Earth: Nature’s Role in American History* (New York: Oxford University Press, 2002), 239-261; John Opie, *Nature’s Nation: An Environmental History of the United States* (Fort Worth: Harcourt Brace College Publishers, 1998), 404-433.

<sup>20</sup>William Robbins, “Creating a ‘New’ West: Big Money Returns to the Hinterland,” *Montana: The Magazine of Western History* 46 (summer 1996): 66-72.

<sup>21</sup>Earl Pomeroy and Richard Etulain, *The American Far West in the Twentieth Century* (New Haven: Yale University Press, 2008).

ical context, writing about how people created, and were affected by, urban culture. In particular, Findlay analyzes how urban environments were planned, built, managed, and used, and how inhabitants made sense of cities. Findlay's analysis used Silicon Valley as one of his case studies, focusing on Stanford University and suburban landscapes to understand the ways that residents used the pastoralism of the university as a retreat from the chaos of urbanization. Margaret O'Mara extended the story in one of her case studies analyzing the success and failure of places that attempted to replicate Silicon Valley's success. O'Mara focused on how Stanford University played an important role in shaping land-use policies in Palo Alto and surrounding communities, and contextualizing the reasons behind Silicon Valley's success owing to pleasant climate, a white-collar workforce, the space to expand suburban areas, and proximity to a research university.<sup>22</sup>

Historians have begun to explore the social and cultural consequences of Silicon Valley. Glenna Matthews addressed issues of gender, labor, and class in Silicon Valley, focusing her lens on immigrant women who worked in canneries and high-tech industries to "test [the] reality behind the [area's] glitzy image." Her focus on unionization of workers and their efforts towards social justice illustrates a dimension of the story not otherwise told. On issues of race in Northern California, Stephen Pitti has examined Mexican Americans and the long history of race relations and labor issues in the Bay Area. And Cecilia M. Tsu examined the agricultural past of Santa Clara Valley, studying Asian immigrants in Santa Clara Valley to examine the overlapping ideologies of race, gender, and labor between 1880 and 1940. These works have helped to uncover the story of Silicon Valley that have been ignored or gone unknown—race relations, social justice, labor, gender, and politics.<sup>23</sup> These works help to build my own by taking into account, in

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<sup>22</sup>Findlay, *Magic Lands*, 117–159; O'Mara, *Cities of Knowledge*; Annalee Saxenian, *Regional Advantage: Culture and Competition in Silicon Valley and Route 128* (Harvard University Press, 1996).

<sup>23</sup>Glenna Matthews, *Silicon Valley, Women, and the California Dream: Gender, Class, and Opportunity in the Twentieth Century* (Stanford: Stanford University Press, 2003); Stephen J. Pitti, *The Devil in*

particular, the class and gendered dimensions of Silicon Valley's origins and post-war development. While Matthews primarily looks to blue-collar women inside the manufacturing facilities and canneries of Santa Clara Valley, I turn my gaze to white-collar professional women as leaders in promoting an environmental politic.<sup>24</sup>

Other writers and observers have attempted to draw lessons from Silicon Valley's growth and development, but those works have targeted audiences interested in the entrepreneurs famous to the region. Tech journalist Robert Cringely, biographer Walter Isaacson, journalist Michael S. Malone and other popular writers have highlighted the importance of specific individuals in shaping the technology industry, but such works tend to celebrate individuals and companies rather than contextualize the Valley's history.<sup>25</sup> Historians of business have of-

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*Silicon Valley: Northern California, Race, and Mexican Americans* (Princeton: Princeton University Press, 2004); Cecilia M. Tsu, *Garden of the World: Asian Immigrants and the Making of Agriculture in California's Santa Clara Valley* (New York: Oxford University Press, 2013). See also Aaron Cavin's excellent study of race and citizenship in Silicon Valley among Mexican Americans and Asian Americans. Aaron Cavin, "The Borders of Citizenship: The Politics of Race and Metropolitan Space in Silicon Valley" (PhD Dissertation, University of Michigan, 2012).

<sup>24</sup>The exception in Matthews' work is Matthews, *Silicon Valley, Women, and the California Dream*, chap. 6. For additional work on gender, class, and race in Silicon Valley, see Christian Zolniski, *Janitors, Street Vendors, and Activists: The Lives of Mexican Immigrants in Silicon Valley* (Berkeley: University of California Press, 2006); Marcia Lynn Douglass, "The Myth of Meritocracy: Race, Class, and Gender in Silicon Valley" (PhD Dissertation, University of California, San Diego, 1991); Nancey Green Leigh, "What Happened to the American Dream? Changing Earning Opportunities and Prospects of Middle-Class Californians, 1967-1987," *California History* 68, no. 4 (December 1989): 240-247; Cecilia Tsu, "'Independent of the Unskilled Chinaman': Race, Labor, and Family Farming in California's Santa Clara Valley," *Western Historical Quarterly* 37, no. 4 (December 2006): 474-495; Herbert G. Ruffin, *Uninvited Neighbors: African Americans in Silicon Valley, 1769-1990* (Norman: University of Oklahoma Press, 2014); Glenna Matthews, "The Fruit Workers of the Santa Clara Valley: Alternative Paths to Union Organization During the 1930s," *Pacific Historical Review* 54, no. 1 (February 1985): 51-70.

<sup>25</sup>Michael S. Malone, *The Valley of Heart's Delight: A Silicon Valley Notebook, 1963-2001* (New York: John Wiley & Sons, 2002); Michael Malone, *Betting It All: The Entrepreneurs of Technology* (New York: Wiley, 2001); Malone, *Bill & Dave: How Hewlett and Packard Built the World's Greatest Company* (New York: Portfolio, 2007); Robert Cringely, *Accidental Empires: How the Boys of Silicon Valley Made Their Millions, Battle Foreign Competition, and Still Can't Get a Date* (New York: HarperBusiness, 1996); James Wallace, *Hard Drive: Bill Gates and the Making of the Microsoft Empire* (New York: HarperBusiness, 1993); David A. Kaplan, *The Silicon Boys: And Their Valley of Dreams* (New York: William Morrow, 2000); Leslie R. Berlin, "Robert Noyce and Fairchild Semiconductor, 1957-1968," *Business History Review* (Spring 2001): 63-100. Very few of these books address issues of women or gender, often reflected in the book titles. On the centrality of women and gender in the history of computing, see Nathan L. Ensmenger, *The Computer Boys Take Over: Computers, Programmers, and the*

ferred more nuanced approaches to the Valley's history.<sup>26</sup> Furthermore, scholars have looked to the countercultural and libertarian origins of the Valley's political culture, whose ethos and energies likewise shaped the environmental politics described ahead.<sup>27</sup> My work intervenes in this discussion by placing suburban liberals into the history.

Few environmental histories have focused on local environmental histories, except in cases of single local campaigns. Most histories focus their geographic scale far above the local community, giving their attention to national legislation, federal agencies, or large environmental organizations. Those works that attempt to give attention to local action—namely Samuel Hays's classic *Beauty, Health, and Permanence*—address topics so briefly as to only give local activism but a few pages of discussion. The larger goal of such works has been to connect places and controversies to the wider national narrative. Other works have focused their lenses on single states or controversies, such as William Robbins's two volumes on Oregon and Andrew Hurley's *Environmental Inequalities*, a study of environmental racism in Gary, Indiana. By focusing on Silicon Valley, I add to the historiography on local environmentalism and look at the ways grassroots politics helped form state and national changes in policy, discourse, and ideology. If the Valley represents a promise for cities to jumpstart their economies, it also represents a

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*Politics of Technical Expertise* (Cambridge: MIT Press, 2010); David Alan Grier, *When Computers Were Human* (Princeton: Princeton University Press, 2005). On criticism of Silicon Valley, see Clifford Stoll, *Silicon Snake Oil: Second Thoughts on the Information Highway* (New York: Doubleday, 1995).

<sup>26</sup>See, especially, Leslie R. Berlin, "Robert Noyce and Fairchild Semiconductor, 1957-1968," *The Business History Review* 75, no. 1 (April 2001): 63-101. Berlin argues for the importance of Robert Noyce and the development of the integrated circuit in fostering a business culture in Silicon Valley. As Founder of Fairchild Semiconductor and Intel, Noyce represented an important public figure for the semiconductor industry that helped create a culture of innovation, creativity, and collaboration.

<sup>27</sup>See, in particular, Fred Turner, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism* (Chicago: University of Chicago Press, 2006); Fred Turner, "Where the Counterculture Met the New Economy: The WELL and the Origins of Virtual Community," *Technology and Culture* 46, no. 3 (July 2005): 485-512; Eric James Vettel, *Biotech: The Countercultural Origins of an Industry* (Philadelphia: University of Pennsylvania Press, 2006); John Markoff, *What the Dormouse Said: How the Sixties Counterculture Shaped the Personal Computer Industry* (New York: Viking, 2005).

pace-setting location for land use and regulation.<sup>28</sup>

The lacunae of this dissertation stands at the intersection of urban development, postwar suburbanization, recreation and leisure, business history, and American environmentalism, arguing that the politics of growth intersected with a powerful nostalgia about the countryside of Santa Clara Valley. Environmental critics argued that industrialization and real estate development served to ruin the environment, introducing sprawling places that wrought ecological havoc and erased a sense of community identity. These debates highlight the malleability of landscapes. More broadly, these attempts to define the landscape shape the political, cultural, and social norms that tend to shape space and geography. As other historians of space and place have noted, the spatial structures used to order the world produce a metageography that relies on myths and half-truths in order to create a narrative of place.<sup>29</sup>

That malleability forms my core analytical framework. In order to recover conflicts among communities, I have imposed some order onto the analysis. In particular, the concept of landscape has helped me unravel how and why communities vied over land use. The geographer D. W. Meinig refers to landscapes as “a naïve acceptance of the intricate intermingling of physical, biological, and cultural features which any glance around us displays.”<sup>30</sup> Cordoned off sites for

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<sup>28</sup>Margaret O'Mara says that Silicon Valley was “home to some of the environmental movement’s most important early battles and precedent-setting land-use planning measures”. O'Mara, *Cities of Knowledge*, 131. The work that is closest to mine, and is owed a debt for his pathbreaking work, is Richard Walker, *The Country in the City: The Greening of the San Francisco Bay Area* (Seattle: University of Washington Press, 2007), whose work illuminated the workings of a “green” political culture in the Bay Area. Walker’s work does not focus primarily on Silicon Valley, however. His work ranges from the vineyards in Marin to the Bay conservation controversies. Walker’s title is consciously drawn from Raymond Williams, *The Country and the City* (Oxford: Oxford University Press, 1973).

<sup>29</sup>Susan Schulten, *Mapping the Nation: History and Cartography in Nineteenth-Century America* (Chicago: University of Chicago Press, 2012), 3; Mark Lewis and Kären Wigen, *The Myth of Continents: A Critique of Metageography* (Berkeley: University of California Press, 1997); Kären Wigen, *A Malleable Map: Geographies of Restoration in Central Japan, 1600–1912* (Berkeley: University of California Press, 2010).

<sup>30</sup>Donald Meinig, ed., *The Interpretation of Ordinary Landscapes* (New York: Oxford University Press, 1979), 2.

military installations, polluted grounds, and wildlife refuges hold just as much meaning as neighborhoods and city districts defined for particular uses or perceived of in particular ways. The Santa Clara Valley—indeed, much of the American West—contain what Richard White has called “hybrid landscapes” where cultural ideologies clash over conflicting uses of natural resources. The hybrid landscape is neither purely wild nor purely built, but instead a construction of natural and cultural systems that shape and create place.<sup>31</sup> People define places by embedding ideas on the landscape. In cities, urban planners lay down grids of roads, zones, and regulations that divide cities along labor, leisure, and consumption, thus imbuing certain places with particular meaning.<sup>32</sup>

Promoters, boosters, business leaders, residents, and government constructed physical and conceptual boundaries around competing landscapes in Silicon Valley. These landscapes were designed to promote a particular metropolitan future

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<sup>31</sup>Richard White, “From Wilderness to Hybrid Landscapes: The Cultural Turn in Environmental History,” *The Historian* 66 (September 2004): 562–664. In Richard White’s survey of trends in environmental history, he argues historians reject any hard division between culture and natural. Instead, they examine how cultural forces shape landscapes. Kenneth Olwig has argued that landscape is a physical and cultural manifestation, where “environment, economics, law, and culture are all important,” and symbolic, “to be perceived, read, and interpreted on the ground, in written texts, and through artistic images.” Kenneth R. Olwig, “Recovering the Substantive Nature of Landscape,” *Annals of the Association of American Geographers* (December 1996): 645. See also Donald Meinig, “The Interpretation of Ordinary Landscapes,” in *The Beholding Eye: Ten Versions of the Same Scene*, ed. Donald Meinig, pp. 43–45; Keith H. Basso, *Wisdom Sits in Places*, p. 110. William Cronon has argued the same phenomenon happens when Americans construct and then preserve wilderness to suit ideas of sublime nature while disregarding less-striking landscapes. See William Cronon, “The Trouble with Wilderness; or, Getting Back to the Wrong Nature,” in *Uncommon Ground: Rethinking the Human Place in Nature*, ed. Cronon, (New York: Norton, 1996), 69–90. See also Sharon Zukin, *Landscapes of Power: From Detroit to Disney Land* (Berkeley: University of California Press, 1991). The literature on space and place is vast. See, for example, Henri Lefebvre, *The Production of Space*, trans. by Donald Nicholson-Smith, (New York: Wiley-Blackwell, 1992); Lewis, and Wigen, *The Myth of Continents*; Neil Smith, *Uneven Development: Nature, Capital, and the Production of Space* (Oxford: Basil Blackwell, 1984); Edward Soja, *Postmodern Geographies: The Reassertion of Space in Critical Social Theory* (London: Verso, 1989); David E. Sopher, “The Landscape of Home,” in *The Interpretation of Ordinary Landscapes: Geographical Essays*, ed. by D. W. Meinig, (Oxford: Oxford University Press, 1979), 129–149; Meinig, *Interpretation of Ordinary Landscapes*.

<sup>32</sup>Lefebvre, 68–168; Cameron Blevins, “Space, Nation, and Triumph of Region: A View of the World from Houston,” *Journal of American History* (June 2014);, Yi-Fu Tuan, *Space and Place: The Perspective of Experience* (Minneapolis: University of Minnesota Press, 1977); Michel de Certeau, *The Practice of Everyday Life*, trans. by Steven Rendall, (Berkeley: University of California Press, 1984); John A. Agnew and James S. Duncan, eds., *The Power of Place: Bringing Together Geographical and Sociological Imaginations* (Unwin Hyman, 1989).

and were enacted through federal policies and city regulations, ranging from the establishment of wilderness areas and environmental protection to the particularities of zoning decisions that enacted cultural, environmental, and economic patterns. Places were designed for specific intents, but the conceptual and the geographic converged on the landscape. The conflicts over the landscape belied the clean lines on physical maps. The actual boundaries were far messier and complex.

These competing landscapes formed the cultural and political underpinnings of Silicon Valley's environmental politic. In the Santa Clara Valley, the creation of new landscapes resulting from perceptions of the region as farmland, electronics manufacturer, suburban paradise, and natural paradise shaped the Valley's environment. The underlying and conflicting connections among these landscapes shaped environmental, cultural, and political identities.<sup>33</sup> Landscapes, in Meinig's words, are "a great exhibit of consequences," and are "symbolic, as expressions of cultural values, social behavior, and individual actions worked upon particular localities over a span of time."<sup>34</sup> By viewing Silicon Valley this way, I argue for the significance of nature in shaping space and perceptions in the crafting of a suburban high-tech urbanism. Rather than echo Lewis Mumford's claim that "as the pavement spreads, nature is pushed away," I argue that the creation of landscapes was both natural and social.<sup>35</sup> Nature and cities are not distinct entities, and any separation among them is nearly futile but ever-changing and

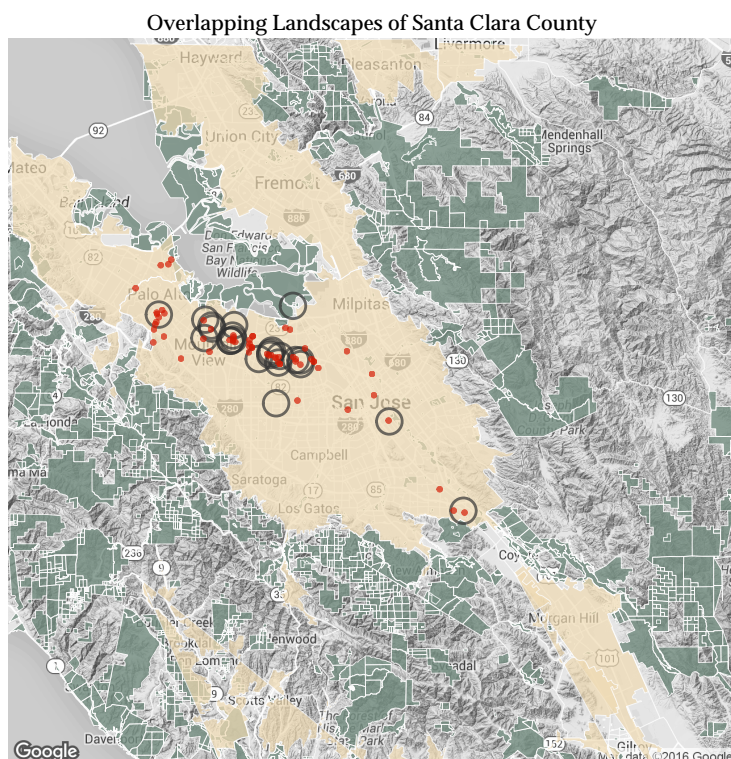
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<sup>33</sup>Historian Hal Rothman and economist Thomas Michael Power have explored the larger ramifications of this shift in the American West. See Hal Rothman, *Devil's Bargains: Tourism in the Twentieth-Century West* (Lawrence: University Press of Kansas, 1997), 17; Thomas Michael Power, *Lost Landscapes and Failed Economies: The Search for a Value of Place* (D. C. Washington: Island Press, 1996).

<sup>34</sup>"Introduction," in Meinig, *Interpretation of Ordinary Landscapes*.

<sup>35</sup>Lewis Mumford, *The Culture of Cities* (1938; reprint, San Diego: Harcourt, Brace, 1970), 253. See also Williams, *The Country and the City*, Smith, *Uneven Development*, 55–58; Eric Monkonn, *America Becomes Urban: The Development of U.S. Cities and Towns, 1780–1980* (Berkeley: University of California Press, 1988), 3; William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W.W. Norton, 1989), 7.

shifting in complex ways.<sup>36</sup>



**Figure 2:** The overlapping landscapes. The map depicts urban areas (tan), open space (green), Superfund sites (large dark circles), and toxic and chemical leaks and spills (small red circles). Map by author. Interactive version at <http://dissertation.jasonheppler.org/visualizations/rivers/>. Data courtesy NHGIS, the Bay Area Conservation Lands Network, and U.S. Census.

These landscapes in conflict are explored through community studies focusing primarily around San Jose and Palo Alto, arranged in six chronologically thematic chapters. The first two chapters explore the structural and political forces that created the political culture of suburban environmentalists in Silicon Valley. The idealized pastoralism of the Santa Clara Valley was a significant draw for nineteenth century boosters and town builders, a theme that continued well into the postwar era. That vision sought to build cities in tune with the natural world,

<sup>36</sup>I am influenced here also by Ari Kelman's terrific study of New Orleans and the Mississippi River. Kelman sees nature and the city as inseparable, arguing that "New Orleans's waterfront represents a mingling of built and natural environments, and that the production of space in New Orleans has been both a natural and social process." See Ari Kelman, *A River and Its City: The Nature of Landscape in New Orleans* (Berkeley: University of California Press, 2006), 1–17.

first through farming and later through leisure and aesthetics. These foundations paved the way for a variety of grassroots activism. The remaining chapters examine how suburbanites confronted, challenged, and conformed to new political and environmental realities, including the collapse of the farm economy, rampant urban sprawl and industrialization that threatened the amenities that drew residents to the Valley, and the often-hidden health risks of airborne and waterborne pollutants that obliterated suburbanites' sense as privileged communities.

Silicon Valley has become a cultural center in the United States; the wealth, political influence, environmental precedence, and place in the American imagination has led the Valley to take on an almost mystical quality in American life. Cities and universities across the country and across the world try and mimic the success of Silicon Valley and Stanford University. The Valley is synonymous with the technology industry, an industry that has taken on ever increasing importance to the nation's economy. Furthermore, the economic importance of regions like Silicon Valley meant that places where suburban liberalism persisted also led to shifts in political discourse at the state and national level in both parties as the priorities of suburbanites and their employers took hold. These priorities not only manifested themselves in economic policies like free trade, tax cuts, and continued investment into high-tech industry, but also through environmental policies and regulations that filtered up from local issues.

This is not a history of prominent leaders often attributed to the creation of Silicon Valley—the veritable household names of David Packard, William Hewlett, Robert Noyce, and Steve Jobs. But a note on the people that do appear here merits some attention. Although the pages ahead dive little into business leaders often credited with the origins of the Valley, the people that appear are largely white, male, affluent elites. Race certainly plays a role in environmental conversations in Silicon Valley, particularly among the largest community of color,

Latinos. Activism around environmental issues in Santa Clara County, however, are not a major driving force of Latino politics in the postwar era. More political energy is spent on issues related to housing, employment, citizenship, and discrimination—and although “environment” appears within some of these issues, my archival sources did not often reflect that. However, there does exist ample evidence for future work on Silicon Valley and race. There is little work, for example, on the role of Latino laborers working inside high tech manufacturing facilities who were exposed to harsh chemicals during the manufacturing process.<sup>37</sup>

Many of the sources used in this study were drawn primarily from people working within the confines of traditional political power. Local government publications played a big role in framing the ways government leaders sought to shape and define high tech suburbanization in Silicon Valley. Much of the source material is drawn from, in particular, a documentary record surrounding land use and environmental regulations and legislation. The evidence from these sources rarely confronted issues surrounding race, at least as it applied to the environment. More often, these sources point to issues of housing, access to employment, and segregated urban spaces.<sup>38</sup>

Based on my evidence, class and gender play much larger roles in the

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<sup>37</sup>Some early work includes Matthews, *Silicon Valley, Women, and the California Dream*; Ted Smith, David Sonnenfeld, and David Pellow, eds., *Challenging the Chip: Labor Rights and Environmental Justice in the Global Electronics Industry* (Philadelphia: Temple University Press, 2006); Pitti, *Devil in Silicon Valley*; Zolniski, *Janitors, Street Vendors, and Activists*.

<sup>38</sup>One of the archives I went through, for example, included the Don Edwards Papers at San Jose State University. Edwards' papers includes large amounts of material related to African American and Latino housing issues in particular. See, in particular, Box 72 and Box 84 in the Don Edwards Congressional Papers, San Jose State University. It's certainly not the case that racial dynamics do not exist in Silicon Valley. Important scholarly work, in particular by Ruffin, *Uninvited Neighbors*, Tsu, *Garden of the World*, Pitti, *Devil in Silicon Valley*, and Cavin, “Borders of Citizenship,” address Silicon Valley's issues of race and class. There may be other sources out there that bring to bear new light on the racial dynamics of Silicon Valley's environmentalism of this beyond the evidentiary base I have dealt with, and moving forward with the book project I intend to seek these out more fully. Brown and black communities were harder to get at, rarely mentioned in the power dynamics of the white, affluent environmentalists of Silicon Valley.

story ahead. The affluent, white-collar suburbanites drove much of the responses to environmental laws and regulations. Planning and regulation largely benefited these suburban white neighborhoods over ethnic enclaves. As the pages ahead show, pollution was often offloaded to areas of cities away from high property values, middle-class neighborhoods, and high tech industrial districts. Postwar suburbanization largely benefited the white middle class, giving them a chance to enjoy environmental amenities of suburban life while environmental costs were shuffled onto non-white communities on the suburban fringe. This environmental racism—the unequal distribution of environmental hazards along lines of race—largely occurred within class privilege. In Silicon Valley, the environmental dangers of flooding, subsidence, and sewage processing largely exempted middle-class whites.<sup>39</sup>

Gender plays the bigger role in Silicon Valley's urban environmental history than class or race. To a great degree, many of the earliest activists for the environment were women. Whether starting out as affordable housing activists in San Francisco or concerned about high tech pollution in their neighborhoods threatening family health, women led the way in galvanizing political activity around environmental issues.<sup>40</sup> In the 1970s, the widespread ascent of women into political office, especially in San Jose and Santa Clara County government, led to the moniker "Feminist Capital of the World." Lawyers, housewives, politicians, scientists, engineers, and mothers such as Pam Tau Lee, Janet Gray Hayes,

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<sup>39</sup>Laura Pulido, "Rethinking Environmental Racism: White Privilege and Urban Development in Southern California," *Annals of the Association of American Geographers* 90, no. 1 (March 2000): 12–40; Robert D. Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* (Boulder: Westview Press, 1990); David N. Pellow and Lisa Sun-Hee Park, *The Silicon Valley of Dreams: Environmental Injustice, Immigrant Workers, and the High-Tech Global Economy* (New York: New York University Press, 2002); Andrew Hurley, *Environmental Inequalities: Class, Race, and Industrial Pollution in Gary, Indiana, 1945–1980* (Chapel Hill: University of North Carolina Press, 1995); Laura Pulido, *Environmentalism and Economic Justice: Two Chicano Struggles in the Southwest* (Tucson: University of Arizona Press, 1996); Marc Cooper, "Class War @ Silicon Valley: Disposable Workers in the New Economy," *The Nation*, May 27, 1996.

<sup>40</sup>Matthews, *Silicon Valley, Women, and the California Dream*; Douglass, "The Myth of Meritocracy."

Mary Bowerman, Dorothy Erskine, and Lorraine Ross were central grassroots activists. In public and private spheres—local government, neighborhoods, the home—women developed a “green” political culture primarily revolving around health. Janet Gray Hayes in particular plays a key role in the story ahead as she and her suburban liberal allies built coalitions with environmentalists, labor groups, and minorities to promote “smart growth” in San Jose. These female activists shifted the grounds on which debates about sustainability, livability, open space, leisure, and health took place, standing against pro-growth advocates in city and regional government.

This history is about the history that Silicon Valley has inherited. The Valley often thinks of itself as outside of history—always looking to the future, at the forefront of change and progress. But the organization and imagination of Silicon Valley—its landscape, its communities, its relationships—are inseparable from its past. People here live with its history daily. We must recognize how desires for beauty, nature, and pleasure shape our spatial history, landscape, and nostalgia embodied in cities. Cities, the novelist Italo Calvino reminds us in *Invisible Cities*, do “not tell [their] past” but are “like lines on a hand, written in the corners of the streets, the gratings of the windows, the banisters of the steps, the antennae of the lightning rods, the poles of the flags, every segment marked in turn with scratches, indentations, scrolls.”<sup>41</sup> Cities and the nature that surrounds them—that is embedded in them—are reflections of past and present desires. To build better cities, we must reflect the ways our landscapes match our aspirations.

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<sup>41</sup>Italo Calvino, *Invisible Cities*, trans. (New York: Harcourt Brace and Company, 1974), 11.

## Chapter 1

### Nature, History, and the Origins of the Countryside

The whole valley was densely timbered, but the gigantic oaks had to make way for the plow, to be succeeded by fields of grain, and these were followed quickly by vines and fruit trees. —E. S. Harrison, 1888

Glorious oaks! Your days are numbered. The axe of Utility is already at your base. Pass into the dreamy past of Love and tender Memories, and let your places be filled by the grape, the prune, the apricot, and other fruits whose rich juices shall carry to the end of the earth the life, drawn from the fertilizing mold formed by the countless years of your lavishness of cast off leaves and twig. —Carrie Stevens Walter, 1887

A veritable Paradise.

—C. L. Lawrence, 1927

The San Francisco Peninsula followed—and in some ways led—the nation's shift in population moving westward. The location of World War II military facilities drew millions to the Far West. But it also followed another wartime trend—the militarization of industry. The twentieth-century American West, according to Kevin Fernlund, “bristled with airfields, army bases, naval yards, marine camps, missile fields, nuclear test sites, proving grounds, bombing ranges, weapons plants, military reservations, training schools, toxic waste dumps, strategic mines, transportation routes, lines of communication, laboratories, command centers, and arsenals.” The burgeoning industrial and military landscape in the West demanded a population to support it. California alone accounted for the most dramatic increase in population due to the militarization of its economy.<sup>1</sup>

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<sup>1</sup>The *San Francisco Chronicle* estimated that nearly 40,000 acres of the Santa Clara Valley were

Postwar prosperity encouraged widespread growth across the country. By the 1950s many American cities experienced sprawling suburbanization, but what was initially seen as a fulfillment of the American dream of homeownership became viewed as an environmental disaster. Critics took aim at suburban growth and environmental destruction, and nowhere was this change more obvious than in the West. Metropolitan growth doubled the population in the region between 1940 and 1960. By the 1980s, the region was among the fastest growing in the nation.<sup>2</sup> Many westerners were unsettled by population growth, and raised concerns about the disappearance of rural landscapes being replaced by sprawl.<sup>3</sup> Western political leaders such as Oregon Governor Thomas McCall condemned what he called “sagebrush suburbs” and sought limits on urban growth in the state. Anti-growth and environmental sentiments lay behind Bay Area residents placing new limits on urban growth and condemning boosters that supported plans for urban expansion.

The Bay Area witnessed some of the most dramatic urban growth. During the 1940s, Santa Clara County experienced 66% growth in population, compared to a California wide growth of 53%. By the 1950s those figures surged upward; the population increased 121% in Santa Clara County compared to 49% statewide. Subdivisions sprang up to accommodate the influx of new residents. Most of these new subdivisions were located beyond existing city boundaries in unincorporated areas. Between 1945 and 1950 county farmland decreased from 727,000 acres to 589,000—a reduction of 81%.<sup>4</sup> During that same period, Santa Clara County cities

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devoted to the fruit industry in 1895. “Santa Clara Valley: A Favored Section,” *San Francisco Chronicle*, July 29, 1895.

<sup>2</sup>Michael Friedly, “‘This Brief Eden’: A History of Landscape Change in California’s Santa Clara Valley” (PhD Thesis, Duke University, 2000), 58.

<sup>3</sup>Mars, *Reminiscences of Santa Clara Valley*, 58.

<sup>4</sup>Today, the valley oak (*Quercus lobata*) is among California’s most threatened oak species, largely because they grew on lands desired for suburbanization and agricultural development. See Robin M. Grossinger, Charles J. Striplen, Ruth A. Askevold, Elise Brewster, and Erin E. Beller, “Historical Landscape Ecology of an Urbanized California Valley: Wetlands and Woodlands in the Santa Clara Valley” *Landscape Ecology* 22 (2007): 3.

engaged in rapid annexations. San Jose annexed land thirty-two times between 1945 and 1950. During the same period, the City of Santa Clara annexed only four tracts, but in 1951 annexed six tracts and another nine in 1952. Santa Clara added 50 acres to the city in two years. In the same two year period, San Jose annexed sixteen parcels that totaled over 1000 acres.<sup>5</sup> Between 1945 and 1970, San Jose approved over 1,400 annexations and expanded the city's footprint from fifteen square miles to 135 square miles. The city's land area expanded by 900 percent.<sup>6</sup>

Populations surged simultaneously with industrial development. The combination of defense industries, electronics research and development contracts, Cold War defense agendas, abundant and inexpensive land, and cities willing and able to support the rapid expansion of city infrastructure welcomed the arrival of new industries. Industrial development began in the 1940s when the National Advisory Committee on Aeronautics started construction of the Ames Research Laboratory near Moffett Airfield. Stanford University leased its large land holdings to industrial entrepreneurs and researchers who were active in developing electronics equipment for military purposes. In just five years after the end of World War II, fifty new electronics industries began in the Valley. International Business Machines (IBM) established a card printing plant in 1948 in San Jose, and Russell and Sigurd Varian, inventors of the klystron tube, founded Varian Associates to manufacture devices.<sup>7</sup> Other industrial developers founded their companies on what would become the Stanford Industrial Park in the late 1950s.

Before the wartime transformations, however, Silicon Valley was known instead as the "Garden of the World." This landscape was constructed out of agri-

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<sup>5</sup>Foote, *Pen Pictures from the Garden of the World*, 21.

<sup>6</sup>Mary McDougall Gordon, "'This Italy and Garden Spot of All-America': A Forty-Niner's Letters from the Santa Clara Valley in 1851," *Pacific Historian* 39:1 (1985): 12.

<sup>7</sup>Friedly, "'This Brief Eden'," 317.



**Figure 1.1:** North Santa Clara Valley looking east towards San Jose, 1962. Photograph from Air-Photo Co., Inc., Palo Alto Airport, Palo Alto.

culture and the creation of a “garden myth.”<sup>8</sup> We can begin to understand how the Valley was thought of as a desired place influenced by the Valley’s agricultural productivity and climate. The past peculiarities of the Valley’s agriculture history illustrates how nineteenth century Spanish, Mexican, and American settlers came to define land use around climate and productivity. To understand the tensions between users of the land—should a hillside be a research laboratory, suburb, or preserved in a “natural” state?—a consideration of the “garden myth” helps explain later patterns of metropolitan development and environmental thought in the twentieth century. As the lands became understood as an agricultural bounty, it also influenced the shape and character of cities. The market towns of Santa Clara Valley adapted to this landscape, seen specifically through San Jose and its canneries and railroads or Saratoga and Los Gatos and “agricultural tourism.” These places became defined by their “nature.” Before the Valley’s change to a place for electronics, federal investments, and military geography, place was defined by its natural surroundings, the definition of which remained contested into the twentieth century.

THE STORY BEGINS WITH THE LAND. As the Wisconsin glaciation period was ending 12,000 years ago, uplift resulting from the collision of the Pacific and North American tectonic plates started shaping the San Francisco Bay Area into its present form. The collision forced the coastline northward along the San Andreas fault and caused additional uplift along the entire coast, generating the coastal range. The new coastal ranges interrupted the flow of air coming off the Pacific Ocean. At the northern end of the Bay, a stubborn marine layer created by regular tem-

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<sup>8</sup>On the emergence of the garden myth, see Mark Fiege, *Irrigated Eden: The Making of an Agricultural Landscape in the American West* (Seattle: University of Washington Press, 1999); Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (Oxford: Oxford University Press, 2000), Henry Nash Smith, *Virgin Land: The American West as Symbol and Myth* (Cambridge: Harvard University Press, 1950).

perature inversions that trapped cool, moist air caused regular fog to drift into the mouth of the Bay. On the Pacific-facing side of the coastal ranges, the moisture-heavy air allowed coastal redwoods to flourish, giving the Santa Cruz Mountains a green vale year-round. Yet the range also produced a rain shadow for the flatlands of the Valley, where trees became scarcer and native grasses took their place. The eastern half of the Valley rises again into the dry and khaki-brown Diablo Range and its highest point, Mount Hamilton. The coastal ranges protected the Valley from serious frosts, major storms, and excessive temperatures, giving the region its reputation as one of the most temperate environments on the planet.<sup>9</sup>

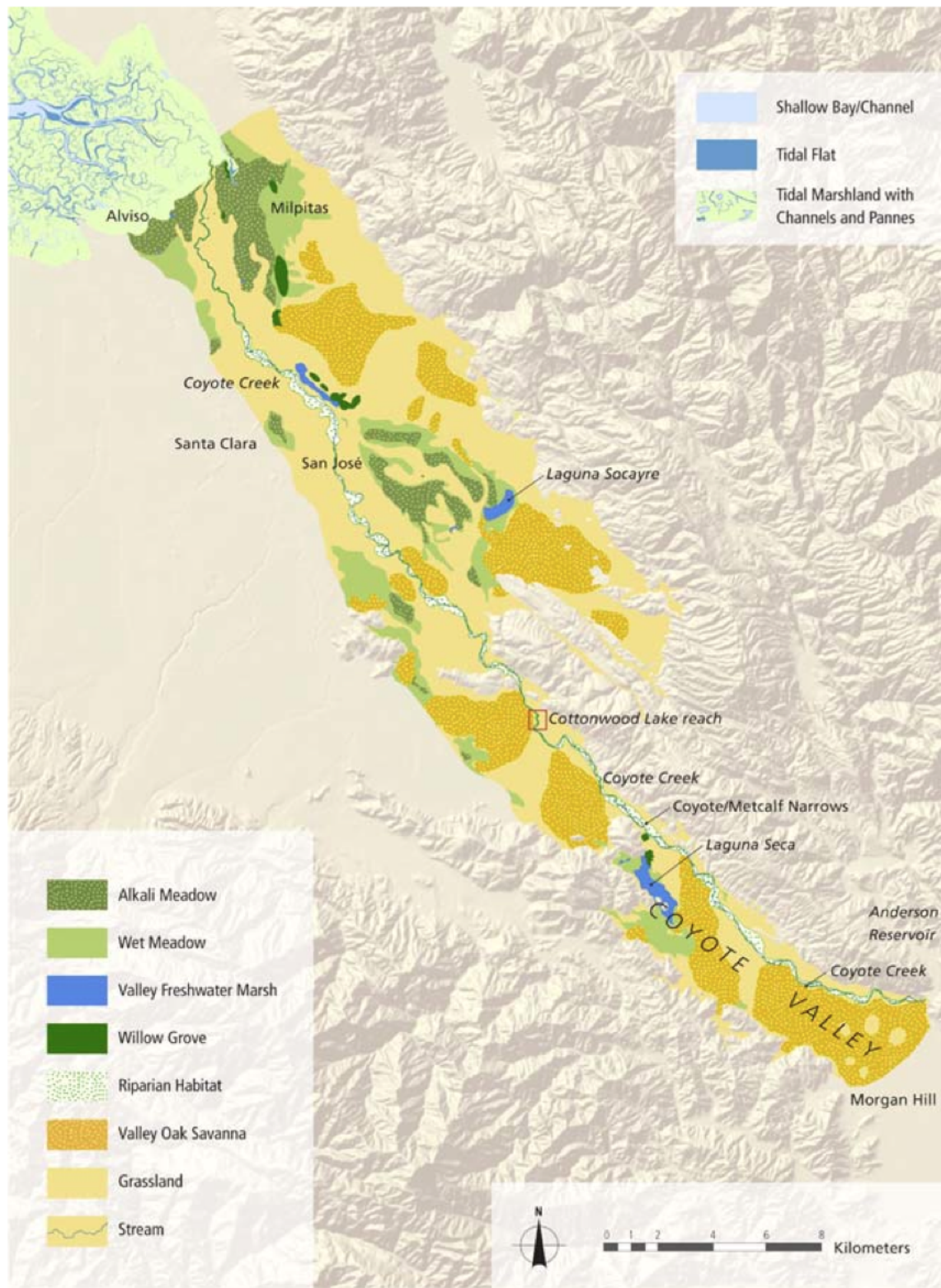
The uplift of the coastal range reshaped the flow of water. As the glacial period ended a single river flowed across the future Santa Clara Valley, meeting with the Sacramento River to the east and flowing to the lowest point along the Coastal Range. Glaciers never reached coastal California and did little to carve the land into shape, but glaciers influenced the land as they began to melt. The melting glaciers increased global sea levels, flooding the majority of ancient valleys and creating the San Francisco Bay. Uplift allowed new trickles of water to slowly carve paths into the landscape, but they remained narrow, shallow, and prone to flooding. Most mountain run-off dissipated quickly into the well-drained alluvial soils and replenished underground aquifers. Freshwater marshes, seasonally-flooded meadows, forested wetlands, and riparian habitats were common natural features on the Valley landscape. Nearly 5,000 years ago, the landscape of the present Bay Area had largely taken shape.<sup>10</sup>

Below ground, the Valley was supplied by a regional aquifer consisting of multiple Pleistocene aquifers grouped into upper and lower systems. These groundwater systems were replenished primarily through precipitation, stream

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<sup>9</sup>Amaury Mars, *Reminiscences of Santa Clara Valley and San José* (San Francisco: Artistic Publishing Company, 1901), 76.

<sup>10</sup>Michael Friedly, "This Brief Eden': A History of Landscape Change in California's Santa Clara Valley," (Ph.D. diss., Duke University, 2000), 18.



**Figure 1.2:** Reconstructed land cover map of the valley floor along Coyote Creek. From Robin M. Grossinger et al., "Historical Landscape Ecology of an Urbanized California Valley: Wetlands and Woodlands in the Santa Clara Valley," *Landscape Ecology* 22 (December 2007): 112.

channels, and, today, artificial recharge ponds. The presence of rock faults also served as potential sources and barriers of hydrological flows. Twenty-six major creeks flowed through the Valley, and the major rivers included the Arroyo Hondo, Guadalupe River, and Pajaro River, which originated in the Santa Cruz or Diablo Range and emptied into the Calaveras Reservoir, the San Francisco Bay, and the Pacific Ocean respectively. A majority of the thirty-seven lakes now in the Bay Area are artificial reservoirs. Two major dam projects, the Coyote Dam built in 1936 and the Anderson Dam built in 1950, regulated watershed discharge into the creeks and rivers. Changes in vegetation and habitats came about due to changes in stream hydrology that included flood control efforts and summer water releases from groundwater recharge associated with the Coyote and Anderson dams.

The interactions of wind, air, and land shaped the layout of the Santa Clara Valley. Between the Santa Cruz and Diablo mountain ranges, the Valley widens out from 15 miles across at its northern point near the mouth of the San Francisco Bay to 25 miles across at its southern end before the Diablo and Santa Cruz mountains nearly converge to form the Coyote Narrows. Within these lands, the Valley hosted a variety of lifeforms. Along the Valley floor, oak scrub, cacti, and a variety of oak, willow, sycamore, and alder trees provided cover for wildlife and shelters for native grasses. At higher elevations, a variety of conifers including coastal redwoods (*Sequoia sempervirens*), ponderosa pine (*pinus ponderosa*), and sugar pine (*pinus lambertiana*) mingled with white fir (*Abies concolor*) and black oak (*Quercus kelloggii*) that carpeted the mountains in green. The plants of the Valley adapted to the Mediterranean climate: perennial bunchgrasses die back every winter, leaving only roots to help preserve water; oak trees have extensive root systems to tap into groundwater supplies.<sup>11</sup> The oak woodlands and chaparral ecoregions

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<sup>11</sup>Friedly, " 'This Brief Eden'," 20.

provided habitats for acorn woodpeckers, nuthatch, oak titmouse, and Pacific pallid bats. The major waterways supported a diverse range of native fish species, including Pacific lamprey (*Lampetra tridentata*), steelhead trout, chinook salmon, Sacramento blackfish, and tule perch, among many others. Golden beavers and raccoons shared the landscape with rabbits, squirrels, and other small species, as well as a variety of snakes, lizards, spiders, and insects. Mountain lions, wolves, and grizzly bears once hunted and lived in the valley, mingling with ungulates such as elk and mule deer. Woodpeckers, wrentits, scrub jays, Chestnut-backed Chickadees, and hundreds of additional bird species thrived in the Valley's skies.

Human habitation of the Valley originated around 6,000 years ago. The Ohlone people, Penutian-speakers that included the Miwok, Wintun, Maidu, and Yokuts who likely migrated to the Santa Clara Valley from the eastern foothills of the Central Valley, displaced or assimilated Hokan-speaking populations already living in the area. When Spanish colonists arrived in the Valley in the 1760s, Ohlone numbered between 7,000 and 26,000. They subsisted on the land by collecting acorns from oak trees, hunted game, fished, and harvested clams and other shellfish from the Bay. The discarded shells formed the famous shellmounds along the Bay's shores.<sup>12</sup> The Spanish brought disease and warfare, which overwhelmed Ohlone communities. In the fifty years between the arrival of Spanish missionaries and the end of Spanish rule in 1821, Native populations declined by seventy-five percent in the Bay Area.<sup>13</sup>

When Spanish colonial settlers first crested the Santa Cruz Mountains in

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<sup>12</sup>For a map of the shellmound locations, see Matthew Booker and Allen Roberts, *Shellmounds in San Francisco Bay Area, 1909*, Spatial History Project, Stanford University, <https://web.stanford.edu/group/spatialhistory/cgi-bin/site/viz.php?id=23>.

<sup>13</sup>Matthew Booker, *Down by the Bay: San Francisco's History between the Tides* (Berkeley: University of California Press, 2012), 22–26; Randall Milliken, *A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area, 1769–1810* (Menlo Park, CA: Ballena Press, 1995); James J. Rawls, *Indians of California: The Changing Image* (Norman: University of Oklahoma Press, 1986), 13–21; Albert L. Hurtado, *Indian Survival on the California Frontier* (New Haven: Yale University Press, 1990).

the late-1760s, they saw a Valley hosting a range of ecosystems—coastal redwoods and Douglas fir dominated the ridge of the mountain, giving way to chaparral shrub that occupied the rockier soils in the foothills. As the foothills smoothed out into the flatlands of the valley, grasslands overtook the chaparral and were dotted with oak savannahs, cottonwoods, laurels, and willow groves. Nearer the bay, salt marshes and vernal pools dominated the land. Franciscan missionaries gave the Valley the name *Llano de los Robles* (“Plain of the Oaks”) as they established missions throughout the Valley. The eighth mission established by Fray José Murguía was given the name Mission Santa Clara de Asís (“Clare” or “Clara” means “clear” or “bright”), giving the valley its current namesake.<sup>14</sup>

The Spanish also recognized the richness of the Valley soil. The alluvial soils provided rich nutrients to the expanding agricultural presence in the Valley. When George Vancouver nosed his ship into the Bay to visit Mission San Jose in 1792, he admired the crops of wheat, maize, peas, and beans, “which had been obtained with little labour and without manure.” The Mission’s gardens contained peaches, apricots, pears, and fig trees. Vancouver noted the soil and climate seemed “well adapted to most sorts of fruit.”<sup>15</sup> Vancouver overlooked Ohlone contributions to the land, noting only that they “still remained in the most abject state of uncivilization.”<sup>16</sup> But Ohlones had transformed the land—they hunted game, trapped fish and netted waterfowl, harvested shellfish, planted seeds, lit fires to control brush buildup, and perhaps collected salt from naturally evaporating ponds for trade.<sup>17</sup> European settlers expanded such transformations on the land, establishing large plots of land for farms and ranches. By the time Vancouver visited the missions, San José produced enough cattle and crops to

<sup>14</sup>Pedro Font, *Font's Complete Diary: A Chronicle of the Founding of San Francisco* (Berkeley: University of California Press, 1933), 323–324.

<sup>15</sup>George Vancouver quoted in Mel Scott, *The San Francisco Bay Area: A Metropolis in Perspective* (Berkeley: University of California Press, 1959), 12.

<sup>16</sup>Vancouver quoted in Booker, *Down by the Bay*, 20.

<sup>17</sup>Booker, *Down by the Bay*, 21.

fully support the mission as well as the Spanish presidios in Monterey and San Francisco.

European animals also reshaped the land. A French merchant visiting the Santa Clara and San José missions in 1828 estimated that twelve thousand cattle and fifteen thousand sheep grazed on the foothills. The perennial bunchgrasses once common on the hillsides of the valley all but disappeared as animals devoured them and allowed less-desirable grazing annuals to crowd out native grasses. New plants transplanted from seeds brought along by the Spanish, either intentionally or not, also took root in the Valley. The changing grasses also left the hillsides more susceptible to erosion as long-established root systems deteriorated. Greater erosion changed the Valley's waterways, allowing runoff to deposit voluminous mud that destroyed roads and filled river outlets into the bay.<sup>18</sup>

Portions of the garden myth trace themselves to the waterscape, but also to the great expanse of trees that once occupied the flatlands and valley hillsides. Oak trees once dotted the flatlands of the Santa Clara Valley and were uniquely adapted to survive both the arid climate and human influences. Fires, set by Ohlone and by storms, led oaks to adapt to burnings through thicker barks and an ability to sprout new growth from root systems. Fires also released new nutrients into the soils, allowing the hardier oak saplings to take advantage of the lack of competition for fresh nutrients.<sup>19</sup> The same climate and soils that proved so nutrient-dense for crops were ideal for trees. The great collections of redwoods, oaks, and riparian groves that grew along the Santa Cruz range and along rivers

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<sup>18</sup>Booker, *Down by the Bay*, 24–26; Richard Walker, *The Country in the City: The Greening of the San Francisco Bay Area* (Seattle: University of Washington Press, 2007), 26–28; Milliken, *Time of Little Choice*, 72–74, 98–99, 148, 221; Daniel J. Pitti, *The Devil in Silicon Valley: Northern California, Race, and Mexican Americans* (Princeton: Princeton University Press, 2004), 20–23. Californios especially after independence from Spain in 1821 increased their reliance on the cattle industry, expanding their presence to meet a demand for hide and tallow. Cecilia M. Tsu, *Garden of the World: Asian Immigrants and the Making of Agriculture in California's Santa Clara Valley* (New York: Oxford University Press, 2013), 18.

<sup>19</sup>Friedly, "'This Brief Eden,'" 58.



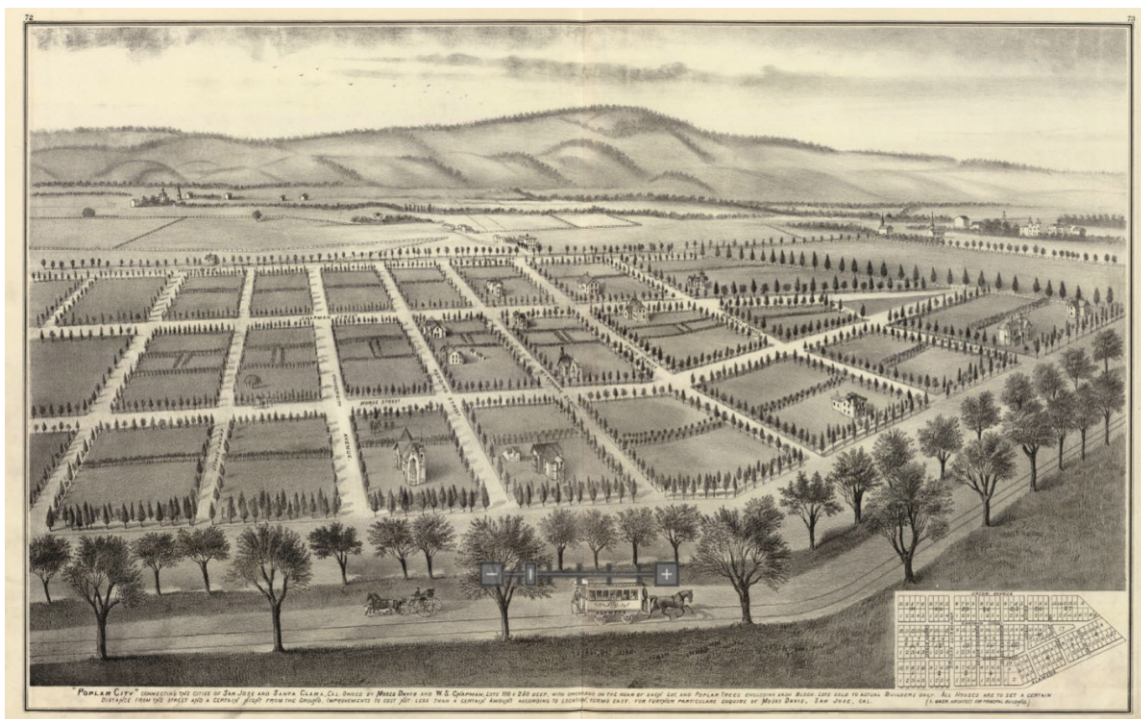
**Figure 1.3:** Mission San Jose by Henry Chapman Ford, ca. 1883. Courtesy of University of Southern California Libraries.

in the flatlands commanded the attention of timberers who sought to realize fortunes from nature. Spanish missionaries used abundant wood sources primarily for construction rather than selling timber in markets. Not until the arrival of Americans in the mid-nineteenth century would logging become a commodity for sale. Redwood City to the north of Palo Alto, for example, originated with the establishment of a lumber wharf in the southwest end of the San Francisco Bay in the 1860s, floating cut timber northward up the Bay to the shipping ports in San Francisco. Timbermen like William Page arrived in California from New York around 1860, relocating to Palo Alto in 1879 after he purchased a lumberyard and timber lands near Mill Creek. Page's Mill Road—now the scenic route Old Page Mill Road outside Palo Alto—became a major thoroughfare for moving lumber out of Palo Alto to the wharfs in Redwood City.<sup>20</sup>

Water played a central role in the Santa Clara Valley. Water, at times, seemed too abundant. Heavy rains around 1791 flooded Mission San José, forcing

<sup>20</sup>Ralph Hansen, "Historical Notes of Interest Surrounding Page Mill Road and Environs," 1, n.d., Folder 9, Box 1, Page Mill Co-ordinating Committee Records, Stanford University.

the missionaries to relocate the settlement. Spanish missionaries would eventually relocate San Jose three times to get away from an erratically flooding Guadalupe River. But if water could be too abundant, it could also be fickle. The critical growing months of summer also left the Guadalupe River devoid of water. Missionaries, usually with forced labor provided by Ohlone, constructed dams on the Guadalupe to capture the waters when they flowed, which found its way into canals and ditches to irrigated wheat fields.<sup>21</sup> Not until the arrival of Americans were wells sunk to tap into underground water supplies.



**Figure 1.4:** “Poplar City connecting the cities of San Jose and Santa Clara, Cal.” (San Francisco: Thompson & West, 1876). Courtesy the David Rumsey Map Collection.

IN 1821 MEXICO CAST OFF SPANISH COLONIAL RULE, leading to the end of the mercantile system and allowing foreign trade to expand. Mexican inhabitants of Cal-

<sup>21</sup>Clyde Arbuckle, *Clyde Arbuckle's History of San Jose: Chronicling San Jose's Founding as California's Earliest Pueblo in 1777, Through Exciting and Tumultuous History Which Paved the Way for Today's Metropolitan San Jose* (San Jose: Smith & McKay, 1985), 11; Friedly, “‘This Brief Eden’,” 112; Mars, *Reminiscences of Santa Clara Valley*, 25.

ifornia, known as Californios, adopted cattle as their central economic activity. Trade in tallow and hides became the core enterprise of Californios. Following the Mexican-American War, the Santa Clara Valley became part of America in 1848. American immigrants, primary Irish Catholics, began arriving in the 1840s and quickly seized Californios property. Anglo-Americans ignored stipulations in the Treaty of Guadalupe-Hildalgo that Mexican-held property would remain in their hands. The passage of the California Land Act on March 3, 1851, placed the burden of proof to property rights onto Californios who lacked both knowledge about the workings of the American justice system as well as extensive documentation about their property holdings. Under the Land Act, Californios land holdings quickly eroded as Anglo-Americans replaced the Californios economic base with their own.<sup>22</sup>

As cattle ranching gave way to wheat farming and, later, orchard production, Anglo-Americans reshaped the land to serve their needs. When farmers of the Santa Clara Valley began irrigating their lands, they added a level of environmental change to a land that had already undergone momentous change at the hands of humans. The flow of the Valley's waterscape—the rivers, canals, reservoirs, dams, creeks, and streams that comprised this landscape—would emerge as a hybrid landscape that both aided and hindered humans. The ecological transformations of the Valley swung between destruction and creation. The building of new dams, reservoirs, and canals interrupted the water's flow across the landscape, which in turn destroyed or drastically altered habitats used by other flora and fauna.

The water engineers thought little about the destructive aspects of their projects. Indeed, for many these projects were signs of progress and improvement—

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<sup>22</sup>Tsu, *Garden of the World*, 18; Friedly, "'This Brief Eden'," 274–278; Douglas Monroy, *Thrown Among Strangers: Making of Mexican Culture Frontier* (Berkeley: University of California Press, 1993), 233–251; Pitti, *Devil in Silicon Valley*, 52–77.

of human's ability to bend nature to their will. The drilling of numerous wells across the Valley allowed farmers to tap into an unused water source beneath them. In 1854, when San Jose was still the capital of California, the first wells were sunk into the earth. Diggers struck water at fifty-five feet below the surface of the earth, continued digging until they reached eighty feet, then drilled through an impermeable layer of rock into a pressurized artesian well.<sup>23</sup> The Spanish and Ohlone did not know of the artesian reservoir's existence; the reservoir had collected water for centuries until it was first pierced by a six-inch diameter well.<sup>24</sup> Shortly after the first well was bored, two additional wells were drilled nearby.<sup>25</sup> Americans became convinced they had discovered an inexhaustible supply of water. San Jose booster Frederick Hall could hardly contain his excitement. "As this year [1854] came rolling in," he wrote,

the artesian water first came surging up from its hidden depths, to play and sparkle in the living light of day. What a change! What a wealth for this beautiful valley! Far beyond in value the discovery of a dozen gold mines; it appeared to be the work of an enchantment. This was the only thing that seemed to be wanting. All had felt that the scarcity of water for irrigation, and good for drinking, were the great necessities of this lovely valley.<sup>26</sup>

The fickleness of the valley's water supply, however, plagued Americans. While the early wells tapped into the artesian system provided abundant water—at times too much, as when G. A. Dabney's drilling released so much pressurized water it flooded the streets of San Jose in six feet of water for several weeks—

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<sup>23</sup>Frederic Hall, *The History of San José and Surroundings with Biographical Sketches of Early Settlers* (San Francisco: A. L. Bancroft and Company, 1871), 263.

<sup>24</sup>Friedly, " 'This Brief Eden' ," 329.

<sup>25</sup>Hall, *The History of San José*, 263–264.

<sup>26</sup>Hall, *The History of San José*, 262–263. Almost a decade later, the City of San Jose credited the artesian wells for "solving" the area's water problems, noting the tapping of the San Fernando Street well that produced so much water that "a stream 4 feet wide by six inches deep [flowed] for six weeks despite all efforts to cap it." San Jose Planning Commission, *Master Plan of the City* (San Jose: City of San Jose, 1958), 10.

by the 1860s the availability of water started wavering.<sup>27</sup> Severe floods in 1861 overflowed the Coyote and Guadalupe Rivers and killed thousands of cattle, yet in the three years after the floods a prolonged drought killed thousands more. In 1862 Santa Clara County had around 19,000 cattle on the rangelands; by 1868, that figure had fallen to 10,000. Outbreaks of big jaw and Texas fever swept through the Valley in the early 1860s, adding to a shifting preference away from ranching.<sup>28</sup> The instability of cattle raising initiated the conversion of rangelands to croplands. The cattle culture introduced by the Spanish ninety years earlier fell away as ranchers sold their lands to farmers. Wheat cultivation especially took off in the 1860s. While ranching remained dominant in 1860, nearly 26,000 acres were converted into farms by 1857. By 1863, 165,000 acres were under cultivation, and by the end of the decade farming dominated the valley.<sup>29</sup>

The severe droughts in the 1860s led farmers to rely heavily on the ground-water supplies, which had the effect of lowering the groundwater table. Americans understood groundwater recharge and overdraft, and before long comprehended the interconnected artesian system belowground. As one well drew water supplies, it lowered the availability of all the other wells.<sup>30</sup> Some Americans continued to live by what historian Michael Friedly called the “illusion of inexhaustibility,” noting one writer in 1876 who gleefully wrote about the Valley’s “supply [of artesian water] is inexhaustible, and would, with the inauguration of the proper system, be sufficient to irrigate the entire valley.”<sup>31</sup> Yet the droughts and dwindling artesian supplies led American capitalists to pursue alternative forms of water supply. In November 1866, businessmen organized the San Jose Water Company (SJWC) to supply water to its residents. The towns of San Jose

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<sup>27</sup>Hall, *The History of San José*, 264.

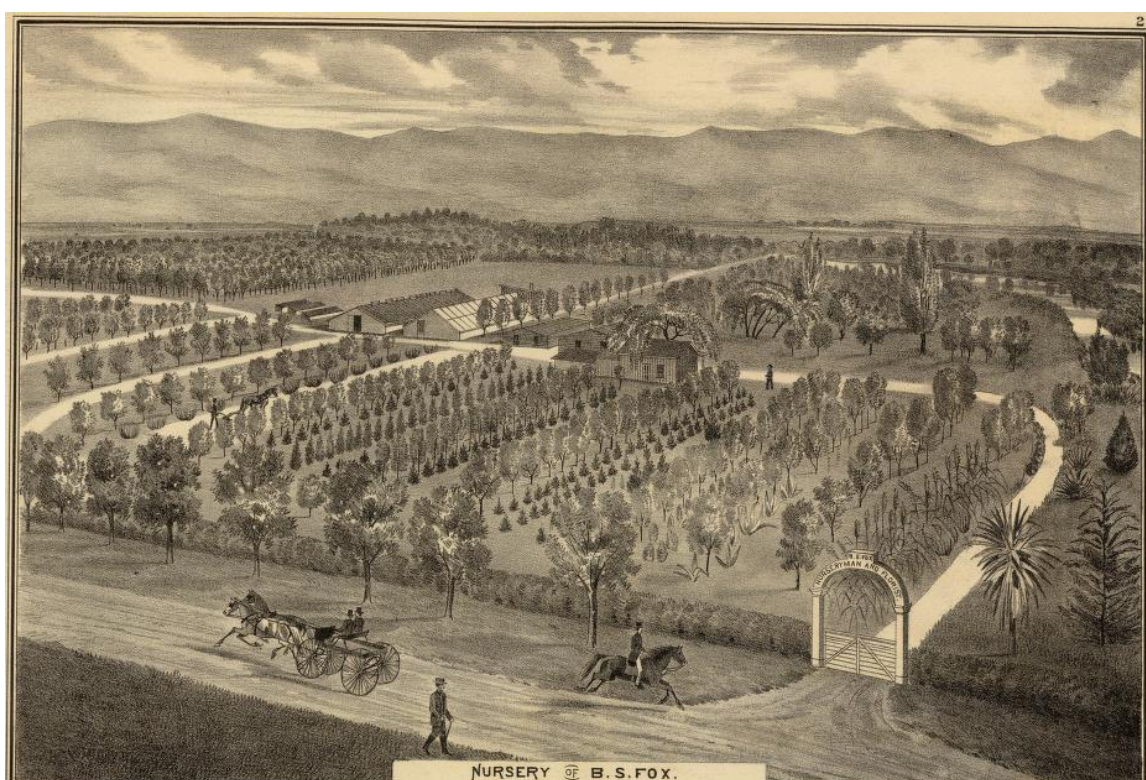
<sup>28</sup>Friedly, “‘This Brief Eden’,” 301–302.

<sup>29</sup>Friedly, “‘This Brief Eden’,” 302, 306–307; Henry Foote, *Pen Pictures from the Garden of the World* (Chicago: Lewis Publishing Company, 1888), 23; Hall, *The History of San José*, 444–445.

<sup>30</sup>Friedly, “‘This Brief Eden’,” 333–335.

<sup>31</sup>Quoted in Friedly, “‘This Brief Eden’,” 338.

and Santa Clara gave the company a twenty-five-year lease to pursue water resource development and provide the towns with reliable water. SJWC first turned to artesian wells, but as overdraft continued to exhaust the supply they sought out the flowing waters of the Los Gatos Creek. Flowing from the Santa Cruz Mountains into the Guadalupe River west of San Jose, SJWC built a network of pipes and a 2.5 million gallon reservoir to funnel the creek's water to their customers.<sup>32</sup> The artesian supply continued to be unreliable. The end of the droughts in the late 1860s filled the underground reservoirs, but when drought returned in the 1870s the supply again ran dry.<sup>33</sup>



**Figure 1.5:** B.S. Fox's nursery along the Coyote River. *Thompson & West Atlas*, 1876.

Water engineering projects introduced unanticipated problems. By the 1930s, agricultural wells had become a problem for the Valley. A 1921 engineering report warned of the falling water table and its possible threat to farming and cities. Con-

<sup>32</sup>Hall, *The History of San José*, 305–307.

<sup>33</sup>Friedly, “‘This Brief Eden’,” 336–337.

tinual overdrafting of the water supply led to subsidence—the sinking of surface land as the emptied aquifers compressed under the weight of the earth above them—which led to ruptured well casings, broken water lines, damage to building foundations, and made well-pumping more expensive for farmers as wells were sunk deeper to reach lowered water tables. Even worse, traces of salt from the San Francisco Bay appeared in the aquifers, another result of sinking land reshaping the underground water system. Salty water was useless for irrigation and unable to be used for drinking water.<sup>34</sup> Realizing that the underground waters were unsustainable, politicians looked to the examples of the Hetch Hetchy and Owens Valley reservoirs in San Francisco and Los Angeles, respectively. Herbert C. Jones, an attorney from Stanford and member of the State Senate elected as a Progressive Republican in 1913, took steps to remedy the valley's growing water problem. Spending-wary voters twice rejected bond measures to construct percolation ponds and dam projects to help trap and funnel waters back into the underground aquifers. In 1929, Jones introduced a new bill to placate voters by setting up a water district that lacked the power of provisioning bonds to pay for water projects. The bill finally met the approval of voters, and the Jones Act helped establish the Santa Clara Valley Water Conservation District (SCVWCD) in 1930 with the mandate to help solve the reliability of water. By the end of the 1930s, SCVWCD constructed six new dams.<sup>35</sup> The Valley's cities also contracted with existing water infrastructure, including private water suppliers and the Hetch Hetchy, to supply the growing farms and cities with enough resources.<sup>36</sup>

While engineers worked toward solutions to the water supply, farmers

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<sup>34</sup>Scott, *The San Francisco Bay Area*, 230; William L. Berry and Herbert A. Howlett, "Supplemental Water for the San Francisco Area," *American Water Works Association* 50:5 (May 1958): 279.

<sup>35</sup>Glenna Matthews, *Silicon Valley, Women, and the California Dream: Gender, Class, and Opportunity in the Twentieth Century* (Stanford: Stanford University Press, 2003), 103–104.

<sup>36</sup>As of 1996, 42% of the Valley's water comes from local reservoirs, 23% comes from the Central Valley Project, 19% comes from the State Water Project, and 16% is purchased from the Hetch Hetchy aqueduct. Matthews, *Silicon Valley, Women, and the California Dream*, 104.

sought ways to adapt their crops to the land and climate. Although the semiarid Valley provided little rainfall outside the winter months of November through March, farmers enjoyed a consistent and long growing season. The Valley's mountains prevented serious frosts, protected the valley from harsh winds, and storms of any sort were rare. The rich alluvial soils provided wheat with plenty of nutrients. These combined factors of climate and soil allowed farmers to determine which crops were best suited to the area. While the Spanish tended to use most of the Valley for ranching, Americans overturned the Spanish ranching culture by the 1860s and instead adopted dry wheat farming, oats, barley, and other grains. By the 1870s wheat farming dominated the Valley as farmers collected nearly 1.2 million bushels of wheat, an 872% increase from twenty years earlier.<sup>37</sup>

Just as wheat cultivation reached its peak in the 1870s, fruit cultivation began to take root. Prune cultivation introduced in 1856 by Louis Pellier was followed quickly by other fruit varieties well-suited to the climate. By 1888, historian George Bancroft estimated that California shipped 54 million pounds of fresh fruit, 39 million pounds of canned fruit, and 20 million pounds of dried fruit to the East Coast.<sup>38</sup> By 1915 the Santa Clara Valley alone produced one-third of the world's prune crop as well as significant amounts of walnuts and apricots. Just before the outbreak of World War II, California supplied over half of the world's dried prunes.<sup>39</sup>

Over time, the emergence of the canning industry would alter the agricultural landscape further. In 1871, Dr. James Dawson started canning his surplus peaches and pears, starting what would become a massive cannery industry that

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<sup>37</sup>Friedly, " 'This Brief Eden' ," 302.

<sup>38</sup>Bancroft, *History of California*, VII, 743; Mel Scott, *The San Francisco Bay Area: A Metropolis in Perspective* (Berkeley: University of California Press, 1959), 71.

<sup>39</sup>Robert C. Fellmeth, *Politics of Land: Ralph Nader's Study Group Report on Land use in California* (Grossman Publishers, 1973), 32–33; Edward N. Torbert, "The Specialized Commercial Agriculture of the Northern Santa Clara Valley," *Geographical Review* 26:2 (April 1936): 248; Richard Rowe, "Agricultural Land and Open Space in Santa Clara County and Its Preservation" (M.A. thesis, Stanford University, 1962), 23, 42.

dominated the Valley's economy until World War II.<sup>40</sup> By 1872 San Jose boasted two large canneries.<sup>41</sup> Along with advancements in transportation methods including the completion of the transcontinental railroad in 1869 and the introduction of refrigerated rail cars in 1888, fruit and vegetable production became economically profitable and allowed trade to expand. On the verge of the Great Depression, thirty-eight canneries operated in Santa Clara County. The California canneries of Del Monte, the California Packing Corporation (Calpak), Hunt's, Richmond-Case, Bayside Canning Company, Precita Canning Company, and the Garden City Canning Company all operated in Santa Clara County by the 1920s. By the middle of the twentieth century, California produced more canned fruits and vegetables than any other state.<sup>42</sup>

New systems of food preparation, shipping, distribution, and financing aided the transition to fruit production. The completion of a railroad between San Francisco and San Jose in 1864 allowed farms to ship goods out of the agricultural towns of the Valley to the ports in San Francisco. The new Oceanic Steamship Company began importing raw sugar and other products from Hawaii, aiding further the shift to fruit canning. Claus Spreckle's huge sugar refinery built along 23rd Street in San Francisco helped refine the Hawaiian sugar into a cannery product. Fruit growers also benefited from the invention of an orchard spray pump, created by John Bean of Los Gatos. The invention allowed fruit growers to combat pests and insects more easily. Bean's success allowed him to found the Food Machinery and Chemical Corporation in San Jose in 1883.<sup>43</sup>

In addition to copious amounts of water and its attendant problems noted

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<sup>40</sup>Rowe, "Agricultural Land and Open Space," 249.

<sup>41</sup>Mel Scott, *The San Francisco Bay Area: A Metropolis in Perspective* (Berkeley: University of California Press, 1959), 68.

<sup>42</sup>Tsu, *Garden of the World*, 76–77; Matthews, *Silicon Valley, Women, and the California Dream*, 34–37; Vicki Ruiz, *Cannery Women, Cannery Lives: Mexican Women, Unionization, and the California Food Processing Industry, 1930–1950* (Albuquerque: University of New Mexico Press, 1987), 21–23.

<sup>43</sup>Mel Scott, *The San Francisco Bay Area: A Metropolis in Perspective* (Berkeley: University of California Press, 1959), 73.

above, the orchards generated tremendous levels of waste. Much of the waste came in the form of cannery effluence. To aid the canneries in their production, San Jose especially became a willing partner. Beginning in the 1870s the small farm town began construction of a storm and sewage system that would funnel wastes away from the city. Much of the waste found itself simply dumped into the San Francisco Bay. While the system seemed to effectively deal with the problem of waste in the city, it had the effect of upsetting the Bay's ecosystems. The dumping of the city's waste into the Bay all but destroyed the clam and shrimp industries as the contamination of water caused steadily-increasing dieoffs that made the raising and harvesting of molluscan fisheries unprofitable.<sup>44</sup>

The orchards also clouded the skies with soot. Orchardists employed the use of smudgepots—a device comprised of a basin that held kerosene and a chimney-like pipe emerging roughly five feet high—to warm orchard fields and prevent frosts from damaging fruits. Usually lit and burned through the duration of the night, the smudgepots cast smoke and oily soot into the air. Californians recalled waking up after cool nights to find themselves covered in an oily film from the kerosene burners, and children were loathe to arrive at school with “smudge face.”<sup>45</sup>

Cattle ranching, wheat and grain production, and quicksilver mining flourished in the Valley in the late nineteenth century prior to the Valley becoming

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<sup>44</sup>Stanford Environmental Law Society, *San Jose: Sprawling City: A Report on Land Use Policies and Practices in San Jose, California* (Stanford: Board of Trustees of the Leland Stanford Junior University, 1971), 13; John E. Skinner, *An Historical Review of the Fish and Wildlife Resources of the San Francisco Bay Area*, California Department of Fish and Game, (June 1962), 100; Dreisbach, *Handbook of the San Francisco Region*, 155; Charles Gilman Hyde and George Leonard Sullivan, *Santa Clara County Sewage Disposal Survey: Report upon the Collection, Treatment and Disposal of Sewage and Industrial Wastes of Santa Clara County* (Ann Arbor: Edward Brothers, 1946), 101–102.

<sup>45</sup>Jared Farmer, *Trees in Paradise: A California History* (New York: W. W. Norton & Company, 2013), 294–296; Robin Chapman, *California Apricots: The Lost Orchards of the Silicon Valley* (Charleston, S.C.: American Palate, 2013), 90–91. Smudgepots were more commonly used in other parts of California, especially in Southern California which experienced two kinds of cold snaps, either through atmospheric inversion or from Arctic air sweeping down through the Great Basin across the Mojave Desert and into California. Nevertheless, smudgepots were still occasionally used in the Valley. See Farmer, *Trees in Paradise*, 291–292.



**Figure 1.6:** Smudging in orchards to prevent frosts from damaging fruits. Reproduced from Jared Farmer, *Trees in Paradise: A California History* (New York: W. W. Norton & Company, 2013).

“one vast orchard.”<sup>46</sup> By the end of the nineteenth century, fruit production had surpassed all other agricultural, mining, and timbering activity. The growth of Silicon Valley occurred upon some of California’s most fertile lands. A survey by the U.S. Department of Agriculture designated 400 square kilometers—32 percent—of Santa Clara County as Class 1 land, the highest ranking possible for the cultivation of fruits and vegetables. Water systems flowing into the valley carved out rich alluvial fans in the Valley. Santa Clara Valley farms remained relatively small. In 1900, the typical farm was under fifty acres; in 1920, the average farm size was forty acres and dropped to thirty-two acres by 1950.<sup>47</sup> Agricultural activity by the 1940s witnessed around 6,000 farms in the Valley, mostly family-run operations that totaled around 132,000 acres and some eight million cherry, apricot, and pear

<sup>46</sup>San Jose Chamber of Commerce, *San José, Santa Clara County, California* (San Jose: San Jose Chamber of Commerce, 1910), 4; Tsu, *Garden of the World*, 17.

<sup>47</sup>Tsu, *Garden of the World*, 6.

trees.<sup>48</sup> By the end of the nineteenth century, as the region became a prominent agricultural producer, *Sunset* magazine writers labeled it “The Valley of Heart’s Delight” and “The Delectable Valley” due to its reputation as a major fruit producer.<sup>49</sup> As late as the 1950s, canneries processed more than thirty percent of the state’s crop of fruit and vegetables. Although the valley itself only produced a small portion of the crop, the facilities for canning, drying, and freezing were located near rail, highway, and water routes in the South Bay.<sup>50</sup> The Valley had become a major agricultural center, and with it came the “garden myths.”

THE AGRARIAN CULTURE THAT HAD COME TO DOMINATE the Valley was exalted not only for its remarkable productivity but also for its aesthetics and promise of the “good life.” When John Muir passed through the Valley in the spring of 1872, he remarked that the Santa Clara Valley’s climate was “the best we ever enjoyed.”<sup>51</sup> The French writer Amaury Mars agreed. When he visited the Santa Clara Valley in 1901, he gushed that “no spot in the world has Nature been more lavish of her gifts. The heat is never oppressive nor the cold severe; there is never too much moisture, while thunder storms and, above all, cyclones are altogether unknown here.”<sup>52</sup> The valley’s landscape offered a compelling tale: a veritable garden; indeed, the Garden of the World. The story was uncomplicated, and in its simplicity it masked historical realities of the landscape.

“What a sight it was to behold all those old oaks and majestic sycamores,” wrote Amaury Mars during his visit to Santa Clara Valley in 1901.<sup>53</sup> The oaks

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<sup>48</sup>Sachs, “Virtual Ecology,” 16.

<sup>49</sup>G. von Viereg, “Santa Clara: The Delectable Valley,” *Sunset*, August 1912; E. Alexander Powell, “The Valley of Heart’s Delight,” *Sunset*, August 1912.

<sup>50</sup>Paul Griffin and Ronald Chatham, “An Industrial Analysis of North Santa Clara County,” County of Santa Clara Planning Department, 3.

<sup>51</sup>John Muir, *John Muir: His Life and Letters and Other Writings*, ed. Terry Gifford (Seattle: Mountaineers, 1996), 96.

<sup>52</sup>Mars, *Reminiscences of Santa Clara Valley*, 76.

<sup>53</sup>Mars, *Reminiscences of Santa Clara Valley*, 58.

were a source of attraction for the rural lifestyle painted by the region's boosters. "The valley is a park," claimed the San Jose Chamber of Commerce in 1910, "originally dotted with magnificent oaks." Left unsaid by the twentieth century was the near-elimination of oaks from the valley floor.<sup>54</sup> The shift from ranching to farming also led to widespread clearcutting of trees. Eager to clear the land for maximum availability of cultivation, farmers cut down oak woodlands and willow groves, filled vernal pools, and reclaimed salt marshes to expand the amount of land available for farming. The cutting of trees also formed a core business for timber interests. Returning Gold Rush seekers often went into the lumber business rather than farming. By 1857 twelve sawmills were active in Santa Clara Valley. Groves and woodlands were quickly cleared and transformed into land for cultivation.<sup>55</sup> When aspiring homesteader Bernard Reid moved to Santa Clara in 1851, he noted that most wood for fuel was hauled in from three miles away. No nearby lumber existed for the town.<sup>56</sup> As oak woodlands disappeared from the Valley floor, timbermen went into the hills for the redwoods. By the 1880s, much of the accessible forests in the Santa Cruz Mountains were logged.<sup>57</sup>

Key to Santa Clara Valley resident's understanding of themselves was the "nature" they had inherited. Above all, the orchards symbolized the Valley as a paradise on earth. Journalist Bayard Taylor, arriving in California in 1849, reported on "the vast and wonderful landscape" of the Santa Clara Valley. He wrote of

the soft cloudless sky—the balmy atmosphere—the mountain ranges on either hand, stretching far before me until they vanished in a purple haze—the silica sweep of the plain, with its islands and shores of

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<sup>54</sup>Today, the valley oak (*Quercus lobata*) is among California's most threatened oak species, largely because they grew on lands desired for suburbanization and agricultural development. See Robin M. Grossinger, Charles J. Striplen, Ruth A. Askevold, Elise Brewster, and Erin E. Beller, "Historical Landscape Ecology of an Urbanized California Valley: Wetlands and Woodlands in the Santa Clara Valley" *Landscape Ecology* 22 (2007): 3.

<sup>55</sup>Foote, *Pen Pictures from the Garden of the World*, 21.

<sup>56</sup>Mary McDougall Gordon, "'This Italy and Garden Spot of All-America': A Forty-Niner's Letters from the Santa Clara Valley in 1851," *Pacific Historian* 39:1 (1985): 12.

<sup>57</sup>Friedly, "'This Brief Eden'," 317.



**Figure 1.7:** "Largest Prune Orchard in the World in Bloom, Mar. 26 1888," near Los Gatos in 1888. Pacific Coast Photo and View Co., Sourisseau Academy for State and Local History, San Jose State University.

dark-greek oak, and the picturesque variety of animal life on all sides, combined to form a landscape which I may have seen equaled but never surpassed.<sup>58</sup>

Gold rush seeker Bernard Reid wrote in a letter to his family that the Valley “was far preferable to any spot I had before seen in California,” describing the Valley as “this Italy and garden spot of All-America—of singing birds, and the grassy sward, and balmy air, and the sunny sky.”<sup>59</sup> Visitors to the Valley celebrated the expanse of trees, wild flowers, animals, and rural pastoralism of the Valley.<sup>60</sup>

Such thinking found its way into promotional material as well. The San Jose Board of Trade asked rhetorically in 1895, “What will not thrive in the utmost prodigality? . . . Come let us show you hundreds of acres in constant bearing.”<sup>61</sup> The San Jose Chamber of Commerce boasted that the valley had the “largest fruit canneries in the world; largest fruit packing houses in the world; largest fruit drying ground in the world.” The Chamber beckoned farmers from the Midwest and Northeast, where climate and frosts could threaten their crops. Not so in Santa Clara Valley, where sunshine outnumbered cloudy skies. Chamber advertisements claimed 245 clear days and only a handful of rainy or cloudy days.<sup>62</sup> The climate made for perfect farming conditions. “Without any days so cold as the colder days of an Illinois April, it has no days so warm as the warmer days of an Illinois June,” the Chamber assured readers in 1910.<sup>63</sup> The Valley presented farmers with a seemingly assured profit and almost no risk thanks to the climate in which they could grow their produce.

The orchard landscape introduced new myths to the Valley. As historian

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<sup>58</sup>Quoted Gordon, “‘This Italy and Garden Spot of All-America,’” 5.

<sup>59</sup>Quoted in Gordon, “‘This Italy and Garden Spot of All-America,’” 9, 13.

<sup>60</sup>Mars, *Reminiscences of Santa Clara Valley*, 18, 26.

<sup>61</sup>San Jose Board of Trade, “San Jose and Vicinity,” 1897, Santa Clara Valley’s Agricultural Past, California Room, San Jose Public Library.

<sup>62</sup>San Jose Chamber of Commerce, *San José, Santa Clara County, California* (San Jose: San Jose Chamber of Commerce, 1910), 14.

<sup>63</sup>San Jose Chamber of Commerce, *San José, Santa Clara County, California* (San Jose: San Jose Chamber of Commerce, 1910), 14.



**Figure 1.8:** Fruit drying trays, ca. 1920–1930. California Room, San Jose Public Library.

Cecelia Tsu notes, by the 1880s California boosters promoted “orchard fruit growing as one of the most idyllic incarnations of the family farm ideal, and the Santa Clara Valley as the finest location to live out this agrarian dream.”<sup>64</sup> The San Jose Chamber of Commerce boasted in 1910 that the “Santa Clara Valley is literally the most fruitful valley in the world,” growing “the *very best*” fruits, and took pride in “our magnificent roads, the best of country highways, our fine fruits, our possibilities in home making, our universities, schools, churches, transportation facilities, our ‘best ever’ climate” in transforming the Valley into a successful agricultural center.<sup>65</sup> As acreage devoted to fruit cultivation grew, so did the myths.<sup>66</sup>

Promotional material also placed the productivity of the land against an idealized narrative of a Spanish and Mexican past. American promotional literature avoided distinctions among peoples and cultures, casting the Spanish, Mexican, and Indian history of the Valley together as a “mission era” where land went underutilized until Anglo-Americans improved the land. Spanish and Mexicans were cast as “content to eat, sleep, ride horseback and roll cigarettes” while the land went unused, against the hard-working Anglo-American farmers raising orchards and who improved the land for maximum productivity.<sup>67</sup> Orchards replaced adobe as a defining feature of the Valley. While the Spanish names remained on the Valley’s landscape like the city names “Santa Clara,” “Palo Alto,” and “San Jose,” Anglo-American promoters had recast the landscape in their view. Promoters anticipated that newcomers would be unfamiliar with the pronunciation of Spanish names and instructed Anglo-Americans on pronunciation

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<sup>64</sup>Cecilia M. Tsu, *Garden of the World: Asian Immigrants and the Making of Agriculture in California’s Santa Clara Valley* (New York: Oxford University Press, 2013), 5.

<sup>65</sup>San Jose Chamber of Commerce, *San José, Santa Clara County, California* (San Jose: San Jose Chamber of Commerce, 1910), 16, 28.

<sup>66</sup>The *San Francisco Chronicle* estimated that nearly 40,000 acres of the Santa Clara Valley were devoted to the fruit industry in 1895. “Santa Clara Valley: A Favored Section,” *San Francisco Chronicle*, July 29, 1895.

<sup>67</sup>*Santa Clara County and Its Resources: A Souvenir of the San Jose Mercury* (San Jose: San Jose Mercury Publishing and Printing Company, 1896), 12, quoted in Tsu, *Garden of the World*, 19.

to clarify that “San Jose” was pronounced “San Hosay.”<sup>68</sup> When botanist William Brewer passed through the Valley in 1861 he remarked that Americans were already showing signs of progress. The Valley, he noted, was “all . . . enclosed, in farms, and under good cultivation. Farmhouses, orchards, etc., give it an *American* look . . . [The valley] is perhaps twelve or fourteen miles wide at San Jose, an almost perfect plain, very fertile, a perfect garden, and much of it in higher cultivation than any other part of California.”<sup>69</sup>

What historian Mark Fiege concluded for nineteenth-century Idaho—that Americans crafted a story of “pioneers [who] conquered the howling wilderness and transformed it into beautiful, productive fields and farms”—could be equally applied to the Santa Clara Valley.<sup>70</sup> The story was a powerful one in American culture. The land was one of Eden, and the garden myth that emerged in the nineteenth century would maintain a powerful grip on the human imposition of ideas onto nature. Americans viewed the valley through the lens of capitalizing on the “prodigal gifts of nature,” picturing straight plots of reclaimed land held by private-property owning farmers who toiled to raise the best fruit in the world. By the end of the nineteenth century, fruit stood at the core of life in the Santa Clara Valley and in many ways came to define the market towns. The horticulture economy was not simply an accident of topography but came from culture as well. Promoters of the Valley crafted a narrative of a land laid fallow under the hands of Indians and Spanish transformed into a garden by Americans. Emphasizing conquest, both over people and over nature, the narrative crafted a vision of the

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<sup>68</sup>San Jose Chamber of Commerce, “San Jose (San Hosay): Santa Clara County, California” (San Jose Chamber of Commerce, 1910); Hall, *History of San Jose*, 8. See also Tsu, *Garden of the World*, 21; Aaron Cavin, “The Borders of Citizenship: The Politics of Race and Metropolitan Space in Silicon Valley” (Ph.D. diss., University of Michigan, 2012), 226.

<sup>69</sup>William Brewer, *Up and Down California in 1860–1864: The Journal of William H. Brewer* (New Haven: Yale University Press, 1930), 173, quoted in Friedly, “‘This Brief Eden,’” 306. Italics in original.

<sup>70</sup>Mark Fiege, *Irrigated Eden: The Making of an Agricultural Landscape in the American West* (Seattle: University of Washington Press, 1999.), 171.

Valley put to better use by the ingenuity and industry of Americans. City and nature were culturally intertwined.

Over time, city leaders valued the orchards, recognizing their importance in crafting an image of the Valley that would draw people to the towns. Irrigation, roads, sewers, railroads, cheap land, and consistently-productive farms became hallmarks of promotional literature all revolving around the orchard trees. The orchard trees were admired but also celebrated for the significant income it provided communities.<sup>71</sup> Americans admired their handiwork on the land. In 1894 San Jose held its first agricultural festival at Agricultural Park that featured appearances by Arizona Charlie's troupe, Doc Goodwin's horse riders, fireworks, and dancing, to celebrate the agricultural bounty of the Valley. By the early 1900s Saratoga advertised "blossom week" hosted by the Santa Clara County Improvement Club where visitors flocked to the valley to view orchards in full bloom. Such pilgrimages to nature continued well into the late 1950s, when residents and visitors could take part of "Blossom Tours" that allowed them to view fruit trees in full bloom at various times of the year.<sup>72</sup>

The exceptional growing climate, fertile soil, and plentiful water from artesian wells allowed farmers to transform the landscape into its reputation as a fruit capital. By the 1920s, Santa Clara Valley led the state in fruit production, drying, canning, and packing, providing a range of products such as cherries, prunes, apricots, pears, peaches, plums, and apples. By 1930, Santa Clara County produced between one-third to one-half of the world's prune supply.<sup>73</sup> The cultivation and processing of apricots, prunes, pears, and cherries became staples on the horticulture landscape.<sup>74</sup> Fruit trees produced a canopy of pink and white

<sup>71</sup>Matthews, *Silicon Valley, Women, and the California Dream*, 37.

<sup>72</sup>"San Jose's Fiesta," *San Francisco Chronicle*, May 22, 1894; "Blossom Festival in Santa Clara Valley," *San Francisco Chronicle*, March 22, 1902; "Santa Clara's Blossom Festival," *San Francisco Chronicle*, April 6, 1903.

<sup>73</sup>Matthews, *Silicon Valley, Women, and the California Dream*, 18; Tsu, *Garden of the World*, 17.

<sup>74</sup>Edward N. Torbert, "The Specialized Commercial Agriculture of the Northern Santa Clara



**Figure 1.9:** Blossom tours in Santa Clara Valley were widely popular. Tours took place several times per year depending on which trees were in bloom. Source: "Blossomtime Tours: Santa Clara Valley Routes PC, ca. 1953," Greater San Jose Chamber of Commerce, Santa Clara History Center Collection, Santa Clara City Library.

blossoms along with orange California poppies and other native wildflowers that bloomed on the hillsides. The blooming seasons were popular early in the twentieth century as visitors flocked to the area to behold the orchards in full bloom, along with farmhouses, berry patches, vegetable gardens, and pastures.<sup>75</sup> Little wonder why Santa Clara Valley boosters advertised the area as “nearest Paradise” and “the best spot in the whole earth,” a place where “the Eden of vine and tree” was a “God-favored spot” and “God’s favorite valley.”<sup>76</sup>



**Figure 1.10:** Santa Clara Valley Blossom Time, Sourisseau Academy for State and Local History.

Valley,” *Geographical Review* 26 (April 1936): 247–263.

<sup>75</sup>Edith Brockway, *San Jose Reflections: An Illustrated History of San Jose, California and Some of Surrounding Area* (Campbell, Calif.: Academy Press, 1977), 132–133.

<sup>76</sup>Quotes from Tsu, *Garden of the World*, 3–4; H. S. Foote and C. A. Woolfolk, *Picturesque San Jose and Environs: An Illustrated Statement of the Progress, Prosperity, and Resources of Santa Clara County, California* (San Jose: H. S. Foote and C. A. Woolfolk, 1893), n.p.; *The Progressive City Beautiful: Santa Clara* (Santa Clara Chamber of Commerce, n.d.); E. Alexander Powell, “The Valley of Heart’s Delight,” *Sunset* 29 (August 1912), 120.

THE PRE-WORLD WAR II SPATIAL PRACTICES THAT CONFIGURED Santa Clara Valley were products of the agricultural economy. By the twentieth century, the Santa Clara Valley landscape became more than just the earth. Collections of laws, institutions, attitudes, infrastructure, and policies were tied to the natural world of water, soil, plants, and animals. City promoters in the nineteenth century crafted an identity of the Valley around its climate, environmental amenities, and productivity, in the process embedding cultural values into perceptions of the valley while farmers simultaneously grew prodigious orchards. But the Valley had become an overburdened landscape through the demands placed on its environment. Aquifers ran dry, forests were clear-cut, natural flora crowded out, and lacked state and national parks until the mid-twentieth century. As industrialization and urbanization took off in the twentieth century, the county became a groundswell for environmentalism. The nineteenth century activities had great consequences on the region's people and environment, and each landscape greatly overlapped one another leading to strenuous debates about how each landscape affected the others.

The Valley distinguished itself in the nineteenth and early twentieth centuries as a space for agricultural productivity. The monumental shifts in the Valley economy came with two wars in Europe and Asia, transforming the industrial activity of Santa Clara Valley towards high technology well before the moniker Silicon Valley became a household term. The path between agriculture and high technology may not seem straightforward, but the Valley's history as an agricultural center helped shape its twentieth century. The choice of water projects and planning, built originally for the purpose of supporting agriculture, would come to serve the metropolitan growth after World War II. The road systems, avail-

ability of land, sewer systems, a major research university all became attractive features to new industry and federal military investment during and after World War II.

The orchards themselves would come to shape suburban sprawl. The image of a home in the countryside drew newcomers and oldtimers of Santa Clara Valley alike further and further away from downtowns in order to participate in recreation and suburban domesticity. Throughout the San Francisco Peninsula, families moved into unincorporated land to be near nature. As downtowns declined, the suburbs rapidly expanded as federal tax policies and incentives encouraged businesses, malls, and subdivisions to locate new construction outside city cores. Industrial recruitment likewise used the countryside lifestyle to attract new industries. "Their scientists liked living there . . . attracted, in part, by the region's 'good life'," Richard Rowe wrote in his study of open space and agriculture in Santa Clara County. But Rowe worried about amenities disappearing in the twentieth century. "Today's open space appears headed for tomorrow's subdivision. With the loss of these open spaces the county will lose much of its charm."<sup>77</sup>

The orchards found expression on the landscape of the Valley's infrastructure. Mid-twentieth century promoters did not forget the agricultural heritage of the Valley, giving or maintaining street names such as "Blossom Hill," "Cherry," "Apricot," "Hillsdale," "Willow Glen," and "Cherrydale" that expressed a landscape culturally tied to agriculture. Homebuilders promoted their subdivisions as "country-side living" next to orchards. The agricultural past became a tool for the marketability of homes. Land as a productive source became valued differently, not as space that was agriculturally productive but as space fit for suburban homes in the garden. The Garden of the World remained, but became cast as the

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<sup>77</sup>Rowe, "Agricultural Land and Open Space," 45.

suburban dream.

While these events would come later in the postwar period, the infrastructure and culture of agriculture—roads, sewers, the countryside—supported and encouraged urbanization. The economic and political demands of the nineteenth century allowed these spaces to take shape and contributed profoundly to the process of Silicon Valley’s postwar urbanization. The Santa Clara County underwent a definition of a particular kind of place that revolved around its relationship to the environment. The cultural and structural creation of this Eden by nineteenth century boosters and twentieth century promoters detailed a landscape put to the service of agricultural production, but its agricultural identity was cast as the suburban ideal in the mid-twentieth century. The agricultural past allowed cities like Santa Clara to boast of “THE GOOD LIFE” owing itself to the “blooming orchard trees,” “relaxed outdoor living,” and the “heritage and legacy of the early Franciscan padres.”<sup>78</sup> The same culture of orchards-as-nature is what led Wallace Stegner to conclude that the “original sin came with the Spaniards” before Americans planted their pear, peach, cherry, prune, and apricot trees, the “forerunners of the golden age.”<sup>79</sup> In the process of redefining the land’s past, the modern Santa Clara Valley took shape.

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<sup>78</sup>Santa Clara Chamber of Commerce, “Industrial Introduction to the City of Santa Clara,” 1964, Santa Clara City Library.

<sup>79</sup>Yvonne Jacobson, *Passing Farms, Enduring Values: California’s Santa Clara Valley* (Los Altos, Calif.: W. Kaufmann, 1984.), x.

## Chapter 2

### The Nature of Business

Palo Alto is half bedroom suburb, half futuristic 1970s science fiction movies. . . . The big thing about Palo Alto is that, as a city, it designs tons of incredibly powerful and scary shit inside its science parks, which are EVERYWHERE.

—Douglas Coupland, *Microserfs*

Hammer in hand, the county went noisily about the job of transforming itself from a rural to a metropolitan community. Bulldozers leveled orchards for thousands of homesites. The steel webbing of new factories spread over former hay fields. Acres of asphalt marked the parking areas of new suburban shopping centers. Service stations sprang up like mushrooms along our major thoroughfares. Fleets of ready-mix trucks disgorged concrete into the foundation forms of every kind of building—in every part of the county.

—Karl J. Belser, *Planning Progress 1956*

The West has long dreamed of an indigenous industry of sufficient magnitude to balance its agricultural resources. The war advanced these hopes and brought to the West the beginning of a great new era of industrialization. A strong and independent industry must, however, develop its own intellectual resources of science and technology, for industrial activity that depends upon imported brains and second-hand ideas cannot hope to be more than a vassal that pays tribute to its overlords, and is permanently condemned to an inferior competitive position.

—Frederick Terman

On Labor Day in 1956 a caravan of 300 moving vans trekked into Santa Clara County carrying the possessions of nearly 600 families and equipment for Lockheed's research labs. One month later, Lockheed's first building on its 600-acre Sunnyvale campus opened to its employees. Many of the families came from Burbank, California, the home of Lockheed's southern California corporate headquarters, to work in the new missile and space facility established in the northern California city. The experience of Sunnyvale and Lockheed typified the indus-

trial and suburban growth of Santa Clara County. Once a small agricultural market town of 9,829 in 1950, Sunnyvale's population expanded rapidly and housed 52,898 people by 1964. Employment in electronics research and manufacturing expanded just as quickly, rising from less than 3,000 workers in 1940 to 68,000 in 1963.<sup>1</sup> Among the advertisements sold to these companies was the Santa Clara County environment. David Beers, whose father worked in the Sunnyvale facility, recalled the Chamber of Commerce brochures ensuring an "all-year garden" and "the most beautiful valleys in the world" that enticed his family's relocation to Sunnyvale.<sup>2</sup> The convergence of boosterism, climate, environment, and industry defined the contours of Santa Clara County's growth liberalism.

The spatial transformation of agricultural space to industrial space in Santa Clara County resulted from the imaginations of city builders and boosters during the World War II and postwar eras. Coalitions of city builders, merchants, and industrialists imagined a modern urban setting of single-family homes, separation from a dependence on eastern capital, low taxes, the lack of unions, and plenty of space to accommodate the expansion of cities. Home and work could occur in what historian Robert Self called the "industrial garden" where workers and their homes were in relative proximity to each other and nestled into the garden landscape that erased distinctions between country and city. Through the process of defining the countryside in the suburbs, boosters relied on California's climate, environment, and landscape to pitch their vision of the modern city.

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<sup>1</sup>"Defense Boom: Lockheed Arrived in '56, Leading to Economic Explosion," *San Jose Mercury News*, December 26, 1999; "Lockheed Aircraft: Midpenninsula's Largest Employ," *Palo Alto Times*, February 3, 1960; interview with Jack Balletto, Silicon Genesis Project, Stanford University, 1–3. Lockheed was not alone in its arrival to Santa Clara County in the postwar era, nor was it the first. Hewlett-Packard, Varian Associates, GTE Sylvania, FMC Corp., and Philco Ford all established operations for space, electronics, and telecommunications research and manufacturing prior to 1956.

<sup>2</sup>David Beers, *Blue Sky Dream*, {PG}.



DEL CARLO STUDIOS

**Figure 2.1:** The Lockheed Missile and Space Division building in Sunnyvale, California, ca. 1956–1957. Arnold Del Carlo Collection, Sourisseau Academy for State and Local History, San Jose State University.

THE INTRODUCTION OF THE MILITARY ECONOMY in the Santa Clara Valley transformed the landscape in the Santa Clara Valley. The market towns of Palo Alto, Sunnyvale, Mountain View, and San Jose had grown up around agricultural commodities and supporting their production, processing, and distribution. City officials encouraged the construction of city infrastructure to support activity in the hinterlands, including roadways and sewers, and such decisions largely reflected the desires and interests of farmers.

The transition to defense industries began prior to the attacks at Pearl Harbor in 1941. A decade before, the City of Sunnyvale purchased a 1,000 acre parcel of farmland against the San Francisco Bay and sold the land to the Navy for running dirigibles. The newly created Naval Air Station Moffett Field remained relatively dormant until April 1942, when the base was used for staging anti-submarine campaigns and maritime patrols. During the interwar era, scholars at Stanford University initiated research agendas around microwave and radio technology and their military applications.

Historians have warned of granting World War II too much influence in shaping the West Coast. Roger Lotchin in particular suggests that defense-related industries in Southern California and elsewhere in the West show that World War II had less impact than assumed. Rather, World War II was a continuation of policies underway well before the war and the benefits of federal spending to cities were largely the result of unintended consequences. With that in mind, however, the results of federal activism had deep effects in Santa Clara County's economy and housing markets.<sup>3</sup>

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<sup>3</sup>Roger W. Lotchin, *Fortress California, 1911–1960: From Warfare to Welfare* (New York: Oxford University Press, 1992), 393–420. For an opposing view, see Gerald D Nash, *The American West Transformed: The Impact of the Second World War* (Lincoln: University of Nebraska Press, 1990); Ger-

World War II introduced seismic shifts in Santa Clara County's cities as political leaders began accommodating land use towards the defense industry. Further north in the Bay, the shipyards and manufacturing facilities in San Francisco and Oakland absorbed the bulk of new workers migrating to California to work in defense industries. Between 1940 and 1950, western states led the country in population growth.<sup>4</sup> The production of agriculture still remained Santa Clara County's dominant contribution to the war effort. Federal spending in defense further tied the west's burgeoning educational and high-technology industries to the desires of the federal government. California, Arizona, Washington, Kansas, Utah, and Colorado were among the top ten states for high-tech jobs. San Diego led the way in California, supporting nearly 215,000 people in 1957. The military became a constant and visible presence in the defense-dependent cities of the West.<sup>5</sup>

The Cold War policy of industrial dispersion exerted influence on the design and location of industrial centers. Fears of a potential "total war" with the

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ald D Nash, *World War II and the West: Reshaping the Economy* (Lincoln: University of Nebraska Press, 1990); and Gerald D. Nash, *The Federal Landscape: An Economic History of the Twentieth-Century West* (Tucson: University of Arizona Press, 1999). See also Carl Abbott, *The New Urban America: Growth and Politics in Sunbelt Cities* (Chapel Hill: University of North Carolina Press, 1987), 17-19.

<sup>4</sup>Richard White, *"It's Your Misfortune and None of My Own": A New History of the American West* (Norman: University of Oklahoma Press, 1991), 507.

<sup>5</sup>Carl Abbott, *Metropolitan Frontier: Cities in the Modern American West* (Tucson: University of Arizona Press, 1995), 60-61; Lotchin, "The City and the Sword Through the Ages and the Era of the Cold War," in *Essays on Sunbelt Cities and Recent Urban America*, ed. Robert Fairbanks and Kathleen Underwood (College Station, Tex.: Texas A&M University Press, 1990), 95; James Clayton, "The Impact of the Cold War on the Economies of California and Utah," *Pacific Historical Review* 36, no. 4 (November 1967): 449-473; Abbott, "The Metropolitan Region," 82-83. See also Gilbert S. Guinn, "A Different Frontier: Aviation, the Army Air Force, and the Evolution of the Sunshine Belt," *Aerospace Historian* 29 (March 1982): 34-45; James Eastman, "Location and Growth of Tinker Air Force Base and Oklahoma City Air Material Area," *Chronicles of Oklahoma* 50 (Autumn 1972): 326-346; Leonard J. Arrington and Archer L. Durham, "Anchors Aweigh in Utah: The U.S. Naval Supply Depot at Clearfield, 1942-62," *Utah Historical Quarterly* 31 (September 1963): 109-126; Thomas G. Alexander, "Ogden: A Federal Colony in Utah," *Utah Historical Quarterly* 47 (Summer 1979): 291-309; Martin Schiesl, "Airplanes to Aerospace: Defense Spending and Economic Growth in the Los Angeles Region, 1945-60," in Lotchin, ed., *Martial Metropolis*, 135-150; Stephen B. Oates, "NASA's Manned Spacecraft Center at Houston, Texas," *Southwest Historical Quarterly* 67 (January 1964): 350-375.

Soviet Union prompted officials in Washington to pursue industrial dispersion as an official policy. The dispersal of industry first appeared in federal legislation in the National Security Act of 1947, which created the National Security Resources Board (NSRB) charged with locating the strategic location of industries, services, governmental, and economic activities deemed essential to national security.<sup>6</sup> A presidential order issued by Harry Truman in August 1951 ordered the movement of government agencies “out of dense urban cores” and specifically noted the policy’s importance to “the dispersal of new and expanding industries.” The dispersal policy encouraged the movement of industry to “areas adjacent to industrial or metropolitan districts in all sections of the country.” Such areas needed to be ten to twenty miles from a potential nuclear ground zero. The dispersal of industry to suburban areas meant fulfilling the policy directives while also maintaining proximity to employees, manufacturing facilities, and the infrastructure of central cities. According to the policy of dispersal, the suburb was the ideal industrial area.<sup>7</sup>

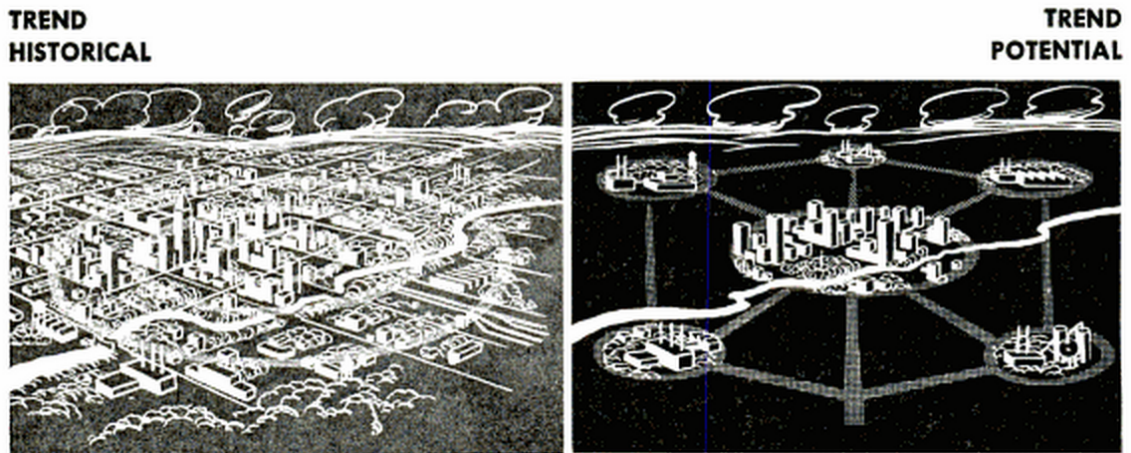
The national policy of dispersal aligned with the desires of business. Throughout the nation, industrial leaders expressed concern about inner cities and pointed to dispersion as a potential solution to what they identified as urban problems, especially entrenched unions, high taxes, and an aging infrastructure. To a speech before the San Francisco Bay Area Council, San Francisco’s director of city planning noted that “it is more than a great piece of good fortune for city planners that policies which best serve the nation’s security are also best for urban development. . . . We claim that this is good for our people and economical for our industry and business.”<sup>8</sup> Just as the federal government endorsed non-urban

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<sup>6</sup>Margaret Pugh O’Mara, *Cities of Knowledge: Cold War Science and the Search for the Next Silicon Valley* (Princeton: Princeton University Press, 2005), 29

<sup>7</sup>“National Dispersal Program Forecast by President Statement,” *Bulletin of the Atomic Scientists* (September 1951): 263–279; O’Mara, *Cities of Knowledge*, 28–38; Kenneth T Jackson, *Crabgrass Frontier: The Suburbanization of the United States* (New York: Oxford University Press, 1985), 249

<sup>8</sup>Quoted in O’Mara, *Cities of Knowledge*, 33



**Figure 2.2:** The policy of dispersal. “National Dispersion as a National Policy,” *Bulletin of the Atomic Scientists* (September 1951).

cores as ideal locations for defense-related industry, business leaders were already looking to relocate their facilities beyond major American cities. Industry no longer developed in central cities as it historically had. Rather, industrial manufacturing sought cheaper and more spacious outlying lands that had adequate space for parking, loading facilities, and room for plant expansions. Industries also sought more amenable work environments. City ordinances in the middle of the twentieth century began pushing industry to less desirable areas of cities, while simultaneously industrial facilities sought the same amenities as suburbanites: a pleasant environment, suburban design, distance from urban problems, and lower taxes, while remaining in proximity to city services and infrastructure.<sup>9</sup>

World War II and the location of defense industries along the West Coast drew thousands of new residents to California in search of jobs after a decade of economic depression.<sup>10</sup> Between 1940 and 1947, the nine counties of the Bay Area

<sup>9</sup>John M. Findlay, *Magic Lands: Western Cityscapes and American Culture After 1940* (University of California Press, 1993), 120; Santa Clara County, Calif., Planning Department, “Directory of Industrial Parks and Industrial Districts in Santa Clara County,” *InfoCommentary: Industrial Districts* 1 (January 1966): 1; Robert E. Boley, “Rx for Successful Industrial Park Development,” *Urban Land* 26 (June 1967): 3; Victor Roterus, *Planned Industrial Parks: A Case Study* (Washington, DC, 1960), 3-4.

<sup>10</sup>On the mid-century migration to California, see James Gregory, *American Exodus: The Dust Bowl Migration and Okie Culture in California* (Oxford: Oxford University Press, 1989). On the ef-

became home for 676,000 more people, 330,000 new jobs, and \$2.5 billion more in annual income.<sup>11</sup> The burgeoning Cold War science complex added an additional influx of people and capital to the region. In 1950, Santa Clara County counted 800 factory workers, which jumped to 264,000 manufacturing workers and more than 3,000 electronics firms by 1980.<sup>12</sup> The county towns grew rapidly during and after World War II as middle-class families moved to the area to take advantage of new defense and related industries. Menlo Park, located in the southern end of San Mateo County, grew from a town of 3,000 to 27,000 between 1940 and 1960, while Palo Alto grew from under 17,000 to 52,000 in the same period.

In the years after World War II, scientific funding by the federal government rose rapidly that helped spur new industrial activity centralized around defense and military applications. In 1955, federal expenditures on basic research topped \$286 million, a figure that jumped to \$693 million by 1960 and, just five years later, topped \$1.6 *billion*. The total research and development budget of the federal government had grown from eight percent to twelve percent in ten years.<sup>13</sup> Along the Peninsula, cities sought out new ways to attract defense industries to the area in order to capitalize on defense research contracts. Bay Area governmental associations, such as the Bay Area Council (BAC), sought to make California an industrial center not by replicating the industrial Northeast or Midwest but by promoting new industries.<sup>14</sup>

Bay Area city leaders chased corporate recruitment and grew their economies

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fects of World War II on the American West, see Nash, *The Federal Landscape*; Abbott, *Metropolitan Frontier*, chap. 1; Roger W. Lotchin, "World War II and Urban California: City Planning and the Transformation Hypothesis," *Pacific Historical Review* 62, no. 2 (May 1993): 143–171; Lotchin, *Fortress California*

<sup>11</sup>O'Mara, *Cities of Knowledge*, 103

<sup>12</sup>Carl Abbott, *How Cities Won the West: Four Centuries of Urban Change in Western North America* (Albuquerque: University of New Mexico Press, 2008), 181. U.S. Bureau of the Census, 1960 Census, Santa Clara County, n.d., census.abag.ca.gov; U.S. Bureau of the Census, 1970 Census, Santa Clara County, n.d., census.abag.ca.gov; U.S. Bureau of the Census, 1980 Census, Santa Clara County, n.d., census.abag.ca.gov.

<sup>13</sup>O'Mara, *Cities of Knowledge*, 47

<sup>14</sup>O'Mara, *Cities of Knowledge*, 106

as other cities faced decline. The Rust Belt in particular, once an industrial powerhouse, began its steady decline in the postwar era while western towns once peripheral to the American industrial economy began to rise. The Sunbelt in particular succeeded in attracting tremendous levels of population, industry, and federal funding.

Regional electronics manufacturing in the Bay Area grew quickly. The Western Electronics Manufacturers Association listed twenty members in the Bay Area in 1951; by 1953 it counted fifty-three, and by 1974 listed eight-hundred and employed around 150,000 people. The bulk of new manufacturers created products for the Department of Defense and NASA. Between 1952 and 1968, electronics firms made at least half of their annual incomes from sales to the federal government for military and space programs.<sup>15</sup> Desires on the part of NASA and the Pentagon for compact systems of missile and rocket guidance as well as wars in Korea and Vietnam and the space race, electronics equipment accounted for as much as twenty percent of the cost of an aircraft and thirty percent of the cost for missiles. While southern California built the aircrafts, northern California provided the electrical components.<sup>16</sup>

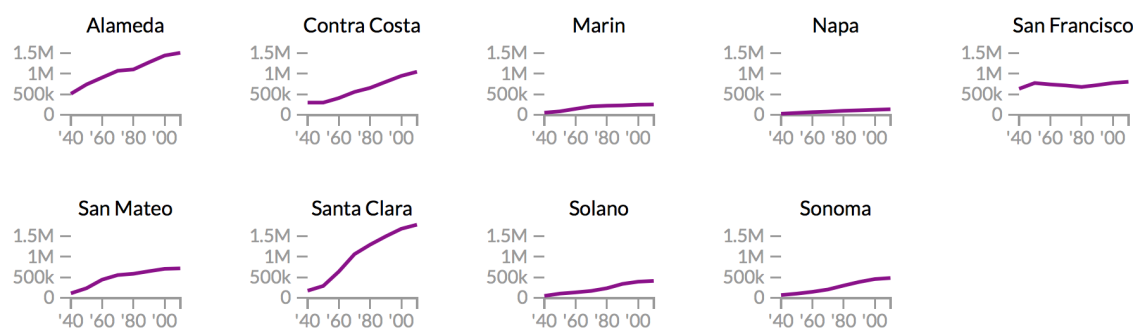
WORLD WAR II AND THE POSTWAR YEARS witnessed an explosion in the population of northern California. San Francisco, Oakland, and Berkeley, the traditional urban centers in northern California, had seen their populations rise during the war years, but in the postwar years populations began moving to the suburbs. Out of the nine counties of the Bay Area, Santa Clara County ranked first in the size of its

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<sup>15</sup>G. Bylinsky, "California's Great Breeding Ground for Industry," *Fortune Magazine* (June 1974): 133, 128-129, 130; Findlay, *Magic Lands*, 145

<sup>16</sup>*Blue Sky Metropolis: The Aerospace Century in Southern California*, ed. Peter Westwick; Findlay, *Magic Lands*, 143-144; Albert Shapero, Richard Howell, and James R. Tombough, *An Exploratory Study of the Structure and Dynamics of the R&D Industry* (Menlo Park, Calif., 1964), 23-25; Saxenian, "The Genesis of Silicon Valley," 27; Siegel and Markoff, *High Cost of High Tech*, 8-9.

population increase. Throughout the 1940s the population of Santa Clara County nearly doubled, and by the mid-1950s, nearly 4,000 new people were moving to the county every month. The county's 1950 population of 290,547 people exploded to 642,365 by 1960, surpassing San Francisco as the region's urban center. The arrival of so many people in a short amount of time led to subdivisions spreading throughout the Valley.<sup>17</sup>



**Figure 2.3:** Population of the Bay Area counties, 1940-2010. U.S. Bureau of the Census.

The rapid rise of the Bay Area followed a wartime and postwar trend throughout the American West. New opportunities in western cities after a decade of economic depression led migrants to metropolitan areas to take jobs in wartime industries in the 1940s. The American West especially felt the impact of this shift, leading urban historian Carl Abbott to remark that the migration led “the entire West into a half-century of head-long urbanization.”<sup>18</sup> Western metropolitan areas—Dallas, San Francisco, San Jose, Denver, Albuquerque—became centers of new economies based on high technology, services, tourism, and recreation.<sup>19</sup>

<sup>17</sup>Belser, *Planning Progress 1956*, 2; U.S. Bureau of the Census, *1960 Census*, Santa Clara County, n.d., [census.abag.ca.gov](http://census.abag.ca.gov); U.S. Bureau of the Census, *1970 Census*, Santa Clara County, n.d., [census.abag.ca.gov](http://census.abag.ca.gov); U.S. Bureau of the Census, *1980 Census*, Santa Clara County, n.d., [census.abag.ca.gov](http://census.abag.ca.gov).

<sup>18</sup>Abbott, *Metropolitan Frontier*, 4

<sup>19</sup>On the metropolitan West, see Abbott, *How Cities Won the West*; Abbott, *Metropolitan Frontier*. See also Arthur R. Gomez, *Quest for the Golden Circle: The Four Corners and the Metropolitan West, 1945-1970* (Lawrence: University Press of Kansas, 2000); Robert M. Fogelson, *The Fragmented Metropolis: Los Angeles, 1850-1930* (Cambridge: Harvard University Press, 1967); William Issel and Robert Cherny, *San Francisco, 1865-1932: Politics, Power, and Urban Development* (Berkeley: University of California Press, 1986); Peter Wiley and Robert Gottlieb, *Empires in the Sun: The Rise of the*

The region that Bernard DeVoto once described as a “plundered province” had become an economic pacesetter in the latter twentieth century, propelled by world war, new economic pursuits, demographic shifts, and federal funding.<sup>20</sup>

Encouraging the arrival of a new base of industry and residents were tireless city boosters. While city leaders had grown wary of agriculture as a core economy activity, especially after the Depression plummeted farm incomes to historic lows, they held onto the imagery of the countryside for their cities. A booster campaign initiated by Palo Alto in 1930 emphasized the city’s pleasant climate, proximity to Stanford University, sport and recreation, and good health, framed by photographs of well-tended landscapes, scenic valley vistas, and towering coastal redwoods. A campaign run by San Jose around the same time likewise pointed to the Bay Area’s blossoms, ideal climate, “sylvan setting[s] for picturesque home[s],” and described the county as “a 60-mile long Garden.”<sup>21</sup>

Climate alone not only shaped the recreational and domestic life for Santa Clara County’s boosters. The same amenities mattered for industry. San Jose made special note of the “great industrial and manufacturing opportunities” of the Santa Clara Valley, all made possible by the “favorable living conditions, varied natural resources, ample transportation facilities, cheap potential power, low overhead costs, and highly intelligent labor supply,” along with San Francisco serving as a “logical distribution center for the Pacific Coast and foreign markets.” San Jose also pointed to the advantages of its neighbors, including Sunnyvale as “the

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*New American West* (New York: G. P. Putnam’s Sons, 1982).

<sup>20</sup>Bernard DeVoto, “The West: A Plundered Province,” *Harper’s Magazine* 169 (August 1934), 355–364. On the West and World War II, see Nash, *The Federal Landscape*. Additional work on World War II and the postwar West include Abraham Shragge, “‘A New Federal City’: San Diego During World War II,” *Pacific Historical Review* 6 (August 1994): 333–361; Clayton, 449–473. See also Lotchin, *Fortress California*. and Roger W. Lotchin, *The Bad City in the Good War: San Francisco, Los Angeles, Oakland, and San Diego* (Indiana University Press, 2003).

<sup>21</sup>“Palo Alto, California: Home of Stanford University,” Palo Alto Chamber of Commerce, ca. 1930, Folder 19, Box 41, Arbuckle Research Files, California Reading Room, San Jose Public Library; “The Valley of Heart’s Delight,” San Jose Chamber of Commerce, ca. 1922, Folder 7, Box 58, Arbuckle Research Files, California Reading Room, San Jose Public Library.

shipping center of the west side of the valley,” Saratoga and it’s “world-famous . . . annual Blossom Festival,” and Mountain View and it’s “steadily growing in population and commercial importance.”<sup>22</sup> In a 1948 promotional video distributed by the San Jose Chamber of Commerce, the city emphasized to industry they would have little problem finding “desirable sites for space for future expansion . . . on the widespreading outskirts of San Jose,” while highlighting the presence of San Jose Steel, General Electric, AMES, and Moffett Airfield. “In this county of home lovers, gardens really flourish,” the Chamber’s video emphasized, “and job opportunities flourish, too, attracting citizens to take pride in establishing a finer type of community life.”<sup>23</sup>

If Santa Clara County was idealized as a place, it was also a political project. By the 1950s, cities took advantage of New Deal era personal consumption and local efforts to attract consumers and capital to the county. These themes contained in promotional material suggested the central message emerging from the municipal campaigns. Seen through promotional material and the pages of national magazines, Santa Clara County was a remarkable place for outdoor living, individual lifestyle choices, and industrial opportunities. The representation mattered because place mattered. The reputation as a place of clear skies, cozy weather, beautiful landscapes, open space, cheap homes, middle-class jobs, and opportunity attracted “quality of life” residents. Climate and environment shaped the sell of the Valley, cast as an opportune situation for domestic life, recreation, and business.

Wartime meant prosperity for the peninsula’s businesses, but postwar reconversion shook the confidence of Peninsula businessmen. From the offices of city halls and businesses throughout the Midpeninsula, businessmen and politi-

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<sup>22</sup>“The Valley of Heart’s Delight,” San Jose Chamber of Commerce, ca. 1922, Folder 7, Box 58, Arbuckle Research Files, California Reading Room, San Jose Public Library.

<sup>23</sup>“Valley of Heart’s Delight,” video recording, San Jose Chamber of Commerce (Three Crown Productions, 1948).

cal leaders worried about their futures. They wanted to avoid seeing their cities fall back into agricultural pursuits, with its limited possibilities for expansion and tax base, while manufacturing located elsewhere. From their perspective, the small tax base and seasonal agricultural business was no way to build a modern, western metropolis. The establishment of the Bay Area Post-War Planning Committee as well as several local postwar planning committees in San Francisco and Oakland attempted to maintain wartime industries. They envisioned cities as business friendly, rich with amenities, benefiting from important universities, providing a bounty of recreational opportunities for homeowners, and key sites for investment of federal dollars in scientific research, development, and manufacturing.<sup>24</sup> Amid national debates about the reduction of reducing wartime spending the Midpeninsula's businessmen, promoters, and political leaders looked locally to maintain their prosperity.<sup>25</sup> Starting in the 1940s, they "reformed" municipal government and reoriented their policies towards attracting new business.<sup>26</sup> What these leaders shared was a vision: local control of municipal government aided by the injection of massive federal funding aimed at promoting new defense-related research. Maintaining a "climate for business" to attract public and private sectors to the county became a guiding principal as a means of promoting municipal expansion.

SAN JOSE'S VISION OF METROPOLITAN EXPANSION BEGAN BEFORE the end of World War II. Up until the 1940s, San Jose and nearby towns promoted their agricultural

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<sup>24</sup>Findlay, *Magic Lands*, 143

<sup>25</sup>Cohen, *Consumer's Republic*, 98–114; Robert O. Self, *American Babylon: Race and the Struggle for Postwar Oakland* (Princeton: Princeton University Press, 2003), 61–95.

<sup>26</sup>Scholars have variously referred to these organized businessmen as "community power structures," "civic-commercial elites," and "growth machines" in places like Phoenix, Arizona's "Charter Government" and Dallas, Texas' "Citizens Charter Association." Needham, *Power Lines*, ch. 3; Molotch, "The City as a Growth Machine"; Molotch and Logan, *Urban Fortunes*; Kruse, *White Flight*, ch. 1; Lassiter, *The Silent Majority*; Shermer, *Sunbelt Capitalism*.

productivity by sponsoring festivals such as the “Blossom Tours.” But in the mid-1940s, an ambitious group of young merchants, lawyers, industrialists, and property owners endorsed the importance of metropolitan expansion in order for the city to achieve the greatness they felt it deserved. The political machinery of San Jose was controlled by the taxi service operator and political boss Charlie “Boss” Bigley and City Manager C. B. Goodwin. Goodwin and Bigley became targets as their critics charged that the leadership failed to entice new industries to the city and help stabilize an economy built on the instability of agriculture and seasonal employment. The 1944 election gave opponents of Bigley and Goodwin an opening. When six of the seven city council seats opened for election, opponents led by businessmen Harvey Claude Miller and Louis Oneal, formed the “Progress Committee” and put up a slate of candidates to capture the vacated council seats.<sup>27</sup> The Progress Committee candidates accused Bigley, Goodwin, and the city council of jeopardizing San Jose’s future. Voters, and the newspaper, agreed. Aided by the newspaper’s endorsement, six members of the Progress Committee—among them the key business and political figures Al Ruffo, Ernest Renzel, Ben Carter, Jim Lively, Roy Rundle, and Fred Watson—secured seats on the city council as “reform” candidates. Lacking the majority on the council to directly fire the manager, the Progress Committee amended the city’s charter requiring city managers to stand for biennial approval by the citizens. The Committee further weakened the power of entrenched officials by reducing the city council member’s terms from six year to four year terms. By the end of the 1940s, Goodwin would be out of office, and the Progress Committee also ousted the antireform manager that replaced Goodwin, John Lynch.<sup>28</sup>

<sup>27</sup>Jessica Trounstone argues that “municipal formers organized groups of concerned citizens into party-like coalitions that slated candidates. These organizations were much less structured than the hierarchical coalitions in machine cities, but they served a similar purpose.” Trounstone, *Political Monopolies in American Cities*, 102.

<sup>28</sup>“No Decision Made on New City Manager,” *San Jose Mercury*, May 13, 1946; Philip Trounstone and Terry Christensen, *Movers and Shakers: The Study of Community Power* (New York: St. Martin’s

With the Progress Committee secured in city government, the new city council's immediate plans aimed to attract industry to San Jose. With subsidies from city and county government, the Chamber of Commerce began a \$60,000 advertising campaign that lured the industries of Food Machinery and Chemical Corporation, already a local to the area, International Business Machines, General Electric, Pittsburgh Steel, Owens-Corning, and Kaiser. The city undertook the construction of its first airport and passed a \$1,700,000 bond to construct new sewers. Some of their initiatives fell under criticism when, in 1946, a fellow member called the committee "reactionaries" and accused them of selling municipal land to companies well below market value. Others in city government disagreed with plans for the private ownership of water infrastructure, arguing instead for municipal ownership. The Progress Committee, along with the newspaper, silenced such criticism with accusations of socialism.<sup>29</sup>

The Progress Committee set to bring their vision for San Jose to life, but had to overcome a major obstacle: the voters. The Progress Committee sought many things for San Jose to make the city an attractive place for industry and workers, including construction of an airport, a deep water port in the north of the city, and improved sewers, streets, and storm drains. The infrastructure projects required the approval of city voters, who approved or disapproved general obligation bonds that allowed the city to borrow money long-term with low interest rates. These bonds were often paid for through increases on property taxes, a maneuver most voters opposed, and benefited developers. Bonds were repeatedly voted down during the interwar years, even as the city attempted to deal with its unique problem of sewage and cannery effluence. Voters refused to give in even

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Press, 1982), 87; Mitchell Mandich, "Growth and Development of San Jose" (PhD Dissertation, San Jose State University, 1975), 44-47; Clyde Arbuckle, *San Jose*, 44; Trounstone, *Political Monopolies in American Cities*, 103.

<sup>29</sup>"City Extends West Border, Annexes Tract," *San Jose Mercury News*, n.d.; "Food Machinery Bids \$140,000, Retains Site," *San Jose Mercury News*, n.d.; Trounstone, and Christensen, *Movers and Shakers*, 88; Mandich, "Growth and Development," 47-49.

as the state of California declared the city in violation of pollution regulations in 1948.<sup>30</sup>

**Table 2.1:** Party Affiliations in San Jose, 1948 and 1950. *San Jose Mercury News*, March 23, 1950.

Party	1950	1948	Gain/Loss
Republican	50,774	41,800	+ 8,974
Democratic	59,042	46,220	+ 12,822
Progressive	53	41	+ 12
Prohibition	106	97	+ 9
Socialist	42	48	- 6
Townsend	19	36	- 17
Independent Progressive	266	45	+ 221
Communist	2	4	-2

The Progress Committee dissolved shortly after their victory, but their pro-growth ideology remained entrenched in San Jose politics for the next three decades. Several of the members of the committee remained in city government for the next two decades. The combination of the population boom and the booster ethos of the city council fueled a political culture that was accommodating to business and favorable towards developers. To fund such growth the city needed long-term, low-interest bonds that required approval by the city's voters, whose property taxes helped pay back the loans. Since the days of the Progress Committee, San Jose city leaders faced reluctant voters who continually refused to fund general obligation bonds. But with the city's rapidly expanding population and attendant needs to support the newcomers—mainly, infrastructure that included roads, utilities, and sewers—the city needed to find someone to convince

<sup>30</sup>Trounstone, and Christensen, *Movers and Shakers*, 88.

voters to support the measures they believed necessary for San Jose's growth. The city council found that person in Anthony P. "Dutch" Hamann. Hamann epitomized San Jose's postwar pro-growth outlook. The forty-year-old former businessman, teacher, and oil company representative had a strong attachment to the city and solid connections throughout the community.<sup>31</sup> Hamann had not served in political office until his appointment by the city council in 1950 in a split 4-to-3 vote. As the city began its drive for urban growth, Hamann hoped to avoid the fate that had befallen his home of Orange County in Southern California with its many competing medium-sized cities. Hamann believed that a large city could better manage urban development and growth than several small towns all looking out for their own interests. He wanted San Jose to dominate the county, and thus avoid what he saw as petty competition among small towns.<sup>32</sup> To grow and make available the funds to sustain growth, Hamann reasoned, the city needed to annex land to raise revenue from taxes.<sup>33</sup> "You don't build a city by staying in a vacuum," Hamann declared. "You build, you sell. . . . And I was the gun for hire."<sup>34</sup>

And build San Jose did. The city approved over 1,400 annexations between 1945 and 1970 including many narrow strips—"shoestring" annexations—snaking outward, sometimes only on one half of a street, to capture a desirable subdivision, commercial center, or street intersection. In some areas, annexations became a tool of coercion. Annex enough areas around land-owning hold-outs, city officials reasoned, and pockets of non-annexed land would have little choice but to succumb.<sup>35</sup> Hamann's drive for land became so aggressive that his staff became

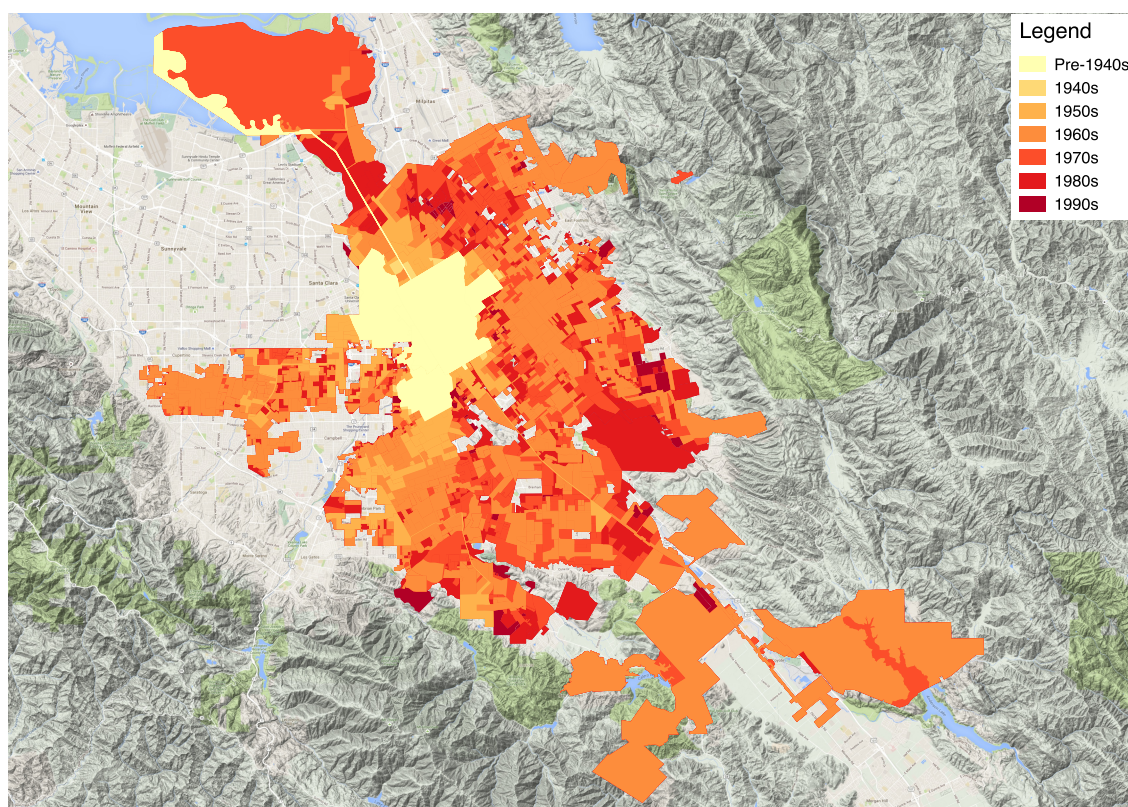
<sup>31</sup>Trounstone, and Christensen, *Movers and Shakers*, 89; Arbuckle, *San Jose*, 44-45. Hamann had graduated from the University of Santa Clara and played on the same football team as Councilman Al Ruffo.

<sup>32</sup>"Hamann: San Jose's Growth Guru," *San Jose Mercury*, 1999.

<sup>33</sup>Glenna Matthews, *Silicon Valley, Women, and the California Dream: Gender, Class, and Opportunity in the Twentieth Century* (Stanford: Stanford University Press, 2003), 96

<sup>34</sup>Hamann quoted in Trounstone, and Christensen, *Movers and Shakers*, 96.

<sup>35</sup>"Annexations by Year", 2011, City of San Jose Planning Division; "City Size by Year", 2011,



**Figure 2.4:** Annexations in San Jose, 1940—1990, shaded from light to dark by decade. Interactive annexation visualization is at <http://dissertation.jasonheppler.org/visualizations/annexations/>.

known as “Dutch’s Panzer division”—named after the swift motorized armored tank squadrons of the Third Reich—as annexations sprawled outward from the city core.<sup>36</sup> “They say San Jose is going to become another Los Angeles,” Hamann rebuked his critics. “Believe me, I’m going to do the best in my power to make that come true.”<sup>37</sup> Under Hamann’s tenure, the San Jose Chamber of Commerce spent nearly \$1 million to attract new industries to the city. The population boomed and the city sprawled. “It was just growth, growth, growth,” Al Ruffo, San Jose’s mayor in the 1940s, recalled approvingly. “That was everybody’s song. And Dutch sang it the loudest.”<sup>38</sup>

San Jose’s pro-growth contingent received enthusiastic support from the city’s newspaper, the *San Jose Mercury*, and its new manager, Joseph Ridder. The Ridder family newspaper empire owned several large publications in the United States, including the *St. Paul Dispatch*, *Duluth Herald*, *Manhattan’s Journal of Commerce*, and the *Seattle Times*. When the family of Everis Hayes sold the morning *News* and evening *Mercury* in 1952 after the paper owner’s death, the Ridders purchased the newspaper.<sup>39</sup> Joe Ridder was sent to manage the new daily paper and redefined the paper’s pro-growth mission, saying that he hoped to make the *Mercury News* “not only among the best newspapers on the Pacific Coast but a vital and constructive force in the development of San Jose and its territory.”<sup>40</sup> When asked why he was so enthusiastic about San Jose’s growth, Ridder responded: “Trees don’t read newspapers.”<sup>41</sup>

The newspaper unabashedly promoted San Jose’s growth. In 1956 it pub-

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City of San Jose Planning Division; Belser, *Planning Progress* 1956, 47; Trounstone, and Christensen, *Movers and Shakers*, 93; “Correcting San Jose’s Boomtime Mistake,” *Business Week*, September 19, 1970, 74; Stanford Law Review, *San Jose*, 5.

<sup>36</sup>Trounstone, and Christensen, *Movers and Shakers*, 93.

<sup>37</sup>Stanford Law Review, *San Jose*, 17.

<sup>38</sup>“Hamann: San Jose’s Growth Guru,” *San Jose Mercury*, 1999.

<sup>39</sup>“The Ridders Buy Again,” *Time*, August 4, 1952.

<sup>40</sup>*San Jose Mercury*, July 1952, quoted in Trounstone, and Christensen, *Movers and Shakers*, 89; Abbott, *Metropolitan Frontier*, 40.

<sup>41</sup>Quoted in Stanford Law Review, *San Jose*, 17.

lished a special series called “Metropolitan San Jose—Progress Town U.S.A.”—the same year that San Jose christened itself the “City of Progress”—detailing the various changes in the city that the paper took as signs of progress.<sup>42</sup> Residential growth, home ownership, and widespread annexations were among its favorites. The paper applauded the arrival of “new plants bearing some of the biggest names in the nation’s business,” the “highly diversified farming” of the region, the “educational, recreational and cultural benefits” the city offered, and the growth of retail, outlets, and store chains.<sup>43</sup> The *Mercury News* praised the industrial diversification of the city and its promise of “year-round employment and production” instead of the seasonal (and uncertain) employment found in the agricultural industries. A town less reliant on agriculture meant avoiding economic dips, more opportunities for employment and education, and additional wealth.<sup>44</sup> The *Mercury News*’ emphasis on the shifting economic center of the city was important as, over time, the paper devoted less and less space to agricultural news. The paper argued for the importance of the “irreplaceable asset” of farmland and the greenbelts that the land provided urban areas, but continued to promote urban developers, subdivisions, and industry flowing into the city.<sup>45</sup> The amount of page space devoted to agricultural news steadily declined and, as early as 1950, columnist Dorothy Thompson could bemoan farm subsidies as a “program [that] has produced preposterous inequities” without insulting a majority of readers.<sup>46</sup> By 1960, farm news covered only two pages of the newspaper. While agriculture still accounted for \$200 million to the county’s economy—canning, packing, drying—the figure was rapidly falling as high tech industry overtook the central economic activity of the county. By 1976 the farm editor and farm

<sup>42</sup>“Metropolitan San Jose—Progress Town U.S.A.,” *San Jose Mercury*, January 15, 1956.

<sup>43</sup>“Metropolitan San Jose—Progress Town U.S.A.,” *San Jose Mercury*, January 15, 1956.

<sup>44</sup>“Diversification Gives Solid Balance to Area,” *San Jose Mercury*, January 15, 1956.

<sup>45</sup>“Greenbelts Protect Irreplaceable Asset,” *San Jose Mercury*, January 15, 1956.

<sup>46</sup>Dorothy Thompson, “Farm Price Program Real Mess,” *San Jose Mercury*, April 7, 1950; Alpert, “Valley of Heart’s Delight,” 37.

section disappeared from the newspaper entirely.<sup>47</sup>

The San Jose Chamber of Commerce also helped pave the way for business. Between 1950 and 1965, the San Jose Chamber of Commerce spent \$1,000,000 publicizing the city.<sup>48</sup> As the *Mercury* reported in 1956, the

San Jose Chamber of Commerce, increasingly a dominant force in Santa Clara County growth because it has long since left behind its restrictive limitation of serving only the City of San Jose, is not content to let 'natural resources' of land availability, good labor supply, key transportation services and growth potential 'pull' new industries here. Active contact with potential industrial neighbors is kept up to date with personal visits, servicing requests for technical information, location of possible plant sites and a nationwide advertising campaign that has proven highly effective.<sup>49</sup>

The industrial campaigns helped pull industry to the city. By the mid-1950s, San Jose was home to IBM and General Electric, and neighboring cities included DuPont, Pittsburgh-Des Moines Steel, Monsanto Chemical, Levi Strauss, Owens-Illinois Glass, Owens Corning Fiberglass, Food Machinery Corporation, Lockheed, and Ford Motor Company.<sup>50</sup> The city attracted the attention of the *New York Times* as early as 1947, who declared the Bay Area an industrial center of the West.<sup>51</sup> By the end of the 1950s, hundreds of new factories were built in the city.<sup>52</sup> Between 1944 and 1962, companies invested more than \$290 million into new plants.<sup>53</sup>

The city's political coalition of businessmen, newspaper publishers, real estate developers, and the Chamber of Commerce allowed the political machinery

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<sup>47</sup>Alpert, "Valley of Heart's Delight," 44-45.

<sup>48</sup>Trounstein, and Christensen, *Movers and Shakers*, 92.

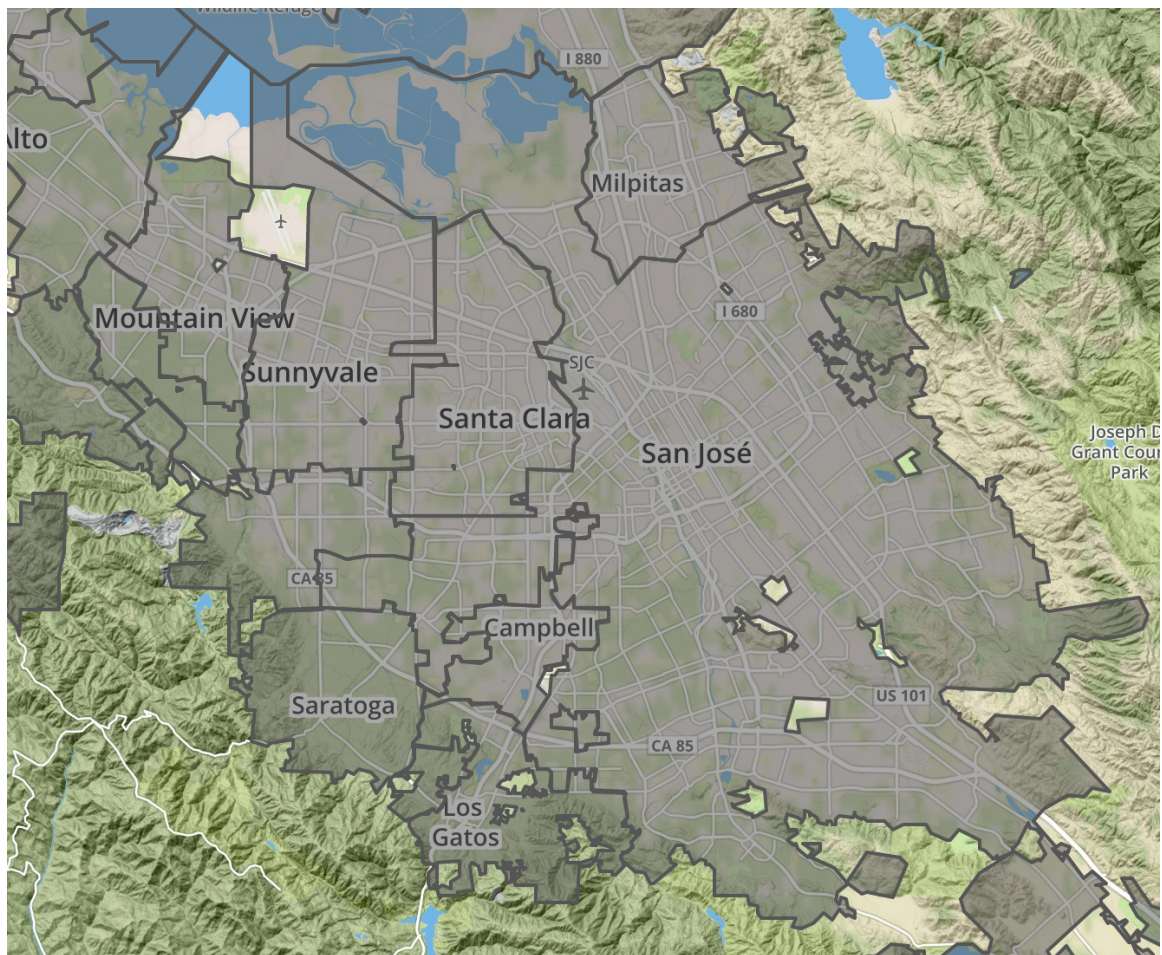
<sup>49</sup>"Chamber Vital to Growth in Valley Areas," *San Jose Mercury* January 15, 1956.

<sup>50</sup>"Santa Clara County—Scene of the Big Boom," *San Francisco Chronicle*, May 11, 1952; Belser, *Planning Progress* 1956, 1.

<sup>51</sup>"Eastern Industry Going Westward," *New York Times*, March 2, 1947.

<sup>52</sup>Belser, *Planning Progress* 1956, 1-2.

<sup>53</sup>Santa Clara Chamber of Commerce, "Industrial Introduction to the City of Santa Clara," 1964, Santa Clara City Library.



**Figure 2.5:** San Jose's unplanned annexation policies resulted in complicated city borders as nearby towns incorporated to resist being brought into the city boundaries.

to pursue growth. Widespread annexation became an avenue for development, provided the city with a broad tax base of industrial, residential, and commercial land, gave itself more power over surrounding cities, and allowed San Jose's leaders think about the city as a regional powerhouse.

CARVED OUT OF THE SOUTHEAST CORNER OF STANFORD UNIVERSITY'S vast land holdings on the San Francisco Peninsula, the Stanford Industrial Park became the epicenter of specialized manufacturing and research activities in the northern end of the county. By the 1960s Stanford Industrial Park had gained a reputation for industrial and technological innovation that would be mimicked around the country.<sup>54</sup> Like many other American colleges and universities throughout the nation, Stanford sought to capitalize on the burgeoning science and technology opportunities in order to fashion itself as a leader in academic research and become a powerful influence in the new industrial age in the American West. As the U.S. Government pursued Cold War scientific research and development programs, places like Stanford Industrial Park fostered specialized science-based industries. The process of industrial recruitment at Stanford reflected an alternative form of land development versus cities like San Jose, but played a key role in shaping the Valley's urban form and political responses to it.

The establishment of Stanford Industrial Park emerged from the confluence of several postwar trends: rapid suburbanization, the Cold War impetus for federal research and development, and the need for Stanford to diversify its finances. The Board of Trustees approved a plan to lease land to high technology companies in 1951 and quickly gained a reputation as a favorable site for burgeoning electronics companies. Roughly five percent of Santa Clara County's workforce was

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<sup>54</sup>Michael I. Luger and Harvey A. Goldstein, *Technology in the Garden: Research Parks and Regional Economic Development* (Chapel Hill: University of North Carolina Press, 1991), 154; Abbott, *Metropolitan Frontier*, 61–68.

employed in high technology or research and development in 1951 (compared to 9.4% in the US as a whole), and by 1986 the workforce reached twenty percent (compared to 8.5% in the US).<sup>55</sup>

Stanford actively pursued close ties with business after World War II. As early as 1945, University President Donald Tressider remarked he “hope[d] that in the postwar period Stanford will draw very much closer to business and industry than it has in the past—by means of cooperative undertakings we hope to develop more and more projects in which both the University and business will have a legitimate stake.”<sup>56</sup> In the postwar era, university officials and faculty supported the expansion of the business/university relationship. Among the most enthusiastic supporters of recruiting and supporting the new economy was Frederick Terman, the university’s first dean of engineering and, later, provost. Terman had spent the war years in Cambridge, Massachusetts, studying radar projects under Vannevar Bush. Terman saw first-hand cooperative programs between MIT and businesses like General Electric, AT&T, and other firms on the front edge of high technology. When he came to Stanford after the war, he used what he learned to begin building a new research agenda for the university. The growing availability of federal research money meant support for the university’s pursuit of academic reputation in addition to becoming a key player in Cold War research in a process Terman referred to as “steeple building.” By 1948, Stanford established a traveling-wave tube research program, supported Stanford alumni Russell and Sigurd Varian in founding their microwave tube company, encouraged faculty consulting with businesses, arranged for university instructors to teach courses for businesses, and established an honors program to allow employees to earn a degree from the university while working full-time.<sup>57</sup>

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<sup>55</sup>Luger, and Goldstein, *Technology in the Garden*, 130.

<sup>56</sup>Quoted in O’Mara, *Cities of Knowledge*, 106

<sup>57</sup>O’Mara, *Cities of Knowledge*, 106–110; Gillmor, *Fred Terman at Stanford*; Findlay, *Magic Lands*, 122–125; Stuart W. Leslie, “The Biggest ‘Angel’ of Them All: The Military and the Making of

While Frederick Terman worked to cement relationships between the university and business, Alf Brandin developed the land. Hired in 1946 to serve as the university's business manager, the 33-year-old Stanford alum quickly set to convincing people about the value of developing Stanford's lands. Brandin recalled wondering before World War II "why didn't we do something with our land? We could lease it out." What was missing was metropolitan growth. "The war changed all that," he recalled. "After the war we then had an opportunity to do something." The University also needed to do something as rising land values and rising property taxes threatened to eat into Stanford's income. The open lands on Stanford were subject to "unrelated business income" taxes, whether those lands were grazing, farming, or office space. Stanford officials feared a future of paying high taxes without a high enough return on rents to cover the costs. Furthermore, the university felt threatened by urban renewal programs whereby local governments could claim unused land for public services. Faced with the potential of condemned land and high taxes, Brandin sought ways to encourage the university to develop its lands for more income.<sup>58</sup>

Stanford's additional motivations for pursuing the creation and growth of the Industrial Park included finances. The university faced financial dilemma by

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Silicon Valley," in *Understanding Silicon Valley: The Anatomy of an Entrepreneurial Region*, ed. by Martin Kenney, (Stanford: Stanford University Press, 2000), 48–67; Rebecca S Lowen, *Creating the Cold War University: The Transformation of Stanford* (Berkeley: University of California Press, 1997), chap. 4; Stuart W. Leslie and Robert H. Kargon, "Selling Silicon Valley: Frederick Terman's Model for Regional Advantage," *The Business History Review* 70, no. 4 (December 1996): 437–440. Timothy Sturgeon warns against giving Frederick Terman too much credit in the creation of Silicon Valley. He argues for extending Silicon Valley's history backward from Varian and HP's founding, suggesting that electronics manufacturing in the Bay Area played a key role in the fields of radio, television, and military electronics before World War II. Sturgeon, "How Silicon Valley Came to Be," in *Understanding Silicon Valley* 16.

<sup>58</sup>Stanford Oral History Project, transcript of interview with Alf Brandin, ca. 1980, 30–31, Stanford University Archives. Margaret O'Mara notes that Stanford University was a 501(c)(3) organization subject to the Unrelated Business Income Taxes (UBIT). Stanford was paying roughly \$700,000 in property taxes in 1968. O'Mara, *Cities of Knowledge*, 111 and 265, fn. 46. See also, "A Look at Stanford Lands Program—Past, Future," *Palo Alto Times*, March 4, 1960; "Questions and Answers About Stanford Land Use," *Campus Report Supplement*, January 1971, Folder 16, Box 1, Page Mill Coordinating Committee Records, Stanford University Archives.

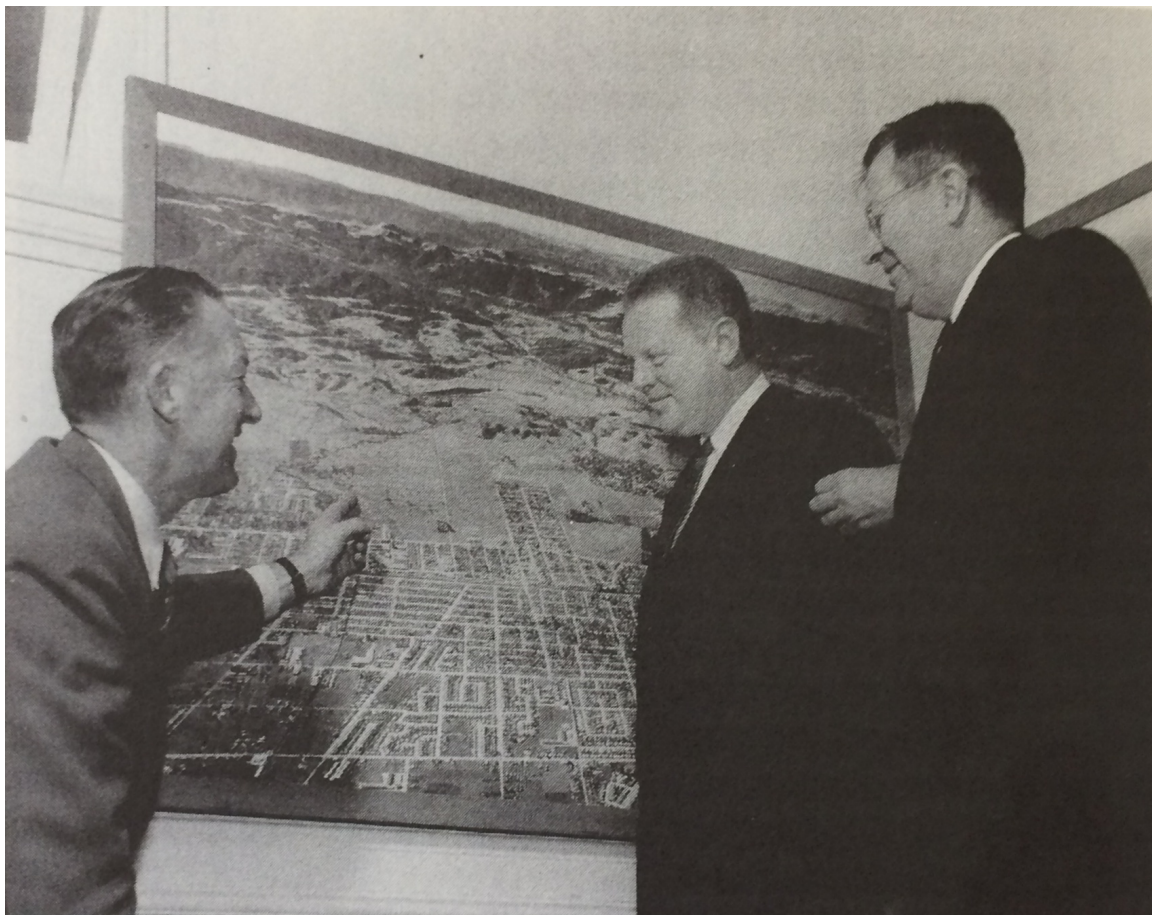
1950, and hoped that the Industrial Park could become a money-making venture to support the university. In the years prior, returning veterans of World War II, aided by the GI Bill, brought a wave of new students to the university. Stanford's income peaked in 1946-1947, when income from tuition amounted to sixty percent of the university's income. By 1952, despite raising tuition, income from student tuition fell to 47 percent. Between 1940 and 1950 income from endowment fell from 29 percent to 16 percent of total income in general for private universities nationwide, figures that were similar to Stanford's own.<sup>59</sup> The pursuit of land development projects and federal grants and contracts proved to be a lucrative business. In the 1950s Stanford's income rose from less than \$2 million in 1951 to over \$8.3 million by 1960, the bulk of which came from Department of Defense and Atomic Energy Commission grants.<sup>60</sup> Stanford lands prior to the land development program initiated by Brandin were leased to farmers and ranchers, ideal tenants for hinterlands so far from urban centers. While the rents from agricultural income were modest, in the postwar era they were not enough for Stanford to continue its reliance. Facing diminishing class sizes, falling tuition income, and declining alumni donations, the university needed to pursue alternative sources of income.

To further cement the relationship with the university and business, Terman helped established two educational programs. Starting with the Honors Cooperative Program that allowed employees of surrounding electronics companies to study part-time towards a master's degree at Stanford, and later with the Industrial Affiliates Program, which allowed companies pre-publication access to scientific and technical military-sponsored research. The two educational programs sought to benefit both industry and the university and strengthen the ties between

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<sup>59</sup>Lowen, *Creating the Cold War University*, 150; "Questions and Answers About Stanford Land Use," *Campus Report Supplement*, January 1971, 1, Folder 16, Box 1, Page Mill Road Coordinating Committee Records, Stanford University Archives.

<sup>60</sup>O'Mara, *Cities of Knowledge*, 109



**Figure 2.6:** Stanford and Lockheed officials discussing the Industrial Park. Courtesy Stanford University Archives.

the two.<sup>61</sup> The cooperative program also proved lucrative to Stanford through the payment of tuition. As Terman recalled, the honors cooperative brought in more students that essentially “paid double tuition, because the company made a matching payment equal to the tuition and this brought extra money,” particularly to the engineering department. Furthermore, the location of nearby firms on Stanford lands also resulted in generous gifts to the university. “We’re getting about as much from the gifts from those technical companies as you’re getting from the lease income,” Terman told Brandin. “Alf Brandin saw the point very quickly, and very soon thereafter, if you weren’t a high-technology company, you had a hell of a time coaxing him to give you a lease.”<sup>62</sup>

Stanford sought to aid its land development plans by establishing a campus planning office after the war. In 1947, the university hired Lewis Mumford to study how the university could best use its land. The university, he suggested, should use some of its open space for “housing developments to serve the staff and faculty” and suggested parcels suitable for industrial development. But Mumford argued that the land’s most suitable use went towards academic purposes or kept as open land, not subdivided along its borders for housing.<sup>63</sup> The university, however, largely ignored Mumford’s advice to concentrate urban development and retain the “rural setting” of the university. The draw of suburban development was too desirable for Stanford to resist. In 1953, the university commissioned the San Francisco architectural firm Skidmore, Owings, and Merrill to suggest land use plans and the economic potentials for its development. They developed the 1953 Master Plan that emphasized an “integrated community.” Thinking of the area as a suburb of San Francisco, the plan emphasized high-income housing rather than “small, attractive, light industry plants” but noted

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<sup>61</sup>Lowen, *Creating the Cold War University*, 130–131.

<sup>62</sup>Terman oral history, 127.

<sup>63</sup>Mumford quoted in O’Mara, *Cities of Knowledge*, 112

that the high income housing areas in San Mateo and Santa Clara counties “do not want heavy industries.” These industries were especially attractive to homeowners if they “relieve their residential tax load,” but the firm also cautioned the university to think carefully about how it used the land, concluding that Stanford preserve the “present character of the entire suburb area.”<sup>64</sup>

While the firm’s study was useful to Stanford planners, the university ultimately rejected the suggestions of the firm. The Advisory Committee on Land and Building Development wrote to University President Wallace Sterling that the university needed to focus on attracting “a wide variety of national and regional activities which have a direct and immediate value to the University.” Such activities revolved around industry.<sup>65</sup> One source of frustration with Skidmore, Owings, and Merrill was its view that the Peninsula was a commuter suburb of San Francisco rather than an economic center. Furthermore, Skidmore, Owings, and Merrill’s recommendations followed the “growth-is-good” philosophy of urban planning common in the 1950s. Had the university followed their plans, most open space on the Stanford lands would have been subdivided into housing projects. The firm concluded that up to 6,000 of Stanford’s 9,000 acres be devoted to residential subdivisions, with only 350 acres given to industrial and commercial uses. Such views went against the philosophy of Stanford administrators, who not only wanted to pursue industrial development but also hoped to maintain the amenity-rich quality of the university.<sup>66</sup>

After rejecting the Skidmore, Owings, and Merrill plan, university administrators decided to pursue high-end housing, a regional shopping center, and

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<sup>64</sup>O’Mara, *Cities of Knowledge*, 112–115; Skidmore, Owings, and Merrill, *Master Plan for Stanford Lands 1953: Report to the Board of Trustees, Stanford University* (San Francisco, 1953), Land Development, General file, Stanford University Archives.

<sup>65</sup>Stanford University Advisory Committee on Land and Building Development, “Master Plan for the Stanford Lands: A Review of the Skidmore, Owings, and Merrill Report,” June 1, 1954, Land Use and Development file, Stanford University Archives, 2-5, 7-9.

<sup>66</sup>O’Mara, *Cities of Knowledge*, 114

the industrial park. Alf Brandin led the way in pursuing the university's land development projects, starting with the shopping center on the north end of the campus. Observing that shoppers commuted to San Francisco to spend their earnings at the high-end shopping center of Stonestown, Brandin saw an opportunity. "Why make everybody go to San Francisco to shop?" he wondered. "Why don't we bring some San Francisco down here?" Brandin, with the support of the real estate banker Colter Coldwell, presented plans to the Stanford Board of Trustees of a regional high-end shopping center that would house the likes of Penney's, Macy's, Emporium, and Roos Brothers. The Board signed off on the project in 1951. As an income-generating idea, the shopping center paid off handsomely. Between 1951 and 1970, the university earned \$1.8 million off rents, sales percentages, and interest.<sup>67</sup>

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<sup>67</sup>Brandin oral history, 32; O'Mara, *Cities of Knowledge*, 115. The shopping center alone covered Stanford's property taxes. In 1960–1970, the university paid \$835,000 in property taxes to Palo Alto and Menlo Park. "Questions and Answers About Stanford Land Use," *Campus Report Supplement* (January 1971): 5, Folder 16, Box 1, Page Mill Coordinating Committee Papers, Stanford University Archives.

**Table 2.2:** Stanford Net Income from Land Use, 1954–1969. “Stanford University Land Use Policy/Plan,” *Campus Report Supplement* March 29, 1971, Folder 16, Box 1, Page Mill Coordinating Committee Papers, Stanford University Archives.

Year	Industrial Park	Shopping Center	Other Incomes	Total
1954	\$3,000	N/A	\$4,000	\$7,000
1955	30,000	N/A	7,000	37,000
1956	117,000	255,000	8,000	380,000
1957	164,000	489,000	58,000	711,000
1958	156,000	510,000	35,000	701,000
1959	296,000	585,000	88,000	969,000
1960	351,000	639,000	121,000	1,111,000
1961	406,000	607,000	120,000	1,133,000
1962	465,000	654,000	172,000	1,291,000
1963	568,000	694,000	201,000	1,463,000
1964	594,000	712,000	204,000	1,510,000
1965	636,000	736,000	223,000	1,595,000
1966	796,000	797,000	220,000	1,813,000
1967	827,000	713,000	184,000	1,724,000
1968	907,000	778,000	305,000	1,990,000
1969	1,024,000	779,000	377,000	2,180,000

By the mid-1950s, Stanford lands around the regional shopping center were opened to residential developers. Sterling, Terman, and other Stanford administrators espoused a vision for the Stanford lands that sought to build a community where “work, home, recreation, and cultural life are brought together with some degree of balance and integration,” outlining a planned vision for the university and surrounding communities.<sup>68</sup> Stanford began its residential development plans by opening up lands in Menlo Park for single-family homes on the north side of campus marketed to Stanford faculty and alumni. In 1957, the university initiated the “Stanford Hills” development, where upscale homes cost between \$33,000 and \$75,000 and lots ranged from one-quarter-acre to five acres in size. “Enjoy Peninsula Living at its Best,” read an advertisement for the Stanford Hills subdivision in 1959. “All homes INDIVIDUALLY PLANNED for the most discriminating buyers. . . . You, too, can now join our ‘Who’s Who’.”<sup>69</sup> In 1959, Stanford continued its role as real estate developer with the expansion of residential suburbs into the Willow Creek Apartments, which developer Howard White described as “luxury apartments” responding to “innumerable requests on the Peninsula for true apartment living in a country setting.”<sup>70</sup>

Two years after the university broke ground for the shopping center, the first tenants of the Stanford Industrial Park began moving into the original 100 acres set aside for industrial development. Varian Associates, who had outgrown their original space in San Carlos in San Mateo County, provided the opportunity for the Industrial Park’s establishment. Russell Varian had developed the Klystron tube at Stanford and worked under Terman at Harvard during World War II. He maintained those close ties to Stanford. Returning to the Bay Area with his brother, Sigurd, after the war, they founded Varian Associates in 1948 to continue

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<sup>68</sup>Quoted in O’Mara, *Cities of Knowledge*, 115

<sup>69</sup>Quoted in O’Mara, *Cities of Knowledge*, 118

<sup>70</sup>Quoted in O’Mara, *Cities of Knowledge*, 118

their work in applied physics. When they began looking for new space for their expanding facilities, Russell Varian went to Alf Brandin first. Varian was followed shortly by Eastman Kodak and Hewlett-Packard, the company founded by former Terman students William Hewlett and David Packard.<sup>71</sup>

Stanford's reputation helped attract potential tenants, but so did its innovations in industrial park design. Stanford administrators drew up strict design guidelines that tenants had to follow. These designs often reflected Stanford's own architectural aesthetics of red-tile roofs and adobe-style exteriors. "Everyone thought of smokestacks," Brandin recalled. "These new people who came out from the east and settled here thought, 'Don't change it. We just left all the smoke and all that junk. Don't change this.'" Stanford planners attempted to make the park-like belief into a reality, regulating that parking lots be located behind buildings and landscaped in a way to screen off anything that might appear unsightly. Any architectural modifications had to be approved by the University, while firms also had to maintain the cleanliness of their grounds. The appearance of greenery was of paramount importance. As Brandin later plainly stated, "this was going to be a park."<sup>72</sup> Setbacks from the road allowed firms to maintain lawns and landscaping to provide a green atmosphere. New tenants were required to submit plans detailing off-street parking, green space, roads, setbacks, location, and the type of industry. Open spaces had to cover at least 60% more than the space occupied by buildings, and no buildings could rise higher than two stories. The university forbade smokestacks and prohibited noise, odor, and emissions that might disturb the area's neighbors. The open, lush, low-rise and architecturally appealing design of the industrial Park also helped provide support from the surrounding suburban communities, ensuring that none of the manufacturing

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<sup>71</sup>"Varian: Pioneer from A (accelerators) to V (vacuum pumps)," *Palo Alto Times*, March 2, 1960; Terman oral history, 127; Findlay, *Magic Lands*, 129–141.

<sup>72</sup>Brandin oral history, n.p. [58].

facilities would interfere with the neighboring affluent suburbs.<sup>73</sup>

Stanford never ran short of potential tenants attracted to the suburban design of the park and its proximity to university researchers. The university privileged those companies working in high technology and medicine—and thus contributed to Stanford’s educational and research programs—and welcomed several companies to the park, including Eastman Kodak, Varian Associates, Hewlett-Packard, Syntex Pharmaceutical, and Lockheed Missiles. The park expanded quickly as its reputation grew. In 1955, only seven tenants occupied fifty-three acres of the Industrial Park. By 1962 the number had jumped to forty-two tenants occupying 360 acres (around half of the available space) and employed 11,000 people. By 1970, the number of tenants had reached fifty, occupied 500 acres, and employed 17,000 people. The rents generated tremendous profits for the university, by 1978 reaching an annual profit of \$4.3 million, while also generating another \$13.5 million in tax revenue and utility payments for the city of Palo Alto.<sup>74</sup> The “electronics-nuclear space-age . . . is accelerating the transformation of the Palo Alto area into one of the country’s most important national defense facilities,” wrote *The Tall Tree*, the publication of the Palo Alto Chamber of Commerce, in 1958. “The Palo Alto-Stanford research community has grown to become an integral part of the science community of the nation.”<sup>75</sup>

Applying the pastoral isolation of the university and a design tradition meant to suburbanize office space allowed the university to pursue industrial growth that seemed qualitatively different from other industries in the country. So successful had Stanford been in its designs that a newspaper editorial remarked in 1960 that “the research centers of the Midpeninsula, with their architectural

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<sup>73</sup>Palo Alto Planning Commission, *Report on the Interim General Plan* (Palo Alto, April, 1955), 42–43; Findlay, *Magic Lands*, 131; O’Mara, *Cities of Knowledge*, 119–120

<sup>74</sup>City of Palo Alto, Calif., *Palo Alto Comprehensive Plan, 1977-1990* (Palo Alto, 1976), 15; Findlay, *Magic Lands*, 140.

<sup>75</sup>“The First Fifty Years of Electronics Research,” *The Tall Tree* 1:9 (May 1958), 3, FF Palo Alto History, SC 486, 90-052, Stanford University Archives.

buildings and landscaped lawns, look more like college structures than factories. In fact, I've seen many college buildings, and attended classes in a few, that resembled those factories of old more than do the industrial plants of today."<sup>76</sup> The *Saturday Evening Post* even referred to Stanford's land program as "a model city" and the *Los Angeles Times* described the Industrial Park as "fast taking on the appearance of a fully integrated city."<sup>77</sup> By the end of the 1960s, the Stanford Industrial Park had become a worldwide model of economic development, exemplified by the tours given to Charles de Gaulle, the Japanese Diet, Nikita Khrushchev, and it's featuring at the World's Fair in Brussels in 1958. Stanford and the surrounding communities represented something new, innovative, and worth replicating—a modern vision of cities for the space age.

SAN JOSE AND STANFORD TYPIFIED THE EMERGENCE of the modern West: a region less reliant on what economist Thomas Michael Power called "folk economics" and more reliant on postindustrial economies of tourism, service, and technology.<sup>78</sup> The economic shift meant a cultural shift as well. As farmland, pastures, and ranches became subdivisions, technology companies, research firms, and service industries, the new economic activity began to reshape how people thought about the Valley. Namely, the expansion of industry carried with it a contentious debate about the effects of industrialization on the Valley's landscape and over how it would be shaped.<sup>79</sup> Appeals to nature, environment, and climate formed a core selling point for boosters on the Midpeninsula, and the expectation of industry as clean made the sell easier for suburbanites. Manufacturing in the Stanford

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<sup>76</sup>Quoted in O'Mara, *Cities of Knowledge*, 118

<sup>77</sup>O'Mara, *Cities of Knowledge*, 127

<sup>78</sup>Power, *Lost Landscapes and Failed Economies*, 19-21.

<sup>79</sup>On postwar suburban growth, see Jackson, *Crabgrass Frontier*; Robert Fishman, *Bourgeois Utopias: The Rise and Fall of Suburbia* (New York: Basic Books, 1987), 155-181; Abbott, *Metropolitan Frontier*.

Industrial Park had “to be clean, no smoke, no heavy manufacturing,” Brandin later said. “Light manufacturing that is clean and electronic. . . . We wanted to put [high-tech companies] in a park-like atmosphere.” The perception of high technology’s “greenness” formed a core component of the booster’s assurance to the new white-collar middle-class that the industrial and manufacturing activity of the Valley would be distinct and different from the Rust Belt’s smokestacks and pollution. Building the reputation of “clean” meant aesthetics, however, not necessarily the cleanliness of industry. But the appearance of suburban offices led to a regional political consensus that valued and encouraged industrial growth, hailed as a sign of progress and modern. Yet by the early 1960s a widening range of growth critics began questioning the environmental, economic, political, and racial consequences to growth.

### 2.0.1 Tables

**Table 2.3:** Sunbelt Population and Territorial Growth, 1940

City	1940 Land Area (sq mi)	1940 Population
Albuquerque	11	35,449
Austin	25.1	87,930
Dallas	40.6	294,734
Denver	57.9	332,412
Fort Worth	49.8	177,662
Houston	72.8	384,514
Los Angeles	448.3	1,504,277
Phoenix	9.7	65,414
San Diego	95.3	203,341
San Jose	14.8	68,457

**Table 2.4:** Sunbelt Population and Territorial Growth, 1950

City	1950 Land Area (sq mi)	1950 Population
Albuquerque	47.9	96,815
Austin	32.1	132,459
Dallas	112	434,462
Denver	66.8	415,786
Fort Worth	93.7	278,778
Houston	160	596,163
Los Angeles	450.9	1,970,358
Phoenix	17.1	106,818
San Diego	99.4	334,387
San Jose	17	95,280

**Table 2.5:** Sunbelt Population and Territorial Growth, 1960

City	1960 Land Area (sq mi)	1960 Population
Albuquerque	58	201,189
Austin	45	186,545
Dallas	254	679,684
Denver	68	493,887
Fort Worth	138	356,268
Houston	321	938,219
Los Angeles	455	2,479,015
Phoenix	187	439,170
San Diego	195	573,287
San Jose	56	204,196

**Table 2.6:** Sunbelt Population and Territorial Growth, 1970

City	1970 Land Area (sq mi)	1970 Population
Albuquerque	82.2	243,751
Austin	72.1	255,869
Dallas	265.6	844,303
Denver	95.2	514,678
Fort Worth	205	844,303
Houston	433.9	1,253,479
Los Angeles	463.7	2,811,801
Phoenix	247.9	589,016
San Diego	316.9	697,027
San Jose	136.2	461,212

**Table 2.7:** Sunbelt Population and Territorial Growth, 1980

City	1980 Land Area (sq mi)	1980 Population
Albuquerque	95.3	332,920
Austin	116	345,544
Dallas	333	904,074
Denver	110.6	492,686
Fort Worth	240	904,074
Houston	556	1,595,167
Los Angeles	464.7	2,968,528
Phoenix	324	789,704
San Diego	320	875,538
San Jose	158	629,400

## Chapter 3

### A Home in the Countryside

Do you know the way to San Jose? It's simple: annex more, plan less density and develop, develop, develop.  
—*Seattle Times*

We'd hate to think of the communities of the Midpeninsula as just little pieces of San Jose.  
—Dutch Hamann

Across the street—the freeway,  
blind worm, wrapping the valley up  
from Los Altos to Sal Si Puedes.  
I watched it from my porch  
unwinding. Every day at dusk  
as Grandma watered geraniums  
the shadow of the freeway lengthened.  
—“Beneath the Shadow of the Freeway,” Lorna Dee Cervantes

Cold War defense policies not only bolstered the position of Santa Clara Valley's industrial leaders. The legacy of New Deal housing policies and post-war homeownership incentives also allowed housing markets to secure anchors into the Valley landscape. The industrial expansion of the Valley intersected with the growth-based strategies of city leaders to attract new white-collar middle-class residents to the area. As newcomers arrived in the Valley, however, their expectations for the landscape shaped growth politics. As early as the mid-1950s, critics launched attacks against growth and its promoters. Their critiques were wide-ranging: racial inequality, environmental concerns, suburban sprawl, vanishing farmland. The emergence of so many critiques from various avenues of

concern illustrated a growing need to redirect development in Santa Clara Valley. When the much-anticipated Rockefeller Brothers Fund published its book-length report from its bipartisan Task Force on Land Use and Growth in 1973, they concluded there existed “a new mood in America” as citizens questioned “what urban growth will add to the quality of their lives.” The questioning of “growth is good, that growth is inevitable” that the Rockefeller report identified in the 1970s existed nearly two decades earlier in the Santa Clara Valley.

THE SANTA CLARA VALLEY OF THE 1940S was a relatively small place, especially in comparison to the urban cores of San Francisco and Oakland. Santa Clara County housed 145,118 people, the bulk of which lived in San Jose—around 68,457 people on roughly 14 square miles. By 1960, San Jose’s population ballooned to 204,196 and covered 56 square miles. Between 1940 and 2000, the city’s land cover expanded 968% and its population rose by 819%. As farmland converted to residential and industrial suburbs, the Midpeninsula cities embarked on aggressive annexation campaigns to maintain control over territory and enjoy new tax dollars.

While the greatest financial benefits for cities came from taxing industry, municipalities of the Midpeninsula encouraged suburban growth. In the wake of the “monetary and credit revolution,” in the words of historian David Freund, that “made it easier—in many cases risk free—for the private sector to lend and borrow,” thousands of new homeowners flooded housing markets.<sup>1</sup> Aided by the Federal Housing Authority (FHA), created under the National Housing Act of 1934, guaranteed mortgage loans up to eighty percent of the value of a home encouraged widespread purchasing of homes. The federal subsidy into housing,

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<sup>1</sup>David Freund, “Marketing the Free Market: State Intervention and the Politics of Prosperity in Metropolitan America,” in Sugrue and Kruse, *The New Suburban History*, 15, 26.

Kenneth Jackson noted, meant there was “very little risk to the banker if a loan turned sour.”<sup>2</sup> The new lending terms under the FHA of low down payments, larger loans in proportion to a home’s value, low interest rates, and longer loan repayments ushered in a dramatic rise in demand. Nationally, single-family housing sales and starts doubled between 1936 and 1941, and rose almost fifteen-fold between 1944 and 1950.<sup>3</sup> The federal tax code also allowed home ownership to blossom by allowing homeowners to take deductions from their mortgage interest and property taxes. Renters, however, received no similar federal subsidy. Thus, federal policies encouraged building in suburbs rather than city cores. Federal tax policies also allowed developers to write off construction costs on commercial buildings, tipping incentives towards new construction instead of renovation.<sup>4</sup>

San Jose lay at the center of northern California’s suburban population boom. A rural farming community of 68,457 in 1940, San Jose would be among the top ten largest metropolitan areas in the nation by the century’s end. By the 1960s the town’s population numbered 204,196, and doubled by 1970 to 445,779.<sup>5</sup> San Jose became the largest city in northern California and largely served as the suburban home for the Bay Area’s technology commuters working in Sunnyvale, Mountain View, and Palo Alto.<sup>6</sup> The city limits rapidly expanded from 17 square miles in 1950 to 137 square miles in 1970, sprawling awkwardly across the Valley floor and foothills.<sup>7</sup> The city grew so rapidly that street map makers could not

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<sup>2</sup>Jackson, *Crabgrass Frontier*, 203–205.

<sup>3</sup>Kenneth T. Jackson, *Crabgrass Frontier*, chapter 11.

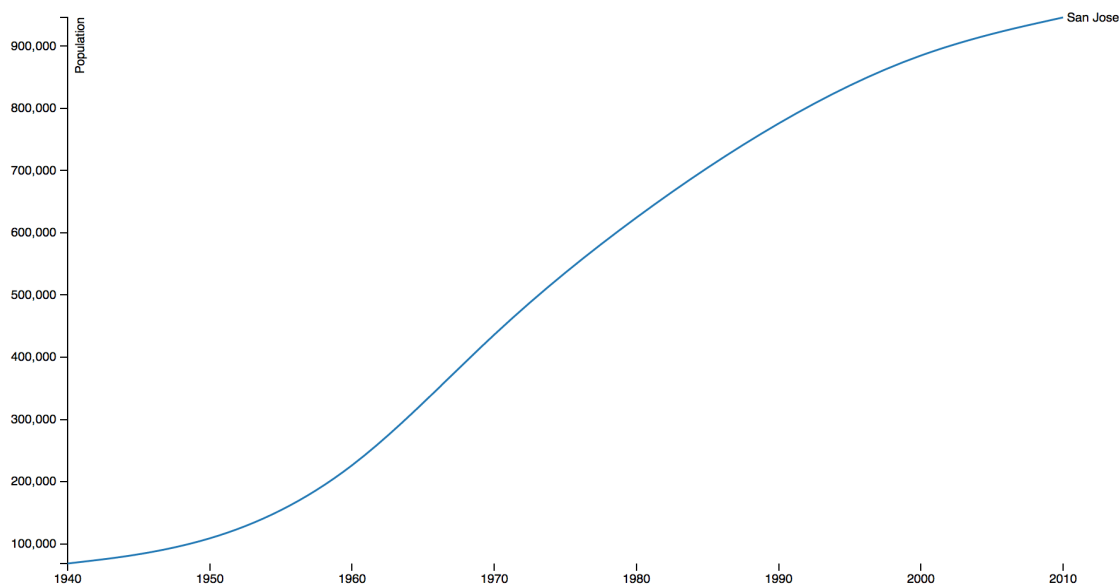
<sup>4</sup>Marion Clawson, *Suburban Land Conversion in the United States: An Economic and Governmental Process* (Baltimore: Resources for the Future, Inc. / The John Hopkins Press, 1971), 41–44; Dreier et al., *Place Matters*, 110–111.

<sup>5</sup>U.S. Bureau of the Census, *1960 Census*, Santa Clara County, n.d., [census.abag.ca.gov](http://census.abag.ca.gov); U.S. Bureau of the Census, *1970 Census*, Santa Clara County, n.d., [census.abag.ca.gov](http://census.abag.ca.gov).

<sup>6</sup>U.S. Bureau of the Census, *1950 Census*, Santa Clara County, n.d., [census.abag.ca.gov](http://census.abag.ca.gov); U.S. Bureau of the Census, *1960 Census*, Santa Clara County, n.d., [census.abag.ca.gov](http://census.abag.ca.gov); U.S. Bureau of the Census, *1970 Census*, Santa Clara County, n.d., [census.abag.ca.gov](http://census.abag.ca.gov); U.S. Bureau of the Census, *1980 Census*, Santa Clara County, n.d., [census.abag.ca.gov](http://census.abag.ca.gov).

<sup>7</sup>Stanford Environmental Law Review, *San Jose: Sprawling City: A Report on Land use Policies and Practices in San Jose, California*, March 1971, 2.

keep up with the changes, finding their maps outdated just five months after printing. The city began selling monthly packets of stickers with corrections that people placed upon their maps to maintain their accuracy.<sup>8</sup>



**Figure 3.1:** Population of San Jose, 1940-2010. Source: U.S. Bureau of the Census, 1950 Census, Santa Clara County, n.d., [census.abag.ca.gov](http://census.abag.ca.gov); U.S. Bureau of the Census, 1960 Census, Santa Clara County, n.d., [census.abag.ca.gov](http://census.abag.ca.gov); U.S. Bureau of the Census, 1970 Census, Santa Clara County, n.d., [census.abag.ca.gov](http://census.abag.ca.gov); U.S. Bureau of the Census, 1980 Census, Santa Clara County, n.d., [census.abag.ca.gov](http://census.abag.ca.gov).

Although much of San Jose's drive aimed at attracting industry to the city, San Jose instead witnessed the most growth in housing and residential development. San Jose gained 25,000 new residents in 1953, and another 31,400 a year later. Residential construction totaled \$84 million in 1954, much of which was in unincorporated county territory. Residential construction employed 35,000 people and built 8,300 homes, while industrial and commercial construction topped \$48 million. Banks in the county lent out more than \$202 million through FHA, Cal-Vet, and other programs meant to entice the construction of homes.<sup>9</sup> Throughout the entire county, housing subdivisions continued to increase. In 1950 Santa Clara

<sup>8</sup>"County Grows Too Fast for Mapmakers," *Palo Alto Times*, September 12, 1952; "Notes for a Gazetteer," *The New Yorker*, May 4, 1963, 148.

<sup>9</sup>"1954—A Year of Amazing Growth in County," *San Jose Mercury*, January 3, 1955.

County witnessed 144 subdivisions and homes on 6,833 lots. A year later the figures dropped slightly with only ninety-eight subdivisions and 4,616 homes. But in 1952 construction jumped again, reaching 144 subdivisions and 6,437 homes. By 1955, the county saw 177 subdivisions and the construction of 10,157 homes for families moving to the area.<sup>10</sup> The county estimated that as much as 75% of the population owned their homes.<sup>11</sup>

Along with suburban growth came new municipal projects. The city council finally convinced voters to approve bond measures beginning in 1955 when San Jose voters approved bonds supporting the construction of a new City Hall, new hospital facilities, new jail and court buildings, and a new YMCA facility. The Progress Committee ran up against resistance from voters in the 1940s as they rejected general obligation bond votes. But by the late 1950s residents started reversing course and approved over \$134 million in general obligation bonds in elections held in 1957, 1961, 1966, and 1969.<sup>[12]</sup>

Like other cities in the nation, New Deal housing policies made homeownership nearly nonexistent by nonwhites. The FHA determined at its inception that integration introduced risk to property values and instituted policies preventing the agency from supporting neighborhoods that housed a majority of nonwhite populations. Simultaneously, the FHA rejected nonwhite applications for homes in the country's new subdivisions. "That the entry of Non-Caucasian[s] into districts where distinctly Caucasian residents live tends to depress real estate values," wrote realtor Stanley McMichael in the industry textbook *Real Estate Subdivisions*, "is agreed to by practically all real estate subdividers and students of city

<sup>10</sup>"Population Growth Created Demand for Housing; Subdivisions on Grand Scale Provided the Homes," *San Jose Mercury*, January 15, 1956; "198 Tracts Provide 11,631 Home Sites," *San Jose Mercury*, January 15, 1960.

<sup>11</sup>"Estimate of Homeowners: 75%," *San Jose Mercury*, January 15, 1956.

<sup>12</sup>Philip Trounstine and Terry Christensen, *Movers and Shakers: The Study of Community Power* (New York: St. Martin's Press, 1982), 95–96.

life and growth.”<sup>13</sup> These ideas followed through in Santa Clara County. While minority populations in the South Bay were much smaller than the North and East Bay’s urban cores of San Francisco, Richmond, and Oakland, where job opportunities and access to government-subsidized housing was more accessible, minority populations still faced the brunt of discriminatory housing policies in the South Bay. When black realtor Mary Anne Smith took a black family to a home in the San Jose neighborhood of Willow Glen, she received a terse phone call from a white agent from a different brokerage who told her “in no uncertain terms that there were areas where black people are not welcome, and that Willow Glen was one of them.”<sup>14</sup> One study concluded that the suburbs of Santa Clara County “are almost totally white.”<sup>15</sup>

Restrictive covenants also shaped the urban space. Restrictive covenants and redlining initially forced African Americans into Northside properties. By the 1950s, roughly 40% of the South Bay’s 1,718 black population lived in Northside. Similarly, the county’s Mexican Americans occupied the enclave of East San Jose, known as Eastside, while Japanese Americans were restricted to downtown and Northside. Southern and western neighborhoods of San Jose were essentially off limits to nonwhites.<sup>16</sup>

Yet while racial discrimination continued to lock minorities out of particular neighborhoods, other homebuilders confronted racial restrictions head-on.

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<sup>13</sup>McMichael quoted in Needham, *Power Lines*, 84. See also Federal Housing Administration, *Underwriting Manual: Underwriting and Valuation Procedure Under Title II of the National Housing Act With Revisions to February, 1938* (Washington, D.C.: Government Printing Office, 1938), Part II, Section 9, Rating of Location.

<sup>14</sup>Smith, “Unsung Hero—In Her Quiet Way, Mary Anne Smith Has Introduced San Jose to Color, Diversity, Acceptance,” *San Jose Mercury News*, October 29, 1995, quoted in Ruffin, *Uninvited Neighbors*, 100.

<sup>15</sup>“Proposal for a Metropolitan Bay Area Housing Development Corporation,” n.d., Folder 32, Box 73, Don Edwards Congressional Papers, MSS-1995-01, San Jose State University Library Special Collections and Archives.

<sup>16</sup>Ruffin, *Uninvited Neighbors*, 74-75. In 1967, the U.S. Civil Rights Commission chastised the Bay Area FHA for “dragging its heels” on President Kennedy’s open housing policy. See United States Commission on Civil Rights, *Hearing Before the United States Commission on Civil Rights: Hearing Held in San Francisco, May 1-3, 1967, and Oakland, California, May 4-6, 1967*, 143.

Among the most prominent was Eichler Homes, founded by Joseph Eichler in 1947. Eichler Homes built homes for the professional middle-class: single-family, modern, and suburban. Yet they also gained a reputation as racially progressive. By the end of the 1960s, Eichler Homes were responsible for 6,000 houses built in the Bay Area, largely located in San Mateo and Santa Clara Counties.<sup>17</sup> After the FHA and Veteran's Administration ended racial restrictions after 1950, Eichler sold their first homes to people of color. Asian Americans and African Americans were Eichler's first minority customers, purchasing new homes in Palo Alto in the early 1950s.<sup>18</sup> By the end of the 1950s, Eichler Homes adopted an "open occupancy policy" that they would sell homes regardless of race. Realtors and competitors questioned the policy and attempted to use the policy against the Eichlers. Yet the company continued to build and sell homes, in part due to educated, white professionals who seemed more agreeable to open occupancy.<sup>19</sup> When residents complained of an Asian American family purchasing a home in their neighborhood in Palo Alto, Eichler partner Jim San Jule told the residents that "we don't even want people like you in our subdivisions."<sup>20</sup>

The county's largest minority population were Latinos, comprising roughly eighteen percent of the county's population in 1970.<sup>21</sup> In East San Jose—known simply as East Side—a small group of Latino laborers banded together in the early 1950s to confront the problems of urban sprawl and urban policy discrimination. The Mayfair District was a key site of Latino activism focused on halting racial discrimination, calling for greater participation in electoral politics, labor rights, and a critique of San Jose's growth policies. Chicano activism and environmental regulations became entwined with debates over citizenship and discrimination,

<sup>17</sup>Cavin, "Borders of Citizenship," 366.

<sup>18</sup>Edward P. Eichler, *Race and Housing: An Interview with Edward P. Eichler, President, Eichler Homes, Inc.* (Santa Barbara: Center for the Study of Democratic Institutions, 1964).

<sup>19</sup>Starr, *Golden Dreams*, 46–49.

<sup>20</sup>Adamson, Arbunich, and Braun, *Eichler: Modernism Rebuilds the American Dream*, 199.

<sup>21</sup>Testimony of Jack Ybarra, May 15, 1972, Folder 3, Box 56, Don Edwards Papers, SJSU.

prompting activists to call for environmental equality alongside their challenges to racial inequality, citizenship, and segregation. Even economic issues that appeared neutral, such as zoning, sewer hookups, and street paving became a core tenant of Chicano politics. In the drive for progress, city leaders in San Jose created spaces that were disconnected from urban services and lacking good roads, adequate sewers, and city utilities.

Perhaps no place better represented frustrations in Mayfair than Sal Si Puedes. Originally a neighborhood populated predominantly by Puerto Rican farm laborers, Latinos living in Sal Si Puedes moved to the neighborhood in greater numbers the 1940s to work in the orchards, packing houses, and on construction crews building San Jose's suburban future.<sup>22</sup> In the early 1950s, agriculture remained a steadily profitable industry. By the mid-1950s, the county boasted the highest levels of agricultural profits before agricultural industries began their steady decline towards the end of the decade. "Agriculture and industry are synonymous words in the Santa Clara Valley," the *San Jose Mercury* could boast in 1955. Food processing employed a third of the county's manufacturing workforce.<sup>23</sup> The presence of San Jose's agricultural industry attracted many migrants seeking job opportunities.

East Side reflected the spatial influences of industrialization in the Bay Area. High tech industries tended to cluster west and south in San Jose, staying close to the highways that channeled traffic and freight north and south. Zoning decisions by city and county government likewise determined the spatial layout of industrialization. Few of the Bay Area's new high-tech industries located themselves in the eastern parts of San Jose. East Side tended to be the site of homes rather than industry, a feature made more prominent through the city's decision

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<sup>22</sup>Clark, *Health in the Mexican American Community*, 49–51, 79; *The Spanish-American Community of the San Francisco Bay Area* (U.S. Commission on Civil Rights, April 28, 1967), 3.

<sup>23</sup>"Agriculture," *San Jose Mercury*, January 15, 1956.

to zone for low-density residential and federally-subsidized housing that clustered heavily in East Side. The density of housing caused severe traffic congestion on roads inadequate to carry the thousands of commuters traveling to their north county jobs.<sup>24</sup> The pattern and policies of the Bay Area's postwar development introduced uneven environmental effects to barrio neighborhoods. Space, race, class, and environmental politics became tangled in East Side, expressed through Latino activists in the South Bay.

Cesar Chavez was among those Latinos coming to East Side in the 1950s seeking out ways to make a living and support his family. Chavez, his wife, and four children moved to San Jose in 1952, where he found irregular work in canneries, orchards, and lumberyards. A native of Yuma, Arizona, Chavez's family moved to Los Angeles when he was ten years old and later to San Jose, where his family worked in fruit packing houses. After a stint in the Navy during World War II, Chavez married and moved to foothills of San Jose where he sharecropped for a few years. Unable to scrape together much of a living, he moved his family into the city where Chavez worked in fields and lumberyards.<sup>25</sup>

Chavez lived in the neighborhood known as Sal Si Puedes ("Get out if you can"), a suburban barrio in East San Jose that served as home for many of the area's seasonal workers. Sal Si Puedes became an epicenter of environmental justice for the city's Mexican American residents. By the early 1950s, Fred Ross, a community organizer from Los Angeles who helped Chavez establish the Community Service Organization (CSO) in 1952, wrote of the neighborhood's lack of sewers, the presence of cesspools that led to amoebic dysentery outbreaks, and flooding, muddy streets that occasionally left children unable to attend school.<sup>26</sup>

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<sup>24</sup>"East Siders form alliance to increase political clout," *San Jose Mercury*, March 22, 1978; Cavin, "Borders of Citizenship," 293–294.

<sup>25</sup>Richard Griswold del Castillo and Richard A. Garcia, *César Chávez: A Triumph of Spirit* (Norman: University of Oklahoma Press, 1995), 24; Stephen J. Pitti, *The Devil in Silicon Valley: Northern California, Race, and Mexican Americans* (Princeton: Princeton University Press, 2004), 150–154

<sup>26</sup>Fred Ross, "The Saga of Sal Si Puedes," 3–6.

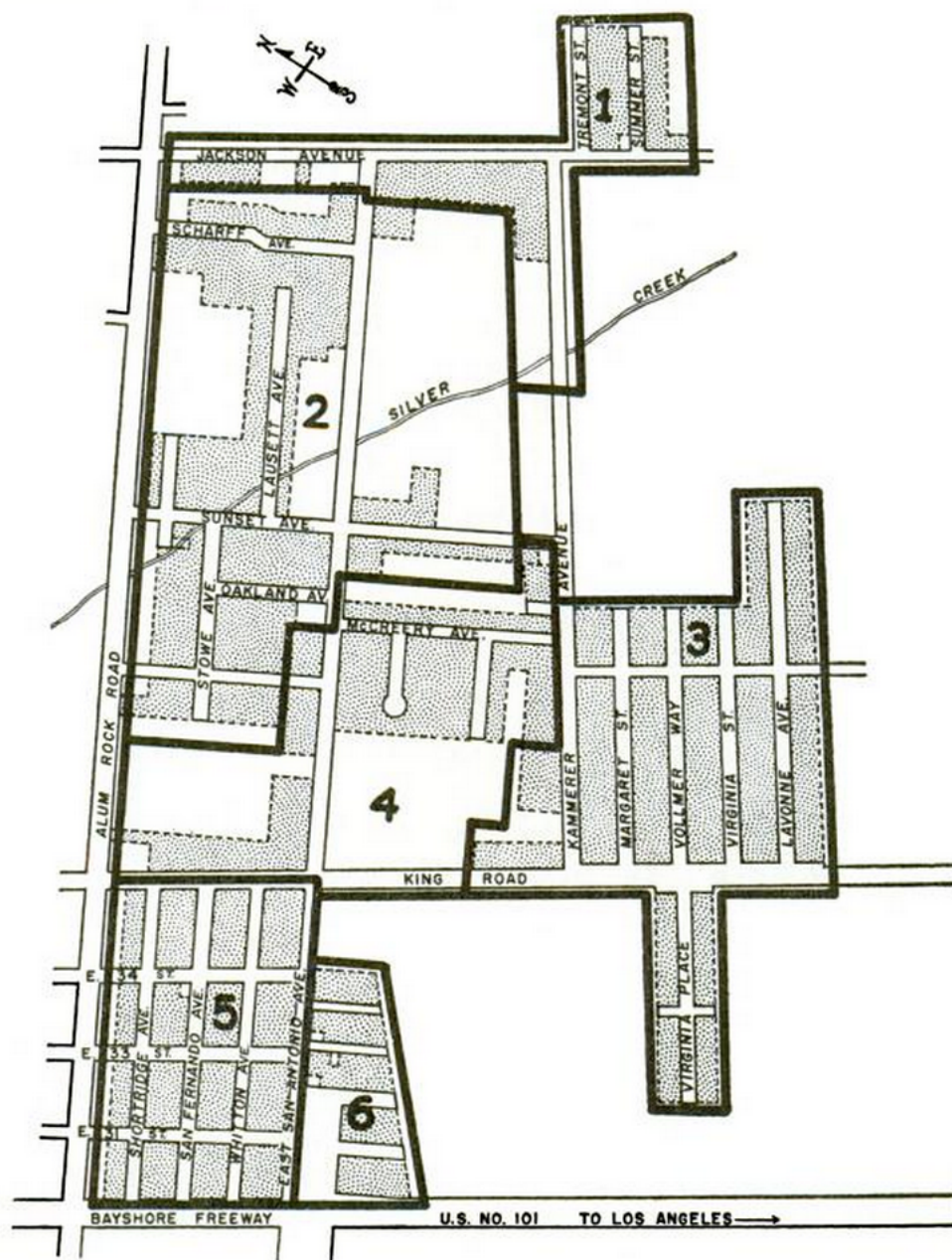


Figure 1. Mayfair barrios, 1955: 1. Sal si Puedes, 2. Sunset, 3. Vollmer Tract, 4. McCreery, 5. Los Calles, 6. San Antonio.

Figure 3.2: Mayfair neighborhood and its subdivisions.

Environmental hazards formed a critique of the city's public policies that overlooked its minority communities. Even the very name of the community became a rallying point for activists. Puerto Rican families jokingly coined "Sal Si Puedes" due to its muddy streets that became filled with potholes in the winter rains. Residents continued to use the name because of its housing and socioeconomic problems, not so much as a joke but as an aspiration.<sup>27</sup>



**Figure 3.3:** Children playing near a culvert at South 33rd Street in the Mayfair District, ca. 1950s. Fred Ross Papers, Stanford University.

Ross, Chavez, Herman Gallagos, who served as the CSO's first president, organized the community to act, turning to electoral politics to get the city's attention. While the CSO predominantly focused on anti-poverty programs, ending

<sup>27</sup>Margaret Clark, *Health in the Mexican-American Culture: A Community Study* (Berkeley: University of California Press, 1959), 35. Herman E. Gallegos, who became the first president of the San Jose CSO in 1952, recalled three stories as to how Sal Si Puedes got its name. See Gallegos, "Equity and Diversity: Hispanics in the Nonprofit World," interview by Gabrielle Morris, 1988, 16, Regional Oral History Office, Bancroft Library, University of California, Berkeley.

racial discrimination, and embraced the postwar welfare state, their platform was framed, in part, around the uneven environmental hazards their neighborhoods experienced. Ross told members of San Jose's first CSO meeting that election drives he helped organize in Los Angeles brought streetlights, paved roads, and medical care to the barrio. East San Jose, Ross promised, could achieve the same.<sup>28</sup> Armed with Ross's know-how for organizing, an eighty-five-day voter drive registered 6,000 new Mexican American voters. The move caught the attention of city officials. Fearing that the wave of Latino voters might sway city politics, city officials approved new urban services to *Sal Si Puedes* within months after the election drive. New public works systems to fix chronic flooding, clearing out cesspools, and paved roads were brought to the barrio. Fruit packinghouses and canneries were forced to cease dumping effluence into creeks.<sup>29</sup>

Yet despite the city's move to connect the barrios to urban services, such places were still considered expendable. Encouraged under the 1949 federal housing act that granted Title I money to demolish substandard housing, local officials looked to secure funds to partake in urban renewal programs. Nationwide, Title I money was used for the demolition of neighborhoods considered "blight," which were then redeveloped often as housing, commercial, or civic projects. San Jose leaders and planners saw barrios as signs of decay. "Each segment of the city," the city's 1958 master plan noted, "has a natural cycle of growth—obsolescence and decay—and then renewal."<sup>30</sup> The planning commission's map of blighted areas closely followed the city's barrios, identifying blight primarily in East Side. The city, the commission warned, needed to pursue urban renewal programs to prevent blight from spreading so "that the vast private investment in our city will

<sup>28</sup>Ross, "The Saga of *Sal si Puedes*," 8.

<sup>29</sup>Ross, "The Saga of *Sal si Puedes*," 16, 22–23; Clark, *Health in the Mexican-American Culture*, 28; Levy, *Cesar Chavez*, 104.

<sup>30</sup>San Jose City Planning Commission, *Master Plan of the City of San Jose*, 89.



**Figure 3.4:** Installing curbs and sidewalks in East Side. Fred Ross Papers, Stanford University.

remain sound and continue to expand.”<sup>31</sup> Renewal needed to “clear and rebuild areas that economically are not worth saving.”<sup>32</sup> The suggestions for renewal also aligned with federal transportation programs. Beginning in the mid-1940s, federal loans to states for road building increased rapidly. After the 1956 Interstate and Defense Highway Act, a larger pool of federal money for transportation became available to states. Over the next decade, 41,000 miles of new highway were authorized nationwide.<sup>33</sup>

In Santa Clara County, city officials turned to the newly available pool of transportation money to aid their demolition of blighted areas as well as provide a short-term stimulus of subsidized construction. Plans for three interstate highways and an expressway through East Side emerged in the late-1950s: Highways 280 and 680 would shuffle traffic between northern and southern Santa Clara County, while Capitol Expressway skirted the eastern edge of San Jose to allow traffic to flow east and west. The federal funds also went into the construction of Bayshore Freeway (Highway 101) and Highway 280 running north and south up the Peninsula. In the process of constructing the new highway system, many of the East Side barrios were demolished.<sup>34</sup>

The social and environmental considerations were rarely taken into account under such development policies. The quickly-crowding Peninsula meant that new road construction projects would almost guarantee the displacement of people and business. But such concerns ran low for highway engineers and

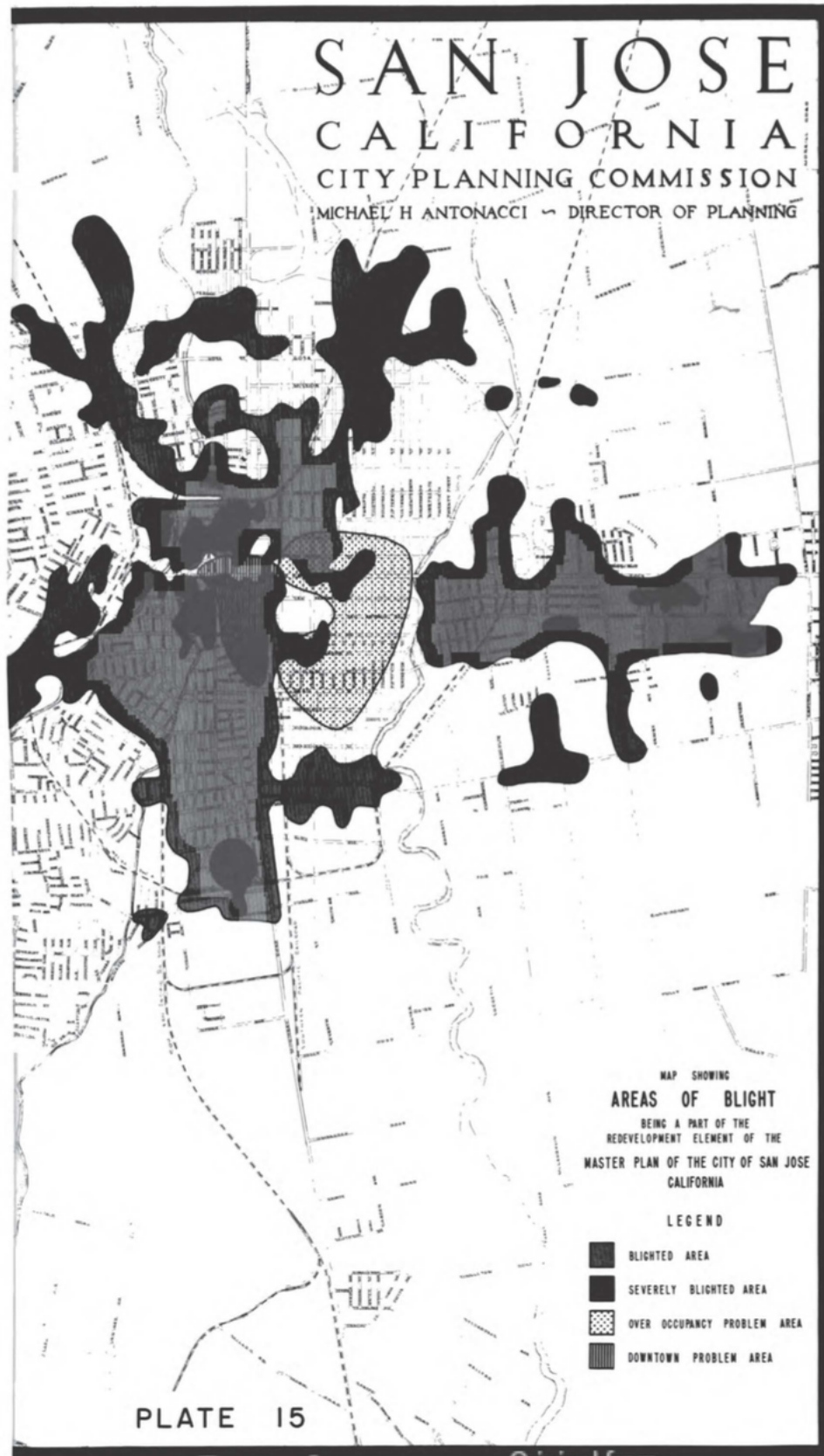
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<sup>31</sup>Planning Commission, *Master Plan of the City of San Jose*, 94–95.

<sup>32</sup>Planning Commission, *Master Plan of the City of San Jose*, 89.

<sup>33</sup>Mark H. Rose, *Interstate: Express Highway Politics, 1939–1989* (Knoxville: University of Tennessee Press, 1990); Raymond A. Mohl, “Race and Space in the Modern City: Interstate-95 and the Black Community in Miami,” in Arnold R. Hirsch and Raymond A. Mohl, eds., *Urban Policy in Twentieth-Century America* (New Brunswick: Rutgers University Press, 1993), 108; Edward Weiner, *Urban Transportation Planning in the United States: An Historical Overview* (Washington, D.C.: U.S. Department of Transportation, 1988), chapter 3. See also Teafor, *Rough Road to Renaissance*, 93–97; Rose, *Interstate*, chapter 5; Annmarie Hauck Walsh, *The Public’s Business: The Politics and Practices of Government Corporations* (Cambridge: MIT Press, 1978.)

<sup>34</sup>“Housing for Freeway Displacees,” newspaper clipping, n.d., Box 5, Folder 19, Fred Ross Papers, Department of Special Collections, Stanford University Libraries, Stanford, California.



**Figure 3.5:** Areas identified as “blight” in San Jose. San Jose Planning Commission, *Master Plan of the City of San Jose* (1958).

civic leaders.<sup>35</sup> The bulk of San Jose's lower-income Mexican Americans displaced under new road projects relocated to a centralized barrio in East Side and remained physically and symbolically separated from white communities by the freeways. The eastern edge of the city also became home to many of the city's federally-financed public housing projects administered through San Jose's Housing Authority, established in 1966.<sup>36</sup> Urban renewal plans sealed the fate of Sal Si Puedes. What had once housed a community of 422 people became the site for highways. San Jose's policies of transportation, urban renewal, and annexations overwhelmed the CSO activists. "What use to be a very small neighborhood is now . . . hundreds of hastily-built tract homes that have become quite blighted," Gallegos noted. San Jose's growth "happened so rapidly," he continued, "[that] it was just incredible." The problems of Sal Si Puedes "were exacerbated by the sudden growth."<sup>37</sup>

By framing community problems around environmental issues, Mexican Americans in East Side shaped a conversation about their lack of access to the suburban lifestyle enjoyed by the majority of white residents in the city, but also demanded that the city ensure an environment that promoted health and quality-of-life. The conditions of their neighborhoods went hand-in-hand with the environment, a point that residents of Sal Si Puedes understood well. In shaping their political organizing around the community, activists argued for a suburban vision that included them while promoting an environmental critique of San Jose's

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<sup>35</sup>Nationally, between 1957 and 1968 nearly 330,000 homes were destroyed to make way for highways. In the 1960s, new interstate highways in urban areas displaced roughly 32,400 families annually. Mohl, "Race and Space in the Modern City," 100–101, 134–136.

<sup>36</sup>"Housing for Freeway Displace-ees," Fred Ross Papers.

<sup>37</sup>Gallegos oral history, 17–18.

sprawl.<sup>38</sup>

SAN JOSE'S RAPID GROWTH CAME WITH a price. Nearby towns attempted to protect themselves from becoming part of the city. In the 1950s, suburban governments proliferated in the Bay Area. For various reasons, towns were not willing partners in San Jose's growth and instead sought strict economic regulations within their boundaries in order to control the development and character of their municipalities. Some cities used incorporation as one method for protecting themselves from San Jose's sprawling annexations. Campbell became a city in 1952, followed by Milpitas in 1954, Cupertino in 1955, and Saratoga in 1956.<sup>39</sup> County-wide, between 1952 and 1957 seven cities incorporated, doubling the number of municipalities in the county.<sup>40</sup>

In other cases, cities found themselves resisting attempts at municipal consolidation.<sup>41</sup> Alviso, located to the north of San Jose at the southern tip of the San Francisco Bay, was an incorporated city long desired by civic leaders in San Jose. City leaders valued Alviso for two particular reasons. First, San Jose desired access to the San Francisco Bay for the location of a deep water port, a dream the city had held on to since the late 1800s.<sup>42</sup> Second, the city wanted to locate a sewage treatment plant on the fringe rather than inside the city. For pro-growth Alvisans, incorporation with San Jose would provide the city with a larger tax

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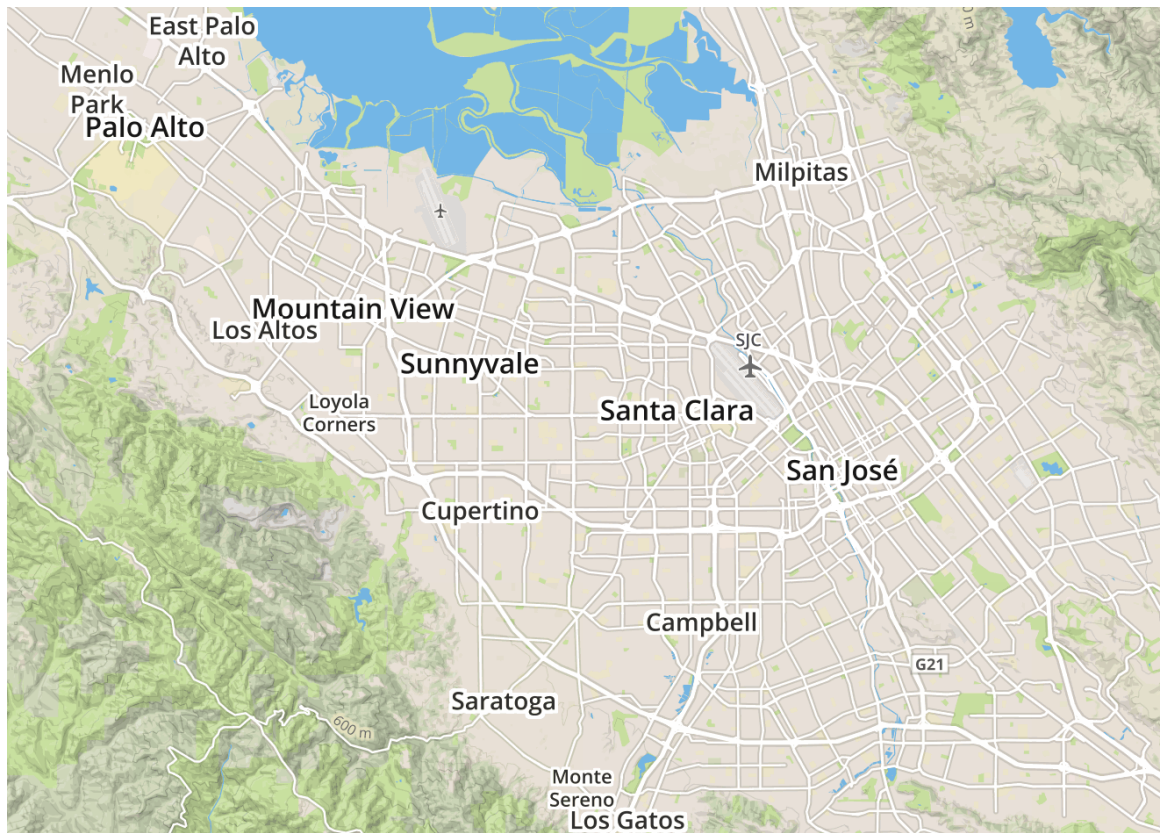
<sup>38</sup>Pitti, *Devil in Silicon Valley*, 157.

<sup>39</sup>"Hamann: San Jose's Growth Guru," *San Jose Mercury*, 1999.

<sup>40</sup>Cavin, "Borders of Citizenship," 491.

<sup>41</sup>Consolidation and annexation are very different issues. Consolidation means the joining of two independent municipalities; annexation means the expansion of municipal boundaries to control unincorporated land.

<sup>42</sup>Land-locked San Jose began looking to Alviso's port as early as 1895. In the 1930s, the city was so certain it would control the port that it prematurely released a pamphlet boasting of the "San José Deep Water Port." In 1958, the city's Master Plan still mentioned their goal of a deep water port located in Alviso. See Cavin, "Borders of Citizenship," 323; "Trip on Alviso Channel," *San Francisco Call*, August 30, 1895; San Jose City Planning Commission, *Master Plan of the City of San Jose*, 50.



**Figure 3.6:** The South Bay cities of San Jose, Santa Clara, Campbell, Saratoga, Cupertino, Sunnyvale, Milpitas, and Alviso. Map courtesy Mapbox.

base to fund capital improvements in the town. Alvisans, one pro-consolidation advertisement wrote, are “tired of wallowing in the mud, are tired of having our children play in the streets . . . are tired of seeing all of our neighboring areas make great strides forward while we just stand still. SUPPORT PROGRESS.”<sup>43</sup> A campaign began to approve the city’s annexation to San Jose. While debates continued in Alviso, San Jose annexed a narrow one-hundred-foot strip of land to the border of Alviso, and there built a sewage treatment plant. That plant would become the basis for more annexations as it allowed the city to extend municipal services cheaply to surrounding areas.<sup>44</sup> The sewer system of San Jose became a key tool in the city’s growth: by offering cities a chance to connect to San Jose’s sewer system, which whisked treated sewage away to outfalls dumping into the San Francisco Bay in a sewer system originally designed to handle the massive amounts of cannery effluence. Neighboring cities had a highly desirable incentive to join the city. Joining the sewer system was the price for annexation.<sup>45</sup> “We’re in this fight to the finish,” Dutch Hamann argued, “and if we have to use sewage disposal to bring Santa Clara [County municipalities] to some point of reasoning, we’ll do it.”<sup>46</sup>

The very choices of annexation, zoning, and construction introduced environmental problems municipal leaders failed to anticipate. When San Jose located a sewage treatment plant near Alviso, they were attempting to push such services away from the city’s downtown in order to maintain a pristine image

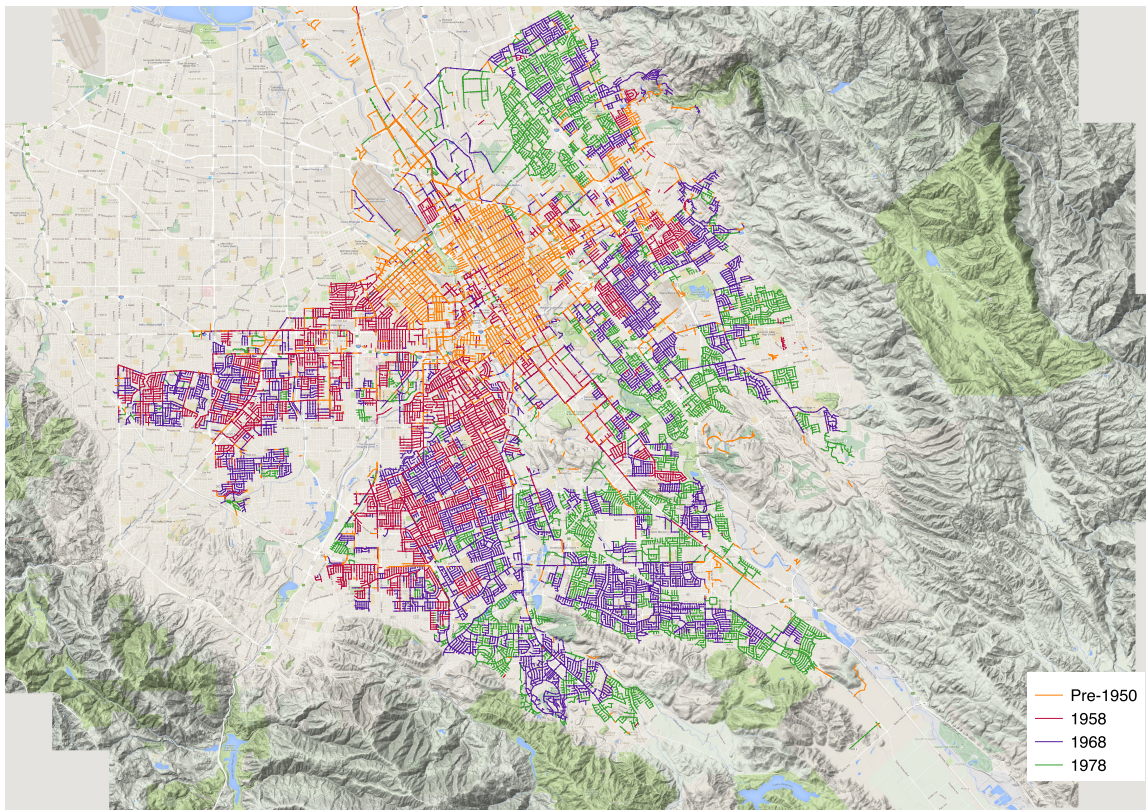
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<sup>43</sup>“Covenant and Betrayal,” *San Jose Mercury*, March 28, 1993.

<sup>44</sup>While San Jose prided itself on industrial and commercial development, the city made most of its revenue through residential property taxes. These taxes, however, were unbalanced. The city desired more industrial land to expand its tax base, and locating industrial facilities northward allowed it to tap into the growing industries of Silicon Valley. San Jose City Planning Commission, *Master Plan of the City of San Jose*, 50.

<sup>45</sup>Trounstone, and Christensen, *Movers and Shakers*, 97; Joel Garreau, *Edge City: Life on the New Frontier* (New York: Anchor Books, 1992), 224-227.

<sup>46</sup>David N. Pellow and Lisa Sun-Hee Park, *The Silicon Valley of Dreams: Environmental Injustice, Immigrant Workers, and the High-Tech Global Economy* (New York: New York University Press, 2002), 70.



**Figure 3.7:** The expansion of San Jose sewers.

and high property values. The sewage treatment plant, however, required massive amounts of chlorine, which was shipped to the plant by rail across Alviso's borders. Alvisans not only dealt with the daily stench of the plant but were also exposed to potential chemical spills and sewage leaks. For San Jose, controlling Alviso's space was a method for offloading the environmental consequences of pollution to neighboring cities.

Complaints and campaigns were not enough to stop San Jose's drive. In January 1968, voters approved consolidation by the thin margin of nine votes.<sup>47</sup> However, many of the developments pro-consolidation Alvisans anticipated were never realized. No deep water port could be constructed because the dredging necessary to accommodate large ships ran up against new state environmental laws passed in the early 1970s. The port had also become less important to San Jose since new industries relied less on water for shipping and more on the interstate system. Yet while commercial developments ran aground, the city continued to expand its sanitation facilities. Large land owners sold their land to the city. Tony Santos, a landlord and former Alvisan police chief, city council member, and mayor, sold his land to San Jose that became the site of the city's huge landfill. The site became so polluted that the Environmental Protection Agency declared it a Superfund site in 1986.<sup>48</sup> William Zanker, chair of Alviso's planning commission, sold his property to the city for \$1.5 million and moved to nearby Sunnyvale. Zanker's land became the site of an expanded sewage plant that encompassed 1,764 acres and quadrupled its capacity. The new sewage plant became San Jose's key to growth, allowing the plant to handle the municipal waste of the whole region, including the industrial effluence from high technology industries. The plant eventually grew to service twenty-four cities.<sup>49</sup>

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<sup>47</sup>"Covenant and Betrayal," *San Jose Mercury*, March 28, 1993.

<sup>48</sup>Cavin, "Borders of Citizenship," 333.

<sup>49</sup>"Covenant and Betrayal," *San Jose Mercury*; Cavin, "Borders of Citizenship," 333.

The city's political coalition of businessmen, newspaper publishers, real estate developers, and the Chamber of Commerce allowed the political machinery to pursue growth. Widespread annexation became an avenue for development, provided the city with a broad tax base of industrial, residential, and commercial land, gave itself more power over surrounding cities, and allowed San Jose's leaders think about the city as a regional powerhouse. The combination of environmental politics and the limits of the environment itself shaped contests over metropolitan space, environmental degradation, and municipal government.

Similar patterns of offloading environmental problems to outside communities occurred elsewhere on the Midpeninsula. In the North Bay next to Palo Alto lay East Palo Alto, a predominantly African American community along the San Francisco Bay. East Palo Alto incorporated for the same reasons other small communities did during the postwar era: they feared the loss of independence. After the City of Menlo Park acquired the Belle Haven subdivision—one-quarter of East Palo Alto's population and property—in 1949, the city made overtures towards incorporation. The city itself had grown dramatically in the postwar era, from 1,500 residents in 1947 to 12,000 by 1953.<sup>50</sup> But incorporation efforts were upended by the Kavanaugh family, the largest property owners in East Palo Alto who worried that incorporation would mean higher taxes.<sup>51</sup>

The widening of Bayshore Freeway (Highway 101), under the same federal funding that allowed San Jose to drive freeways through its neighborhoods, marked a physical boundary between Palo Alto and East Palo Alto that the NAACP's *The Crisis* referred to as the "concrete curtain."<sup>52</sup> When the California State Planning Commission went ahead with plans to widen the freeway in the

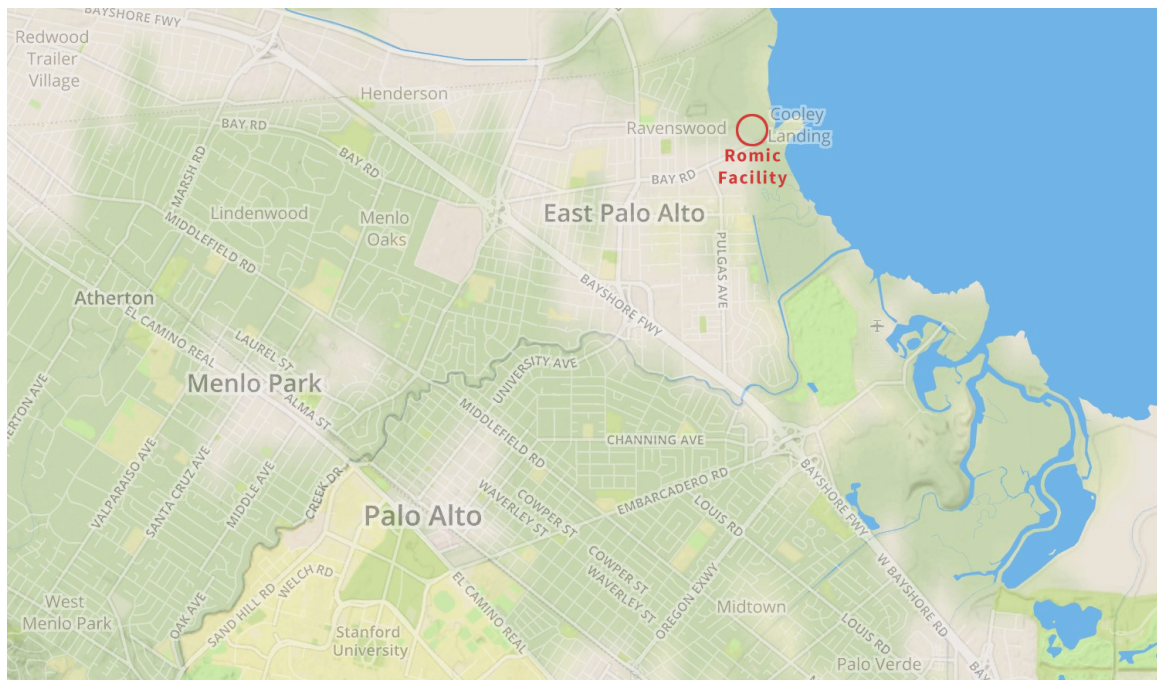
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<sup>50</sup>U.S. Census, 1952.

<sup>51</sup>Bayinnah R. Jones, "The Tinsley Case Decision," Ph.D. diss., University of North Carolina-Chapel Hill, 17–18.

<sup>52</sup>Rachelle Marshall, "Concrete Curtain—the East Palo Alto Story," *The Crisis* (November 1957): 543–548.

late 1950s as a major corridor for traffic between San Francisco and the growing tech industries of Santa Clara Valley, little effort was made to preserve East Palo Alto businesses which mostly lined the freeway. The freeway project appeared willing to curve around other commercial districts, but the fifty-three East Palo Alto businesses lining the old four-lane freeway were displaced. The widening of the freeway also caused greater flooding problems in the city and lowered land values, causing residential and business developers to look elsewhere.<sup>53</sup>



**Figure 3.8:** The former site of the Romic waste facility.

Exacerbating the environmental problems in East Palo Alto was the location of the Romic waste management facility. Opened in 1956, the facility first run by the Hird Chemical Corporation before it was sold to Carad Chemical Corporation in 1959 followed by the purchase of the facility by P.D. Electronics in 1964 before its eventual sale to Romic in 1979. The facility largely existed for the processing of solvent wastes and wastewaters from industrial activity, including

<sup>53</sup>Bayinnah R. Jones, "The Tinsley Case Decision," Ph.D. diss., University of North Carolina-Chapel Hill, 18; *Palo Alto Times*, January 11, 1956.

the manufacturing waste from aerospace and electronics. Like the Alviso sewage treatment plant in San Jose that located the facility outside the city, Romic lay outside of Greater Palo Alto but close enough to East Palo Alto that the community would be left dealing with potential problems. A major environmental problem occurred in the winter of 1972 when tidal flooding breeched wastewater receiving pond levees, causing 20,000 gallons of waste liquids to dump into adjacent tidal sloughs along the San Francisco Bay. The California Regional Quality Control Board issued a Cleanup and Abatement Order in March 1973 commanding Romic to rebuild levees, improve surface drainage, and connect the facility to sanitary sewers.<sup>54</sup> East Palo Alto Vice Mayor A. Peter Evans, who had once worked at the Romic facility in the late-1950s, regretted the facility's presence in the city. East Palo Alto, he recalled, had become "the dumping ground for San Mateo County."<sup>55</sup>

The emergence of urban black and Latino politics in the 1950s did not blossom completely from environmental concerns. Throughout the 1950s growth programs throughout the Midpeninsula faced little resistance. Indeed, political organizing focused more specifically on ending segregation, housing discrimination, and political participation. Yet opposition and critique of urban growth policies promised to unleash new political energies focused on the health of neighborhoods and communities, a alternate expression of environmentalism than that

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<sup>54</sup>The Environmental Protection Agency initiated investigations into the Romic contamination sites in April 1985 and found various volatile organic compounds in the soil including dry cleaning chemicals, carburetor cleaning liquids, paint thinners, and various industrial solvents. See "Statement of Basis for Proposed Soil and Ground Water Remedy," Environmental Protection Agency, September 14, 2007 <http://www.epa.gov/Region9/waste/romic-eastpaloalto/pdf/romic-sob.pdf>. On June 5, 2006, a chemical release of roughly 4,000 gallons of a chemical mixture caused East Palo Alto police to issue a shelter-in-place order. The EPA fined Romic \$20,000 for failing to immediately notify the agency of the problem. See "U.S. EPA finds Romic \$20,000 for failing to notify authorities after chemical release," EPA News Release, August 20, 2007 <http://yosemite.epa.gov/opa/admpress.nsf/6427a6b7538955c585257359003f0230/2c861bd40017ca988525735600604ee3!OpenDocument&Start=3.2&Count=5&Expand=3.4>.

<sup>55</sup>"Romic waste facility fuels toxic debates," *Inside Bay Area*, July 14, 2006 [http://www.insidebayarea.com/argus/localnews/ci\\_4050135](http://www.insidebayarea.com/argus/localnews/ci_4050135).

emerging among lifestyle liberals who valued countryside homes, open spaces, and recreation.

AS CITY LEADERS DEFINED THE DETAILS of San Jose's suburban and industrial future, a sizable contingent of city residents began questioning whether the link between growth and prosperity was guaranteed. In the mid-1950s, debates over the landscape's identity as an agricultural powerhouse rose to fruition, resulting in legal challenges to San Jose's unrestricted growth and initiated a campaign to conserve farmland. The extension of subdivisions into farmland, however, was not a clean story of transition from agricultural to suburban space. Yet given the physical space restrictions in the Santa Clara Valley, farms rarely stayed in the Valley when they were bought up. Many farmers took their new-found capital and moved their operations to other parts of the state, most commonly to the Central Valley straight east of the Santa Clara Valley.

The expansion of the city into agricultural land was part of a large cycle of capital flowing into the county. Federal money, the nation's political and financial centers, and investment dollars became fixed in space in neighborhoods like Willow Glen, Los Altos Hills, and Cupertino, subdivisions built on the periphery of the urban cores of San Jose, Palo Alto, and Sunnyvale. Growth liberalism provided the structure for capital and incentive, allowing banks to aggressively bet on mortgages with the mitigation of risk through the FHA. New Deal housing policies allowed banks in the Valley to become anchors by which capital entered the Valley, establishing homebuilders and city leaders as central figures in the Valley's postwar growth and steady erosion of agricultural land.<sup>56</sup>

Despite the dramatic rise of subdivisions and neighborhoods, Santa Clara Valley maintained its reputation as a major producer of fruit, food preserva-

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<sup>56</sup>Needham, *Power Lines*, 72.

tion, and food processing in the immediate postwar era, even after farm incomes peaked in 1955.<sup>57</sup> The orchards of the Valley remained abundant enough in 1953 that the Chamber of Commerce published a postcard advertising the blossom tours in the “land of sunshine, fruit and flowers.” The blossoming trees lured tourists to the city, giving visitors a chance to see the abundant flowering of cherry, almonds, apricots, prunes, and pears in “famous Santa Clara County, California.”<sup>58</sup> In 1960 the county contained eighty-five canneries, twenty-three dried fruit plants, twenty-five frozen food operations, and eighty-five fresh fruit and vegetable packing facilities.<sup>59</sup>

The county’s suburbanization attracted its critics, most prominently from the suburban critic William H. Whyte. In 1958 in the pages of the *New York Times* Whyte described Santa Clara County cities as a “vast, smog-filled deserts that are neither city, suburb, nor country.” Like other observers of suburban America, Whyte considered suburbanization as a symbol of progress, but he questioned its application to the Santa Clara Valley. “You can’t stop progress, they say,” he wrote, “yet much more of this kind of progress and we shall have the paradox of prosperity lowering our real standard of living.” Whyte’s greatest concern for the Valley was the farmlands. “In a maze of signs and neon lights,” Whyte bemoaned, “the unspoiled country had almost disappeared.”<sup>60</sup>

Beginning in the early 1950s the children and grandchildren of farmers and ranchers began selling their land to developers. Many times smaller farms could not hold out against the pressures of urbanization, while larger land owners waited for a high enough offer. The experience of Carl Wesley Haman’s land

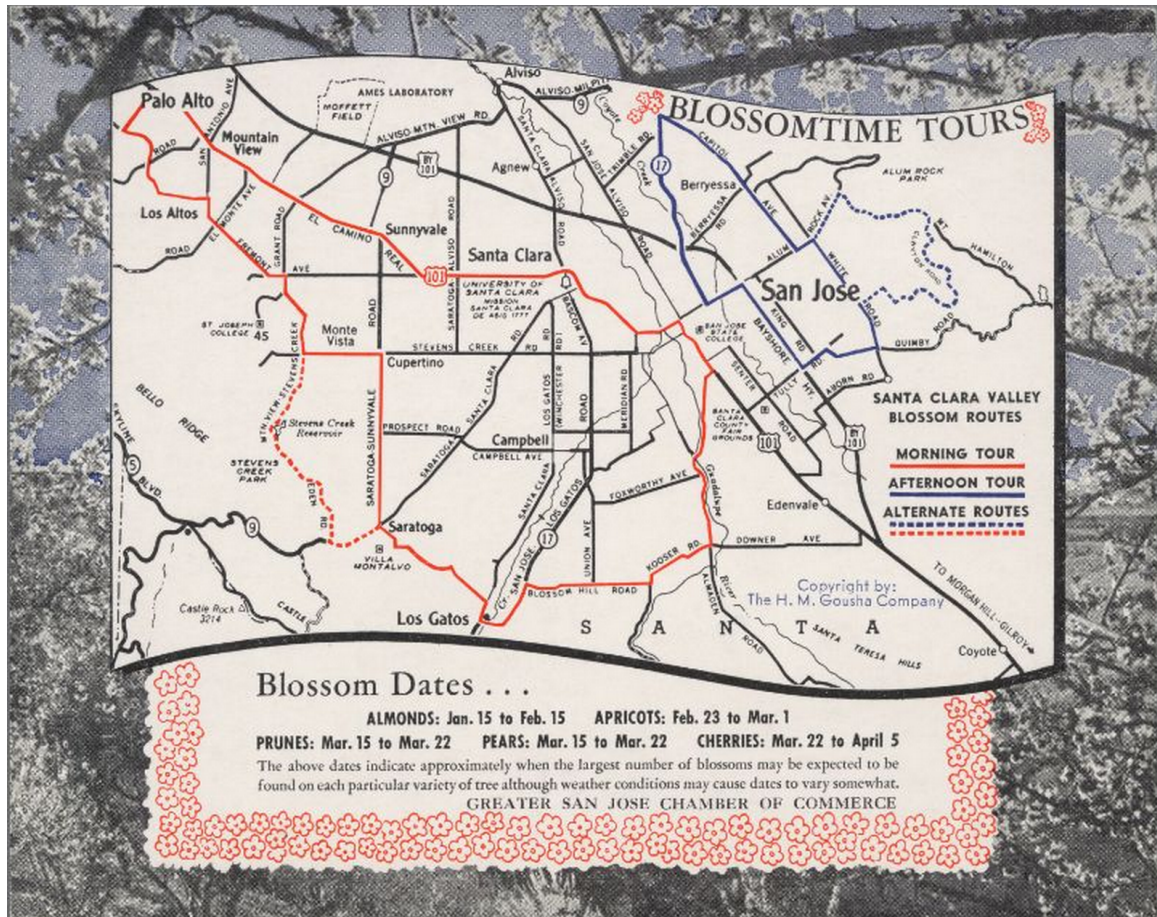
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<sup>57</sup>County of Santa Clara Planning Department, “Land Use Issues in Santa Clara County,” (San Jose: County of Santa Clara Planning Department, 1963), 8.

<sup>58</sup>Greater San Jose Chamber of Commerce, “Blossomtime Tours: Santa Clara Valley Blossom Routes”, ca. 1953, Santa Clara City Library.

<sup>59</sup>“Agriculture,” *San Jose Mercury*, January 15, 1956; Megan Lynn Alpert, “Valley of Heart’s Delight: Orchards to Hard Drives in the San Mercury News” (MA Thesis, San Jose State University, 2010), 16; Cavin, “Borders of Citizenship,” 224.

<sup>60</sup>Whyte, “Urban Sprawl,” 124. See also Rome, *Bulldozer in the Countryside*, 119–152.



**Figure 3.9:** Greater San Jose Chamber of Commerce, "Blossomtime Tours: Santa Clara Valley Blossom Routes," ca. 1953, Santa Clara History Center Collection, Santa Clara City Library.

was typical. When the Santa Clara fruit grower died in 1955, a Palo Alto developer purchased his 41.44-acre lot for \$287,000—seventeen times more than what Haman paid originally. Farmland desired by developers had the opportunity to fetch upwards of \$7,000 an acre by the mid-1950s.<sup>61</sup> Smaller farmers had similar experiences. Joe Ruscigno spent his lifetime working the land on his San Jose farm. Son of first-generation Italian immigrants, Ruscigno and his family had run the farm since the 1940s.<sup>62</sup> But in 1952 he gave up tending land for tearing up land. “Guess I’ve pulled out 150 acres of trees since the first of the year,” he told a *San Francisco Chronicle* reporter. Ruscigno lamented the uprooting of the fruit trees to the bulldozer he now controlled, but “what can you do? . . . The subdivisions were coming in all around us and when they made a good offer I sold out.”<sup>63</sup> By the 1970s, pockets of agricultural land were being sold for \$18,000 an acre, and one land owner refused an offer of \$2,300,000.<sup>64</sup> San Jose, T. H. Bowden was already noting in 1937, “might literally be said to have been carved from a forest of fruit trees, as most of the residential sections were orchards prior to being subdivided, and many of the original trees still ornament the gardens of the invading residences.”<sup>65</sup> The land’s use for agriculture was under threat despite its persistence. Local historian Yvonne Jacobson estimated that 77,000 acres left production in a span of thirty years. By 1982, 20,000 acres of agricultural land remained in the Valley, which fell to just 4,500 by 2001, mostly located near the South Bay cities of Morgan Hill and Gilroy.<sup>66</sup> “As the people came,” the *San Jose*

<sup>61</sup>“41.44 Acres Bring Price of \$287,000,” *San Jose Mercury*, September 17, 1955; Cavin, “Borders of Citizenship,” 212.

<sup>62</sup>U.S. Census, 1940. <http://www.archives.com/1940-census/joe-ruscigno-ca-34378841>.

<sup>63</sup>“Santa Clara County—Scene of the Big Boom,” *San Francisco Chronicle*, May 11, 1952.

<sup>64</sup>Stanford Law Review, *San Jose*, 8.

<sup>65</sup>T. H. Bowden, *Report of a Survey in San Jose, California*, (Washington, D.C.: Division of Research and Statistics, Home Owners’ Loan Corporation, September 18, 1937), 2, quoted in Cavin, “Borders of Citizenship,” 208.

<sup>66</sup>Jacobson, *Passing Farms, Enduring Values*, 231–236; Paul F. Griffin and Ronald L. Chatham, “Urban Impact on Agriculture in Santa Clara County, California,” *Annals of the Association of American Geographers* 48 (September 1958): 203; “From Fertile Fields, a High-Tech Harvest,” *San Jose Mercury News*, June 20, 2001; Roy Hitchcock, “Taking the Pulse of the Prune,” *California Farmer*, September

*Mercury* noted in 1956, "the orchards went."<sup>67</sup>



**Figure 3.10:** Clearing out orchards. Reproduced from Karl Belser, *Planning Progress*, 1956.

City leaders had no problem annexing land for what they saw as the appropriate and correct use for land: new industry and new suburban homes. But this vision of the landscape came into conflict with farmers, whose own ideas about

4, 1957; "The Indispensable Man at Harvest Time," *San Jose Mercury*, August 28, 1955.

<sup>67</sup>"Population Growth Created Demand for Housing; Subdivisions on Grand Scale Provided the Homes," *San Jose Mercury*, January 15, 1956.

land use also meant protecting their livelihoods. Right as suburbs were expanding across the valley floor, their farming neighbors began organizing an effort at agricultural land preservation. Farmers worked with the County Planning Commission to create new zoning ordinances that would maintain greenbelts between cities and leave pockets of land to the exclusive use of agriculture.

The combined efforts of Santa Clara County Planning Director Karl Belser and County Planning Commissioner Will Weston drove the county's early efforts at farmland conservation. On April 8, 1953, the county proposed an amendment to the zoning ordinance establishing exclusive agricultural zoning after fifteen pear growers near the community of Agnew in the City of Santa Clara appealed to the county for help. The amendment passed in April 1954 with little opposition—perhaps due to its broad definition of agricultural land that included nurseries, botanical conservancies, riding academies, stables, and other land uses pursued by hobby farmers—and established the county's first greenbelt of 744 acres for pear orchards in Agnew controlled by fifteen owners.<sup>68</sup>

Belser and the county planning commission continued to advocate for the importance of agricultural zoning. County planners contributed to a 1954 report to the state legislature identifying areas where the state could improve its role in helping shape chaotic urban growth around the state. The report pointed specifically to agricultural land in Santa Clara County, arguing that unplanned urban growth posed a “direct threat” to the “agricultural base of Santa Clara County, and the hastening of the day that it ceases to contribute to the economy of Santa Clara County and the state as a whole.”<sup>69</sup> Four years later the county published “Green Gold,” a county publication that argued for “permanent agricultural re-

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<sup>68</sup>Rebecca Conard, “Green Gold: 1950s Greenbelt Planning in Santa Clara County, California,” *Environmental Review*: ER 9, no. 1 (April 1985): 6–8.

<sup>69</sup>Assembly Interim Committee on Conservation, *Planning and Public Works, Planning for Growth: A Report on the Status of City and County Planning in California* (Sacramento: Assembly of the State of California, January 1955), 43.

serves” for protecting the “priceless reserve” of farmland threatened to succumb to an “endless, monotonous megalopolis.”<sup>70</sup> Farms, they argued, required growth control if they hoped to survive urban development.

Pressure by farmers and the county, with the support of the Santa Clara County Farm Bureau and California Farm Bureau Federation, led the state legislature to pass the Green Belt Exclusion Law in 1955 and the Agricultural Assessment Law in 1957, both efforts thought to help farmers hold on to their land.<sup>71</sup> The Green Belt Exclusion Law created zones where no subdivisions, industry, or commerce could establish itself. The land would remain the exclusive use of agricultural production. This was aided by the Agricultural Assessment Law, which sought to help farmers maintain low tax assessments on their land. By allowing green belts to be preserved, assessments of land would remain low since no non-farming activity would be located on neighboring land. The exclusive zoning expanded the county’s zoned agricultural land by almost sixty percent, from 40,000 acres in 1958 to 70,000 acres in 1960.<sup>72</sup>

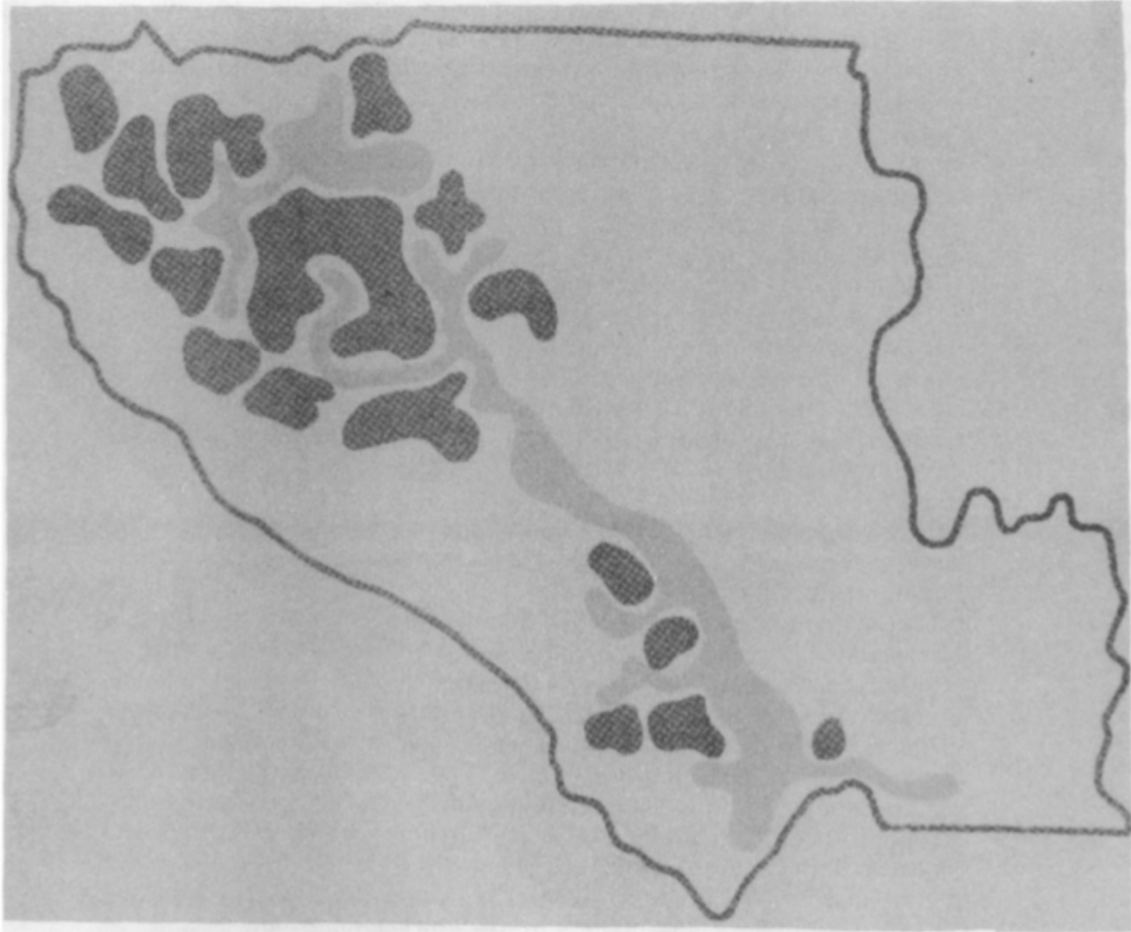
Many of those supporting the zoning of agricultural preserves did not think of themselves as environmentalists, but, as Adam Rome has observed, they were “grassroots activists and government officials [that] saw the difficulty of acquiring open space as part of a larger problem—uncontrolled growth.”<sup>73</sup> Most

<sup>70</sup>Santa Clara County Planning Department, “Green Gold: A Proposal for a Pilot Experiment in the Conservation of Agricultural Open Space,” (San Jose, 1958), n.p., quoted in Conard, “Green Gold,” 12.

<sup>71</sup>Although the county and state level farm bureaus supported the local plan, Rebecca Conard argues that the planner-farmer coalition at the local level collapsed once land use issues reached the state level. Conard, “Green Gold,” 14.

<sup>72</sup>Robert C. Fellmeth, *Politics of Land: Ralph Nader’s Study Group Report on Land Use in California* (Grossman Publishers, 1973), 32–34.

<sup>73</sup>Adam Rome, *Bulldozer in the Countryside: Suburban Sprawl and the Rise of American Environmentalism* (New York: Cambridge University Press, 2001), 135. Rome suggests that open space regulations became a phenomenon in the 1970s, but Santa Clara County was ahead of the trend by applying land-use controls to agricultural land in the 1950s. The same is true for other parts of California. See, for example, Kathleen A. Brosnan, “Crabgrass or Grapes: Urban Sprawl, Agricultural Persistence, and the Fight for the Napa Valley,” in *Cities and Nature in the American West*, ed. by Char Miller, (Reno: University of Nevada Press, 2010), 34–56.



**Figure 3.11:** Simplified outline of farmland zoning (light gray) separating urban areas (dark gray). Reproduced from *Green Gold* (Santa Clara County Planning Department, November 1958).

farmers aimed to protect their way of life, seeing sprawl as a threat to their lands and living. Yet others also saw themselves as protectors of the land, notably Belser and others in county government. The coalition worked to protect agricultural land and hoped to maintain alternating patches of agricultural land and urban areas, but their efforts were overwhelmed by the growing cities.

The San Jose Chamber of Commerce noted those in the community who feared the encroachment of industrial development. In an industrial survey, the Chamber noted that

there were some sincere and intelligent people who looked askance at this industrial development. They had genuine fears that smokestacks would “encircle the city”; that “blighted areas” would spring up in industrial sections; that orchards would be torn up “by the hundreds”; and that by past standards, this accelerated trend in the establishment of new industry might result in an unbalanced, top-heavy economy destined to collapse at some undetermined time in the future.<sup>74</sup>

Such fears seemed confirmed by the mid-1960s as the exclusive agricultural zoning would begin to fall under the gerrymandered annexations of the county’s municipalities. Although farmers had felt themselves under pressure in the early 1950s to preserve their lands, many, like Haman and Ruscigno, began to realize the value they could extract from the sale of their lands.<sup>75</sup> The patterns of leapfrogged annexations angered growers as well, which encouraged other farmers to sell their land to urban developers well before the land was needed for the city.<sup>76</sup>

Yet if county government saw the value in protecting farmlands and developers found value in marketing those lands to suburbanites desiring countryside homes, the experience of living among the orchards was another matter

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<sup>74</sup>Quoted in Scott, *Bay Area*, 273.

<sup>75</sup>Fellmeth, *Politics of Land*, 35.

<sup>76</sup>Conard, “Green Gold,” 5–18, 6.

entirely. Living near the accouterments of the farm economy upended suburbanites' views of the countryside. Homeowners complained about farm labor camps for largely Latino farmhands and their mingling with suburban property. When farmer Walter Seagraves announced plans to build a labor camp near Saratoga in 1955, homeowners argued that such development would lower property values in the residential area. Hundreds of residents protested at a County Board of Supervisors meeting about Seagraves' plans, and residents eventually hired a lawyer to make their case, arguing that Seagraves' property should be subdivided rather than developed for the camp. The County Board of Supervisors and Seagraves bowed to public pressure.<sup>77</sup> Nor were suburban residents pleased about the byproducts of agriculture. While orchards and gardens mingled with suburban properties and were desirable for their amenities, canneries and packinghouses were pocks on the suburban landscape. Odors from a meatpacking and tallow facility near the new Berryessa housing development upset the air quality of the suburb. At a meeting of the Board of Supervisors, one resident complained about the odors. "We want real action taken immediately and this cleaned up," he threatened the Board, "otherwise we will do our best to do some cleaning up in the next election."<sup>78</sup>

Such sentiment reveals the shifting political patterns in Santa Clara County. Growers and their issues dominated Valley politics until the 1950s as suburban voters displaced farmers. The concerns of the *San Jose Mercury Herald* indicate the importance of agriculture to the Valley until the 1950s. The column "Let's Grow It!" about home gardens and fruit trees appeared regularly for several years, and in the immediate postwar era the newspaper ran a Sunday insert called "Ranch,

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<sup>77</sup>"Saratoga Residents Win Labor Camp Ban Fight," *San Jose Mercury*, August 9, 1955; "Saratogans to Protest Farm Labor Camp," *San Jose Mercury*, July 27, 1955; Cavin, "Borders of Citizenship," 213–214.

<sup>78</sup>"Still Smells, Berryessa Road Dweller Tells Supervisors," *San Jose Mercury*, 1950, quoted in Alpers, "Valley of Heart's Delight," 36.

Home, Garden” that provided agricultural news and technology.<sup>79</sup> Yet by 1960, the farm news section of the *Mercury* fell to one or two pages on Sundays and Frank Freeman, the paper’s columnist for local news, implored readers to remember that “this county is among the 25 most important counties in agricultural production in the United States.”<sup>80</sup> After 1976, the farm section and farm editor were gone from the *Mercury*.<sup>81</sup>

The contest over the agricultural landscape revealed not only an effort by farmers to protect their livelihoods, but a broader debate about land use and the environmental costs exacted on the land for its various uses. The hope for orderly planning separated by “nature”—the greenbelts of orchards—sought to impose the environment into urban space. The agricultural landscape not only dealt with the livelihoods and economics of food production, but was valued for what appeared to be an inherent ability to control urban growth. Farmlands needed acreages to produce crops, the argument went, necessarily causing pockets of land to separate urban areas. But the rural landscape would be valued for another reason: its suburban aesthetics.

LAND DEVELOPERS IN SAN JOSE WERE OPERATING at a time when planning and zoning regulations of undeveloped areas was virtually nonexistent. The City of San Jose rarely hesitated in granting land uses to industry and residential subdivisions with no regard to planning guidelines. The city’s original master plan created in 1934 was routinely ignored and was not revised until 1958, when state regulations required the city to update its general plan. The city continued to paid little heed to the goals outlined in the document. The city also routinely ig-

<sup>79</sup>Alpers, “Valley of Heart’s Delight,” 32.

<sup>80</sup>Frank Freeman, “Agriculture’s Still S.C. County’s Biggest Industry,” *San Jose Mercury News*, April 4, 1965.

<sup>81</sup>Alpers, “Valley of Heart’s Delight,” 44–45.

nored the recommendations of the Santa Clara County Planning Commission. In some cases, land originally deemed unfit for development by the county was nevertheless developed once the city acquired the land through annexations. Many times, the decisions of city leaders, developers, and industrialists failed to take into account the best interests of residents as the city permitted construction in flood plains, hillsides, and along fault lines. The lack of such considerations led to problems homeowners would have to manage in the future.

Historian Hal Rothman has noted that Americans could develop land while still considering themselves conservationists because “progress and the ethic of conservation were entirely compatible. Space was either sacred or profane, either reserved because of its special value or open to development.”<sup>82</sup> The desire for scenic nature and the eagerness to develop the land accompanied, ironically, the devaluation of agricultural land. The suburban characteristics of the South Bay were marketed to residents seeking natural amenities. Promotional material and advertisements from realtors, the Chamber of Commerce, and developers frequently promoted the Bay Area’s pleasant climate and natural setting. Beginning in the 1950s, land developers began buying up farmland and marketing these places as scenic, suburban areas located away from urban cores. This reflected a shift in thinking about the land—no longer was land thought of for extractive industries. Instead, the land would be tended in order to preserve the Valley’s views. Farms were no longer valued for the production of food, but instead culturally and spatially valued for their aesthetics.

The development of county lands followed a pattern identified by historian Jon Teaford, writing about a different region but whose findings equally apply to Santa Clara Valley. Developers, Teaford argued, took advantage of county land’s lax zoning laws and low property taxes in order to develop suburban areas

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<sup>82</sup>Rothman, *Saving the Planet*, 95.

away from urban centers. Only after the initial phase of development did localities attempt to pass and enforce more strict zoning and planning regulations. In San Jose, county lands followed Teaford's pattern of little governance and rapid growth.<sup>83</sup> Much of the housing developments anchored themselves into unincorporated county land at the outskirts of the city. Such growth made Santa Clara County the fastest growing county in the Bay Area. These unincorporated lands had been owned or leased to orchardists, wheat and nut farmers, and horse and cattle ranchers. Productive farmland became a draw for suburbanites lured to the region's growing high-tech economy.

Advertisements for homes noted the bloom-time beauty of the orchards, the rolling foothills, the pleasant climate, and the countryside character of the South Bay, offering suburbanites the natural beauty they expected with their new homes. Yet often these "countryside" landscapes quickly gave way to more suburban housing developments. It was not uncommon for a new homeowner, enticed by the idea of a countryside home, to suddenly be in the midst of sprawling subdivisions in only a few years.<sup>84</sup>

Suburban homeowners came to expect that the places they moved to not only had low property taxes, provided property ownership as an avenue for upward mobility, and segregated neighborhoods, but a pleasant environment as well.<sup>85</sup> Such views put residents at odds with the concerns of developers and boosters, who tended to privilege the sale of land for profit, taxes, and jobs—the very core of "growth." But home-owning suburbanites approached property differently, expecting that the place they inhabited had access to public parks, open

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<sup>83</sup>Jon Teaford, *Post-Suburbia: Government and Politics in Edge Cities* (Baltimore: John Hopkins University Press, 1997), 7.

<sup>84</sup>Stanford Law Review, *San Jose*, 23-24.

<sup>85</sup>On the issues of social mobility, racialized suburban space, and taxes, see Robert O. Self, *American Babylon: Race and the Struggle for Postwar Oakland* (Princeton: Princeton University Press, 2003), 96–100; Ronald Tobey, Charles Wetherell, and Jay Bringham, "Moving Out and Settling In: Residential Mobility, Home Owning, and the Public Enframing of Citizenship, 1921-1950," *American Historical Review* 95 (December 1990); Nicolaidis, *My Blue Heaven*, 185-237.

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Nestled in a beautiful walnut and cherry orchard—  
and the builder is leaving the trees for your enjoyment.

- 6 DISTINCTIVE MODELS
- 3 OR 4 LARGE BEDROOMS
- BEAMED OR CATHEDRAL CEILINGS
- BRICK FIREPLACE AND PLANTERS
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**HAMILTON MODEL**

\* All Homes Are Architect Designed

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**MARTINO'S**  
21st And East Santa Clara

Be sure to circle this ad so you won't miss these  
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**DIRECTIONS:** Stevens Creek Road (W. San Carlos St.) to Meridian Road. Turn south about 2 miles to Cherry Wood

**SOUTH BAY CONSTRUCTION CO.**

1825 Meridian Road Phone CY4-6517

**Figure 3.12:** An advertisement for homes in San Jose that features a subdivision “nestled in a beautiful walnut and cherry orchard” that the builder is “leaving . . . for your enjoyment.” *San Jose Mercury*, January 18, 1956.

Discover  
 "An Adventure In  
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 Convenience of the City!

Good Living Features Galore:

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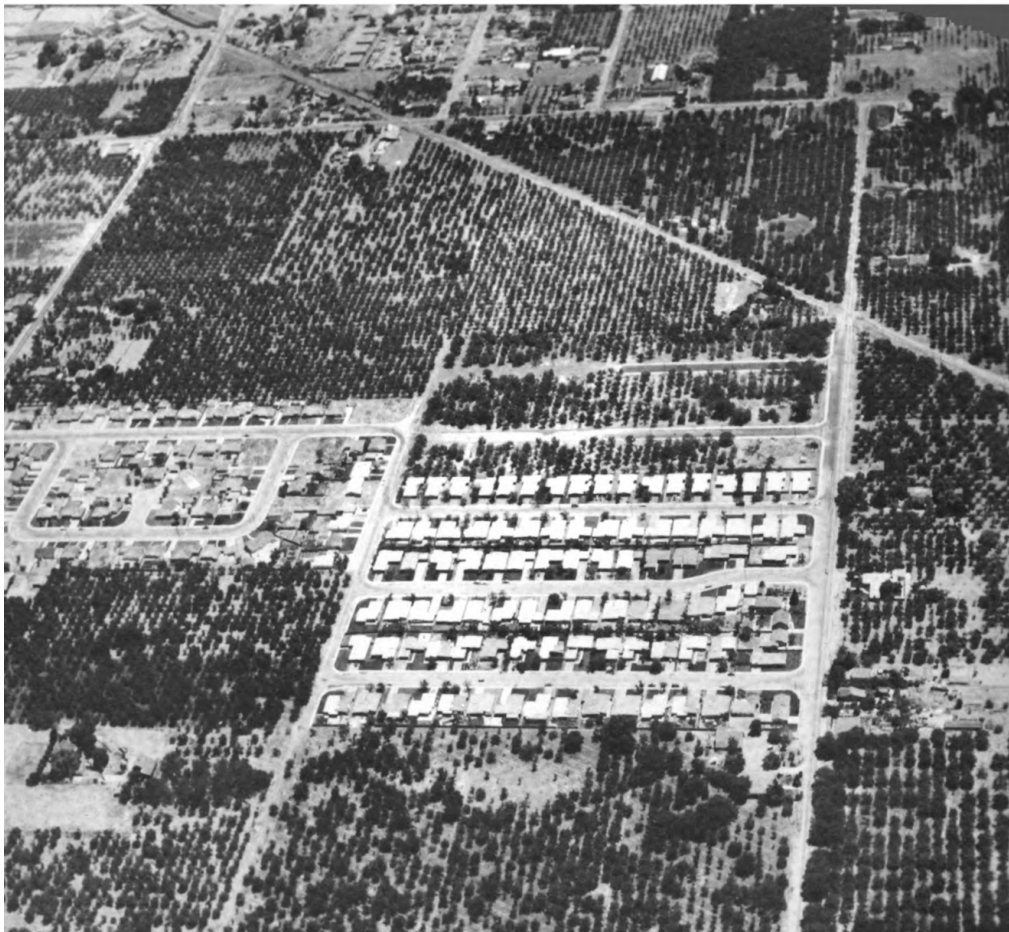
Discover Good Living TODAY!

TO GET THERE drive out Almaden or Union Ave. to Foxworthy. Turn on Foxworthy and proceed to Ross Avenue, then drive South for a few blocks to picturesque ROSS ESTATES.

Model home phone, ANDrews 9-2800

**Figure 3.13:** An advertisement for homes in San Jose boasting of the "calm of the country." *San Jose Mercury*, January 18, 1956.

space, well-kept lawns, and access to recreation. Property, then, was more than just the accumulation (and production) of capital. Property's proximity to nature mattered a great deal to suburbanites, manifesting itself in a sort of "aesthetic capital" that could not be measured by dollar amounts. Suburbs were not just efforts towards organizing space; their very proximity to natural surroundings led suburbanites to define their space in aesthetic terms and take measures to protect their idea of "nature."



**Figure 3.14:** Subdivisions among the orchards. *Planning for Growth: A Report on the Status of City and County Planning in California* (Sacramento: Assembly of the State of California, 1955), 42.

The very location of annexations and subdivisions ignored potential environmental issues, or introduced new problems the city failed to anticipate. The City of San Jose eagerly approved subdivisions in floodplains, hillsides, fault lines,

and wetlands. Such flexible land use gave San Jose city leaders what they wanted, drawing developers to the city rather than its neighbors whose land use policies were more restrictive.<sup>86</sup> Sometimes housing developments occurred on land originally blocked by the county as improper for development, only to be annexed by a city and opened to development.<sup>87</sup> No type of land, it seemed, would be off the table for San Jose civic leaders.

San Jose had to confront more than the politics surrounding land use. They confronted the land itself, which had its own ways of dictating the limits of urban growth. The approval of development in areas prone to flooding provides one example of the environmental limits of growth. The city's poor planning exacerbated flooding problems. As more and more soil was paved over and built upon, the less area remained to absorb excess water.<sup>88</sup> Urban development changed the Valley's drainage system, upsetting centuries of drainage patterns that had created hundreds of small streams and areas for groundwater absorption. Storm runoff and flooding became problems in ways it had previously not been.<sup>89</sup> Furthermore, building in low areas frequently flooded in winter and spring rains, places often sold to lower-income families.<sup>90</sup>

In addition to runoff and drainage issues, communities faced an issue with the earth sinking beneath them, a phenomenon known as subsidence. Subsidence occurred as groundwater stores were depleted and the soil and clay above the aquifer compressed from the weight above. The area had been facing problems of subsidence since the early twentieth century as groundwater levels dropped

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<sup>86</sup>Trounstone, and Christensen, *Movers and Shakers*, 95.

<sup>87</sup>"Proper Storm Drainage Possible, Says Planner," *San Jose Mercury*, January 5, 1956.

<sup>88</sup>Leonard Downie Jr., "A Misplanned Suburb," *Washington Post*, December 30, 1973.

<sup>89</sup>Bill Zanker to Don Edwards, February 11, 1966, Box 72, Folder 3, Don Edwards Congressional Papers, MSS-1995-001, San Jose State University Library Special Collections and Archives.

<sup>90</sup>Downie, "A Misplanned Suburb," *Washington Post*, December 30, 1973. According to Downie, such sales were made primarily to lower-income families and allowed developers "profit risk-free." The homes were guaranteed by FHA loans, which were often leased to black and Hispanic homebuyers.

as much as ninety-five feet from heavy pumping from the county's more than 2,000 wells.<sup>91</sup> Alviso sank six feet in the postwar years through a combination of agricultural groundwater pumping and, later, increased water draws to supply residential subdivisions. By comparison, San Jose's downtown sank fourteen feet before groundwater replenishment efforts finally ended the subsidence in the late 1960s. The combined issues of subsidence and altered drainage patterns dramatically collided in a Christmas 1955 deluge that flooded nearby Sunnyvale and Alviso, requiring the Santa Clara County Flood Control and Water District and the Army Corps of Engineers to begin building a system of levies and dikes to protect the communities.<sup>92</sup> Changes to the drainage channels altered the rivers and creeks of the area as well. The Guadalupe River and Coyote Creek, which whisk water from the southern rim of the Diablo Mountains to the San Francisco Bay, experienced a change in their grade from the subsidence. The sinking land caused the rivers to adjust their angle more sharply downward, causing them to transport more and larger river material than they had previously.<sup>93</sup>

Subsidence unwittingly caused infrastructure problems as well. As aquifer levels fell, farmers had to run their wells deeper and, in turn, use more electrical power and larger pump equipment to bring the water to the surface. Furthermore, the sinking of the ground caused damage to well casings, sewers, water mains, and other underground infrastructure. At the very moment that the city needed its infrastructure the most, the rapid urbanization it was promoting was putting stress on existing facilities.<sup>94</sup>

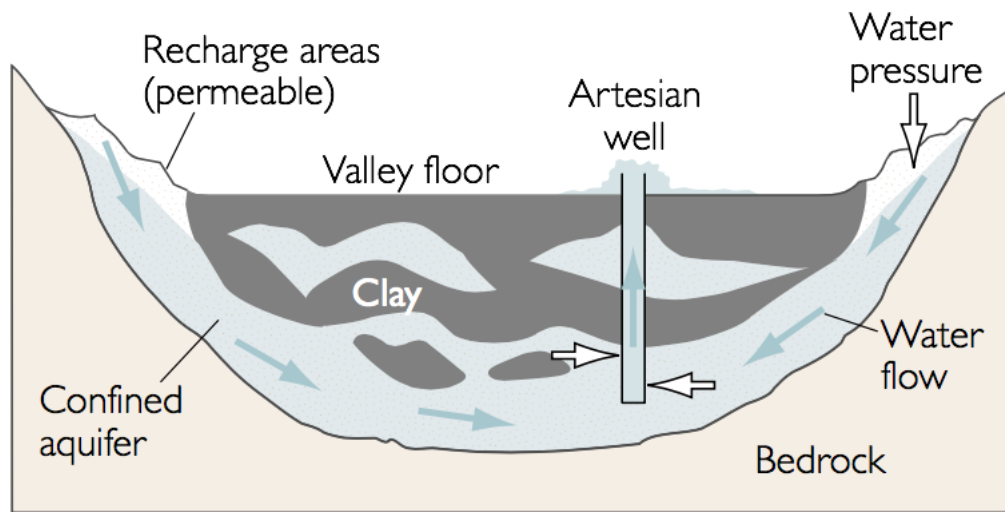
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<sup>91</sup>Scott, *San Francisco Bay Area*, 229-230.

<sup>92</sup>Andrew Trice, *Review of Economic Aspects of the Corps of Engineers' Draft Report on Coyote Creek*, March 22, 1971, Box 84, Folder 140, Don Edwards Congressional Papers, MSS-1995-01, San Jose State University Library Special Collections and Archives; "Proper Storm Drainage Possible, Says Planner," *San Jose Mercury*, January 5, 1956; "Orchardist Orders Dike Builders Off His Land," *San Jose Mercury*, January 5, 1956; "A 'Walled' City of Alviso May Be Answer to Problem," *San Jose Mercury*, January 6, 1956, p. 4.

<sup>93</sup>J. Robert Roll, "Effect of Subsidence on Well Fields," *American Water Works Association* 59 (January 1967): 80-88.

<sup>94</sup>Scott, *San Francisco Bay Area*, 230.



**Figure 3.15:** Illustrating subsidence and recharge, courtesy of the U.S. Geological Survey. Reproduced from S. E. Ingebritsen and David R. Jones, *Santa Clara Valley, California: A Case of Arrested Subsidence* (U.S. Geological Survey, n.d.), 16.

Rapid urbanization also resulted in the disappearance of open spaces and undeveloped land, despite the goals of the agricultural zoning laws. When county planning director Karl Belser issued the county's planning goals in 1956, he urged the "preservation of scenic beauty" and the maintenance of undeveloped land for the purpose of "relief" from the city. The county sought scenic roads projects to limit the "unsightly development" on the land and provide "visual amenity" for the area.<sup>95</sup> Yet by the early 1970s journalist Leonard Downie concluded that all that remained of scenic open space was the "carefully tended and regularly watered greenery along the shoulders of the county's many freeways."<sup>96</sup> Ironically, the countryside amenities that had attracted new people to the region were rapidly giving way to roads, commercial districts, industrial parks, and residential subdivisions.

The dwindling amount of agricultural land, the growth of industrial and

<sup>95</sup>Belser, *Planning Progress* 1956, 12. See also Belser's remarks in *Beauty for America: Proceedings of the White House Conference on Natural Beauty* (Washington, D.C.: Government Printing Office, 1965), 190-295.

<sup>96</sup>Downie, "A Misplanned Suburb," *Washington Post*, December 30, 1973.

residential areas, and the expansion of energy, water and city infrastructure allowed San Jose to exert authority over space beyond its borders. Through this process, a new region took shape largely defined by San Jose's desires to become the Los Angeles of the North. Although the conservation politics of the 1950s attempted to slow San Jose's expansionist drive, the city had already come to dominate and define a new region in the South Bay. But the drive to dominate was not simply a matter of greed, as observers at the time identified. Rather, San Jose's sprawl resulted from a desire to take advantage of nature as an aesthetic experience for new suburban subdivisions.

Anchored by the growing high technology industry, the construction of new homes, interstate highways, and city infrastructure led to unprecedented growth in the Bay Area, transforming the once agriculturally-dominated region of rural communities into a sprawling metropolis that quickly filled the flatlands of the valley. San Jose became the model of urban development. Widespread annexation combined with real estate development, retail services, and high tech industries became drivers of population growth. Simultaneously, the concerns of conservationists and environmentalists over urban growth and the loss of open space was the first salvo in future struggles over the environment. City competition over land use and control would only increase over the next two decades, leading to a growing intensity of environmental critique and more strident demands for open space and growth limits.

IN CALIFORNIA, RAPID GROWTH BROUGHT PROSPERITY TO THE STATE, but by the 1960s Californians were questioning these benefits. Many communities of the Midpeninsula attempted to participate in suburban growth, and those who desired to sustain their suburban lifestyles generated an environmental politics. But those politics failed to live up to alternative forms of growth patterns pursued by

critics. The varieties of suburban development and efforts to participate in that experience defined responses to environmental health and hazards. Often times that experience was rooted in an ideal of the orchard for many middle class families, but more often than not it also predicated itself on the health of communities, especially among Latinos and African Americans whose communities were often separated physically and culturally from the core of city services. Urban growth took various forms in urban and suburban settings, and oftentimes growth ignored communities on the margin of society.

## Chapter 4

### A Place for Nature

We stand today poised on a pinnacle of wealth and power, yet we live in a land of vanishing beauty, of increasing ugliness, of shrinking open space and of an overall environment that is diminished daily by pollution and noise and blight. This, in brief, is the quiet conservation crisis.  
—Stewart Udall, 1965

From the work bays of the light-industry sheds that the speculators were beginning to build in the valley, you could look out and see the raggedy little apricot trees they had never bothered to bulldoze after they bought the land from the farmers.  
—Tom Wolfe, 1983

The breakfast garbage you throw in the Bay, they drink as lunch in San Jose.  
—"Pollution," Tom Lehrer, 1960

Journalist Leonard Downie could scarcely find nature in Santa Clara County. Visiting San Jose in the early 1970s, he concluded that the only remaining open space existed along the "carefully tended and regularly watered greenery along the shoulders of the county's many freeways." The Santa Clara Valley had become defined by the clusters of poorly-built and quickly constructed homes, traffic that had given the air a "mustard-colored haze," and urban space so compact that there existed no "open spaces, parks or even sidewalks." Downie blamed poor planning and greed for the Valley's urban problems, citing a study that found residential density could be maintained near 1973 levels in just thirty square miles instead of 134, saving miles of open space and orchards. Santa Clara County, Downie concluded, had become a "jigsaw puzzle of intertwined suburbs" and the

land “systematically ravaged” by “speculators, developers, other entrepreneurs and homebuyers.”<sup>1</sup> Downie was not alone in questioning the value of urban growth at the expense of disappearing open space. After a decade-long boom that saw Bay Area cities sprawl across the landscape, activists, journalists, homeowners, and critics promoted the protection of open space for recreation, aesthetics, and ecological health. Environmental advocates argued for new restrictions on city growth and the protection of greenbelts, public parks, and wilderness areas. “Already we have filled the San Francisco basin with housing, industry, airfields, and highways, from the tops of the hills to the edge of the water,” wrote Raymond Dasmann, a Berkeley-trained biologist and conservationist. If the process proceeded, Dasmann feared a “gigantic, disorganized metropolis” “engulfing farm and forest, marsh and pasture with no end in sight.”<sup>2</sup>

Anxieties over suburban growth and issues of clean air and water, open space, sprawl, discrimination, and pollution defined environmental politics in the Bay Area. Postwar American environmentalism largely became issues over quality-of-life as new worries about chemicals used in products, pollution of water resources, pesticides, and overrun national parks became key political issues. The publication of bestselling books, including Stewart Udall’s *The Quiet Crisis*, Rachel Carson’s *The Silent Spring*, and Paul Ehrlich’s *The Population Bomb*, made the case for greater regulation of urban growth and pollution. The passage of new legislation embodied attempts to protect land, air, and water, such as the Wilderness Act of 1964, the National Environmental Policy Act of 1970, the creation of the Environmental Protection Agency, the Clean Air Act of 1972, and Endangered Species Act of 1973.<sup>3</sup>

<sup>1</sup>Leonard Downie, Jr., “A Misplanned Suburb,” *Washington Post*, December 30, 1973.

<sup>2</sup>Raymond F. Dasmann, *The Destruction of California* (New York: Macmillan, 1965), 19.

<sup>3</sup>On the emergence of wilderness protection, see James Morton Turner, *The Promise of Wilderness: American Environmental Politics Since 1964* (Seattle: University of Washington Press, 2012); Roderick Nash, *Wilderness and the American Mind* (New Haven: Yale University Press, 1967); Mark Harvey, *Wilderness Forever: Howard Zahniser and the Path to the Wilderness Act* (Seattle: University of

Against this backdrop, rapid growth in western cities encouraged new concerns about their environmental impact, which had the effect of shaping local and regional politics. World War II defense industries, Cold War military and industrial buildup, and tourism and recreation encouraged the growth of western cities, and, while growth brought new prosperity and wealth, it also unsettled westerners who watched rural landscapes vanish under four-lane highways, parking lots, office buildings, and residential developments. By the 1960s, some westerners began pushing back against the tide of change and fueled new antigrowth and environmental politics throughout the region. Comprised mostly of middle-class professionals, suburban liberals and conservatives found common ground over environmental damage, uncontrolled growth, poor planning and development, trampled wilderness, and disappearing open space.

The economic and infrastructural changes wrought by World War II, the militarization of western industry, and the growing recreational and tourism economy led to breakneck metropolitan growth throughout the region between 1940 and 1960. Westerners witnessed what they perceived as environmental damage, giving rise to a cultural and political backlash throughout the region that manifested itself in antigrowth activism and quality-of-life politics. Largely comprised of middle-class professionals, metropolitan growth and environmental and social problems identified by growth and quality-of-life activists lay at the center of their

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Washington Press, 2005); Paul S. Sutter, *Driven Wild: How the Fight Against Automobiles Launched the Modern Wilderness Movement* (Seattle: University of Washington Press, 2002); Liza et al. Nicholas, ed., *Imagining the Big Open: Nature, Identity, and Play in the New West* (Salt Lake City: The University of Utah Press, 2003). The historiography of the environmental movement is vast. See, for example, Samuel P. Hays, *Beauty, Health, and Permanence: Environmental Politics in the United States, 1955-1985* (Cambridge: Cambridge University Press, 1987); Adam Rome, *Bulldozer in the Countryside: Suburban Sprawl and the Rise of American Environmentalism* (New York: Cambridge University Press, 2001); Hal Rothman, *Saving the Planet: The American Response to the Environment in the Twentieth Century* (Chicago: Ivan R. Dee, 2000); Thomas Wellock, *Preserving the Nation: The Conservation and Environmental Movements, 1870-2000* (Wheeling: Harlan Davidson, 2007); Philip Shabecoff, *Earth Rising: American Environmentalism in the 21st Century* (Washington, DC: Island Press, 2000); Victor B. Scheffer, *The Shaping of Environmentalism in America* (Seattle: University of Washington Press, 1991); Robert Gottlieb, *Forcing the Spring: The Transformation of the American Environmental Movement* (Washington, DC: Island Press, 2005).

motivations. The millions of Americans coming to western states like Colorado, Oregon, and California since World War II came to take advantage of these state's air quality, federal public lands, recreation, and economic opportunities. By the 1960s, however, newcomers and old-timers alike believed too many people were moving in and threatening their quality of life.<sup>4</sup>

This chapter traces the chronological contours of urban sprawl debates in Silicon Valley. Debates over open space in Santa Clara Valley roughly followed three branches. One branch emerged among expert urban planners and residential activists, who relied on professionals to form a critique of poor urban planning and the loss of natural landscapes. As Adam Rome has demonstrated, homeowner's sense of environmentalism emerged from professionals and experts.<sup>5</sup> In the process, they pressured politicians to craft new zoning restrictions that required environmental impact studies and strict zoning requirements. A second branch came from anti-growth and no-growth advocates who urged tightened restrictions on the places that cities were allowed to expand. Simultaneously, elite suburbanites were challenged by communities on the margins of the suburbs—Chicanos, African Americans, Asian Americans—who formed a critique of sprawl based not on aesthetics but out of concerns for human health and safety. Together, these activists shared a common language—using terms such as “beauty,” “wilderness,” “ecology”, “health”, “sprawl”—but used that vocabulary to defend

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<sup>4</sup>On quality-of-life politics, see Carl Abbott, *How Cities Won the West: Four Centuries of Urban Change in Western North America* (Albuquerque: University of New Mexico Press, 2008), 205; Elizabeth Carney, “Suburbanizing Nature and Naturalizing Suburbanites: Outdoor-Living Culture and Landscapes of Growth,” *Western Historical Quarterly* 38, no. 4 (winter 2007): 477–500, 480–481; Amy Scott, “Remaking Urban in the American West: Urban Environmentalism, Lifestyle Politics, and Hip Capitalism in Boulder, Colorado,” in *The Political Culture of the New West*, ed. by Jeff Roche, (Lawrence: University Press of Kansas, 2008), 253–255, 253–255; Michael W. Childers, *Colorado Powder Keg: Ski Resorts and the Environmental Movement* (Lawrence: University Press of Kansas, 2012), 71–73.

<sup>5</sup>See Rome,, *Bulldozer in the Countryside*. Christopher Sellers argues that Rome overlooks a genuine environmentalism emerging from the suburbs. Christopher C. Sellers, *Crabgrass Crucible: Suburban Nature and the Rise of Environmentalism in Twentieth-Century America* (Chapel Hill: University of North Carolina Press, 2012).

and define different goals. Environmental advocates revealed a clash between competing political ideas and urban priorities, placing ecology and its relationship to cities at the center of the conflict. Environmental activists influenced urban planning, arguing that prevailing trends in land use, density, and urban design harmed sustainability and the economic viability of their communities.

IN 1960, A SHORT BUT INTENSE FIGHT over the proposed industrial development of the Stanford foothills to the southeast of the main campus marked the beginning of a cultural and political shift in the Bay Area. Stanford announced in January plans to expand foothills development southward from the existing Industrial Park. In particular, Stanford received interest from the Ampex Corporation, a manufacturer of high-end sound recording and broadcasting electronics, to build a new research facility in the foothills. Surrounding neighborhoods, however, fiercely opposed the development on Stanford's property eventually leading to a referendum campaign. Stanford President Wallace Sterling referred to the year-long contest as "the Battle of the Hills."<sup>6</sup>



**Figure 4.1:** Comparing the urban development of the area near the Ampex foothills proposal.

<sup>6</sup>Letter from Wallace Sterling to John Francis Neylan, April 11, 1960, Folder 8, Box A29, SC 216, Stanford University Archives. Margaret O'Mara provides an excellent overview of the Battle of the Hills in *Cities of Knowledge*, 132-139.

Roughly six-hundred acres of undeveloped university land lay between Junipero Serra, West Fremont, Arastradero, and Page Mill roads. Originally zoned for residential development, Stanford administrators submitted an annexation proposal to the City of Palo Alto, who would then have the authority to rezone the land for light industry. Electronics manufacturers had already sought out the area as prime real estate for establishing research facilities, taking advantage of nearby residential neighborhoods for employees to live, proximity to researchers at Stanford and the Industrial Park, city infrastructure, and a favorable tax climate. In January 1960, Ampex and General Telephone and Electronics Laboratories Corporation (GT&E) announced plans to build and expand their operations in the Stanford foothills both north and south along Page Mill Road, in part to take advantage of the proposed route of the new Junipero Serra Freeway.<sup>7</sup> Additional development plans were laid out for a new shopping center and luxury homes in the Palo Alto–Los Altos Hills foothills.<sup>8</sup> In May 1960, the Palo Alto City Council approved the rezoning in a 9 to 4 vote.<sup>9</sup>

Residents had few objections for the proposed residential and shopping center developments in the foothills. Industrialization, however, was unacceptable. Ampex's proposed eighty-acre development location ran up against resistance from neighboring communities, fueling quality-of-life and environmental politics in surrounding neighborhoods. The proposed site ran along the Los Altos Hills city line and raised concerns among property owners and Los Altos Hills city officials who feared the loss of scenic beauty and the residential ambience of the area.<sup>10</sup> Furthermore, residents were growing suspicious of Stanford's role

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<sup>7</sup>"Ampex plant just first in Stanford plan," *Palo Alto Times*, January 14, 1960, 2; "Electronics research plant planned for foothills area," *Palo Alto Times*, January 28, 1960, 1; letter from Wallace Sterling to Gordon Johnson, March 16, 1960, FF8, Box A29, SC 216, Stanford University Archives.

<sup>8</sup>"103-acre foothill plan told," *Palo Alto Times*, January 29, 1960, 1-2.

<sup>9</sup>Letter from Thomas Hunt to Alumni, May 9, 1960, 2, Folder 8, Box A29, SC 216, Stanford University Archives.

<sup>10</sup>"Decision now will determine future," *Palo Alto Times*, February 11, 1960, 16.

as a land developer and apparent disregard for planning. One resident summed up the issue saying, “there has been growing concern over Stanford’s policy of presenting pre-packaged zoning requests. . . . They resemble closely the tactics of many a Land Developer asking for variances from planned uses.”<sup>11</sup> Another resident wrote the Stanford Board of Trustees urging the foothills to remain closed to industrial development: “The Peninsula is already too crowded – therefore, new industry should not locate here.”<sup>12</sup> Palo Alto resident Richard Bell in a letter to Stanford President Wallace Sterling lamented the “program of land exploitation pursued by the school during the past ten years” which has “succeeded . . . in eliminating much of the natural beauty and attraction . . . [that] contributed so much toward making Stanford the top school in the west.”<sup>13</sup> The goals of Stanford’s development plans were unclear to residents which, from their perspective, seemed to indicate the university was planning to overrun the natural beauty of the area.<sup>14</sup>

Complaints of potential industrialization of the foothills reflected not only arguments about the area’s beauty, but also noise and air pollution that accompanied development. The sounds of hammers driving nails into two-by-fours were only part of a chorus of common sounds experienced by suburbanites. The whirring and grinding of manufacturing equipment, the clattering of dump trucks, the drone of automobile traffic, the belching of bulldozers—these became common sounds of the growing city. Concerned that such realities would become even more common in Palo Alto, critics spoke up in newspaper editorials and letters. In a letter to the *Palo Alto Times*, Morgan Stedman, a member of the Santa

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<sup>11</sup>Morgan Stedman, text of prepared meeting with Sterling, March 14, 1960, FF11, Box A29, SC 216, Stanford University Archives. Quoted in ???Mara, *Cities of Knowledge*, 136.

<sup>12</sup>Letter from Mrs. H. Wilson to Stanford Trustees, March 4, 1960, FF8, Box A29, SC 216, Stanford University Archives.

<sup>13</sup>Letter from Richard Bell to Wallace Sterling, August 2, 1960, FF8, Box A29, SC 216, Stanford University Archives.

<sup>14</sup>Letter from Thomas Hunt to Wallace Sterling, May 14, 1960, Folder 8, Box A29, SC 216, Stanford University Archives.

Clara County Planning Commission, argued that new foothills industrialization would increase traffic flow through neighborhoods, thus increasing smog, noise, and danger, large-scale cutting and filling of land would be required to support new buildings, parking lots, and roads, the loss of rainwater through runoff, and “irreparable damage to natural beauty.”<sup>15</sup>

The spatial arrangements of cities and zoning shaped how residents responded to the proposed industrialization. The foothills area was originally zoned for residential or agricultural use and excluded the establishment of industrial and commercial developments. Furthermore, the community of Los Altos Hills incorporated as a residential-only city. But encroachments of industry into these areas raised concerns about the potential environmental damage that industrialization would bring to surrounding communities. Stanford claimed that the industrialization would result in clean and well-kept facilities, reassuring residents that the smoke pollution of the Midwest and East would never be present in Santa Clara Valley.<sup>16</sup> However, a greater concern for local residents revolved around the issue of smog and traffic. In a letter to Wallace Sterling, one resident summed up the attitude of many of the area’s environmental critics:

We now have smog, congestion, and acres of asphalt where we once had fresh air and freedom of movement in a beautiful countryside – in one of the finest climates on earth! The responsibility for developing such a unique area should be in the hands of the most intelligent and PERCEPTIVE people available! There seems to be little concern about total environment. . . . The area sorely needs parks, golf courses, and low density housing. We need cultural and recreational centers for all age levels. A University such as Stanford could well promote an interest in fields that enrich life. Industrial and commercial interests are far from being neglected but the humanities certainly are!<sup>17</sup>

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<sup>15</sup>Newspaper clipping, “Area planning seen as needed,” *Palo Alto Times*, March 12, 1960, from FF8, Box A29, SC 216, Stanford University Archives.

<sup>16</sup>Transcript of interview with Alf Brandin by Bob DeRoos, Regional Oral History Office, The Bancroft Library, University of California-Berkeley, n.d., 42.

<sup>17</sup>Letter from Gordon Johnson to Wallace Sterling, March 6, 1960, FF8, Box A29, SC 216, Stanford University Archives.

Heavy commuter traffic, smog, concerns about the loss of the foothills pastoral beauty, and Stanford's seemingly smug handling of community relations resulted in new political energy that would spread through the community and alumni networks.<sup>18</sup> In the wake of such concerns and criticisms, ad hoc community and environmental coalitions formed, led by the Citizens Committee on Regional Planning (CCRP). The organization, under the initial leadership of Robert Mahan, an insurance executive from Palo Alto, organized a letter writing campaign to voice their opposition to the foothills proposal. A few weeks before the group officially named itself, some of the founding members ran an insert in the *Palo Alto Times* that urged readers to clip from the paper and mail to the Stanford Board of Trustees to illustrate grassroots opposition to industrialization.<sup>19</sup> Within two days of publishing the letter, the Stanford Board of Trustees had received 250 letters voicing opposition to the plan, many of which were clipped from CCRP's *Palo Alto Times* insert.<sup>20</sup>

Resistance from residents targeted the city council as well. The Palo Alto Residents Association (PARA) called for "a vigorous campaign" against the Palo Alto City Council's plans to allow industrial development in the foothills.<sup>21</sup> Peter Hughes, an officer of PARA, charged that developing the foothills would destroy the landscape. Calculating that the Ampex site would cover thirty acres of parking lot and another twelve acres for buildings, Hughes challenged that "if anyone can lay down that amount of building without changing the contour of the land he is

<sup>18</sup>???Mara, *Cities of Knowledge*, 135; letter from Jerrold and Sara Hunt to Wallace Sterling, May 14, 1960, 1, Folder 8, Box A29, SC 216, Stanford University Archives.

<sup>19</sup>"Anti-foothill industry drive launched here," *Palo Alto Times*, March 8, 1960, 2; "Industry opponents organize, name head," *Palo Alto Times*, March 11, 1960, 1.

<sup>20</sup>"Industry opponents organize," *Palo Alto Times*, March 11, 1960, 1; "13 residents protest foothill zoning change," *Palo Alto Times*, March 4, 1960, 17.

<sup>21</sup>"Residents oppose industry," *Palo Alto Times*, March 10, 1960, 1. Residents also pointed to a potential conflict of interest relationship between Palo Alto Mayor Noel Porter and David Packard. Porter was serving as vice president of Hewlett-Packard at the time. See "Industry opponents organize, name head," *Palo Alto Times*, March 11, 1960.

an engineer the like of which I have never seen.”<sup>22</sup> Other residents charged that industrialization of the foothills would inevitably result in the ruin of a pastoral landscape, no matter how much planning went in to the design of industrial areas.<sup>23</sup> Los Altos Hills resident Thomas Hunt put it more bluntly: “The foothills can be kept green and will be kept green, IF WE ARE DETERMINED TO KEEP THEM SO!”<sup>24</sup>

The neighboring community of Los Altos Hills also expressed their disapproval of the plans. Residents, irate that their residential-only incorporation would be blemished by industrialized foothills, expressed their displeasure through letters and newspaper editorials. Mayor John Fowle and the city council rebuffed Stanford in a letter to Alf Brandin, accusing Stanford of “jeopardizing existing zoning and land development” and charged that the university’s plans were never “subject to public scrutiny.” Furthermore, contrary to Stanford’s claims that it was working with surrounding communities, Los Altos Hills claimed it was caught unaware of the university’s plans.<sup>25</sup> Sterling responded to one such letter claiming that “Stanford has made a conscientious effort to keep the communities surrounding the campus informed of our plans, an effort which could easily be documented.”<sup>26</sup> Letters continued to pour into Stanford and the *Palo Alto Times*. President Sterling received around 400 letters in opposition to the plan and around fifty in support over the course of four months.<sup>27</sup> The editorial pages of the *Palo Alto Times* also became a key outlet for residents to voice their frustrations

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<sup>22</sup>“Residents oppose industry,” *Palo Alto Times*, March 10, 1960, 1.

<sup>23</sup>Letter from Gordon Johnson to Wallace Sterling, March 6, 1960, 1-2, Folder 8, Box A29, SC 216, Stanford University Archives; letter from Jerrold and Sara Hunt to Wallace Sterling, May 14, 1960, 1-2, Folder 8, Box A29, SC 216, Stanford University Archives.

<sup>24</sup>Letter from Thomas Hunt to Alumni, May 9, 1960, 2, Folder 8, Box A29, SC 216, Stanford University Archives.

<sup>25</sup>“Stanford foothills plans hit by Hills,” *Palo Alto Times*, February 10, 1960.

<sup>26</sup>“Sterling Answers Alumni,” *Palo Alto Times*, February 24, 1960, Folder 11, Box A29, SC 216, Stanford University Archives.

<sup>27</sup>Margaret Pugh O’Mara, *Cities of Knowledge: Cold War Science and the Search for the Next Silicon Valley* (Princeton: Princeton University Press, 2005) , 134.

and concerns.



**Figure 4.2:** Criticizing Stanford's plans for the foothills. Depicted on the Mount Rushmore illustration, from left to right, are David Packard, Wallace Sterling, Herbert Hoover, and Dolores Weaver. Folder 11, Box A29, SC 216, Stanford University Archives

For its part, Stanford pushed back by arguing that it needed to develop the lands in order to generate income for the University. Thomas Ford, staff council for the university, claimed that he desired to see the land remain undeveloped but "the university's need for funds makes that impossible."<sup>28</sup> Stanford had good reason to pursue this line of argument. The university had indeed fallen on financial hard times, and its endowment was far below its peer institutions.<sup>29</sup>

Stanford also continued their refrain that the development of the foothills

<sup>28</sup>"Foothills industry can be beautiful," *Palo Alto Times*, March 2, 1960.

<sup>29</sup>Rebecca S Lowen, *Creating the Cold War University: The Transformation of Stanford* (Berkeley: University of California Press, 1997), 130.

would not become industrial blight, but rather, in the words of Thomas Ford, would “be a thing of beauty” due to the University’s enforcement of strict design regulations.<sup>30</sup> Furthermore, Stanford positioned itself as a reluctant land developer only in the business of supporting education and research. Alf Brandin took to the pages of the *Palo Alto Times* to argue that the university was not “in the land development business per se” but that the university was “doing everything we possibly can to produce income [to support education].”<sup>31</sup> “People should feel thankful Stanford owns the land and not someone else,” Brandin chided. “We try to look at the problems politically, sociologically, aesthetically, and economically.”<sup>32</sup> Stanford urged residents to realize the role the university had played in preserving open space, the role residents played in causing traffic congestion, and Stanford’s road construction efforts. Without Stanford, the university seemed to argue, none of these improvements would exist.<sup>33</sup>

When letter and editorial campaigns failed to initiate the planning that critics wanted to see, they turned to the next available civic tool: the referendum. In June a petition campaign initiated by opponents of foothills industrialization circulated through Palo Alto. The petition called on the city council to either rescind its decision to rezone the land for light industry or to allow residents a vote on the issue. Four days before the rezoning ordinance was to become official, the referendum petition was filed to the City of Palo Alto having collected over two thousand signatures above the necessary 1,000 that was needed. The Stanford lands were now in the hands of the voters. Placed on the ballot for the November elections, a “yes” vote would allow for Stanford to carry forward with its expansion of the

<sup>30</sup>“Foothill industry can be beautiful,” *Palo Alto Times*, March 2, 1960.

<sup>31</sup>“Undeveloped acres prime resource,” *Palo Alto Times*, March 4, 1960.

<sup>32</sup>“Stanford wouldn’t do anything detrimental,” *Palo Alto Times*, March 4, 1960.

<sup>33</sup>“Foothills industry can be beautiful,” *Palo Alto Times*, March 2, 1960; “Stanford wouldn’t do anything detrimental,” *Palo Alto Times*, March 4, 1960; Letter from Gordon Johnson to Wallace Sterling, March 6, 1960, FF8, Box A29, SC 216, Stanford University Archives.

Industrial Park and pave the way for Ampex's research facility.<sup>34</sup>

As referendum supporters spent the month of June collecting signatures, additional pressure to alter land development policies came from Stanford alumni. In June, a group calling themselves the Bay Area Stanford Alumni printed an insert in the *Stanford Review*, the alumni news organ of the University, accusing Stanford of ignoring land development policies implemented by the Board of Trustees in 1958. The petition called on Stanford to find alternatives for earning money other than "defacing the beauty of the green and summertimes golden hills" and called on the university to consult with the master plans of surrounding communities before making plans to rezone nearby areas.<sup>35</sup>

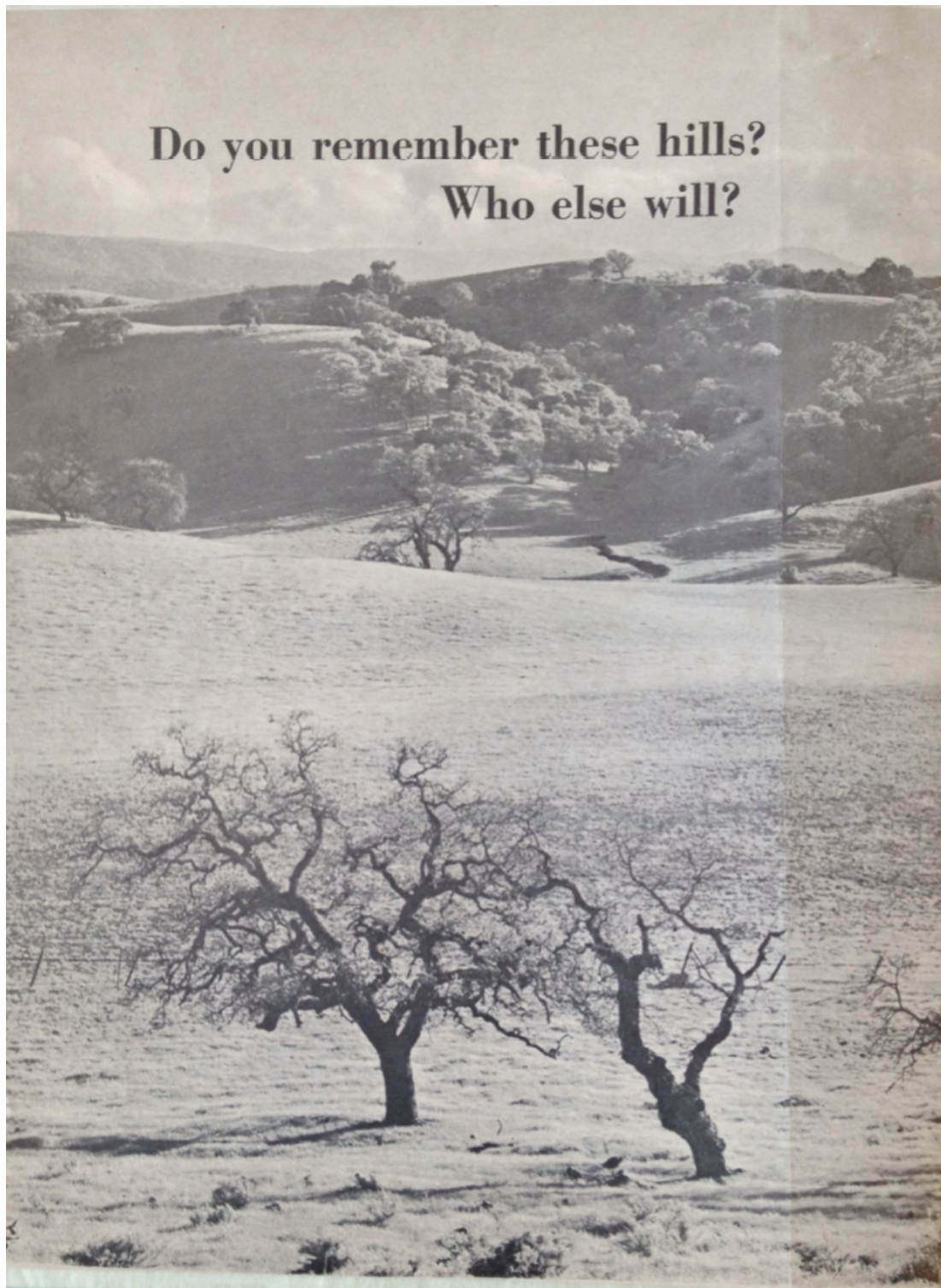
The *Review* was quick to distance itself from the Bay Area Stanford Alumni. In the issue in which the insert ran, Kemper Freeman, president of the Stanford Alumni Association, noted that the official alumni organization "emphatically disagrees with the views and impressions" of the insert. The *Review* ran the insert, Freeman argued, because the periodical "stands for freedom of expression," but "reject[ed] their assumptions, criticisms, and conclusions."<sup>36</sup> Freeman placed distance between the alumni association and the Bay Area group, noting that the group's members accounted for "less than half of one per cent of the total" number of Stanford alumni living in the Bay Area. Kemper's letter responded to the insert's criticism point by point, arguing that the Stanford lands were "never intended to be a wilderness" and concluded that the development of lands not

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<sup>34</sup>Details about the petition's criticisms and intent can be found in a letter from Morgan Stedman to Wallace Sterling, June 20, 1960, FF 8, Box A29, SC 216, Stanford University Archives. In an explanatory sheet given to solicitors and signers of the petition, the referendum called for better planning of residential, industrial, and commercial areas and specifically criticized the sudden zoning change to light manufacturing, housing and traffic pressures that new industrialization would add to the area, the leveling of hills to accommodate new construction, and pointed to undeveloped lots already zoned for industry as alternatives to foothills development. Letter from Stedman to Sterling, June 20, 1960, FF 8, Box A29, SC 216, Stanford University Archives.

<sup>35</sup>"A Message from Bay Area Stanford Alumni to President Sterling and the Board of Trustees," 1960, FF 8, Box A29, SC 216, Stanford University Archives, p 2-3.

<sup>36</sup>Kemper Freeman to Stanford Alumnus, *Stanford Review*, June-July 1960, Folder 8, Box A29, SC 216, Wallace Sterling Papers, Stanford University Archives, 1.



**Figure 4.3:** A section of the Bay Area Stanford Alumni insert in the *Stanford Review*, 1960. Source: Folder 8, Box A29, SC 216, Stanford University Archives.

“needed for academic purposes is overdue.” Furthermore, the insert gave “no hint” that Stanford was “preserving 4,800 of its 8,800 acres for academic purposes or that this reserve includes the greater part of the ‘rolling hills.’ Nor does it reveal that for every two acres of its land which Stanford has leased in the past decade, one acre has been condemned for use by some governmental unit or agency.” The claims of the Bay Area Alumni, Freeman concluded, were misleading and without merit.

As the referendum campaign dragged on through the summer, editorials to the *Palo Alto Times* attempted to flip complaints about the loss of the foothills upside-down, using the critic’s nostalgia of the environment as an argument in Stanford’s favor.<sup>37</sup> One such editorial in the *Palo Alto Times* expressed “gratitude” to Stanford for “so generously permitting thousands of people to freely enjoy the rolling, tree-studded hills, the lakes, and views of the campus.”<sup>38</sup> The *Times* itself continued its enthusiasm for Stanford’s land development plans, writing that the community owed Stanford a debt for keeping the area’s lands free of intrusive industry. The *Times* argued that Stanford’s large landholdings “constituted a free park” for Palo Alto and surrounding communities. Had these lands fallen into the hands of private owners, they “long ago would have been converted to the houses, business places and industries where so many of us live and work.”<sup>39</sup> One editorial writer to the *Times* admonished the former “solid supporters of free enterprise” who were now staging “violent public quarrels about what they’re going to do with someone else’s property” that “the land isn’t theirs” and Stanford should do what it needed to do.<sup>40</sup> Stanford itself was quick to remind critics of the efforts the university had put towards city development. As Sterling reminded

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<sup>37</sup>???Mara, *Cities of Knowledge*, 137.

<sup>38</sup>Esther B. Clark, M.D., Letter to the Editor, *Palo Alto Times*, March 28, 1960, FF 11, Box A29, SC 216, Stanford University Archives.

<sup>39</sup>Editorial, *Palo Alto Times*, November 1960, Stanford Lands Scrapbook V, 1960-61, Subject File 1300/9, Stanford University Archives.

<sup>40</sup>Editorial by Daniel S. Endsley, *Palo Alto Times*, November 1, 1960.

one critic, overseeing the vast domain of land on the Peninsula meant “the hills are not likely to be overrun by any commercial developments in your lifetime or mine.”<sup>41</sup> In other cases, university officials were willing to dismiss them entirely. Donald Carlson referred to critics as “malcontents in the community” and complained in another letter that industrialization would only affect “one little foothill,” dismissing their concerns as something trivial.<sup>42</sup>

In November, the referendum was defeated in a close vote. The University’s arguments and own grassroots campaign helped to turn the referendum in their favor and allowed for the expansion of the Industrial Park. On the one hand, the campaign against the Ampex development could be considered a victory. The company, after the year-long, drawn-out political process, decided to build its research facility elsewhere. However, the new zoning of the foothills opened a new area for new light industry to join the Stanford Industrial Park.<sup>43</sup>

Stanford administrators never understood why residents were upset about Stanford’s development plans. Alf Brandin recalled that Stanford had an issue with semantics, arguing that “we tried to say it has got to be clean, no smoke, no heavy manufacturing. Light manufacturing that is clean and electronic.”<sup>44</sup> Stanford took this to heart, renaming the *Industrial* Park to *Stanford Research* Park shortly after the Battle of the Hills in order to avoid industrialization’s association

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<sup>41</sup>“Letter from Wallace Sterling to Gordon Johnson,” March 6, 1960, FF8, Box A29, SC 216, Stanford University Archives. Editorials to the *Palo Alto Times* made the same claims. See, for example, the editorial by Louise Brisebat, *Palo Alto Times*, November 4, 1960.

<sup>42</sup>Letter from Donald Carlson to Ben Allen, May 12, 1960, FF 8, Box A29, SC 216, Stanford University Archives; “Groups Clash over Use of Stanford Land,” *San Francisco Examiner*, March 18, 1960.

<sup>43</sup>Stanford learned lessons about community engagement through the “Battle of the Hills.” An example of this came a year later when a proposal for the expansion of Oregon Expressway, which cut through a highly desirable residential community, met resistance of area residents. But a community organization calling itself the Traffic Action Committee emerged to support the expansion. The pro-expressway movement arose from grassroots, but appears to have also been supported (if not encouraged) by Stanford administrators. See ???Mara, *Cities of Knowledge*, 137-138; letter from Donald Carlson to Frederic Glover, September 20, 1961, Box A22, Stanford University Archives.

<sup>44</sup>Brandin interview, 42.

with the area. But Stanford's belief that the issue revolved around semantics—that the word "industry" in Stanford Industrial Park was confusing residents—reveals that Stanford had no understanding of citizen's real concerns. Citizens rightfully argued that industrialization—light manufacturing or otherwise—was going to have an enormous impact on the environment. Stanford's frequent claims of "clean" industry often turned out to be false. Stanford could control complaints about light and noise pollution to a degree, but other pollutants—radiation, smog, and toxic solvents—would remain harder to regulate, sometimes invisible, and have great repercussions. One resident noted in the heat of the Battle of the Hills debate that a Lockheed plant near his home resulted in a "federal agency [that] has been checking the shrubs in our back yard for radioactivity."<sup>45</sup> No amount of planning, architectural prowess, and superb landscaping could get around the visible and invisible pollution resulting from high technology manufacturing and urban sprawl.

THE GRASSROOTS ACTIVISTS SPENT THE 1960S BUILDING NETWORKS in order to support a growing citizens' movement to protect the foothills. The controversies over Stanford Industrial Park and Stanford's economic development plans spurred the emergence of grassroots environmental activism. In the wake of Stanford's victory, residents of the area, increasingly concerned that Stanford might overrun the foothills and irritated by the university's seemingly dismissive attitude towards citizen's concerns and favoritism towards industry, continued to pressure the university. Among the most prominent and long-lasting groups to emerge was the Committee for Green Foothills. Formed in the living room of Ruth Spangenberg in 1962, the Committee included Stanford alumni and area professionals, including the well-known writer and Stanford creative writing professor Wallace

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<sup>45</sup>"Pros and Cons of Foothill Industry Zone Debated," *Palo Alto Times*, April 21, 1960, 13.

Stegner and former Santa Clara County planner Morgan Stedman.<sup>46</sup> The Committee was founded, Wallace Stegner explained, because “of things that seemed to be happening in the hills that we didn’t like to see happen” and motivated by a “fear of what Stanford might do in the hills.”<sup>47</sup> The impulse to protect land that emerged in the Battle of the Hills continued throughout the rest of the decade as Stanford pursued land development initiatives on the Peninsula.



**Figure 4.4:** Board Members, Committee for Green Foothills. Front row, from left: Pat Barentine, George Norton, Ruth Spangenberg, Lois Crozier-Hogle, Kent Dedrick, and Tom Jordan; back row: Kirke Comstock, Claire Dedrick, Larry Dawson, Marry Moffat, Mary Gordon, Paul Smith, Eleanor Boushey, Norman KcKee, Kathryn Stedman, and Morgan Stedman. Photo by Lowell Johnson. From Walker, *Country in the City*.

The organization was not anti-growth per se, and thus distinct from the no-growth activists that would come in the 1970s. Rather, the organization and

<sup>46</sup>Stegner oral history, Bancroft, 8; Richard Walker, *The Country in the City: The Greening of the San Francisco Bay Area* (Seattle: University of Washington Press, 2007), 101.

<sup>47</sup>Stegner oral history, Bancroft, p 7-8.

its members feared that city leaders and the university were not giving enough attention to the potential problems of industrial growth. Members of the Committee would still argue that Stanford played an important and positive role in their communities. But they also recognized the immense influence the university would have on the landscape around them. The Battle of the Hills and the rising criticism of urban growth would be only the first conflict for the burgeoning environmental coalitions in the Bay Area.

Some of the original members of the Committee for Green Foothills had earned reputations as conservationists before CGF's establishment. Wallace Stegner had risen to prominence as a conservationist in the late 1950s. His famous "Wilderness Letter" published in 1960 established Stegner as a bona fide defender of the environment.<sup>48</sup> Several additional members of the Committee for Green Foothills had either been long-time conservationists or would get their first exposure to environmental activism with the Committee. Morgan Stedman, an architect who had served on the Palo Alto Planning Commission and the Santa Clara County Planning Commission, became a vocal critic of poor urban planning throughout Santa Clara County. Many other members later devoted themselves to various conservation and environmental protection campaigns throughout the Bay Area. Barbara Eastman, for example, served as a key organizer of the Save Our Seashore organization, founded in 1969 to expand the protection of Point Reyes from logging and freeway construction along the western edge of Marin County.<sup>49</sup> Lois Hogle, Ruth Spangenberg, Morgan and Katy Stedman, and Gary Girard would go on to lead several environmental campaigns throughout the Peninsula, and in some cases find themselves in civic leadership positions

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<sup>48</sup>Wallace Stegner, "Wilderness Idea," in *The Sound of Mountain Water* (1969); originally written to the Outdoor Recreation Resources Review Commission in 1960 to support legislation that would designate wilderness areas in the United States.

<sup>49</sup>Walker,, *The Country in the City*, 91.

in their communities.<sup>50</sup> The Committee counted among their powerful allies Bill and Mel Lane, owners of *Sunset* Magazine; Dorothy Varian, wife of Varian Associates founder Russell Varian and member of the Conservation Associates; and Tom Ford, a real estate developer in the Bay Area.<sup>51</sup>

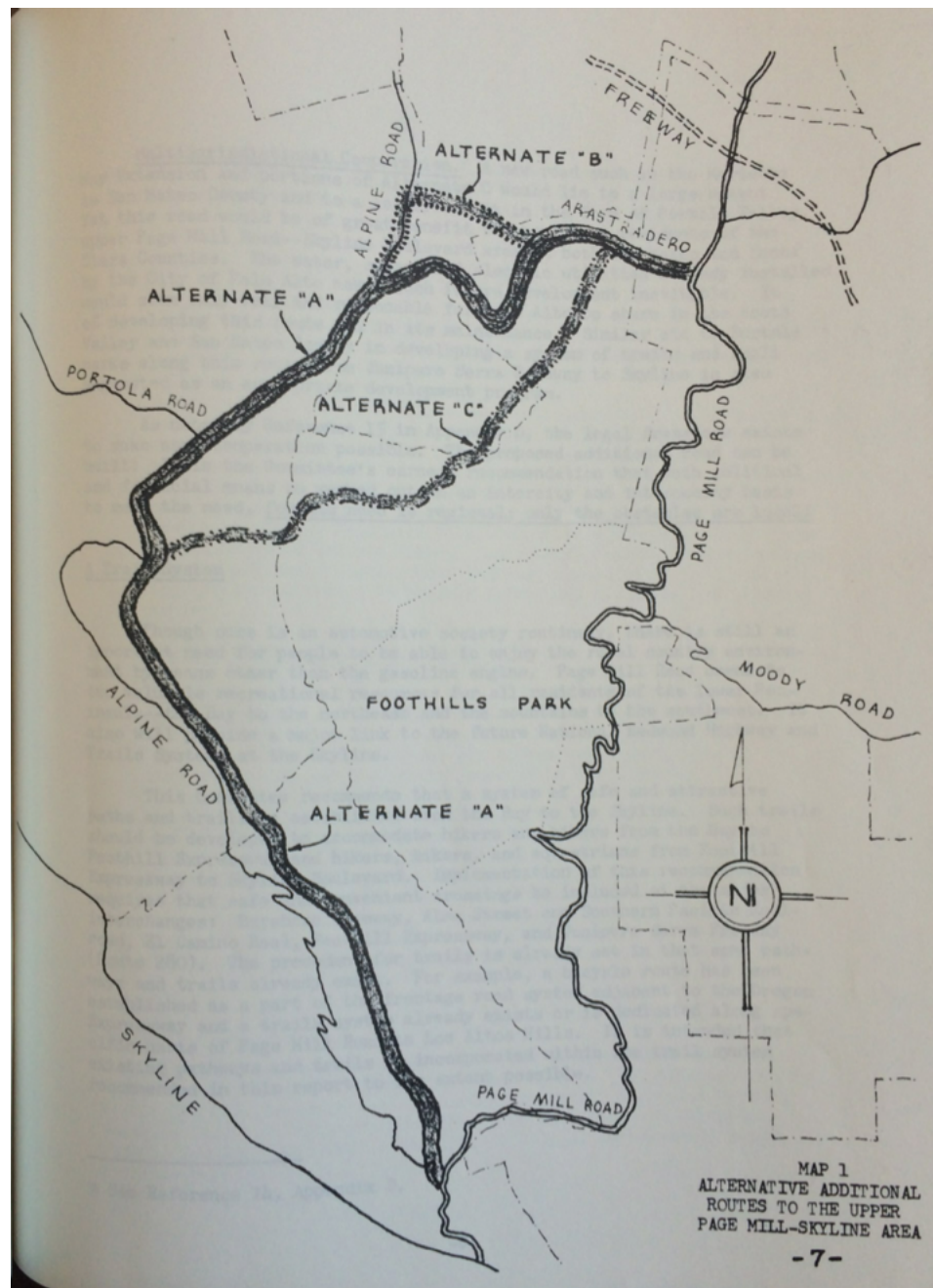
The Committee's first major test came in 1965 when plans were announced to straighten and widen Page Mill Road, a historic roadway running northeast-to-southwest from downtown Palo Alto into the Santa Cruz foothills. Page Mill had become a major thoroughfare for commuter traffic going into and coming out of Stanford Industrial Park. But by the mid-1960s, city planners and the university determined that the winding and narrow road was inadequate for the increased traffic flow. The City of Palo Alto announced plans to widen and straighten the road in late 1964. In response, the Committee for Green Foothills formed a subcommittee called the Page Mill Road Coordinating Committee (PMRCC). The proposed changes to Page Mill, the Committee for Green Foothills argued, would mean deep cuts into the hillsides, the pouring of a cement canal to replace Matadero Creek that ran along the road, the removal of nearly a thousand trees, and potentially threatened Frenchman's Tower, a local historic landmark at the base of the hills.<sup>52</sup>

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<sup>50</sup>Transcript of interview of Wallace Stegner by Ann Lage. Regional Oral History Office, The Bancroft Library, University of California-Berkeley, 1982, 10.

<sup>51</sup>Walker,, *The Country in the City*, 101-103.

<sup>52</sup>Stegner interview, 9; letter from the Committee for Green Foothills to Friends of the Foothills, May 20, 1964, Folder 1, Box 1, Page Mill Road Coordinating Committee Records, M0970, Stanford University Archives, 1; letter from Wallace Stegner to Martin Spangler, July 28, 1964, Folder 1, Box 1, Page Mill Road Coordinating Committee Records, M0970, Stanford University Archives, 1. Page Mill Road dates to the late nineteenth century and was used by William Page, who operated a lumber mill along Mill Creek. "Page's Mill Road" was a main avenue for horse teams to haul lumber into Palo Alto for shipping and construction. Peter Coutts, a French land developer who purchased land along the road in 1876, constructed Frenchman's Tower for the storage of water. Leland Stanford bought Frenchman's Tower and the surrounding land in 1882. See Ralph Hansen to Alf Brandin and Lois Hogle, August 11, 1964, Folder 9, Box 1, Page Mill Road Coordinating Committee Records, M0970, Stanford University Archives, 1-3. See also "Historical Notes of Interest Surrounding Page Mill Road and Environs," Ralph Hansen, Palo Alto City Historian, n.d., Folder 9, Box 1, Page Mill Road Coordinating Committee Records, M0970, Stanford University Archives.



**Figure 4.5:** Alternative Routes for Page Mill Road. "A Study of Page Mill Road," Page Mill Road Coordinating Committee, Folder 12, Box 1, Page Mill Road Coordinating Committee Records, Stanford University Archives, 7.

Unlike the Battle of the Hills where *aesthetics* and *conservation* defined the political response, the convergence of *recreation* and *conservation* formed the crux of criticism charged at the proposed changes to Page Mill Road. The protection of the environment around Page Mill became their central concern, largely revolving around recreational access. In addition to cutting into hills and threatening the creek and numerous trees, changes to the road had the potential to aggravate flooding hazards. A straight four-lane road cutting through the foothills meant the potential for “such a paved canyon” to increase water runoff that could overflow Matadero Creek.<sup>53</sup> The road, Stegner argued, “offers the easiest access to the hills for citizens of Palo Alto and surrounding towns” by serving as a “natural route to Palo Alto’s Foothills Park” and is “used by children on bicycles and horses, and by families on picnics.” Changes to Page Mill Road would mean destroying “these amenities, more valuable with every passing year.”<sup>54</sup> Furthermore, changes to the road meant mixing vehicular and non-vehicular traffic that posed potential dangers to equestrianism—“an important part of life of the rural foothills”—pedestrians, and cyclists who used the winding roadway for recreation.<sup>55</sup> A census conducted by the Los Altos Hills Junior Horsemen’s Associated counted 945 horses in the area—residing at the large horse stables at Stanford University, Crook’s Ranch, and Fox Tail Farm—as well as eighty-nine children, eighty-two bicyclists, and forty-three hikers.<sup>56</sup> Mixing vehicular and non-vehicular traffic,

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<sup>53</sup>Letter from Wallace Stegner to Martin Spangler, July 28, 1964, Folder 1, Box 1, Page Mill Road Coordinating Committee Records, M0970, Stanford University Archives, 1. In a letter to the County Board of Supervisors, several sponsoring organizations expressed their view that runoff hazards would increase. “Saving Old Page Mill Road,” September 10, 1964, Folder 1, Box 1, Page Mill Road Coordinating Committee Records, M0970, Stanford University Archives, 1.

<sup>54</sup>Letter from Wallace Stegner to Martin Spangler, July 28, 1964, Folder 1, Box 1, Page Mill Road Coordinating Committee Records, M0970, Stanford University Archives, 2.

<sup>55</sup>“Report on Page Mill Road - Serra Freeway Interchange,” from Page Mill Co-ordinating Committee to Alan Hart, August 3, 1965, Box 1, Folder 10, Page Mill Road Coordinating Committee Records, M0970, Stanford University Archives, 3.

<sup>56</sup>“Report on Page Mill Road - Serra Freeway Interchange,” from Page Mill Co-ordinating Committee to Alan Hart, August 3, 1965, Box 1, Folder 10, Page Mill Road Coordinating Committee Records, M0970, Stanford University Archives, 3.

the Committee argued, would “create a dangerous situation” and “curtail the traditional uses of Page Mill Road as a main access route to and from the foothills.”<sup>57</sup>

In 1965 the Page Mill Road Coordinating Committee began studying the potential environmental impact of widening and straightening Page Mill in order to offer suggestions for alternate routes. The Committee released its study in December 1965 with suggestions for a parallel road that ran near Page Mill Road but left the original road alone. Page Mill’s status as a “scenic resource,” the study concluded, needed to be protected by both rerouting the new road and the establishing a new system of parks and trails near Page Mill.<sup>58</sup> The Page Mill Committee commenced with a petition campaign as well, gathering the signatures of nearby residents to urge the designation Page Mill a recreation road with “possible scenic easements and ‘protection from progress’.”<sup>59</sup> The Page Mill Committee enjoyed wide support from other conservation and recreation organizations, including the Page Mill-Arastradero Association, the Loma Prieta Chapter of the Sierra Club, the California Roadside Council, and the National Campers and Hikers Association.

In the end, the Page Mill Coordinating Committee succeeded in convincing Stanford University, the City of Palo Alto, and the County Board of Supervisors to look into alternative routes. The majority of Page Mill Road was left alone and no major alterations for a second route were made save for the Junipero Serra Freeway and Page Mill interchange, where a four-lane alternative route running parallel to the now named Old Page Mill Road was established to the east of the

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<sup>57</sup>“Report on Page Mill Road - Serra Freeway Interchange,” from Page Mill Co-ordinating Committee to Alan Hart, August 3, 1965, Box 1, Folder 10, Page Mill Road Coordinating Committee Records, M0970, Stanford University Archives, 5. See also letter from Leonard Ginzton to Mary Gordon, July 18, 1965, Folder 10, Box 1, Page Mill Road Coordinating Committee Records, M970, Stanford University Archives, 1-2.

<sup>58</sup>“A Study of Page Mill Road,” December 1965, Folder 12, Box 1, Page Mill Coordinating Committee Records, M0970, Stanford University Archives, 2.

<sup>59</sup>Page Mill Road mailer, March 23, 1965, Folder 2, Box 1, Page Mill Road Coordinating Committee Records, M0970, Stanford University Archives.

scenic route.

The resolve of environmentalists in halting industrialization projects would be tested again by the end of the decade. In the fall of 1967 Stanford announced a request for the rezoning of the land between Hillview Avenue and Arastradero Avenue encompassing Coyote Hill, primarily for the new zoning of residential estates and single-family residences. The Coyote Hill development would also house a medical research center operated jointly by Stanford and the pharmaceutical company Syntex and a grazing area on top of Coyote Hill to house animals used in research. Additional real estate and land development programs spearheaded by Stanford included a financial center called Dillingham along Sand Hill Road that included plans for office towers, a hotel convention center, and parking. On a newspaper clipping announcing public hearings on the proposed zoning changes, an activist circled the included map and scrawled "here we go again."<sup>60</sup>

By the late 1960s conservation and environmental organizations were no longer willing to compromise with Stanford. In November 1969, the Committee for Green Foothills filed suit against the University and the City of Palo Alto citing irregularities in the rezoning process and a conflict of interest with two City Council members in the development of Coyote Hill.<sup>61</sup> On-campus organizers also expressed their disapproval of Stanford's land development plans. Among these groups was GRASS ROOTS, a coalition that issued sharp criticisms toward

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<sup>60</sup>Newspaper clipping, September 16, 1967, *Palo Alto Times*, Folder 16, Box 1, Page Mill Coordinating Committee Records, Stanford University Archives. The writer included their initials, "PMB," which is likely Patricia M. Brown, who had been part of the original 1960 Battle of the Hills fight. Brown was a signatory on the insert "What is the future of the Stanford lands" that ran in the *Palo Alto Times* in 1960 (see "What is the future of the Stanford lands?" newspaper clipping, *Palo Alto Times*, n.d., Folder 16, Box 1, Page Mill Coordinating Committee Records, Stanford University Archives.) A "Pat B." is also noted in some handwritten notes from a Palo Alto city council meeting in Folder 16, Box 1, Page Mill Road Coordinating Committee Records, Stanford University Archives.

<sup>61</sup>"Questions and Answers about Stanford Land Use," *Campus Report Supplement*, January 1971, Folder 16, Box 1, Page Mill Road Coordinating Committee Records, Stanford University Archives, 11; Walker,, *The Country in the City*, 101.

Stanford and specifically targeted the Dillingham plans.<sup>62</sup> Although Stanford won the lawsuit against the Committee for Green Foothills, the activists did succeed in placing restrictions on further expansion beyond Junipero Serra Way into the foothills. Despite the Coyote Hill and Sand Hill developments moving forward, the criticisms of Stanford were effective enough that by 1970 Stanford's own reports on land use began addressing the potential environmental impact explicitly than the University had previously.<sup>63</sup>



**Figure 4.6:** GRASS ROOTS political cartoon, n.d., Folder 16, Box 1, Page Mill Coordinating Committee Records, Stanford University Archives.

By the end of the 1960s, nascent conservation and environmental coalitions pushed back against suburban growth and the encroachment of corporate suburbs near their communities. Stanford attempted to engage with a pastoral vision of suburban nature through campus planning that, outwardly, integrated neatly into surrounding communities. But the spatial arrangement of suburbs and industry led to conflicts with communities at a moment when environmental issues were becoming politically significant. Many of the very critics had been

<sup>62</sup>GRASS ROOTS, for example, charged that Stanford pursued “destructive trends in land use” and led to “smog, overcrowding, the destruction of the foothills, and a housing shortage.” The privileging of offices and factories over housing was “escalating the environmental crisis.” See GRASS ROOTS flyer, Folder 16, Box 1, Page Mill Road Coordinating Committee Records, M0970, Stanford University Archives. See also “House People, Not Profits: A Grass Roots Commentary on the planned Dillingham ‘Palo Alto Square,’” Grass Roots, Folder 16, Box 1, Page Mill Road Coordinating Committee Records, M0970, Stanford University Archives.

<sup>63</sup>“Questions and Answers About Stanford Land Use,” Campus Report Supplement, January 1971, Folder 16, Box 1, Page Mill Road Coordinating Committee Records, M0970, Stanford University Archives, 2.

newcomers attracted to the region's new jobs, climate, and affordable housing. By decade's end, these amenities appeared threatened as machinery cut, filled, paved, released smog, whined, and radiated. Stanford claims to the contrary, residents no longer considered high technology industry "clean." Urban sprawl and industrial expansion met a challenge in the next decade: the rise of no-growth activism and promoters of open space.

THE BATTLE OVER ZONING, RACE, AND ENVIRONMENT would emerge further north in Silicon Valley in the town of Los Altos Hills, to the southeast of Mountain View. The town incorporated in 1956 as an exclusively residential town and implemented some of the strictest zoning requirements in the Bay Area. Los Altos Hills residential zoning required a minimum of one acre lot sizes, among the largest lot sizes in northern California.<sup>64</sup> The community zoned itself to be rural and exclusive, a place defined by horse stables, tennis courts, and swimming pools insulated from the pressures of urbanization and the land-hungry municipalities of Palo Alto and Los Altos. Fearing that newcomers would overwhelm the community's sense of open space, city leaders sought to preserve the rural characteristics of the town by minimizing public services and taxes.<sup>65</sup> Los Altos Hills also couched its regulations in the language of conservation, arguing that steep slopes, unstable soils, the preservation of open space, and protection of wilderness were of paramount concern.<sup>66</sup>

While residents argued that such strict zoning requirements served environmental aims, others saw restrictive zoning that only served as an exclusionary

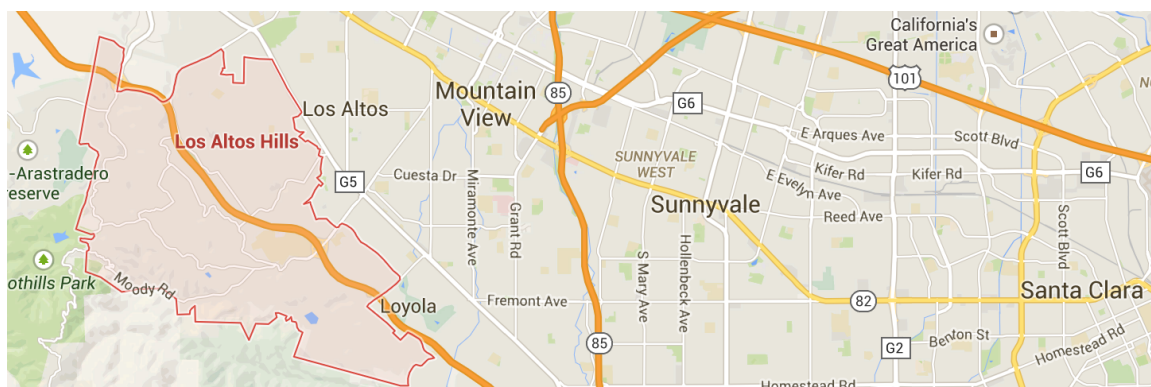
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<sup>64</sup>Social Planning Council of Santa Clara County, Inc. and Santa Clara County Planning Department, "Profile '70: A Socio-Economic Data Book for Santa Clara County", (County of Santa Clara Planning Department, 1973).

<sup>65</sup>Susan Mensinger, "Los Altos Hills: The Statutory Scheme," *Stanford Environmental Law Annual* 4 (1981): 93-99, 21-22.

<sup>66</sup>Mensinger,, *Los Altos Hills*, 23.

tactic. Los Altos Hills' zoning policies drove up housing prices and its 7,000 residents lived in one of the wealthiest communities in Santa Clara County.<sup>67</sup> To Jack Ybarra, president of La Confederacion de la Raza Unida (CRU), Los Altos Hills typified suburbia's exclusionary affluence.<sup>68</sup> Like many of Santa Clara County's suburban Chicano activists, Ybarra's politics emerged out of farmwork and housing shortages. He started working for the National Farmworkers Association in 1966 and the Tropicana-Hillview Organization United. Ybarra identified sprawl as a key problem for Latinos in Santa Clara County.<sup>69</sup> The rapid urbanization of the Valley, he argued, had destroyed agriculture and in the process "displaced the Mexican-American not only from his employment, but from his home." The county's growth came at the expense "of thousands of its poorest and most defenseless citizens."<sup>70</sup>



**Figure 4.7:** The location of Los Altos Hills.

Following a successful 1970 lawsuit against Saratoga, a wealthy suburb in the Santa Cruz foothills, that charged the city violated a new state law requiring

<sup>67</sup>Social Planning Council of Santa Clara County, Inc. and Santa Clara County Planning Department, "Profile '70: A Socio-Economic Data Book for Santa Clara County".

<sup>68</sup>"Scatter Low-Cost Housing," *San Jose Mercury News*, September 10, 1970.

<sup>69</sup>"Mexican Americans Sound Call for Unity," *San Jose Mercury*, September 17, 1969; "Thou Tells Ybarra: Get Thee Out," *San Jose Mercury News*, August 9, 1968; "Mexican Americans Split from THOU Group," *San Jose Mercury News*, August 12, 1968; "The 'U' Is Dropped Off THOU," *San Jose Mercury News*, August 13, 1968; Aaron Cavin, "The Borders of Citizenship: The Politics of Race and Metropolitan Space in Silicon Valley" (PhD Dissertation, University of Michigan, 2012), 515-517.)

<sup>70</sup>*San Jose Mercury*, March 11, 1972.

housing for all economic segments, CRU filed another suit against Los Altos Hills. The organization had applied for a low-income housing permit in 1971 on land near the edge of town to become a 200-unit apartment that could accommodate 800 persons. The town refused, and Ybarra filed suit charging that the city violated California law. During the three-day trial, representatives for CRU argued that the city's zoning requirements were exclusionary and served only to maintain an enclave of white, upper-class families. The city responded that their zoning requirements sought to maintain the "rural" character of the town. Furthermore, they claimed, such additions to the town posed an environmental threat. Nor could the city fully provide the urban services that would be needed.<sup>71</sup> To Ybarra, such claims were empty, telling the *San Jose Mercury* that "if they're interested in preserving the foothills for a certain class of people then the conservationists are our enemies, too."<sup>72</sup> In November, Judge Stanely Wiegel rejected Los Altos Hills' argument that infrastructure and environmentalism supported the town's restrictive zoning, but Wiegel upheld the zoning law. When CRU appealed, the Ninth Circuit upheld the district ruling on the basis that low-income housing was available elsewhere in the county.<sup>73</sup>

Landscape aesthetics and appeals to environmentalism formed the core justification for suburban exclusivity in Los Altos Hills. Special zoning allowed affluent suburbs to maintain their "rural" environments, maintaining a sense of countryside living that had drawn them to the foothills in the first place. Yet zoning for environmental reasons, whether intentional or not, introduced exclusive spaces. What environmentalists and homeowners neglected was that the protection of environments not only served to redefine what could or could not happen

<sup>71</sup> *San Jose Mercury*, November 24, 1972; *San Jose Mercury*, November 22, 1972; *San Jose Mercury*, December 4, 1972; *San Jose Mercury*, November 21, 1972; "One-Acre Zoning Draws Criticism," *San Jose Mercury*, December 16, 1970; Cavin,, "Borders of Citizenship.", 527-528.

<sup>72</sup> *San Jose Mercury*, December 21, 1970; Cavin,, "Borders of Citizenship.", 489-490.

<sup>73</sup> "Hills City Zoning Upheld by Court," *San Jose Mercury*, September 12, 1974; *Ybarra v. Los Altos Hills*.

in space, but also those protections came with a social cost.

THE PROBLEMS OF URBAN GROWTH AND ENVIRONMENTAL CONSEQUENCES in the South Bay caught the attention of expert planners, intellectuals, scholars, journalists, and students. Emanating most forcefully from Berkeley, a new wave of environmental thought began to shape the conversation about the entirety of the Bay Area's environment. These emerging conservation groups formed a vision at once utopian and regional. Rather than leaving planning at the whims of local governments, these environmentalists called for thinking about a *regional environment* where local governments could improve its coordination, cooperation, and urban planning. These critics were what geographer Richard Walker labeled "midcentury Modernists" who believed in "the enlightened application of foresight, science, and good government" to the Bay Area's problems.<sup>74</sup> The expert critics made their case through book publications, conferences, educational workshops, teach-ins, and editorials and, in so doing, helped reshape the conversation about urban growth and environmental degradation.

Students and scholars at the University of California-Berkeley led the way. In 1939, students formed an organization called Telesis, a Greek word meaning "planned progress," that included T. J. (Jack) Kent, Mel Scott, and Francis Violich, who would not only become future Berkeley professors but also formed an important intellectual core of the Bay Area's midcentury critics. Inspired by the New Deal, housing reformer Catherine Bauer, and civic planner Lewis Mumford, the students outlined a vision for the Bay Area focused on planning, architecture, and greenbelts.<sup>75</sup> The university's Bureau of Public Administration, under the leadership of Samuel May, attempted to establish a state planning commission in 1940

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<sup>74</sup>Walker,, *The Country in the City*, 133.

<sup>75</sup>Walker,, *The Country in the City*, 133.

under Governor Culbert Olson's tenure. The bureau, renamed the Institute for Governmental Studies (IGS) in the 1950s, continued to advocate for region-wide governance throughout the postwar era.<sup>76</sup>

Ideas of regionalism pervaded the thinking of the Bay Area's midcentury environmental critics. In 1959 IGS helped publish Mel Scott's study of the Bay Area, the first study of the region's urban history and a plea for regional governance.<sup>77</sup> Bay Area cities, Scott argued, all faced the same problems of "air pollution, vanishing open space, bay pollution, inadequate transit, [and] uncoordinated planning." These challenges were "so pervasive," Scott concluded, that "the oneness of the area cannot be denied."<sup>78</sup> The lack of coordinated planning—or any planning at all—had become most apparent in Santa Clara County, Scott urged. He pointed to the "lack of zoning, inappropriate zoning, or changes in zoning ordinances made under pressure from developers and landowners" that "accounted for these ill-advised and detrimental uses of the land."<sup>79</sup> The "oneness" of the Peninsula environment could not be ignored. Smog and water pollution recognized no municipal boundaries. The only sensible way forward, according to Scott and others, was a new form of coordinated regional government.

As intellectuals pushed the agenda of metropolitan-wide planning, the California state legislature took legal action. The Bay Area had grown remarkably beyond the old urban cores of San Francisco and Oakland, encompassing the nine counties that touched the Bay, one-hundred cities, 108 special districts overseeing parks, sewage, and water, and twenty-four transit districts.<sup>80</sup> Metropolitan fragmentation had led to a chaotic, complicated, and confusing mixture of spe-

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<sup>76</sup>Walker,, *The Country in the City*, 132–133; John A. Vieg, "Two Men and Two Institutions: The Lengthening Shadows of Samuel c. May and Emery E. Olson," *Public Administration Review* 15, no. 4 (October 1955): 244–246, 244–246.

<sup>77</sup>Walker,, *The Country in the City*, 133.

<sup>78</sup>Mel Scott, *The San Francisco Bay Area: A Metropolis in Perspective* (Berkeley: University of California Press, 1959), 2.

<sup>79</sup>Scott,, *The San Francisco Bay Area*, 274.

<sup>80</sup>Walker,, *The Country in the City*, 136.

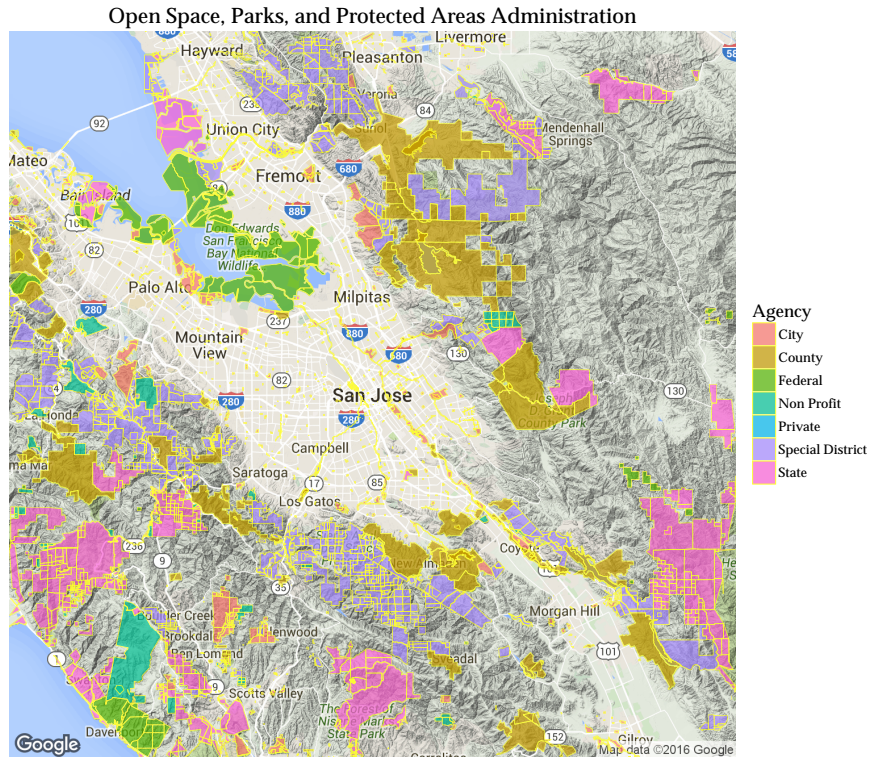
cial interests and local governments. In the late 1950s the California Legislature attempted to intervene, creating the state's Office of Planning in 1959 and appointing a Governor's Council on Metropolitan Area Problems to study what the state could do to confront challenges to urban growth. The council recommended the establishment of regional districts to oversee transportation, recreation, and planning, but resistance by local governments forced the commission to revise their proposal to a metropolitan-level commission.<sup>81</sup>

Some metropolitan areas like San Jose resisted the call for regionalism and sought to maintain their local autonomy, going so far as to reject being included with the San Francisco-Oakland Statistical Metropolitan Area in favor of its own census designation and rejecting a connection to the Peninsula-wide Bay Area Rapid Transit (BART) system. By the late 1950s and early 1960s planning professionals and state legislatures were formalizing plans to correct what they viewed as a fragmented regionalism that did a disservice to urban planning and introduced environmental degradation.

Despite resistance to any state intervention into local land-use planning by the League of California Cities and the County Supervisors Association, the Coordinating Council continued to argue for a regulatory body in the belief that problems of growth stemmed from jurisdictional boundaries. The State Legislature's passage of the Knox-Nisbet Act in 1963 resulted in their intervention into urban planning. Under the Act, every county in the state was required to create a Local Area Formation Commission (LAFCO) whose mandate primarily revolved around the approval of annexations and incorporations. LAFCO's authority attempted to discourage urban sprawl and maintained the ability to regulate many special districts, including sewers and sanitation, police, irrigation, county services, water districts, reclamation, and parks and recreation. LAFCOs also estab-

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<sup>81</sup>Stephanie Pincetl, *Transforming California: A Political History of Land Use and Development* (Baltimore: John Hopkins University Press, 1999), 140–141.



**Figure 4.8:** Open Space in Santa Clara County by administration.

lished “sphere of influence” boundaries for cities in an attempt to prevent one city from annexing into the area of interest of another city, as well as requiring all counties and cities to draw up general plans. An extension of the Act under the 1965 Quimby Act required developers to dedicate space to parks and open space.<sup>82</sup>

Although LAFCO attempted to intervene in local political issues, the regionalist thinking of the Bay Area environmentalists remained, perhaps because the LAFCO ideal simply threw power back to local governing elites. A new coalition of planners and citizen activists formed under the aegis Citizens for Regional Recreation and Parks (CRRP), emerging after a June 1958 conference in San Francisco called “The Peril To Our Public Lands—A Discussion of Regional

<sup>82</sup>“Guidelines, Santa Clara County Local Agency Formation Commission,” September 1974, Folder 7, Carton 53, California Tomorrow Records, MS 3641, California Historical Society; Walker,, *The Country in the City*, 137; Pincetl,, *Transforming California*, 141–143.

Recreation.” The organization’s core concern was the lack of accessible spaces for recreation in California’s metropolitan areas and the rapid disappearance of such spaces under urban expansion. Leading the charge were Dorothy Erskine and Jack Kent, who immediately set themselves to creating an inventory of public lands, sponsored conferences on open space and conservation, and fostered partnerships with regional conservationists and national organizations like the Sierra Club.<sup>83</sup>

Kent and Erskine were natural activists. Kent earned a degree in architecture at Berkeley in 1938 and spent a year in Europe studying under Lewis Mumford before returning to Berkeley to help found Telesis. Kent quickly jumped into various planning roles, first working as a junior planning assistant with the Marin County Planning Commission and a planning technician with the Pacific Southwest Regional Office of the National Resources Planning Board. He earned a Masters degree in 1943 in City Planning from the Massachusetts Institute of Technology and became the Associate City Planner for the San Francisco City Planning Commission in 1943, but his tenure was cut short when he was drafted into the Army during World War II. Kent served in Washington, D.C., during the war, and was stationed in Berlin between 1945 and 1946 before returning to San Francisco and beginning work as the Director of City Planning under Mayor Roger Lapham. He was recruited to teach at Berkeley and, along with other planning professors, founded the Department of City and Regional Planning in 1948. Along with serving as a Berkeley professor, he maintained an active role in the Berkeley City Planning Commission and, in 1957, was elected to the Berkeley City Council.<sup>84</sup>

Like his mentor Mumford, Kent maintained a firm belief in careful plan-

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<sup>83</sup>T. J. Kent, *Open Space for the San Francisco Bay Area: Organizing to Guide Metropolitan Growth* (Berkeley: Institute of Governmental Studies, University of California, 1970), 69.

<sup>84</sup>Louise Dyble, *Paying the Toll: Local Power, Regional Politics, and the Golden Gate Bridge* (Philadelphia: University of Pennsylvania Press, 2009), 175–176.

ning to manage urban growth and prevent suburban sprawl. He was wary of local governments and their penchant for bucking regional efforts at controlling land use. He supported the formation of the Association of Bay Area Governments (ABAG), a voluntary association of Bay Area municipalities, helping draft its first constitution and bylaws in 1958 and serving on its executive committee. Regional planning was essential, Kent believed, in protecting open space and environmental quality. As he explained in 1963:

Without a regional plan, the so-called “natural” forces of economic development will overwhelm the best efforts of local governments to control them. . . . Speculative land development forces now operate on a metropolitanwide basis. They are commanded by men of great enterprise and ability. These men—the builders and does of today—will wipe out the vineyards of the upper Napa Valley and fill it with suburban tracts; they will overrun the Livermore Valley; they will mop up Stinson Beach, Bolinas, and the Olema Valley. They will spread to the northeast, beyond Vallejo and Fairfield toward Sacramento; to the south, below San Jose to Hollister; and to the west, beyond Santa Rosa to Sebastopol and the Pacific Ocean. . . . Freeways will precede the initial wave of surging growth, and more freeways will follow. Predictably inadequate bridges for trucks and automobiles will be constructed [and] tidelands will be filled. The central districts of San Francisco, Oakland, and San Jose will become inaccessible, and will decay.<sup>85</sup>

Like Kent, Erskine’s political education was rooted in progressive politics stemming from her immersion with socialism and labor activism. Erskine established herself as a dedicated conservationist and social activist for various Bay Area causes. Erskine helped found the Marin Conservation League in the early 1930s. In 1938, she traveled to the Soviet Union to seek how the nation handled urban planning, particularly housing for laborers.<sup>86</sup> She became a proponent of public housing in San Francisco, helping revitalize the San Francisco Housing As-

<sup>85</sup>Jack Kent, *City and Regional Planning for the Metropolitan San Francisco Bay* (Berkeley: Institute of Governmental Studies, 1963), 1–2; quoted in Dyble, *Paying the Toll*, 176.

<sup>86</sup>Janet B. Thiessen, *Dorothy Erskine: Graceful Crusader for Our Environment* (Dorothy Erskine Biograph, LCC., 2010), 45–53.

sociation, originally formed after the 1906 earthquake, in 1938.<sup>87</sup> Her interest in housing led to a growing awareness of the role city planning played in creating livable spaces for people, and by the late-1950s Erskine had taken an interest in greenbelt planning. Erskine devoted her energies to CRRP, which played a significant role in crafting the California Public Outdoor Recreation Plan in 1960, and aided in the establishment of the Save San Francisco Bay organization and served on the board of directors of the Bay Conservation and Development Commission.<sup>88</sup>

Erskine located in postindustrial capitalism a warped idea about land. "Land is a resource," she argued, "not a commodity subject to speculation and mindless use."<sup>89</sup> She distrusted local decision-makers, writing to Sierra Club executive director Michael McCloskey that the "pressures of self-interest and greed are too powerful on local agencies to protect the great mass from serious harm." Erskine put her faith in federal programs, arguing for their use in reclamation projects, building recreational areas, improving land values, and preventing air and water pollution. "Apparently we don't try to change our system or tinker with men's minds too much. . . . That might be called 'socialism,'" she wrote. "Instead, we put a 'price tag' on a social reform at the Federal level and then do the job. That's just another business transaction."<sup>90</sup>

Part of the solution to the open space problem was the preservation of agricultural land. The rapid loss of agricultural land—as much as one million acres left production between 1945 and 1968—led to discussion about defining city boundaries to protect open lands.<sup>91</sup> By the mid-1950s studies were pointing to the problems of lost agricultural land in the Valley. A study by the California

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<sup>87</sup>Thiessen,, *Dorothy Erskine*, 57.

<sup>88</sup>Walker,, *The Country in the City*, 134–136; Thiessen,, *Dorothy Erskine*, 117–128.

<sup>89</sup>Quoted in Walker,, *The Country in the City*, 136.

<sup>90</sup>Letter from Dorothy Erskine to Michael McCloskey, April 12, 1969, Folder 4, Carton 2, California Tomorrow Records MS 3641, California Historical Society; ellipses in original.

<sup>91</sup>Pincetl,, *Transforming California*, 147–148.

State Planning Commission noted the sprawling nature of urbanization in northern Santa Clara County, finding that all of the subdivisions established between 1945 and 1955 covered just seven square miles if combined. But instead of dense development, subdivisions “dotted over 200 square miles of prime agricultural land.”<sup>92</sup> If such growth continued, the state planning board concluded, Santa Clara Valley would lose nearly all farmland by 1960.<sup>93</sup> Land selling for between \$800 and \$1,200 an acre for agricultural uses was fetching upwards of \$8,000 an acre for industrial or residential uses. The disparity between the price of land for agriculture and the price of land for subdivisions introduced a capital imbalance for tax assessments. As a result of rising land prices nearby agricultural land, county tax assessors likewise raised the value of agricultural land and, therefore, the burden of taxes farmers owed.<sup>94</sup>

Concerns about the increasing value of agricultural land and threat of urban sprawl led the state legislature to act. The California Legislature passed the Land Conservation Act in 1965. Known as the Williamson Act, the state legislation ostensibly provided protections for open space and greenbelts. Under the Williamson Act, agricultural land had the option to be removed from markets by entering into a contract with county governments. The contract restricted the land’s use to agricultural purposes for a minimum of ten years. In return, farmers enjoyed a tax benefit. County assessors valued the land at agricultural value rather than market value, allowing farmers to pay lower taxes on their land and, both parties hoped, allowed the land to remain perennially agricultural. Contracts were renewed annually unless notice for nonrenewal was given. By 1969, twenty-three counties in California placed more than two million acres of private land into the agricultural preserve.<sup>95</sup>

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<sup>92</sup>“Planning for Growth”, 1955, 43.

<sup>93</sup>“Planning for Growth,” 45.

<sup>94</sup>“Planning for Growth,” 43—44.

<sup>95</sup>California Legislature, *Joint Committee on Open Space Land, Preliminary Report* (Sacramento,

Despite the availability of state law to control land use, it fell short of its intended goals in Santa Clara County. Farmers, after all, still had the voluntary option of selling their land at some point in the future. Farmers oftentimes waited as land values rose for the right moment to sell, fetching prices well above what they had originally paid. Open space land was not held as a public good, and once farmland became a place for subdivisions it no longer served its open space purpose. The Williamson Act contained the potential for perpetual agricultural reserves under its renewable ten-year contracts, but in reality farmers often bowed to market pressures. Faced with shrinking agricultural land, citizens began seeking alternative and long-term methods for sustaining the presence of open space throughout the Peninsula. Community organizing continued to shape the local policies guiding land use with an increasing focus on recreation and public lands. In 1968, CRRP filed for nonprofit, tax-exempt status and renamed themselves People for Open Space (POS). Their new status as nonprofit allowed them to pursue a \$59,000 Ford Foundation grant to examine the economic impact of open space in the Bay Area.<sup>96</sup> Completed in 1969 and published as both a main report and as a summary pamphlet, POS laid out a vision for Peninsula open space that fulfilled their desire to guide places against urban expansion. "A major open space system can be created only on a regional basis," argued the study, "because open space exists without regard to city or county boundaries. . . . To establish permanent open space, all parts of the region must act together, probably using types of

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March 1969), 10; B. Bruce-Biggs, "Land Use and the Environment," in *No Land Is an Island: Individual Rights and Government Control of Land* (San Francisco: The Institute for Contemporary Studies, 1975), 1–13; J. Herbert Snyder, "A Program for Agricultural Land Use in Urbanizing Areas," *Journal of Farm Economics* 48 (December 1966): 1306–1313; Walker,, *The Country in the City*, 43. See also Kathleen A. Brosnan, "Crabgrass or Grapes: Urban Sprawl, Agricultural Persistence, and the Fight for the Napa Valley," in *Cities and Nature in the American West*, ed. by Char Miller, (Reno: University of Nevada Press, 2010), 34–56, 36.

<sup>96</sup>Kent,, *Open Space for the San Francisco Bay Area*, 74; "Ideas for Discussion with Ford Foundation," November 19, 1968, Folder 4, Carton 2, California Tomorrow Records MS 3641, California Historical Society.

legislation not currently available to counties or even special districts.”<sup>97</sup>

People for Open Space applauded the Williamson Act, but remained skeptical about its implementation. Finding that “very little high quality agricultural land has been conserved” and concerned about the lack of a “guarantee of permanence,” they conclude that the voluntary contracts were ultimately an unsatisfactory solution to open space preservation.<sup>98</sup> A more desirable action was for a regional governmental body to purchase all available open space and regulate its preservation. Such a plan, they argued, would hardly place a financial burden onto Bay Area residents. In assessing the costs of such a program that factored in land value and the offsetting of expenses that would come from providing urban services to densely-populated areas versus sprawling cities, People for Open Space estimated that the net costs for each person in the Bay Area would amount to only \$2 to \$3 dollars per year—“about the cost of a good bottle of California wine and a loaf of sourdough French bread.”<sup>99</sup>

The loss of agricultural land was only one feature among many that motivated environmentalists. Frustrated by the state’s lack of any comprehensive planning for California and believing that local government was the source of urban California’s problems, a new nonprofit educational organization called California Tomorrow entered the political scene with its 1962 publication of *California Going, Going...*, whose opening sentences reiterated the “serious, progressively disastrous lack of coordinated land planning and development” in California.<sup>100</sup> California Tomorrow was the brainchild of Alfred Heller and Samuel Wood. Heller

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<sup>97</sup>People for Open Space, “The Case for Open Space,” January 1969, 4, Folder 4, Carton 2, California Tomorrow Records, MS 3641, California Historical Society.

<sup>98</sup>People for Open Space, “The Case for Open Space,” report, 7, Folder 4 People for Open Space, Carton 2, California Tomorrow Records MS 3641, California Historical Society.

<sup>99</sup>People for Open Space, “The Case for Open Space,” report, 10, Folder 4 People for Open Space, Carton 2, California Tomorrow Records MS 3641, California Historical Society. See also Association of Bay Area Governments, *Regional Open Space Element*, Supplemental Report RP-3, (Berkeley, October 1969), 9–10.

<sup>100</sup>Samuel E. Wood and Alfred E. Heller, *California Going, Going.: Our State’s Struggle to Remain Beautiful and Productive* (Sacramento: California Tomorrow, 1962), 6.

served as the editor and publisher of the *Nevada County Nugget* newspaper and became involved with planning after fighting for a rerouting of a freeway through Nevada City. Wood got his start working as an official with the Interior and Agriculture departments before moving into state government as the staff director of California legislative committees working on conservation. He helped draft the bill establishing the State Office of Planning in 1959 and, after leaving government service, became a consultant and a professor of political science at the University of California-Berkeley in the Department of City and Regional Planning. Heller and Wood met through their mutual friend, Berkeley professor Catherine Bauer Wurster. *California Tomorrow* reflected a belief in scientific and expert knowledge in overcoming urban planning and environmental degradation, forcefully arguing for a central regulatory body to solve the state's rapidly disappearing open spaces. *California Tomorrow* urged the state to think about both urban and rural areas. A year later, Heller and Wood published *The Phantom Cities of California*, arguing that weak planning allowed political power to aggregate among regional actors—phantom cities—that enacted sprawling urban growth. Without regional planning, Heller and Wood concluded, California was destined to become “unsightly intrusions of subdivisions, cars, roads, parking spaces, sewage, exhaust, strip development, *slurbs*—sloppy, sleezy, slovenly, slipshod, semi-cities.”<sup>101</sup>

As part of their efforts towards shaping the state's conversation about planning, *California Tomorrow* published a quarterly magazine *Cry California* starting in 1966, dedicated to covering issues of environmental decline, race and class discrimination, housing shortages, and job inequalities. The journal attracted many leading environmentalist and conservationists including William Bronson, who served as the journal's editor, landscape architect Garrett Eckbo, environmental

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<sup>101</sup>Samuel E. Wood and Alfred E. Heller, *The Phantom Cities of California* (Sacramento: California Tomorrow, 1963), 5; Kevin Starr, *Golden Dreams: California in an Age of Abundance, 1950–1963* (New York: Oxford University Press, 2009), 418–419.

writer T. H. Watkins, journalist Mel Wax, and an editorial board that included Wallace Stegner, columnist Neil Morgan, architect Nathaniel Owings, attorney Clarence Heller, and Caspar Weinberger. The journal had a northern California tilt, dominated mostly by writers (and issues) facing the San Francisco Bay Area and surrounding areas.<sup>102</sup> *California Tomorrow* believed that state intervention into urban growth could allow regional government to act, as political scientist Stephanie Pincetl has noted, “as a redistributive entity and actively redress revenue and housing inequities.”<sup>103</sup>

Former Santa Clara County Planning Department director Karl Belser, who had attempted to limit San José’s growth into unincorporated county lands in the 1950s, took to the pages of *Cry California* to bemoan the state’s lack of coordinated planning. The mix of federal, state, and local agencies that “dabble in the planning business” lacked regulatory authority resulting in “fragmented plans” without clear goals to ensure the protection of open space and maintain quality of life.<sup>104</sup> Despite the presence of these various regulatory bodies, Belser asserted, “the bay is being filled in, air and water are being polluted, hillsides are being mutilated and prime cropland is being paved over.”<sup>105</sup>

Belser placed blame for environmental degradation onto the “economic elite”—“landowners,” “money controllers”, and “mass communication media”—who “operate in a realm of their own with little concern for *any* but their private interests.” To Belser, the *laissez-faire* approach to land use was a symptom of the failings of postindustrial capitalism. The public was beholden to the elite’s plans, not because they agreed with the planners but because they lacked power.<sup>106</sup> Adding to the problem of economic elites was the presence of “competitive jeal-

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<sup>102</sup>Starr, *Golden Dreams*, 422.

<sup>103</sup>Pincetl, *Transforming California*, 153.

<sup>104</sup>Karl Belser, “The Planning Fiasco in California,” *Cry California* (Summer 1967), 10.

<sup>105</sup>Belser, “Planning Fiasco,” *Cry California*, 11.

<sup>106</sup>Belser, “Planning Fiasco,” 11.

ousy” among local governments who abandoned proper planning and instead “spend sleepless nights figuring out how to throw the gig into their neighbors.”<sup>107</sup> The end result from this lack of coordinated planning resulted in “the most tragic and dangerous trend” of ignoring the conservation of resources. “What has already happened should certainly indicate to anyone with common sense that our state faces not only the disfigurement of its natural beauty,” Belser argued, “but also the ruin of its primary economy.”<sup>108</sup> While governments bicker, “our prime soils are being lost, our forests are being butchered, our scenic areas are being raped, and our air and water are being polluted beyond reclamation.”<sup>109</sup>

Three years later the situation had not improved, and Belser’s warnings about the lack of planning took on an even more seething tone in the pages of *Cry California*. Pointing to the Santa Clara Valley as an example of “slurban” development, he wrote of the “flagrant ruination” and “irrelevant urban development of massive size and questionable quality” that had come to dominate the valley.<sup>110</sup> The environmental problems attending such growth had become the primary concern for Belser. Increased traffic on roadways introduced high levels of air pollution, exacerbated by the San Francisco Bay’s impenetrable inversion layer that trapped smog in the Valley. Overdraft on underground water supplies and the resulting subsidence threatened to ruin underground utilities and stretch the natural limits of water availability for cities.<sup>111</sup> “Wild urban growth,” he wrote, “attacked the valley much as cancer attacks the human body.”<sup>112</sup>

By the late 1960s the efforts by conservationists to overcome poor land use planning was failing. No regional restrictions on urban growth had successfully reversed the trend of sprawl in Bay Area cities. San Jose continued to expand

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<sup>107</sup>Belser, “Planning Fiasco,” 13.

<sup>108</sup>Belser, “Planning Fiasco,” 13.

<sup>109</sup>Belser, “Planning Fiasco,” 13.

<sup>110</sup>Karl Belser, “The Making of Slurban America,” (Fall 1970), 1.

<sup>111</sup>Belser, “The Making of Slurban America,” 17.

<sup>112</sup>Belser, “The Making of Slurban America,” 5.

rapidly, adding roughly 55,110 acres (or eighty-two square miles) to the city between 1960 and 1970. California Tomorrow argued in 1969 in a proposed study of Bay Area open space that

the rapid disappearance of the orchards of the Santa Clara Valley is perhaps the most dramatic example of the pattern which urban development will take unless *permanent* measures are taken to preserve open spaces within the urbanized areas. It should be remembered that as recently as 1960, Santa Clara County was considered a model throughout the country in terms of progressive “greenbelt” ordinances to preserve agriculture.<sup>113</sup>

Despite the lobbying, educational, and political efforts of California Tomorrow, People for Open Space, and other regional environmental organizations, open space continued shrinking and land converted into urban space. At the state-wide level, at least, very little action took place in protecting open spaces aside from the 1972 Coastal Protection Initiative. Not to be deterred, California Tomorrow published the *California Tomorrow Plan* in 1971. The *California Tomorrow Plan* proposed a comprehensive initiative to address state infrastructure and environment. The monograph argued that there existed a “California One” and a “California Two”—two potential paths that the state could follow given the current problems of environmental degradation and widespread urbanization. California One imagined a California without any change to these policies. California One would be unable to meet the state’s energy needs, deteriorate water quality and accessibility, continue the urbanization of farmland, lose wilderness areas and open spaces, worsen air quality, increase noise pollution, clog roadways, cause greater housing shortages, result in underfunded and understaffed schools, widespread unemployment especially among minorities, fall short in recreational areas, and emphasize punitive rather than rehabilitative treatment of criminals.<sup>114</sup>

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<sup>113</sup>“Regional Open Space Study,” August 1, 1968, 1, Carton 2, Folder 4, California Tomorrow Records MS 3641, California Historical Society.

<sup>114</sup>*California Tomorrow Plan*, 24–36.

To overcome these challenges, California Tomorrow envisioned a different California comprised of a State Planning Council to develop comprehensive policies addressing a wide range of environmental, social, and economic issues in the state. Under their imagined Planning Council, California Tomorrow envisioned ten regional governments to absorb the many single-issue agencies and districts, drawing up regional plans regarding land use, infrastructure, and socioeconomic issues.<sup>115</sup> By devising regional plans rather than piecemeal local decisions, California Tomorrow leaned on a belief in good government, scientific evidence, and expert knowledge in solving the state's urban problems.

"WE WERE GOING TO HAVE A CITY OF 60,000 PEOPLE in the hills [above Palo Alto]," Lennie Roberts recalled years after the founding of the Committee for Green Foothills. "And a number of people got together and decided, well, we'll be for something—we'll be for the Green Foothills."<sup>116</sup> As the political efforts of California Tomorrow and People for Open Space accelerated, primarily in northern counties and East Bay communities like Napa and Marin, further south on the Midpeninsula ideas about restricting urban growth and critiquing environmental degradation influenced local politics. The legislative efforts of California Tomorrow and People for Open Space failed to gain much traction at the state level by the end of the 1960s, but the advocates of urban development for the sake of "progress" would find their greatest challengers coming out of grassroots politics and local action.

In Palo Alto, the Committee for Green Foothills initiated a campaign shortly after their first fight with Stanford University to enact policies for setting aside lands for recreation. Members of the Committee worked closely with the county in

<sup>115</sup>*California Tomorrow Plan*, 46–48. See also Pincetl, *Transforming California*, 161–162.

<sup>116</sup>Roberts quoted in Daniel Press, *Saving Open Space: The Politics of Local Preservation in California* (Berkeley: University of California Press, 2002), 41.

establishing the Midpeninsula Regional Open Space District (MROSD). In 1972, a referendum placed Measure R onto the ballot that would establish the Open Space District, originally focused on the northwestern portion of Santa Clara County. Inspired by the San Francisco-based Livingston and Blayney planning agency report in 1971 that concluded it would be cheaper for open space to be acquired and preserved rather than infrastructure extended into the foothills, the Committee for Green Foothills cited the report as a means for passing the MROSD measure.<sup>117</sup> Since MROSD existed as a special district, it required no legislative intervention by the state—only the approval of county voters.<sup>118</sup>

The themes identified by Alfred Heller, Dorothy Erskine, Sam Wood, Jack Kent, and Mel Scott were picked up by a range of intellectuals, journalists, and observers throughout the 1960s, including William Bronson's photojournalistic *How to Kill a Golden State* (1968), Berkeley-trained biologist Raymond F. Dasmann's *The Destruction of California* (1965), Dorothea Lange and Pirkle Jones' *Death of a Valley* (1960), Richard G. Lillard's *Eden in Jeopardy* (1966), and journalist Harold Gilliam, who served as Secretary of the Interior Stuart Udall's assistant and published a series of books and articles in the *San Francisco Chronicle* about the Bay Area.<sup>119</sup> Collectively, the intelligentsia gave expression to a growing anxiety about unplanned, runaway urban growth and the environmental, social, economic, and political chaos that accompanied the lack of planning. Above all, these writers and advocates argued for a philosophy that fused environmentalism and regulated, regional urban development.

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<sup>117</sup>Press, *Saving Open Space*, 42; Walker, *The Country in the City*, 164.

<sup>118</sup>California state law defines special districts as "any agency of the state for the local performance of governmental or proprietary functions within limited boundaries." For an explanation on the role of special district in California, see *What's So Special About Special Districts? A Citizen's Guide to Special District in California*, 4th ed., Senate Local Government Committee, October 2010.

<sup>119</sup>William H. Bronson, *How to Kill a Golden State* (Garden City, N.Y.: Doubleday, 1968); Dasmann, ; Dorothea Lange and Pirkle Jones, *Death of a Valley* (Rochester, N.Y.: Aperture, 1960); Richard G. Lillard, *Eden in Jeopardy* (New York: Knopf, 1966); Harold Gilliam, *For Better or for Worse: The Ecology of an Urban Area* (San Francisco: Chronicle Books, 1972); Walker, *The Country in the City*, 133; Starr, *Golden Dreams*, 416–420.

## Chapter 5

### Rejecting the Los Angeles of the North

People in San Jose want limited growth. They don't want another Los Angeles.  
—Janet Gray Hayes

The campaigns for open space throughout the San Francisco peninsula represented the broadening of suburban environmentalism as postwar liberalism shifted from its New Deal vision of growth toward an emphasis on quality-of-life issues, which included a new appreciation for nature. Throughout the Valley, white middle-class suburbanites fought against suburban sprawl through measures such as zoning requirements, land trusts, and conservation organizations. Yet these efforts to control growth not only represented a land ethic of conservation, but also solidified race and class exclusivity for affluent liberal suburbs. Scholars have looked at the anti-sprawl politics as a symbol for suburban exclusionary politics. Mike Davis in his study of Los Angeles finds “slow growth” the “latest incarnation of a middle-class subjectivity that fitfully constitute and reconstitutes itself around the defense of household equity and residential privilege.”<sup>1</sup>

Adam Rome suggests, instead, that suburbanites played a key role in shaping

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<sup>1</sup>Mike Davis, *City of Quartz: Excavating the Future in Los Angeles* (New York: Vintage, 1992), 159; Andrew Hurley, *Environmental Inequalities: Class, Race, and Industrial Pollution in Gary, Indiana, 1945–1980* (Chapel Hill: University of North Carolina Press, 1995); Matthew Klinger, *Emerald City: An Environmental History of Seattle* (New Haven: Yale University Press, 2007); Lily Geismer, *Don't Blame Us: Suburban Liberals and the Transformation of the Democratic Party* (Princeton: Princeton University Press, 2015), 290–293.

modern environmentalism.<sup>2</sup> In Silicon Valley, the result was a mix of these two conclusions: suburbanites expressed a genuine concern for environmental degradation through continued urban growth, but by pursuing policies that sought to preserve their quality-of-life they solidified spatial, environmental, and racial inequality.<sup>3</sup>

However, just as issues of environmental and social justice were burgeoning, the changing demographics of Silicon Valley introduced a significant shift to the political culture. In San Jose, the city's population ballooned rapidly from 204,196 in 1960 to 445,779 in 1970. Among this expansion came demographic shifts as the city became more diversified. People of Hispanic origin expanded from 11.4% to 15.1% between 1950 and 1970, while African Americans increased from 0.6% to 2.5% over the same period. By the end of the 1970s, San Jose's population grew to 629,442, with Hispanics accounting for 22% of the population, African Americans 4.6%, and Asian and Pacific Islander 8.5%.<sup>4</sup> San Jose was becoming less homogeneous, and politics had to grapple with an electorate demanding attention to their communities. These shifts were happening throughout Silicon Valley, shaping how homeowners, suburbanites, politicians, and communities defined their urban spaces. The major target for criticism was the ideology of urban growth, which was no longer seen as the central goal for a city's prosperity.

Perhaps no place better represented the crumbling philosophy of growth-as-progress better than San José. Challenges to San José's growth interests on the city council began to mount in the early 1960s as homeowners in the suburban fringes of the city began opposing the city's sprawl. In 1962, Virginia Shaffer, a

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<sup>2</sup>Adam Rome, *Bulldozer in the Countryside: Suburban Sprawl and the Rise of American Environmentalism* (New York: Cambridge University Press, 2001), 1–14.

<sup>3</sup>A similar argument is advanced by Lily Geismer. See Geismer, *Don't Blame Us*, chap. 4. See also Peter Siskind, "Suburban Growth and Its Discontents: The Logic and Limits of Reform on the Postwar Northeast Corridor," in *The New Suburban History*, ed. by Kevin M. Kruse and Thomas Sugrue, (Chicago: University of Chicago Press, 2006), 163.

<sup>4</sup>U.S. Census Bureau, "City of San Jose."

Republican and the first woman to be voted onto San José's city council, rose to office representing the interests of homeowners and taxpayers.<sup>5</sup> The *Mercury News* referred to Shaffer as "Madam No" based on a voting record that frequently opposed rezoning decisions. Shaffer represented the expression of new interests guiding ideas about the city's future growth, but to call her platform conservation would misrepresent her attitude towards urban growth. Although her criticisms of San José found sympathy among conservationists, her concerns revolved primarily around slowing growth to ease the tax burden on homeowners and limiting government spending. Shaffer and her homeowner constituency had grown frustrated by the city's continual emphasis on growth without paying mind to the adequacy of city services, high taxes, and development policies that allowed construction on landslide-prone hillsides and floodplains.<sup>6</sup> The 1962 elections rattled the pro-growth advocates in San José. "The election of 1962 cast a shadow that falls across our political scene even today," recalled former councilman and mayor George Starbird. The pro-growth council still had an ally in Dutch Hamann, who voters retained as city manager after a vote-of-confidence in 1962, but homeowners would be watching the council closely in their decisions about zoning, places for recreation, taxes, and annexations.<sup>7</sup>

Poor planning and runaway growth met Shaffer's ire. Like many of Santa Clara's residents, Shaffer was a newcomer to the county. Born in Chicago in 1922, Shaffer grew up in Wisconsin and attended the University of Wisconsin. In 1946, she married Harold Shaffer, an engineer, while both were working for Lockheed in

<sup>5</sup>Philip Trounstine and Terry Christensen, *Movers and Shakers: The Study of Community Power* (New York: St. Martin's Press, 1982), 77.

<sup>6</sup>"Voters Pass on Manager, 3 For Council Tuesday," *San José Mercury*, April 8, 1962; "Voters Will Decide on Council Posts," *San Jose Mercury*, April 10, 1962; "6 Will Vie for S.J. Council in Runoff!" *San José Mercury*, April 11, 1962; Trounstine, and Christensen, *Movers and Shakers*, 100–101; Glenna Matthews, *Silicon Valley, Women, and the California Dream: Gender, Class, and Opportunity in the Twentieth Century* (Stanford: Stanford University Press, 2003), 191–192; Paul Johnston, *Success While Others Fail: Social Movement Unionism and the Public Workplace* (Cornell: Cornell University Press, 1994), 94–95.

<sup>7</sup>Trounstine, and Christensen, *Movers and Shakers*, 99–101.

Southern California. They moved to San José in 1957 after Harold's transfer to the Santa Clara County facility.<sup>8</sup> Motivated by encroaching commercial developments in her neighborhood, along with rising taxes and insufficient parks, Shaffer began attending council meetings in the early 1960s and became active with homeowner groups displeased with high taxes and industrial development near their communities.<sup>9</sup> Shaffer's entry into San José politics was a challenge to the mostly white, upper-middle-class male political establishment, whose close personal and political connections helped smooth the path for developers to promote city growth. Shaffer entered the political ring in 1962 along with additional anti-incumbent candidates, including former councilman Clyde Fisher and Joseph L. Pace. Securing the support of homeowners and their concerns about controlling growth, rising taxes, and zoning, voters placed the challengers on city council seats. The election, according to the *San José Mercury*, was "an upheaval in the city's political structure."<sup>10</sup>

Developers now found their plans challenged by a vocal and stubborn voting block. With Shaffer's ascent to the city council, she objected to the city's poor planning and lack of oversight, as well as objecting to the secret "Book of the Month Club" meetings held away from public scrutiny.<sup>11</sup> Her voting record rejected projects she felt did not work for residents, such as her vote against moving city offices to downtown in the mid-1960s.<sup>12</sup> When a ballot initiative failed to remove City Manager Dutch Hamann from office, Shaffer and her allies launched

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<sup>8</sup>"Virginia Shaffer, 1st Woman to Serve on S.J. City Council," *San José Mercury News*, May 14 1998. Janet Flammang, *Women's Political Voice: How Women Are Transforming the Practice and Study of Politics* (Philadelphia: Temple University Press, 1997), 41.

<sup>9</sup>"Fischer, Shaffer, Pace Win City Council Seats," *San José Mercury*, May 9, 1962.

<sup>10</sup>"Fischer, Shaffer, Pace Win City Council Seats," *San José Mercury*, May 9, 1962. According to San José developer Charles W. Davidson, the very engineers that high tech attracted had become drivers of political change. "Lockheed," he said, "had come to the valley in the late 1950s, spurred development in the West Valley and, in 1962, got Shaffer elected." See "S.J. Recall Effort in '64 Only a Dim Memory," *San José Mercury*, April 4, 1994.

<sup>11</sup>On the "Book of the Month Club," see chapter 3.

<sup>12</sup>"'Madam No' Still Says No—First S.J. Councilwoman Eschews Politics Now That She's Retired," *San José Mercury*, June 5 1989.

a recall initiative in 1964 in an attempt to ouster four councilmembers closely allied with the city manager. Supporters criticized the “extravagant growth” of the city, accusing the four councilmembers of ignoring good planning policies, hiking taxes on homeowners, and favoritism in zoning decisions.<sup>13</sup> The recall effort, however, failed to resonate with voters. Occurring on an off-election year, only nineteenth percent of San José’s eligible voters turned out. They overwhelmingly supported the recalled candidates.<sup>14</sup>

Reacting to the growing homeowner resentment for the city’s growth policies, the pro-growth leadership proposed a removal of the biannual vote of confidence for city manager. Hamann had won the vote of confidence in elections under his tenure, but the margin of victory was dwindling. They also proposed making the office of mayor an elected office again, reversing a Progressive Era measure whereby the mayor was a rotating position selected among the council by council members on the basis of seniority.<sup>15</sup> Additional measures by the pro-growth contingent included raising the number of signatures required for placing initiative and referendums on ballots and granting more administrative power to the city council. For the pro-growth supporters, these changes were necessary for the modernization of San José governance. Yet critics, among them Shaffer, opposed the measures, seeing them as a power grab that would fail to help residents.<sup>16</sup> The charter revisions received wide support from the pro-growth

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<sup>13</sup>“Arguments for an against Recall of Certain Elective Officers,” City of San José, Municipal, Recall Election, July 14, 1964, voter pamphlet, clipping file, “San José - Elections - 1964,” envelope, California Room, San José Public Library.

<sup>14</sup>“S.J. Recall Effort in ‘64 Only a Dim Memory,” *San José Mercury*, April 4, 1994.

<sup>15</sup>Placed onto San José’s city charter in 1916, the office of mayor was designed to limit the mayor’s power by making the position on an equal footing with council members. This move gave rise to the position of city manager, who inherited most of the former powers of the mayor’s office that included policy implementation, budget oversight, and labor decisions for municipal employees. The decision was designed to check against corruption, while the management-style of city government sought to make government more accountable and less susceptible to cronyism. “First S.J. City Manager Faced a Tough Task, Too He Wrote Charter, Hired Top Cop, Prepared Budget,” *San Jose Mercury News*, January 3, 1995; Trounstone, and Christensen, *Movers and Shakers*.

<sup>16</sup>“Lengthy Ballot in City April–26 Candidates,” *North San José Sun*, February 24, 1965, Clipping File - Santa Clara County,” San José Elections, 1965, April” envelope, California Room, San José

coalition of real estate developers, utility companies, and *Mercury News* publisher Joseph Ridder. The proposal divided homeowners, and voters passed the revised charter in 1965.

Shaffer's time in office was plagued by a male-dominated political culture and a voting record that challenged the designs of the pro-growth coalition. While serving on city council, the male majority broke the tradition of rotating the positions of mayor and vice mayor based on seniority in order to bypass Shaffer five times. In 1964, the council went so far as to lock Shaffer out of a public council meeting.<sup>17</sup> "Madam No" increasingly became isolated on the six-member city council, including among her anti-incumbent allies who swept into office with her. Yet her ascent to office and attitude toward continued growth represented a significant shift in San José politics, reflecting a growing middle-class homeowner resentment with taxes, zoning, growth, and poor city services. The city's growing high-tech professionals helped swing elections, such as in 1967 when Democrat Joe Colla, a self-described maverick and downtown drugstore owner, won a seat on the council as an opponent of business-as-usual politics. During the 1969 elections, homeowners supported a slate of three candidates who had the potential to become key allies for Shaffer's policy changes. The newcomers to the city, brought in by the likes of Hamann, were becoming their biggest challengers.

While the 1964 and 1967 elections destabilized the growth coalition, 1969 promised to crumble their foundation entirely. Two of the three candidates endorsed by Shaffer, David Goglio and Kurt Gross, won their council bids. Goglio, president of a homeowners' association and an IBM employee, campaigned against the city's growth policies. The incumbent, Louis Solari, a real estate developer and supporter of Hamann, had originally taken a seat on the council in 1952. Solari

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Public Library; "Measures on Ballot Listed," no source, no date, Clipping File - Santa Clara County, "San José Elections, 1965, April" envelope, California Room, San José Public Library.

<sup>17</sup>"'Madam No' Still Says No—First S.J. Councilwoman Eschews Politics Now That She's Retired," *San José Mercury*, June 5 1989.

was the longest-serving member on the council and hoped to pick up an unprecedented fifth term. Goglio's win signified a blow to the pro-growth coalition. Kurt Gross was likewise a growth critic. As a member of the San José Planning Commission, he criticized his incumbent for his continued support of urban policies that failed to check the city's expansion. A third candidate supported by Shaffer failed to make it past the primaries, but Walter Hays, an attorney with a record as an outspoken environmentalist and planned-growth advocate, won the third council seat. Hays wanted San José to become a more livable city while still attracting high tech industry to the area.<sup>18</sup> Hamann, sensing the shifting political winds, resigned shortly after the 1969 elections and was replaced by Thomas Fletcher, a controlled-growth manager. Annexations declined sharply after 1970 as the city council shifted its policy toward urban renewal and a "in-fill" policy to encourage development with the existing urban service area. Hamann's nineteen-year tenure as city manager ended just as the city's new council majority rose to challenge growth interests. "The voices of the builders and doers became lost in the many-voiced demands of the users," former Mayor George Starbird lamented. "The veto was back."<sup>19</sup> The end of growth-as-progress spelled disaster for city boosters by the end of the 1960s.

San José was among a wave of no-growth and slow-growth regulations in the Bay Area. Although San José's growth control measures never became quite as strident as those pursued in the northern peninsula cities of Menlo Park, Los Altos Hills, Palo Alto, and Atherton, homeowners demanded new policies to protect their natural views and aesthetics. Following the nation-wide trend in establishing land use controls to slow urban growth, only a single Bay Area town had growth control laws in 1972 but by 1975 thirty-one had established new regula-

<sup>18</sup>"Candidates for Seat 5 View Issues," *San Jose Sun*, May 14, 1969.

<sup>19</sup>Quoted in Trounstein, and Christensen, *Movers and Shakers*, 103.

tions.<sup>20</sup> These regulations sought to preserve a suburban and rural character of middle-class neighborhoods. For some municipalities on the Peninsula, environmental protections emerged not out of genuine concern for the environment but as a method for preserving property values or setting down symbolic boundaries between race and class. In other towns, environmental regulations did reflect a concern for the environment. Whereas San José politics in the 1950s sought to become the “Los Angeles of the North,” in Dutch Hamann’s words, the San José of the 1970s jettisoned its L.A. envy. “People in San José want limited growth,” future Mayor Janet Gray Hayes remarked in 1978. “They don’t want another Los Angeles.”<sup>21</sup> The changing contours of San José’s green political culture grappled with two decades of unrestrained urban growth, leading voters to support new local regulations and support local political leaders that made the environment a key component of their platform.

One method of growth control came in the form of zoning for residential density. San José reduced residential density throughout the city from twelve to eighteen housing units per acre to six to eight units. New policies also required that no new development could be permitted until developers submitted environmental impact statements that specified how they would handle storm runoff, maintain open space, ensure the availability of city infrastructure, and accessible schools.<sup>22</sup> In 1973, San José voters passed Measure B that prevented new residen-

<sup>20</sup>Kenneth Rosen and Lawrence Katz, “Growth Management and Land Use Controls: The San Francisco Bay Experience,” *Real Estate Economics* 9, no. 4 (December 1981): 332–333.

<sup>21</sup>“Sweet Triumph for San José’s Mayor,” *San Francisco Chronicle*, November 9, 1978, Folder 13, Box 1, Janet Gray Hayes Papers, San Jose State University Archives and Special Collections.

<sup>22</sup>Santa Clara County Planning Policy Committee, *Zoning and Housing* (San José: Santa Clara County Planning Department, 1970); Santa Clara County Planning Policy Committee, “Urban Development/Open Space Plan for Santa Clara County, 1973–1978” (Santa Clara County Planning Department, n.d.), Box 4, Folder 96, League of Women Voters, San José/Santa Clara Chapter Records, MSS-2006-09-01, San Jose State University Library Special Collections and Archives; Social Planning Council of Santa Clara County, Inc. and Santa Clara County Planning Department, “Profile ‘70: A Socio-Economic Data Book for Santa Clara County”; San José City Planning Commission, Master Plan of the City of San José; San José City Planning Commission, 1981 *Annual Review: The General Plan, List of Potential Land Use/Transportation Diagram and Text Amendments*; “General Plan Amendment Report, 1981 Annual Review, Text Amendments, Number 139”, 1981, Box

tial development until adequate school space was provided for future residents.<sup>23</sup> Many of these regulations, however, had the unintended affect of offloading the costs of development and environmental regulations onto consumers, and made low- and mid-size developments unprofitable for most developers. In response, developers built pricier housing affordable only to high-income residents.<sup>24</sup> Various maneuvers to build low-income housing in Los Altos Hills, San José, and elsewhere in Silicon Valley faced challenges by conservationists who complained that such projects threatened environmental land use regulations.

Yet, Santa Clara County did not continue down the path of a conservative ascendancy like Southern California experienced. Shaffer represented that strain of American political culture, formulating a critique of taxes, government austerity, and opposed an attempt to honor the African American civil rights movement at a Willow Glen library.<sup>25</sup> She opposed public housing measures, and outside of local politics she served on the Republican State Central Committee and was appointed to California's planning advisory committee under Governor Ronald Reagan. She unsuccessfully ran for the State Assembly twice and Congress once, but her greatest impact remained as an advocate for homeowner interests that garnered support among local and state conservatives. Yet Shaffer's quality-of-life positions put her increasingly out of step with San José's minority and working class voters. Even so, San José's growing high tech professional class largely avoided the race and class strife experienced by other cities in the 1960s and 1970s. Shaffer represented the interests of high tech professionals and their interests, yet those interests were often willing to let government intervention serve

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3, Folder 50, League of Women Voters, MSS-2006-09-01, San José/Santa Clara Chapter Records, San José State University Library Special Collections and Archives; San José City Planning Commission, *Conforming Zoning Ordinance and Management Task Force Report* (San Jose: City of San José, July 16, 1981), Box 4, Folder 94, League of Women Voters, San José/Santa Clara Chapter Records, MSS-2006-09-01, San José State University Library Special Collections and Archives.

<sup>23</sup>Rosen, and Katz, *Growth Management and Land Use Controls*, 332–333.

<sup>24</sup>Rosen, and Katz, *Growth Management and Land Use Controls*, 328–331.

<sup>25</sup>"Willow Glen residents reject DuBois, Stokely," *Afro-American*, March 22, 1969.

their goals. But the political culture in San José was different from Orange County, where anti-unionism, Cold War anti-communism, and rural voters and merchants helped shape its political culture. San José had a young population—among the youngest average aged populations in the nation in the 1970s—but the culture focused on different issues.<sup>26</sup> Quality of life, environmental policies, and a liberal attitude toward civil rights expressed a liberal political culture in Santa Clara County.

Inheriting the leadership of the growth coalition was Mayor Ron James, a popular candidate supported widely by both homeowners and business leaders. Yet his tenure was short lived when he decided not to seek re-election in 1971. And in a surprise to voters and political observers alike, Shaffer, who was expected to make a mayoral run that same year, decided to give up her council seat at the end of her term. A record thirty-three candidates vied for vacancies, including fifteen alone contending for the office of the mayor. The frontrunner for Shaffer's seat was a self-avowed "suburban housewife" and environmentalist Janet Gray Hayes. Growth dominated the election, and Hayes made slow growth the core component of her campaign. A native of Indiana who came to San José in 1956, Hayes involved herself in local politics almost immediately, becoming a key member of the League of Women Voters and president of the organization. Hayes won the council seat carrying 50.9% of the vote. Along with Hayes, vice mayor Norman Mineta won the mayor's office—a liberal Democrat and the nation's first Asian American mayor who won with "overwhelming support in every community sector, 'establishment' or otherwise"—and council incumbent Joseph Colla hung onto his council seat.<sup>27</sup> Hayes quickly garnered political support, becom-

<sup>26</sup>Norman Y. Mineta, "The State of the City," (Mayor, City of San José, July 8, 1971, City Hall, City of San José, California, Clipping File-Santa Clara County, "Norman Mineta, 1960 to 1979" envelope, California Room, San José Public Library).

<sup>27</sup>"Race Non-Issue in Mineta Win," (*San José Mercury News*, April 1971 [clipping undated], Clipping File-Santa Clara County, "Norman Mineta, 1960 to 1979" envelope, California Room, San José Public Library); "Pick a Winner! Janet Gray Hayes," (Political advertisement, [unknown pa-

ing San José's first female vice mayor. Mayor Mineta also moved to diversify the city council, appointing Alfredo Garza, Jr., as the city's first Latino to serve on the council. Quality of life politics had come to dominate San José politics. In a pledge to homeowners, Mineta promised that he would "recreate San José as 'The Garden City,' a term by which it was known not too many years ago." He promised

By "The Garden City," I mean that all our efforts should be directed toward creating a quality of life in San José . . . in which the needs of the people are provided and in which all the people have an opportunity to participate in determining the delivery of those services.<sup>28</sup>

The concerns of suburban liberals—controlling growth, the environment, improving the city's infrastructure, affordable housing, and expanding economic opportunities—fostered a political culture that fused a suburban liberal vision with quality of life activism.

When Mineta vacated the mayor's office after a successful bid to Congress in 1974, Hayes stepped in to fulfill the suburban liberal vision for San José. Hayes meshed well with the concerns of San José voters. Many had become increasingly suspicious of urban growth and its synonym of progress. In one survey, voters identified open space, urban growth, and the environment as key challenges facing the city. Among their top concerns, voters identified pollution, overpopulation, land use planning and zoning, and parks and recreation as major concerns leading up to the 1974 mayoral elections.<sup>29</sup> Sixty-six percent of the survey's respondents listed protecting the environment as the top task the city needed to take

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per], [undated clipping], Clipping File—Santa Clara County, "San José - Elections 1971 - Recall" envelope, California Room, San José Public Library); "Candidates Statements of Qualifications," (City of San José California General Municipal Election, April 13, 1971, voter booklet, Clipping File—Santa Clara County, "San José - Elections 1971 - Recall" envelope, California Room, San José Public Library).

<sup>28</sup>Mineta, "The State of the City," 5.

<sup>29</sup>Diridon Research Corporation, "A Survey of Voter Attitudes in the City of San José," August 26, 1974, 13, 16, Folder 20, Box 1, Janet Gray Hayes Papers, MSS-2002-01, San José State University Library Special Collections and Archives.

on, and fifty-nine percent felt that curbing growth and protecting open space was necessary.<sup>30</sup> Many city council members began to distance themselves from real estate interests in the city, identifying an association with developers as a political liability.<sup>31</sup> San José had become a popular symbol of poor urban growth, lambasted by popular media, books, and studies.<sup>32</sup> Residents wanted that image—and reality—corrected.

Hayes faced off against Bart Collins, a 63-year-old former police chief supported by a pro-growth coalition who she referred to as “Mr. Yesterday.” Of immediate concern, Collins pledged to repeal a construction and conveyance tax passed by Mineta that required developers to pay for the cost of infrastructure and services in new developments. Hayes, on the other hand, felt the “pay as you grow tax” should be kept in place to help curb the city’s growth. Furthermore, Hayes called for a “smart growth” policy of “in-fill” development, a measure meant to develop areas within the city’s urban services area that would not require additional infrastructure to support. For Hayes, this policy had two key goals: it halted suburban sprawl, and it generated new revenue for the city. Hayes outlined a vision that called for improving quality of life, controlling growth, promoting economic development, and cutting taxes, along with a progressive stance on social and environmental issues.

Hayes narrowly won the 1974 mayoral race, carrying the majority of voters particularly in Eastside and the new neighborhoods of Berryessa, Evergreen, and West Valley. In one analysis of the election, Collins prevailed among conservative,

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<sup>30</sup>“Survey of Voter Attitudes,” 1–2, 1974, Folder 20, Box 1, Janet Gray Hayes Papers, MSS-2002-01, San José State University.

<sup>31</sup>“Forerunner,” March 1973, Folder 405, Box 88, Don Edwards Congressional Papers, MSS-1995-01, San José State University Library Special Collections and Archives.

<sup>32</sup>Stanford Environmental Law Review, *San José: Sprawling City; A Study of the Causes and Effects of Urban Sprawl in San José, California*, March 1971; Robert C. Fellmeth, *Politics of Land: Ralph Nader’s Study Group Report on Land Use in California* (Grossman Publishers, 1973); “Correcting San José’s Boomtime Mistake,” *Businessweek*, September 19, 1970; “Boom Town,” *Newsweek*, September 14, 1970.

older, and more affluent parts of the city, while Hayes carried new, outlying areas of the city—those areas facing the worst of the growth problems.<sup>33</sup> Hayes was the first woman to serve as mayor of a major metropolitan center and among a wave of female political leaders taking office in Santa Clara County. The San José chapter of the National Women's Political Caucus dubbed the county the "feminist capital of the world" as women assumed positions of power throughout city and county government, many of whom were protégés or allies of Hayes.<sup>34</sup> Mayor Hayes and her allies ran on a platform of responsible growth and environmental consciousness, epitomized by her campaign promise to "make San José better before we make it bigger."<sup>35</sup> These women preceded the Proposition 13 anti-growth and anti-tax revolt, and like Shaffer became a tireless advocate for homeowners and "smart growth" to reign in urban sprawl.<sup>36</sup>

According to Janet Flammang, Santa Clara female leaders gained traction in county politics because of the "association . . . between male candidates and the growth machines of a booster political elite." Women were able to juxtapose themselves against this political culture as protectors of neighborhoods and torch bearers for clean government.<sup>37</sup> Future council member Lu Ryden suggested the rea-

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<sup>33</sup>"Precinct Analysis Shows Who Got the Votes - and Where," *San José Sun*, July 17, 1974, clipping file, "Janet Gray Hayes" folder, California Room, San José Public Library. Scholars suggest that one reason Hayes enjoyed wide support among minorities is because they did not want to see a former cop become mayor. Trounstein, and Christensen, *Movers and Shakers*, 104; Janet A. Flammang, "Female Officials in the Feminist Capital: The Case of Santa Clara County," *The Western Political Quarterly* 38, no. 1 (March 1985): 100.

<sup>34</sup>"But She Picks Political Ring," *San José Mercury News*, June 13, 1971, Folder 10, Box 1, Janet Hayes Papers, SJSU; "San José's First Lady, The Mayor," *San José Mercury*, ca. 1974, Folder 12, Box 1, Janet Hayes Papers, SJSU; "City Council Race," *San José Mercury*, March 3, 1974, Folder 12, Box 1, Hayes Papers, SJSU; Flammang; Matthews, *Silicon Valley, Women, and the California Dream*, 191–195.

<sup>35</sup>"Let's Make San José Better - before We Make It Bigger!" Janet Gray Hayes Campaign Literature [Fold-out pamphlet 1974] - Janet Gray Hayes papers, MSS-2002-01, San José State University Library Special Collections and Archives.

<sup>36</sup>Along with Hayes' election to the mayor's office, San José voters elected Larry Pegram to the city council and Rodney Diridon to the Santa Clara County Board of Supervisors. Both candidates supported slowing growth, expanding the county's open space holdings, and improving mass transit and city infrastructure.

<sup>37</sup>Flammang, 97; "Survey of Voter Attitudes," Hayes Papers.

son she and other women got involved in local politics was through their concern as homemakers. “Being a concerned housewife enabled them to get into neighborhood groups in the first place,” she suggested. Since concerns about parks and homes were often seen as “women’s work,” suburban politics allowed women opportunities to become deeply involved in volunteer efforts, civic organizations, and hone their talents for political activism. But their politics also reflected their class bias. Many were highly educated and affluent, intensely interested in their neighborhoods and communities. Many had come to San Jose during the first wave of migration as their husbands took jobs in electronics, aerospace, and engineering. Also enabling women to join political ranks was a redistricting decision that made electioneering easier to enter and fund.

Controlling urban growth became a feature of Valley politics stemming from desire among homeowners to preserve their aesthetic views, one of the very amenities that drew newcomers to suburbs throughout the Bay Area. In 1970, City Manager Fletcher hired Rand researchers to study the ways San José could curtail growth. The researchers concluded little could be done by the city. While city leaders accommodated to the demands of developers, the drivers of urban growth were external—federal investments into suburban homeownership, the decentralization of industry, and highway construction created a situation where Santa Clara County followed similar urban trends throughout the country.<sup>38</sup> But land use regulations were popular among homeowners because it promised protections of aesthetic vistas. The Rand researchers noted a “growing concern for the natural environment and continued concern for one’s family environment.” Many homeowners found “their fortunes are tied, not to continued growth . . . , but to keeping out those who would move in to change the area further and

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<sup>38</sup>Alesch, *Local Government’s Ability to Manage Growth in a Metropolitan Context*, 10, 15, 18, 49; Alesch, *Growth in San José*, viii; Aaron Cavin, “The Borders of Citizenship: The Politics of Race and Metropolitan Space in Silicon Valley” (PhD Dissertation, University of Michigan, 2012), 500.

who, by virtue of moving in, would destroy the reasons for which those who are already in the County moved there.”<sup>39</sup> Whether avowed environmentalists or not, homeowners saw the protection of their environments as a key component of their suburban lifestyles.<sup>40</sup>

Hayes’ election to the mayor’s office in 1974 represented a significant challenge to the development interests in San José. The new mayor promoted a policy of “smart growth” that attempted to balance industrialization with residential development. Under her tenure, Hayes streamlined the city’s permit process and offered new incentives to businesses looking to develop in the city limits. To a speech before the Chamber of Commerce in 1978, Hayes boasted of city hall’s “sympathetic ear” for businesses, helping to attract high tech firms of IBM and Hewlett-Packard. In 1977 alone, the city issued \$70 million in industrial permits, jumping the average from \$7 million to \$42 million in the first months of 1975.<sup>41</sup> Furthermore, to the approval of her homeowner constituents, Hayes insisted on new measures to slow suburban sprawl and preserve open space. Hayes insisted that homeowners would pay less and receive more, lowering the city’s tax rate from 1.78% to 1.36%.<sup>42</sup> While residential taxes dropped, Hayes continued using the construction and conveyance tax to make up for lost revenue and continue expanding city services and infrastructure. Adding to the city’s coffers were federal and state money, which helped subsidize redevelopment, upgrade to the sewage system, and provide training and employment programs.<sup>43</sup>

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<sup>39</sup>Alesch, “Managing Growth,” 29.

<sup>40</sup>Alesch, “Managing Growth,” 45; Bernard J. Frieden, “The New Regulation Comes to Suburbia,” *Public Interest* 55 (Spring 1979): 15–27; Bernard J. Frieden, *The Environmental Protection Hustle* (Boston: MIT Press, 1979); Cavin, “Borders of Citizenship,” 501–502.

<sup>41</sup>“State of the City,” Janet Gray Hayes, January 18, 1978.

<sup>42</sup>“Pocket Summary of Finances, San José, California, for the Fiscal Year 1974-75,” Series I: Administrative Files, 1974-1982, Box 1, Folder 5, “Financial Statements, 1974-1981,” Janet Gray Hayes Papers, MSS-2002-01, San José State University Library Special Collections and Archives. Hayes was also likely aware of the growing property tax revolt, and worked hard to keep taxes low while improving the city’s frugality.

<sup>43</sup>“Pocket Summary of Finances, San José, California, as of June 30, 1979,” Series I: Administrative Files, 1974-1982, Box 1, Folder 5, “Financial Statements, 1974-1981,” Janet Gray Hayes Papers,

As the 1978 mayoral campaign approached, Hayes had taken several steps to improve growth issues in the city. But like 1974, the mayoral campaign remained centered almost exclusively around limiting urban growth—what the *San Francisco Chronicle* simply called “The Issue.”<sup>44</sup> Hayes, who had risen to prominence on the basis of her commitment to controlling sprawl in San José, was challenged primarily by city council member Al Garza. A native of East San José and the oldest of ten siblings, he graduated from San José State University and worked as a high school teacher and counselor prior to his appointment on city council. Garza had connections to the city’s developers, working at a real-estate title firm to supplement his income. Garza unsuccessfully ran for the council seat Hayes captured in 1970, but was appointed to the council to fill a seat vacated by the death of Vice Mayor Kurt Gross in 1971. He successfully ran for reelection in 1973 and 1976, and took a run at the office of mayor in 1974 but was overshadowed between the Hayes-Collins race. Garza took aim at Hayes’ campaign promises of “better before bigger,” in particular accusing the city’s lack of attention in providing East Side with the “services and amenities” of the rest of the city. To Garza, Hayes’ campaign promise four years earlier failed to materialize in quality-of-life services. He also positioned himself as the candidate speaking for working-class and minority residents.<sup>45</sup>

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MSS-2002-01, San José State University Library Special Collections and Archive; “Pocket Summary of Finances, San José, California, as of June 30, 1980, Series I: Administrative Files, 1974-1982,” Box 1, Folder 5, “Financial Statements, 1974- 1981,” Janet Gray Hayes Papers, MSS-2002-01, San José State University Library Special Collections and Archives; “Pocket Summary of Finances, San José, California, as of June 30, 1981, Series I: Administrative Files, 1974-1982, Box 1, Folder 5,” “Financial Statements, 1974-1981,” Janet Gray Hayes Papers, MSS-2002-01, San José State University Library Special Collections and Archives.

<sup>44</sup>“A Tough Race for Mayor of Sprawling San José,” *San Francisco Chronicle*, October 14, 1978, Folder 13, Box 1, Janet Gray Hayes Papers, MSS-2002-01, San José State University Library Special Collections and Archives.

<sup>45</sup>“Garza berates mayor in bid to unseat her,” *San José Mercury*, March 6, 1978, Folder 13, Box 1, Janet Gray Hayes Papers, MSS-2002-01, San José State University Library Special Collections and Archives; “Garza on attack in mayor debate,” *San José Mercury*, April 27, 1978, Box 13, Folder 1, Janet Gray Hayes Papers, MSS-2002-01, San José State University Special Collections and Archives; “The Politics of Growth in San José,” *California Journal*, October 1978, Folder 13, Box 1, Janet Gray Hayes Papers, MSS-2002-01, San José State University Special Collections and Archives.

Debates around the two candidates positions focused on specific spaces in the city. Hayes insisted early in the campaign that she was a limited growth—not anti-growth—candidate, while Garza represented pro-growth interests in the city. Hayes pointed to her support to various plans included attracting new industry, using a policy of fill-in to build in areas already adequately served by city services, an expansion of city parks, and capital improvements. Garza pointed to other areas of the city, such as Hayes' approval of a commercial development in the Evergreen district in southeast San José where existing roads could not handle the influx of traffic.[<sup>98</sup>] Yet even the pro-growth sympathies of the *San José Mercury* evaporated by the mid-1970s. The *Mercury* editorialized in support of reelecting Hayes, arguing that her policy of in-filling, improving the city tax base, promoting urban redevelopment, and cutting government spending had served to control growth and take advantage of existing city services.<sup>46</sup>

A strong anti-incumbent sensibility among San José voters contributed to a runoff election between Hayes and Garza after neither managed to gain a majority vote in the June primaries. What would explain why Hayes failed to capture re-election despite her popularity? The *San José Mercury* identified a “damn-the-incumbent movement” among voters, a claim it bolstered by pointing to the three other races among candidates who also failed to garner enough primary votes.<sup>47</sup>

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[<sup>98</sup>]: “Garza on attack in mayor debate,” *San José Mercury*, April 27, 1978, Box 13, Folder 1, Janet Gray Hayes Papers, MSS-2002-01, San José State University Special Collections and Archives; “Difference is ‘clear,’ says mayor of rival,” *San José Mercury*, May 12, 1978, Folder 13, Box 1, Janet Gray Hayes Papers, San José State University Special Collections and Archives; “Five in crowded mayor’s race; Hayes, Garza emerge as favorites,” *San José Mercury*, May 24, 1978, Folder 13, Box 1, Janet Gray Hayes Papers, San José State University Library Special Collections and Archives.

<sup>46</sup>“Re-elect Mayor Hayes,” *San José Mercury*, May 22, 1978, Folder 13, Box 1, Janet Gray Hayes Papers, MSS-2002-01, San José State University Library Special Collections and Archives.

<sup>47</sup>“Santa Clara County and ‘the Revolt’,” *San José Mercury*, no date, Series II: Campaign & Election Materials, 1971-1982, Box 1, Clippings, 1971-1978 Mayoral Reelection Campaign, 1978, Janet Gray Hayes Papers, MSS-2002-01, San José State University Library Special Collections and Archives; “San José’s ‘Unpersuaded’ Electorate,” *San José Mercury*, no date, Series II: Campaign & Election Materials, 1971-1982, Box 1, Clippings, 1971-1978 Mayoral Reelection Campaign, 1978, Janet Gray Hayes Papers, MSS-2002-01, San José State University Library Special Collections and Archives). Hayes received 67,149 votes while Garza carried 54,152. Other candidate also faced runoffs in the 1978 elections, including Joe Colla, Larry Pegram, and Susanne Wilson.

The political interest in land use bled into other city and county campaigns, primarily the Santa Clara County supervisor seat vacated by the retirement of Sig Sanchez. A runoff between Susanne Wilson, a city council member, and Ivan Zubow, a South County land developer who funded his campaign out of his own pockets, exposed political faultlines around growth. Wilson, often described as a “a Hayes protégé,” emphasized her voting record of slow growth. Zubov charged that her record failed to reflect her claim arguing that his role as a land developer made him more than qualified to understand the issues around land use and growth.<sup>48</sup>

Builders and developers were central figures in the campaign. The Hayes-Garza race achieved prominence as the most expensive campaign waged in San José’s history, supported largely by developer interests pouring money into both candidates. The Builders and Contractors Committee, comprised of thirty members of builders, contractors, bankers, and associated industries, pledged \$14,000 to Garza’s campaign and planned donations of \$10,000 to Councilman Joe Colla, who faced a challenge from limited growth advocate Jerry Estruth. Bill Williams, a member of the Committee and builder for Sea Homes, remarked that he could “only surmise that the majority of our members felt that those two people [Garza and Colla] are better for our industry.”<sup>49</sup> By the end of the mayoral campaign, sixty percent of Garza’s political donations came from developers.<sup>50</sup> Hayes, Garza, Estruth, Colla, Zubow, and Wilson all received major contributions from local developers.<sup>51</sup>

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<sup>48</sup>“Supervisor runoff to focus on land use,” *San José Mercury* June 8, 1978, Folder 13, Box 1, Janet Gray Hayes Papers, San José State University Library Special Collections and Archives.

<sup>49</sup>“Builders giving Garza, Colla \$24,000,” *San José Mercury*, October 13, 1978, Folder 13, Box 1, Janet Gray Hayes Papers, MSS-2002-01, San José State University Library Special Collections and Archives.

<sup>50</sup>“San José’s future growth main issue in campaign,” *San José Mercury*, November 3, 1978.

<sup>51</sup>“Finding money the key play in the campaign game,” *San José Mercury*, October 8, 1978, Folder 13, Box 1, Janet Gray Hayes Papers, MS-2002-01, San José State University Library Special Collections and Archives.

Bolstering the Hayes campaign were high technology firms. Hayes picked up an important ally in 1977 when David Packard formed the Santa Clara County Manufacturers Group (SCCMG), established to represent the business interests of SCCMG members and aid in planned growth and quality-of-life issues. High tech industries understood that their middle-class professional employees expected a certain degree of cultural and natural amenities. By securing those amenities, firms could attract and retain the best talent. Furthermore, Hayes' pro-business approach underscored the friendliness suburban liberalism offered electronics firms. The new industry was not only transforming the local economy, but had grown to expand their influence in local politics as well.<sup>52</sup>

Adding to tensions in the runoff campaign was the specter of Proposition 13. Hayes and her suburban liberal allies opposed the referendum, but the majority of Santa Clara County voters disagreed and passed the anti-tax measure in 1978. Nevertheless, Hayes maintained throughout her campaign that San José could offer the quality-of-life amenities and services middle-class homeowners desired while also cutting taxes and budgets. While government austerity appealed to conservative voters, Hayes kept a faith in the role of local, state, and federal assistance in achieving the goals homeowners hoped to see in the city. Moreover, Hayes remained committed to her suburban liberal agenda of environmental protection, civil rights, and social programs.

The mayoral campaign became mired in controversy as it entered the final three months. In a maneuver that rhymed with the Progress Committee's firing of the city manager in the 1940s, the pro-growth contingency on the city council sought to strike at the Hayes campaign by orchestrating an ouster of City Man-

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<sup>52</sup>"Finding Money the Key Play in the Campaign Game," {TODO}, October 8; Saxenian, "In Search of Power: The Organization of Business Interests in Silicon Valley and Route 128," *Economy and Society* 18, no. 1 (1989): 33-39, 45-47, 57-61; Annalee Saxenian, *Regional Advantage: Culture and Competition in Silicon Valley and Route 128* (Harvard University Press, 1996), 47-48.



**Figure 5.1:** The perceived cozy relationship between pro-growth members of the San José city council and developers caught the ire of voters.

ager Ted Tedesco.<sup>53</sup> Tedesco, originally the city manager in Boulder, Colorado, assumed office in 1972 under Mayor Mineta and had guided San José's "in-fill" policy. Tedesco promoted controlled growth, and by extension was an important ally in the Hayes administration. But in a four-to-three vote, the city council voted to remove Tedesco from his position. The council members opposing Tedesco—Garza, David Runyon, a real estate developer, Colla, and Pegram, the council's only Republican—overruled the votes of Hayes, Wilson, and Jim Self. Local media quickly dubbed the pro-growth members the "Fearsome Foursome." The opponents of Tedesco were open about their reasoning. Garza explained that Tedesco's ouster reflected his unwillingness to serve the will of the council majority, suggesting that the city manager's slow-growth sensibilities had gotten in the way of the city's operation.<sup>54</sup> Joe Colla reasoned frankly: "He was anti-growth, and this is now a pro-growth city."<sup>55</sup> In the midst of the Tedesco ouster, the Fearsome Foursome pushed through additional pro-growth policies including the abolishment of a city policy tying new growth to adequate streets, adopting a \$28 million road program to build new roads rather than improve existing infrastructure, and approved a new tax on urban development days before Proposition 13 made it illegal.<sup>56</sup>

In November, the pro-growth agenda of the Fearsome Foursome failed to resonate with voters. Hayes swept past Garza, who claimed over 70% of the vote, while Colla was unseated from the council by Estruth, who received 60% of the

<sup>53</sup>On the Progress Committee, see chapter 3.

<sup>54</sup>"Challenger Al Garza," *San José Mercury*, October 31, 1978, Folder 13, Box 1, Janet Gray Hayes Papers, MSS-2002-01, San José State University Library Special Collections and Archives.

<sup>55</sup>"The Politics of Growth in San José," *California Journal*, October 1978, Folder 13, Box 1, Janet Gray Hayes Papers, MSS-2002-01, San José State University Library Special Collections and Archives.

<sup>56</sup>"It's a single issue race," *San José Sun*, October 24, 1978, Folder 13, Box 1, Hayes Papers; "A Tough Race for Mayor of Sprawling San José," *San Francisco Chronicle*, October 14, 1978, Folder 13, Box 1, Janet Gray Hayes Papers, MSS-2002-01, San José State University Library Special Collections and Archives; letter from Susan Hammer, et al., to Friends, n.d., Folder 13a, Box 1, Janet Gray Hayes Papers, MSS-2002-01, San José State University Library Special Collections and Archives.

vote. Shortly after the campaigns, David Runyon was forced to resign after a public drinking scandal and was replaced by Tom McEnery, another limited-growth advocate.<sup>57</sup> The public rejection of Garza and the pro-growth interests in the city council solidified the political shift happening throughout California and the West as concerns about growth and the environment shaped the city's politics. Jubilant victors and outside observers saw Hayes' victory as a sign that the city's incessant drive for expansion had come to an end. Hayes herself saw her victory as "a clear mandate" that San Joséans were through with the growth-as-progress philosophy.<sup>58</sup>

Just as voters helped enable urban growth through their sanction of municipal bonds in the 1950s and 1960s coupled with their desire for countryside living, so to did people begin to have second thoughts about such growth. Inadequate city services, high taxes, gridlocked roads, environmental damage, and a sense that quality of life was declining contributed to a state of alarm and calls for reform. Voters were motivated to action through various sentiments. Sometimes these reflected genuine ecological concerns, arrived at through their exposure to expert literature. Other times, responses to growth came in the form of quality-of-life concerns and a loss of aesthetics, a concern that the foothills of the Santa Cruz and Diablo ranges would be filled with homes or obscured by daily smog. They frequently tied economic issues to environmental issues. Citing the Marshall Plan, urban redevelopment, and the moon landings, Dorothy Erskine pleaded with Michael McCloskey to find out how "can we make environmental

<sup>57</sup>"Sweet Triumph for San José's Mayor," *San Francisco Chronicle*, November 9, 1978, Folder 13, Box 1, Janet Gray Hayes Papers, MSS-2002-01, San José State University Library Special Collections and Archives. Runyon's campaign had cast him as a "born-again Christian," but in June was charged with battery, resisting arrest, and public drunkenness. See "The Politics of Growth in San Jose."

<sup>58</sup>"Sweet Triumph for San José's Mayor," *San Francisco Chronicle*, November 9, 1978, Folder 13, Box 1, Janet Gray Hayes Papers, MSS-2002-01, San José State University Library Special Collections and Archives.

protection fit this pattern and perhaps save us from war and a worse fate?"<sup>59</sup> The political contests over sprawl and growth highlighted how ecological, economic, and social issues intertwined in postwar Santa Clara County. The cities had managed to co-opt regional government, but in the process sparked a grassroots protest. They enjoyed the amenities of their surroundings, and when those were threatened they pushed for reform.<sup>60</sup>

Yet while Hayes and the suburban liberals appeared to have achieved victory over the growth-is-progress ideology that had dominated San José politics since the 1940s—and most local politics for several municipalities in Santa Clara County—the case for reform did not always mean more effective government. Controlled growth advocates succeeded in slowing the city's expansion, including the San José city council's approval of a 1976 General Plan that was seen as a bridle on growth, development moratoriums throughout the Peninsula, and successful efforts and shutting down proposed residential developments.<sup>61</sup> Yet local governments remained at odds with one another. Despite maneuvers by San José to preserve foothills from residential development, for example, proposals by Santa Clara County planners sought to open up hillsides in the Santa Cruz and Diablo mountains for residential development. Environmentalists decried the threats of earthquakes, landslides, and sewer systems that could threaten mountain reservoirs, yet to county planners the decision to open up lands for construction only

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<sup>59</sup>Letter from Erskine to McCloskey, 2, April 12, 1969, California Tomorrow Papers, California Historical Society.

<sup>60</sup>"Anti-Sprawl Initiative: The Citizen's Initiative for Organized Growth and Fiscal Responsibility, An Initiative Ordinance," petition, 1978, Folder 115, Box 4, League of Women Voters, San José State University Library Special Collections and Archives.

<sup>61</sup>"Rancho San José Loses in City Vote," *San José Mercury*, January 18, 1978, Folder 115, Box 4, League of Women Voters, MSS-2006-09-01, San José State University Library Special Collections and Archives; letter from Lennie Roberts to LAFCO Commissioners, May 1, 1979, Folder 115, Box 4, League of Women Voters, MSS-2006-09-01, San José State University Library Special Collections and Archives; "Development Moratorium of West S.J. Considered," *San José Mercury*, August 18, 1978, Folder 115, Box 4, League of Women Voters, MSS-2006-09-01, San José State University Library Special Collections and Archives; *League of Women Voters of San José/Santa Clara, Inc., v. San Jose City Council*, Superior Court of California, December 21, 1981, League of Women Voters Papers, MSS-2006-09-01, San José State University Library Special Collections and Archives.

helped to reduce pressure for more development.<sup>62</sup> The county's plans were all the more troubling to environmentalists following an amended 1980 county General Plan that loosened the slope-density formula that restricted the number of subdivisions that could appear in a 100-acre lot with an average slope of twenty degrees. To the editors of the *San José Mercury*, county planners lacked "political will."<sup>63</sup>

Developers no longer ruled the Valley's future. In November 1982, developer Lee Brandenburg won the approval of the San José city council to begin construction on a hillside development, the first such development in the city since 1976. Brandenburg had built housing developments throughout the South Bay in Saratoga, Los Gatos, Almaden, Willow Glen, and West San José.<sup>64</sup> Brandenburg saw himself adding to San José's cultural and economic capital. Casting himself as an environmentalist and lifelong member of the Nature Conservancy, Brandenburg assured the council and critics at a public hearing that he submitted careful studies of Urban Service Area expansion, archaeological reports, geological and seismic investigations, engineering analysis, and traffic analysis to ensure the development would not become a burden upon the city or its residents. Furthermore, Brandenburg argued, just as he had when one of his proposals came before the city council in 1978, that such high-end developments would attract wealthy and powerful residents, many of whom "do business in San José [but] don't live there."<sup>65</sup> Located north of Silver Creek in the southeast end of the city,

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<sup>62</sup>"Increased Density in Hills Urged," *San José Mercury*, n.d., Folder 96, Box 4, League of Women Voters, MSS-2006-09-01, San José State University Library Special Collections and Archives.

<sup>63</sup>"Keep Hillsides Deal," *San José Mercury News*, October 24, 1984, Folder 96, Box 4, League of Women Voters, MSS-2006-09-01, San José State University Library Special Collections and Archives.

<sup>64</sup>"Partial Transcript of Public Hearing on 1981 General Plan Amendments," November 19, 1981, 1 of 4, 15, Folder 50, Box 3, League of Women Voters, MSS-2006-09-01, San José State University Library Special Collections and Archives.

<sup>65</sup>"Partial Transcript of Public Hearing on 1981 General Plan Amendments," November 19, 1981, 3 of 4, 10, Folder 50, Box 3, League of Women Voters, San José State University Library Special Collections and Archives.

the Silver Creek Hills development sought to be a resort complete with an Arnold Palmer-designed golf course, resort hotel, shops, and 2,610 luxury homes and condominiums. The League of Women Voters and an ad hoc coalition calling themselves San Joséans for Limited Growth filed suit against the city council, arguing that the city failed to follow state environmental laws and, therefore, their approval to amend the General Plan for the Brandenburg development was illegal. Nor, they argued, could the sustainability of the planned community be assured. Not only would Silver Creek Hills reside on extremely steep hillsides, argued H.G. Wilshire, a member of the Committee for Green Foothills, but construction would disturb “underlain . . . rocks that are notoriously difficult to stabilize.” The threats of landslides and unsuitability of city services to reach the community, Wilshire concluded, reflected “risk-taking with innocent lives” by the city council.<sup>66</sup> In the end, a county judge overruled the council’s approval. The environmentalists had won.

SHORTLY AFTER HER ELECTION as mayor, Janet Gray Hayes spoke before an audience at the Conference on Bay Area Urban Growth held in San Francisco. Growth management, Hayes posited, was defined by the three “Ps”—“piecemeal, patchwork, and prop-up.” Her message that day was the role of politics and cities.

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<sup>66</sup>“Safety first,” n.d., no source, news clipping, Folder 49, Box 3, League of Women Voters, MSS-2006-09-01, San José State University Library Special Collections and Archives. See also *League of Women Voters of San José/Santa Clara, Inc., and San Joséans for Limited Growth v. San José City Council*, December 21, 1981, Folder 49, Box 3, League of Women Voters, MSS-2006-09-01, San José State University Library Special Collections and Archives; “Needed: An Environmental Impact Report,” n.d., no source, news clipping, Folder 49, Box 3, League of Women Voters, MSS-2006-09-01, San José State University Library Special Collections and Archives; “Luxury homes, public hearings,” *San José Mercury News*, September 9, 1982, Folder 49, Box 3, League of Women Voters, MSS-2006-09-01, San José State University Library Special Collections and Archives; “Hillside Developer Asks Dismissal of Suit,” *San José Mercury News*, April 20, 1982, Folder 49, Box 3, League of Women Voters, MSS-2006-09-01, San José State University Library Special Collections and Archives; “Partial Transcript of Public Hearing on 1981 General Plan Amendments,” November 19, 1981, 3 of 4, 10, Folder 50, Box 3, League of Women Voters, San José State University Library Special Collections and Archives.

"Political process can be used in a positive way," she told the audience. "Cities can't solve urban problems on their own. Government's can solve urban problems on their own. Governmental policies and programs should set the stage for private initiative and innovation. Both the public and the private sectors have an obligation for tomorrow. We need less conflict and confrontation, and more cooperation and coordination."<sup>67</sup> By the end of the 1980s, cities throughout the Peninsula had placed development limits into their urban plans. Local governments responded to the demands of grassroots activists who expected more from their political leaders. Local opposition to boosters owed much to the new environmental regulations and environmentalists. Plans to expand cities further into the foothills drew attention of environmental organizations whose efforts shaped the proposals. Yet even as environmentalists had halted new development, it could not reverse the original land grab. Once the political ability to confront powerful growth interests became viable, the geography of the postindustrial space had already been set. Capital was fixed in space, shaping suburban and industrial spaces that introduced uneven impacts on housing and environmental risk. The consequences of that history would become apparent in the 1980s, as the following chapter explores, when the landscape of industry and the landscape of suburbs collided over the pollution of space.

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<sup>67</sup>"Presentation by Mayor Janet Gray Hayes, City of San José, California, to the Conference on Bay Area Urban Growth: Yes or No? Up or Out? A Conference on Revitalizing Bay Area Cities," November 1, 1975, 9 and 15, San Francisco Hotel, San Francisco, California, Folder 16, Carton 19, California Tomorrow Records, California Historical Society.

## Chapter 6

### The Tap Water Rebellion

The horizon above San Jose is unmarred by smokestacks, and people here are proud of that. They have worked hard at making the valley a base of the computer-electronics industry and an unpolluted place to live. —*New York Times*, May 20, 1982

When I first became Mayor and we embarked on an economic development program, there was no doubt in my mind that this was a clean industry. We now know that we are definitely in the midst of a chemical revolution. —Mayor Janet Gray Hayes

All of this industrial activity is hard to notice, however. Driving from Stanford University in Palo Alto to the green hills east of San Jose, one sees no smokestacks at all, and hardly anything that even looks like a factory. . . . It has become obvious that the absence of smokestacks does not mean an absence of environmental problems. —Judith Ayres, EPA Region 9 Administrator

Construction workers sunk their backhoe into the earth in an early November morning in 1981, making way in the soil for a second underground industrial solvents storage tank for Fairchild Semiconductor's South San Jose facility. Digging near an existing storage tank, the workers noticed something about the soil that did not seem right: the soil was exceptionally wet and had taken on a rust-colored hue and strange odor. Digging deeper they discovered a leak in the bottom of the existing storage tank. The leak went undiscovered when the above-ground gauge that measured the volume of liquid in the tank failed, and the system normally monitoring incoming chemicals had not been routinely checked. Concerned about the size of the leak, the construction crew reported their finding to Fairchild and the Great Oaks Water Company, which operated drinking water

wells nearby servicing several thousand residents. The water company closed the wells immediately. Tests confirmed that an industrial solvent containing the carcinogen 1,1,1 trichloroethane (TCA) had leaked from the tank and concentrated in the wells at nearly twenty times the permissible limit established by the Environmental Protection Agency. Nearly 60,000 gallons of toxic chemicals had leaked from the tank for at least two years.<sup>1</sup>

JULIANA ROSS WAS ONLY NINE MONTHS OLD in 1982 when she had her first open-heart surgery. When her mother, Lorraine, opened the pages of the *San Jose Mercury News* on January 20, she saw the news: Fairchild Semiconductor, just a quarter mile from her home, had experienced an environmental catastrophe. Suddenly, the neighborhood stories and problems made sense. Her neighbors in the Los Paseos neighborhood had complained about the water tasting and smelling funny, but of greater concern were the four children with birth defects, the two miscarriages, and the one stillbirth that had taken place on her block in the past three years. And her youngest child, nine months old at the time, faced multiple congenital heart defects. Lorraine Ross could not help but wonder if the leak and the health problems were connected.<sup>2</sup>

News of Fairchild's chemical leak captured the Bay Area's attention in early 1982, and parents whose children had experienced health problems wondered about a possible link. Who, Lorraine and her neighbors asked, permit-

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<sup>1</sup>Newspaper clipping, "Water contaminated by leak," *San Jose Mercury*, January 20, 1982, Folder 2, Box 11, Silicon Valley Toxics Coalition Records, San Jose State University Special Collections; "Get Tough Now to Avoid Spills," *Gilroy Dispatch*, July 1, 1983; Peter Murphy, "Great Oaks Water Company Distribution Study," draft report, Folder 1, Box 11, SVTC, SJSU; "High-Tech: a Stain on a 'Clean' Field," *Los Angeles Times* December 22, 1983.

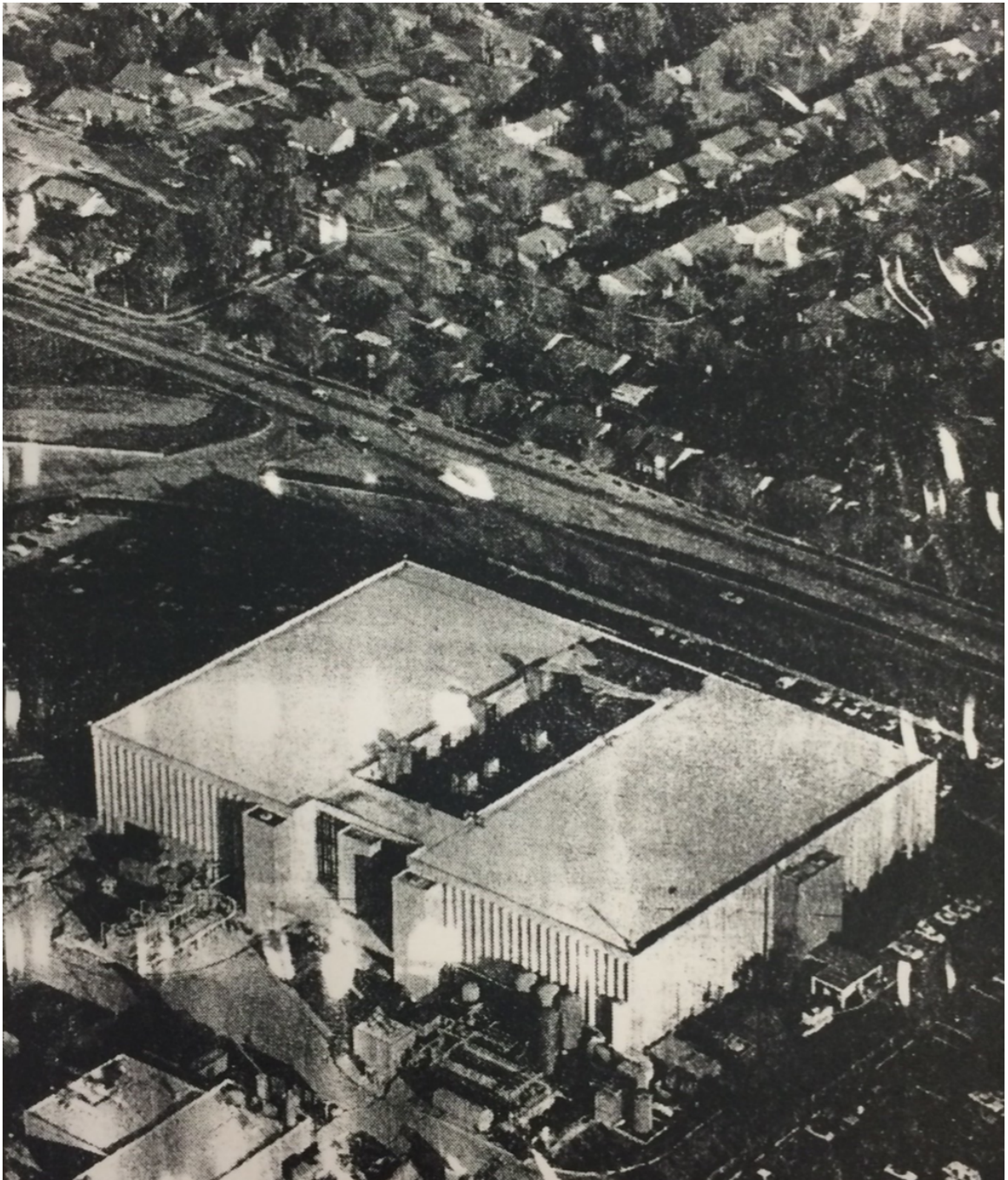
<sup>2</sup>Newspaper clipping, "Water contaminated by leak," *San Jose Mercury*, January 20, 1982, Folder 2, Box 11, Silicon Valley Toxics Coalition Records, San Jose State University Special Collections; newspaper clipping, "Silicon Valley's Fear Over Tainted Water," *San Francisco Chronicle*, May 16, 1983, Carton 20, Folder 12 Hazardous Waste, California Tomorrow Records, MS 3641, California Historical Society; "Birth defects and chemicals," *San Jose Mercury*, February 3, 1982, SVTC Records, SJSU.

ted Fairchild to store toxic chemicals just feet away from public wells? Who decided what trace elements found in the water was safe for human consumption? Why had Fairchild and Great Oaks taken so long to inform the public about the TCA contamination? The chemicals, Lorraine and her neighbors discovered, went unregulated. No official requirements were in place for Fairchild to frequently check its storage tanks. The public was unaware of the sorts of chemicals used by Fairchild and other high tech manufacturers, and news of the problem only broke when construction workers discovered there was a problem. Investigations revealed that the problem was even more widespread. At least an additional 36 leaks had occurred throughout the Bay Area, including a tetrachloroethylene (TCE) leak near an Intel plant that had not used the chemical since 1977.

The Bay Area's contaminated soil and water led to a significant shift in environmental thought. Although many of the other leaks did not threaten drinking water supplies, the widespread presence of toxic leaks concerned many residents in the Valley. For the first time, residents confronted the reality of Silicon Valley's dependence on chemicals—that the premise of “clean” industry was not so clean after all. Stories flooded local headlines: hundreds of chemical leaks and spills, a chemical explosion at Lockheed that forced the evacuation of 400 people from Palo Alto, the stories of workers exposed to chemicals that caused hair loss, respiratory problems, skin infections, and worse. Valley residents came to see the landscape as tainted. “I’m not anti-semiconductor industry,” Lorraine Ross noted, “but I don’t want my health adversely affected by their profit-making. Companies should be willing to invest a portion of their profit to ensure they aren’t damaging the environment.”<sup>3</sup> By 1992 studies found at least fifty-seven private and forty-seven public drinking wells were contaminated, and sixty-six plots of land were too toxic for people to walk upon. County authorities determined that sixty-

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<sup>3</sup>Susan Benner, “Storm Clouds Over Silicon Valley,” *Inc* (September 1982), 84.



**Figure 6.1:** Fairchild Semiconductor located across from the Los Paseos neighborhood to the south in South San Jose. *San Jose Mercury News*, February 3, 1982.

five of the seventy-nine companies they investigated—including IBM, Hewlett-Packard, Raytheon, NEC, AMD, Signetics, and many others—had contaminated the soil beneath their plants. The federal government eventually declared twenty-nine Superfund sites—more than any other county in the nation—twenty-four of which resulted from electronics firms.<sup>4</sup> Furthermore, the “alphabet soup of toxic wastes”—TCE, PCB, EBD—had entered the public vocabulary.<sup>5</sup>

The presence of synthetic and industrial contaminants was a revelation to Valley suburbanites. In earlier decades, cities had dealt with the problem of human waste as public health officials learned how to manage the problem. Experts placed their faith in public health strategies that asserted definition and control over health threats. Even in San Jose, the city had learned to deal with its unique problem of sewage and cannery effluence through an efficient sewer system that could handle massive volumes of detritus. But now cities of the Bay Area were on the front lines of widespread contamination by high tech toxics, a situation the region was unaware and unprepared to confront. Concerns over health transformed thinking about the regional landscape and introduced a new spatial thinking about human health.

The proximity of pollutants near suburban areas along the Peninsula resulted as a consequence of the Bay Area’s lack of residential and industrial urban planning. Because Bay Area cities thought little about the layout of their environs, industrial facilities and warehouses frequently turned up alongside residential developments rather than isolated from the places where people lived. The natural boundaries of the Peninsula—the Santa Cruz Mountains to the west and the San Francisco Bay to the east—also kept suburban areas and industry in close proximity to one another. They simply lacked the space to expand. The emerging

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<sup>4</sup>David N. Pellow and Lisa Sun-Hee Park, *The Silicon Valley of Dreams: Environmental Injustice, Immigrant Workers, and the High-Tech Global Economy* (New York: New York University Press, 2002), 75–76.

<sup>5</sup>“An underground problem surfaces,” *Chicago Tribune*, February 29, 1984.

crisis broadened the coalescing environmental movement, even among those who never considered themselves environmentalists. The daily lived experiences of the Bay Area's suburbanites expected clean tap water and believed that the industries near their communities were clean and green. The toxic landscape shattered that perception.

CONCERNS ABOUT DRINKING WATER were not new in 1982. Water quality, sewage disposal and treatment, and waste generation have been staple issues of urban growth. Urban areas depend on access to fresh water for sanitation, industrial and municipal development, and public health, interlocking both water supply and water quality. During the nineteenth century, cities often treated nearby water supplies as public sewers. Property owners and industries faced few challenges to how they determined their use of water resources until public health advocates during the Progressive Era challenged the environmental conditions that were leading to public health problems.<sup>6</sup>

By December 1970, the month that the Environmental Protection Agency (EPA) began operating under the administration of William Ruckelshaus, Americans were acutely aware of the presence of toxins in their environment. Environmental issues had become a key political issue, made all the more visible with the first Earth Day held in May 1970. Congress passed several pieces of pollution legislation aiming to curb the discharge of potentially harmful chemicals. The Air Quality Act of 1967, the Clean Air Act of 1970, Resource Recovery Act of 1970, Federal Insecticide, Fungicide, and Rodenticide Act Amendments (FIFRA) in 1972, and 1972 Clean Water Act sought to mandate new environmental regula-

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<sup>6</sup>Robert Gottlieb, *Forcing the Spring: The Transformation of the American Environmental Movement* (Washington, DC: Island Press, 2005), 89–92, 95–97; United States Public Health Service Thomas Parran and Watson B. Miller, "Public Health Service Drinking Water Standards," *Journal (American Water Works Association)* 35, no. 1 (January 1943): 93–104.

tions.<sup>7</sup>

Congress began debate over new drinking water legislation in the early 1970s. The debate took on additional pressure when in 1972 the Environmental Protection Agency released a study of drinking water supplies in New Orleans. The study found thirty-six organic chemicals present, some of which were known carcinogens. An additional study of New Orleans' contamination by the Environmental Defense Fund published two years later showed a high incidence of cancer among people whose primary source of drinking water came from the contaminated surface waters. New Orleans' contaminated waters helped prompt the passage of the Safe Drinking Water Act (SDWA) in 1974 that established federal quality standards.<sup>8</sup> SDWA established "maximum contaminant levels" (MCLs) that, in the words of historian Linda Nash, "assumed . . . a level of exposure below which no adverse health effects would occur in any place, at any time."<sup>9</sup> MCLs also assumed that all relevant and possibly harmful contaminants were known to science, although few laboratory tests existed for detecting presence of organic chemicals.<sup>10</sup>

Throughout the United States, chemical contamination sites were uncovered. In California's Central Valley, water quality officials discovered the contamination of groundwater by 1,2-dibromo-3-chloropropane (DBCP), a compound used by farmers as a pesticide. In New York, officials in Long Island had been dealing with contaminated water since the 1940s that included the presence of the

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<sup>7</sup>Gottlieb,, *Forcing the Spring*, 179–180.

<sup>8</sup>Linda Nash, *Inescapable Ecologies: A History of Environment, Disease, and Knowledge* (Berkeley: University of California Press, 2006), 173; Samuel P. Hays, *Beauty, Health, and Permanence: Environmental Politics in the United States, 1955-1985* (Cambridge: Cambridge University Press, 1987), 198. Water quality standards trace themselves to the early twentieth century when the U.S. Public Health Service adopted quality standards for drinking water regarding the presence of *E. coli* used to combat the spread of typhoid.

<sup>9</sup>Nash,, *Inescapable Ecologies*, 173.

<sup>10</sup>Nash,, *Inescapable Ecologies*, 174; William E. Cox, "Evolution of the Safe Drinking Water Act: A Search for Effective Quality Assurance Strategies and Workable Concepts of Federalism," *William & Mary Environmental Law and Policy Review* 21 (Winter 1997): 69–165.

insecticide aldicarb, cadmium, phenol, hexavalent chromium, and synthetic detergents. Further exacerbating the problem was the sheer volume of new chemical compounds coming on to the market. In the 1970s, roughly 500 new chemical compounds appeared on the market each year. These chemicals had few standards and assessments in place aside from certain provisions within the SWDA weakly enforced by the EPA. Compounds and chemicals once thought to pose little environmental risk had, with their appearance in groundwater, revealed how widespread the contamination of the country's drinking water supplies had become.<sup>11</sup>

The Bay Area's water landscape transformed after World War II. The two major rivers, the Guadalupe River and the Coyote Creek, and its tributaries as well as the San Francisco Bay itself were only the most visible signs of the Bay Area's water landscape. Both had been reshaped as urban areas expanded rapidly in the postwar era, either through the river's physical re-routing in canals, dams, and reservoirs, or from higher water levels pouring over their banks due to urban runoff causing excessive amounts of water. Drinking water was not on the minds of most residents. Not until the 1980s would the focus turn to the hidden water trapped between layers of clay and gravel beneath the surface of the cities. Moreover, groundwater supplies were rarely monitored by either the county or the state of California. And since high tech industries maintained a perception as "clean" industry, few thought or were aware that their activities were introducing chemical contamination.<sup>12</sup>

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<sup>11</sup>Nash,, *Inescapable Ecologies*, 175–176; Christopher C. Sellers, *Crabgrass Crucible: Suburban Nature and the Rise of Environmentalism in Twentieth-Century America* (Chapel Hill: University of North Carolina Press, 2012), 113–123; Jared N. Day, "Safe Drinking Water–Safe Sites: Interaction Between the Safe Drinking Water Act and Superfund, 1968–1995," in *Improving Regulation: Cases in Environment, Health, and Safety*, ed. by Paul S. Fischbeck and R. Scott Farrow, (Washington, D.C.: Resources for the Future, 2001), 17–42, 21–23.

<sup>12</sup>Craig E. Colten, "A Historical Perspective on Industrial Wastes and Groundwater Contamination," *Geographical Review* 81 (April 1991): 218–223.



**Figure 6.2:** Lorraine Ross and her daughter Juliana. "Silicon Valley's Fear Over Tainted Water," *San Francisco Chronicle*, May 16, 1983.

THE LOS PASEOS NEIGHBORHOOD SPARKED what one newspaper called the “birth of an eco-tragedy.”<sup>13</sup> Along with the Fairchild leak, the nearby International Business Machines facility announced the discovery of a TCA leak shortly after the Fairchild leak was revealed. Studies would later find that the IBM leak was among the worst in the South Bay, contaminating twenty-five public and private wells.<sup>14</sup> To Lorraine Ross and her neighbors, the presence of chemicals in the suburban neighborhood was as much a spatial experience as a personal one. “It takes a lot of nerve for them to invade a pre-existing residential neighborhood, pour dangerous chemicals into a leaking tank, poison the surrounding environment and hide the fact from the people affected by their negligence.”<sup>15</sup> Ross helped galvanize the community into political action, first surveying her neighbors that turned up a list of seventy-two people who reported birth defects and health problems.<sup>16</sup> The problem seemed so widespread to not be a coincidence. Ross presented the results of her survey to city officials as evidence of a serious problem.<sup>17</sup>

Lorraine Ross had relocated her family south to the city of Gilroy by 1983, but she continued to be a vocal presence in the Bay Area’s anti-toxics campaign. At her new home in Gilroy, the presence of industry near suburban areas continued to be a spatial experience and informed the political critique of toxics. The

<sup>13</sup>“Birth of an eco-tragedy” *Los Angeles Herald Examiner*, February 10, 1982.

<sup>14</sup>Peter Murphy, “Great Oaks Water Distribution Study,” 1988, 1, Folder 1, Box 11, SVTC records, SJSU; Ted Smith oral history, Berkeley, 19; Ted Smith and Mike Belliveau, “Responsible action needed in IBM’s toxic waste cleanup,” *San Jose Business Journal*, April 7, 1986, Folder 3, Box 18, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

<sup>15</sup>Quoted in Pellow, and Park,, *The Silicon Valley of Dreams*, 74.

<sup>16</sup>Lorraine Ross, “State Study Confirms Birth Defect Cluster,” *Silicon Valley Toxics News* (April 1985), 3; “San Jose Hearing Points Up Toxic Risks at Area Plants,” *California AFL-CIO News*, February 11, 1983.

<sup>17</sup>“Leaking Chemicals in California’s Silicon Valley Alarm Neighbors,” *New York Times*, May 20, 1982.

disk manufacturer Dysan planned a facility at the Santa Teresa Technology Park in Gilroy. Although not opposed to its construction, Ross warned her new city that they could not “accept the dictates of Realtors and developers when it comes to determining the health of our families. You all have the right to talk loudly. It’s important that Gilroy plan ahead for industry.”<sup>18</sup> Communities had to insist on their health.

The core issue emerging in the anti-toxics campaign was whether scientific evidence existed to support the claim that exposure to industrial solvents caused the birth defects. The debate over contamination and health originally coalesced around the lack of scientific evidence to support the neighborhood’s claim. Fairchild maintained that the length of exposure to the chemicals were not long enough to cause health effects. Basing their claim on the state standard for TCA exposure, they argued that those standards were set with long-term and high-level exposure as the baseline. Fairchild also challenged the timeline of the chemical leak and its link to birth defects. The company estimated that the leaks began 18 months before they were discovered and took up to sixteen months to travel the 2,000 feet to the Great Oaks wells. The birth defects that began three years prior, Fairchild argued, could not possibly be connected if their leak started relatively recently and exposed people to such low levels of TCA.<sup>19</sup>

Residents were unsatisfied by industry’s answers. The concentration of birth defects in Los Paseos confirmed the presence of a problem, and they linked the local environment as the most likely cause. Like other parts of the Bay Area’s environmental activism, women led the way in prompting action by government officials. Mothers in Los Paseos—Lorraine Ross, Mary Lou Lujan, Julie Bowman, and others—took on the task of protecting their children and their community.

<sup>18</sup>“Get tough now to avoid spills,” *Gilroy Dispatch*, August 1, 1983, Folder 5, Box 10, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

<sup>19</sup>“Birth of an eco-tragedy,” *Los Angeles Herald Examiner*, February 10, 1982.

They developed their own theories as to what was going on in Los Paseos, and focused their critique around female bodies and pregnancy. In their view, the spatialized frequency of pregnancy problems were directly related to the local landscape. Unconvinced by Fairchild's argument that the level and length of exposure was too short, they instead insisted that the only explanation lay with the chemical leak. Families in Los Paseos, Lorraine Ross insisted, felt "like human guinea pigs whose health is being tested by the 'high-tech' companies doing business in our valley."<sup>20</sup>

Under pressure by neighborhood activists, media interest, and political fallout, the county agreed to study the potential for a link between groundwater contamination and health problems that plagued Los Paseos in 1982. County health officials began by looking at birth certificate and infant-death and fetal-death records to reveal the possibility of a cluster of deaths or illnesses in the city. Their early report found "no significant difference" between the neighborhood's birth disorder rate and the county's birth disorder rate.<sup>21</sup> County water quality officials also initiated an investigation into tapwater and wellwater throughout the county. In the South Bay near Los Paseos, water sampling revealed trace levels of TCA and DCE, but the amounts were below the state action level to shut down the wells.<sup>22</sup>

In addition to the birth certificate survey, county health officials formed

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<sup>20</sup>"We Demand Safe Water," SVTC mailer, n.d., Folder 4, Box 10, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

<sup>21</sup>"Study of birth defects continues," *San Jose Mercury News*, February 25, 1982, Folder 2, Box 11, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

<sup>22</sup>"Environmental News Fact Sheet: Status Report, South Bay Tapwater Sampling Program," November 5, 1984, Folder 14, Box 12, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives; "Proposed South Bay Sampling Event, October 9," Folder 14, Box 12, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

the Santa Clara County Health Advisory Committee on Environmental Teratology and agreed in the spring of 1982 that enough evidence existed for a formal investigation. The county turned to epidemiology to study the spatial pattern of disease in San Jose. Epidemiology's disciplinary history roots itself in studies of space to understand whether diseases had a spatial component that could explain health issues in landscapes.<sup>23</sup> The goal of the county's study sought to determine if lifestyle or environmental features affected the health of the Los Paseos community as compared to demographically-similar communities without any known contamination. The study was released in 1985 with no conclusive evidence to support the claims of neighborhood activists. The study reached two key conclusions: the neighborhood of Los Paseos experienced higher rates of miscarriages and a threefold increase in total birth defects compared to nearby communities that had no known water contamination, and the community experienced a two-and-a-half times higher rate of major heart defects compared to the rest of the county. The study, however, made no causal link between the contamination and the high presence of birth defects, citing the lack of water monitoring prior to 1981 that could provide potential data on a link between health effects and contaminated water.<sup>24</sup>

The study did little to stem public concern and only served to strengthen the resolve of the anti-toxic activists, who used the conclusion to continue to point out the presence of an adverse health cluster in San Jose.<sup>25</sup> But the widespread

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<sup>23</sup>Nash,, *Inescapable Ecologies*, 185. See also Neil Pearce, "Traditional Epidemiology, Modern Epidemiology, and Public Health," *American Journal of Public Health* 86 (May 1996): 678–683; Mervyn Susser, "Epidemiology in the United States After World War II: The Evolution of Technique," *Epidemiologic Reviews* 7 (1985): 147–177.

<sup>24</sup>"State Health Department Releases Fairchild Studies," Department of Health Services *News News*, January 16, 1985, 1, Folder 8, Box 12, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

<sup>25</sup>Lorraine Ross, "State Study Confirms Birth Defect Cluster," *Silicon Valley Toxics News* (April 1985): 3, Folder 3, Box 18, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

presence of toxic contamination throughout the Bay Area and other parts of California gave political energy to the state legislature. In 1986, the state legislature overwhelmingly supported the passage of Proposition 65, the Safe Drinking Water and Toxic Exposure Act. Prop 65 made it illegal for businesses to knowingly pollute drinking water with known cancer-causing chemicals and required the immediate notification of the public to any potential exposure to toxic chemicals.

Industry faced another potent challenge to their “clean” image: the neighborhood of Love Canal in New York. Like the toxic spills in San Jose, the neighborhood of Love Canal in Niagara Falls galvanized community activists in 1978 after decades of chemical dumping by Hooker Chemical led to widespread health effects in the community. The company had buried nearly 21,000 tons of chemical waste at the site, and the area became such a concern that the federal government relocated 800 families. The disaster at Love Canal led to Congress passing the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), or Superfund Act.<sup>26</sup> In the Bay Area, activists pointed to Love Canal as the potential future for Silicon Valley. The Santa Clara County Labor Council’s business manager, Peter Cervantes-Gautschi, observed that “we want to prevent San Jose from being transformed into another Love Canal.”<sup>27</sup> These concerns reflected a new environmentalism in California, one still grounded locally but concerned about issues beyond the flora and fauna of the region that remained the bailiwick of other Bay Area conservationists. The Bay Area had become, as Hal Rothman once phrased it, a symbol of “the toxicity of progress.”<sup>28</sup> What made the

<sup>26</sup>Gottlieb,, *Forcing the Spring*, 246–248; Hal Rothman, *Saving the Planet: The American Response to the Environment in the Twentieth Century* (Chicago: Ivan R. Dee, 2000), 192–195.

<sup>27</sup>“Big Turnout Urged in San Jose to Curb Toxic Contamination,” *California AFL-CIO News*, January 28, 1983, Folder 5, Box 10, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives. See also “Labor in lead on toxic controls,” *Santa Clara County Labor*, February 11, 1983, Folder 5, Box 10, Santa Clara County Center for Occupational Health (SSOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

<sup>28</sup>Rothman,, *Saving the Planet*, 195.

contamination even more insidious was its apparent invisibility. At Love Canal, toxic wastes oozed to the surface, fires spontaneously ignited during summers, children tossed chunks of phosphorus against the ground causing white sparks, and the odor was ever-persistent.<sup>29</sup> In Santa Clara County, there were no visible signs of the toxic landscape.

Anticipating the spread of chemicals in the Valley proved difficult due to the region's history. Humans had altered the land in significant ways that affected the aquifers. One of those ways was the burying of the built environment. During new construction, many agricultural pipes used for carrying water through fields or pumping groundwater to the surface were buried. As one study found, these pipes allowed contaminated water to more easily travel through the clay and gravel strata:

It is estimated that there are about ten thousand well pipes in the Valley which extend from the surface to a depth of 30 to 150 feet into the ground. These were well pipes for agricultural uses on the farms. When the factories were built throughout Silicon Valley, most of these well pipes were simply buried. No one knows any longer where the majority of these well pipes are located. After careful searches through the records of the water authorities and other governmental agencies, about three thousand old well pipes were located. The unidentified pipes which remain puncture the clay strata and permit chemically contaminated ground water to seep into the underground water supplies, whereby toxic substances are distributed far and wide.<sup>30</sup>

Like the built environment above, the underground complex of aquifers reflected the relationship between natural and human history. The location and movement of contamination changed not only due to the geological features of the aquifers but human history that had altered the hydrological features of the Valley.

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<sup>29</sup>Rothman,, *Saving the Planet*, 192.

<sup>30</sup>Quoted in Pellow, and Park,, *The Silicon Valley of Dreams*, 78. The EPA also suspected that abandoned or improperly constructed wells allowed contaminants to reach deep aquifers by giving contaminated water a conduit to travel deeper into the ground. See "EPA Superfund Factsheet," 1, Folder 3, Box 11, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

The lack of monitoring and regulation meant no evidence of danger was detected by county or state water quality officials. By the early 1980s high tech continued to enjoy a reputation as a clean industry unmarred by the smokestacks—an aesthetic concern for Bay Area residents—or agricultural runoff problems that characterized other parts of California and the country's industrial centers. Human health, as historian Linda Nash has suggested for the Central Valley of California, was the only barometer to detect problems.<sup>31</sup> Or, as historian Brett Walker argues, "people really do physiologically experience nations' policies and priorities" from industrial diseases that become "physical inscriptions of the nation's policies on the body."<sup>32</sup> By mid-1982, the problem was undeniable. Reports that California companies had discharged nearly 1.4 million tons of hazardous wastes in a single year spurred local and regional government to act.<sup>33</sup> The connection between environment and bodily health focused itself in the Los Paseos neighborhood and would ripple throughout the country.

LORRAINE ROSS CONTINUED TO WORK with her neighbors and document evidence, serving as part of a vocal and persistent group of activists that used the contamination of water to argue that industry and urban growth threatened social stability, environmental quality, and the health of residents. They located in the region's environmental, social, and economic problems the lack of structures present to protect city's environs. A coalition of housewives, laborers, environmental activists, layers, doctors, businesspeople, and minorities challenged the notion that high tech industry was "clean" industry and came to dominate the political dis-

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<sup>31</sup>Nash,, *Inescapable Ecologies*, 181.

<sup>32</sup>Brett Walker, *Toxic Archipelago: A History of Industrial Disease in Japan* (Seattle: University of Washington Press, 2012).

<sup>33</sup>"The industries creating the most waste," *Sacramento Union*, April 18, 1982, Folder 8, Box 12, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

cussion of industry's value to the Bay Area. Significantly, the political discussion of the environment began to shift. The previous decades of environmentalists and conservationists in the Bay Area focused on the health of nature, a point of contention that emerged among the justice-oriented activists of the 1980s. During the decade, a new environmental critique emerged focusing on environmental justice and the health of humans.

Ted Smith, a young San Jose attorney, led the way in building bridges between these groups. Smith's involvement in environmental issues were personal as well as professional. A New Yorker by birth, Smith moved to Washington, D.C., in the late 1960s, where he worked under President Lyndon Johnson's anti-poverty VISTA program for two years before moving to the Bay Area to earn a law degree from Stanford and start his own San Jose practice in 1973.<sup>34</sup> His experiences in VISTA and witnessing riots and demonstrations in the Capitol deeply shaped Smith's attitudes towards social justice. "I think things were so intense then," he recalled, "that I just haven't been able to put it out of my soul."<sup>35</sup> Smith's upbringing exposed him to activism and social justice. His mother was a social activist, involved with the League of Women Voters, the YWCA, and the World Youth Convention. "I think some of her experiences and sensibilities were passed on," he recalled.<sup>36</sup> Environmental issues were not part of Smith's early political activism as he directed his energy into the civil rights and peace movements. But his work on those issues shaped his later thinking about environmental politics and early legal career.<sup>37</sup> Smith began his law practice as a labor lawyer representing cannery workers facing racial discrimination and injuries on the job, but found himself drawn more and more to the Bay Area's electronic industry through his

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<sup>34</sup>Thomas Mahon, *Charged Bodies: People, Power, and Paradox in Silicon Valley* (New York: New American Library, 1985), 252.

<sup>35</sup>Mahon,, *Charged Bodies*, 261.

<sup>36</sup>Ted Smith oral history, Berkeley, 2.

<sup>37</sup>Ted Smith, oral history, Berkeley, 4-6.

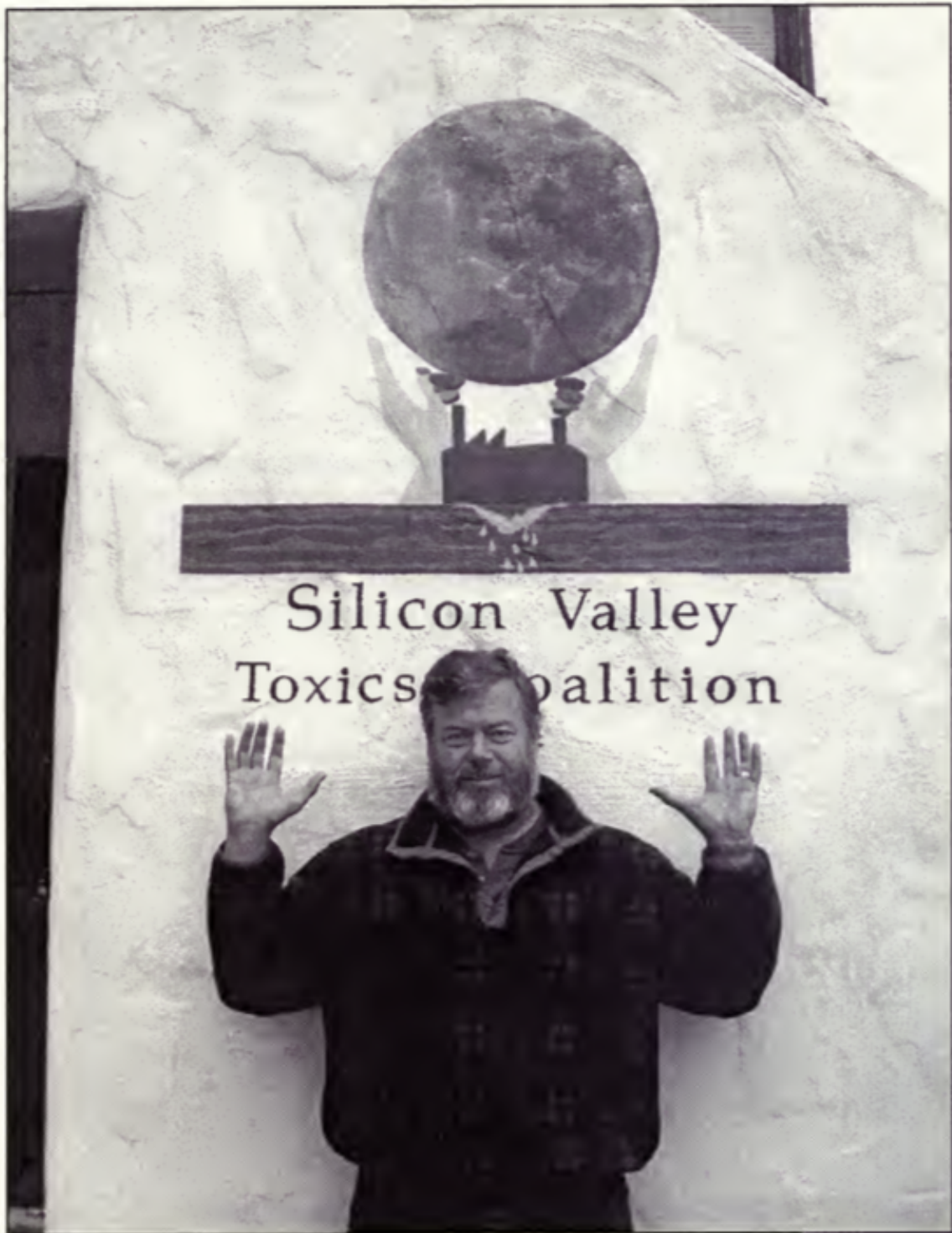
representation of industrial workers. His conviction that industry had destroyed nature in the Bay Area was formed in the crucible of labor rights. Through his wife, Amanda Hawes, a legal services attorney and founder of the Project on Health and Safety in Electronics (PHASE), Smith began to connect with clients injured by chemical exposure inside electronics manufacturing facilities. "The electronics industry," Smith observed, "was actually a chemical-handling industry."<sup>38</sup> The number of clients coming to him with disabling injuries, illnesses, and diseases sparked his interest in the industry and the heavy reliance on chemicals in the manufacture of electronics. Smith believed working conditions and environmental concerns went hand-in-hand, and the discovery of the Fairchild leak provided him with an opportunity to tie the two together and raise awareness on both issues.<sup>39</sup>

The issue of toxics and chemical storage continued to gain attention over the course of 1982. In June, an explosion at IBM's South San Jose plant from improperly stored aluminum waste injured eighteen people. The chip manufacturer also reported a leak at the same facility that dated back to 1972. Hewlett-Packard at the Stanford Industrial Park reported five chemical leaks dating back at least two years at their Palo Alto headquarters. Moffett Airfield's became one of the worst contamination areas, with nineteen different sites on the naval air base eventually identified as toxic spills. One study by the Santa Clara Regional Water Quality Control Board (RWQCB) found that 85% of the test wells they dug tested positive for water contamination by industrial solvents. Reports of leaks and spills became so common that the *San Jose Mercury News* editorialized in February 1982

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<sup>38</sup>Ted Smith, oral history, Berkeley, 13.

<sup>39</sup>Ted Smith, oral history, interview by Glenna Matthews, San Jose State University; Mahon,, *Charged Bodies*, 252-253; "Ted Smith: Foes Think He's Anti-Business, but Fans Say He's Earth's Advocate," *The Business Journal Magazine*, October 15, 1990, 12, in Folder 3, Box 18, Santa Clara Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives; Smith oral history, Berkeley, 14.



**Figure 6.3:** Ted Smith, "Pioneer Activist for Environmental Justice in Silicon Valley, 1967–2000," an oral history conducted in 2000 by Carl Wilmsen, Regional Oral History Office, The Bancroft Library, University of California, Berkeley, 2003.

that “if the present pattern continues, this newspaper might have to stop printing a separate story about each Silicon Valley hazardous chemical leak and just run a daily box score in agate type.” Almost no part of the landscape, it seemed, remained untouched by industry.<sup>40</sup>

Keeping the public educated and maintaining a public voice for those affected by industrial contamination and chemical exposure became Smith’s first priority. In front of the San Jose city hall on November 4, 1982, the Silicon Valley Toxics Coalition (SVTC) announced its establishment. In a letter circulated to community organizations and individuals, SVTC explained its purpose:

... we believe now is the time to pull together a coalition to further organize around these issues. In recent discussions with representatives from labor, health, environmental and community organizations and groups, it has been clear that such a coalition is not only *essential* but it is *feasible* to get off the ground in the immediate future. . . . We proposed the name SILICON VALLEY TOXICS COALITION, the long-term goal of which would be to maintain our communities and workplaces free from toxic contamination.<sup>41</sup>

Formed with the financial and personnel support from the Santa Clara County

<sup>40</sup>“Anti-spill measures still pend,” *San Jose Mercury*, July 24, 1982, Folder 5, Box 10, Santa Clara Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives; map of spills and chemical leaks produced by Citizens for a Better Environment, Folder 4, Box 10, Santa Clara Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives; “Industrial chemicals in Palo Alto,” *Palo Alto Weekly*, November 3, 1982, Folder 5, Box 10, Santa Clara Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives; “We Demand Safe Water,” SVTC mailer, n.d., Folder 4, Box 10, Santa Clara Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives; “How safe is our drinking water?” *San Jose Mercury News*, February 27, 1982, Folder 2, Box 11, Santa Clara Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

<sup>41</sup>“High Tech and Toxics: A Guide for Local Communities” photocopy excerpts, Folder 2, Box 18, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives, 331; emphasis original. Full publication in *High Tech and Toxics*, Golden Empire Planning Center, 1985, in Folder 3, Box 18, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

Occupational Health and Safety (SCCOSH) organization, SVTC's immediate goal was to pass a model toxic wastes ordinance while simultaneously becoming a key voice in the debate over chemicals in the Bay Area.<sup>42</sup> Technology companies "still promoted themselves as clean industry," Smith recalled. "So this was shocking news to people here."<sup>43</sup> As the perception surrounding "clean" industry collapsed, Smith was determined to keep the pressure on industry.

What gave Smith and others a push to organize more formally—and became SVTC's first major campaign—was a 1982 proposal by the Santa Clara County Fire Chiefs' Association (SCCFCA) to set forth regulations regarding chemical storage and reporting leaks.<sup>44</sup> Firefighters were first responders to chemical spills and leaks, and the Fire Chiefs' Association wanted to ensure that firefighters knew what they would be dealing with if they arrived at the scene. Along with a coalition of businesses and trade groups, they formed an organization called the Industry Environmental Coordinating Committee in the spring of 1982 to codify what was called the Hazardous Materials Model Code to the San Jose city council. The ordinance aimed to set county-wide standards for the storage and handling of toxic or flammable chemicals.<sup>45</sup> The Hazardous Materials ordinance face stiff resistance from industry, who largely argued against revealing chemicals stored on their property that potentially threatened to reveal trade secrets. Service station owners also objected to some of the stipulations of the model ordinance, arguing that the new regulations would force smaller business to close

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<sup>42</sup>"Group fights for toxic-waste ordinance," *Peninsula Times Tribune*, November 4, 1982, Folder 2, Box 10, Santa Clara Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives. PHASE renamed itself into SCCOSH in the early 1980s.

<sup>43</sup>Smith oral history, Matthews, 17.

<sup>44</sup>Ted Smith, oral history, Matthews, 16; Mahon,, *Charged Bodies*, 254.

<sup>45</sup>Clipping, "Group fights for toxic-waste ordinance," *Peninsula Times Tribune*, November 4, 1982, Folder 2, Box 10, Santa Clara Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives; Smith oral history, Berkeley, 16; "Anti-spill measures still pend," *San Jose Mercury News*, July 24, 1982, SVTC Records, SJSU.

as the regulation costs could not be met. But industry also faced a furious public and a media less predisposed to support them. The *San Jose Mercury News* was quick to support environmental regulatory measures controlling toxic chemicals.<sup>46</sup>

Despite industrial resistance, the model ordinance passed with widespread endorsement of the Inter-Governmental Council, a coalition of Bay Area city managers led by Sunnyvale manager Thomas Lewcock, San Jose Mayor Janet Gray Hayes, the Santa Clara County Regional Water District, and was quickly adopted by several Peninsula cities.<sup>47</sup> However, environmentalists were not completely satisfied with the passage of the final model ordinance. The ordinance had gone far in protecting employees who disclosed their employer's chemical disposal practices, imposed new regulations requiring double-walled storage containers and new leak detection systems, obtain permits from their home cities for chemical storage, and required companies to identify all stored chemicals. But a key component of the ordinance that environmentalists wanted was the expansion of the toxic chemicals list to 800 rather than the 30 defined by the Environmental Protection Agency.<sup>48</sup>

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<sup>46</sup>"Danger: Hazardous Materials," *San Jose Mercury News*, February 3, 1982, Folder 5, Box 10, SVTC, SJSU.

<sup>47</sup>"Contamination law gets approval from Sunnyvale," *San Jose Mercury News*, March 23, 1983, Folder 5, Box 10, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives; "San Jose OKs ordinance regulating chemical storage," *San Jose Mercury News*, February 23, 1983, Folder 5, Box 10, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives; "Cupertino orders hazardous materials permits," *San Jose Mercury News*, August 2, 1983, Folder 5, Box 10, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

<sup>48</sup>"Intergovernmental panel endorses stiff rules to protect ground water," *San Jose Mercury News*, February 5, 1983, Folder 5, Box 10, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives; "Water tests will begin next week," *San Jose Mercury News*, March 24, 1982, Folder 8, Box 12, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

The ordinance's adoption by several Peninsula cities had repercussions that spread beyond the borders of the county. In July 1983, Democratic state senator Byron Sher of Palo Alto introduced Assembly Bill 1362 to the State Legislature that sought to force industries to meet specific requirements for the storage of chemicals, require permits and regular inspections of storage tanks, and require the reporting of leaks within twenty-four hours of their discovery. Sher's bill was modeled after the county ordinance, tweaked so that it could be applied to the entire state. The bill received widespread support from the Sierra Club, Federated Firefighters of California, SVTC, Citizens for a Better Environment (CBE), Health Officers Organization of California, and the California League of Cities.<sup>49</sup> Furthermore, SVTC's additions for containment, monitoring, and regulations influenced changes to the Superfund law in the late 1980s. When California Representative Norman Mineta introduced House Bill 5640 to the floor of the House, Smith wrote urging Mineta to redefine "imminent hazard" provisions in the Superfund act and to implement stricter design standards for containing possible leaks.<sup>50</sup> Mineta endorsed Smith's recommendations, adding the two suggestions to the Superfund amendments. Although the bill failed to make it through the Senate, the adoption of Santa Clara regulations into federal legislation demonstrates just how important Silicon Valley's case had become to anti-toxics legislation.<sup>51</sup> "We are the leader in this because we are the leader in contamination of our ground water," Ted Smith told the *San Jose Mercury*.<sup>52</sup> The model ordinance sought to

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<sup>49</sup>"Why We Need AB 1362," Silicon Valley Toxics Coalition mailer, July 25, 1983, Folder 2, Box 10, Santa Clara Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

<sup>50</sup>Letter from Ted Smith to Norman Mineta, July 23, 1984, Folder 3, Box 11, Santa Clara Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

<sup>51</sup>Letter from Norman Mineta to Ted Smith, October 25, 1984, Folder 3, Box 11, Santa Clara Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

<sup>52</sup>"Intergovernmental panel endorses stiff rules to protect ground water," *San Jose Mercury News*, February 5, 1983.

tackle the problem, and helped shape local, state, and federal law.

At the heart of the debate over the toxic ordinances was a public policy dispute about the unknown effects of high technology's industrial chemicals. The debate, according to Smith, addressed the question of "who should bear the risks of scientific uncertainty—the victims of toxic exposure or the manufacturers and users of toxic chemicals?"<sup>53</sup> Smith and others would give voice to a frustration felt by many in the Bay Area summed up in the debate over "How Clean Is Clean?" The greatest source of resentment towards state officials came in 1985 when the state water pollution control board decided not to prosecute IBM for its chemical leak in South San Jose. In a 4–3 vote, the Board decided that IBM's \$34 million clean-up plan had shown sufficient evidence that the company was serious about cleaning up its chemical leak and warranted no further state action.<sup>54</sup> Activists were outraged at the board's decision. "Here we have a state agency telling the largest computer company in the world with one of the largest toxic waste spills in the world that it will not have to pay any penalties," Ted Smith fumed. "That's the wrong message to get out."<sup>55</sup>

Who was allowed to define "acceptable risk"? SVTC wanted action against IBM. Before a public hearing in December 1984, members of SVTC argued that IBM violated the state's Nondegradation Policy that called for the "maximum feasible restoration of polluted waters." IBM had failed to uphold that policy, they argued. Their position shared support from the Santa Clara County Board of Supervisors, the San Jose City Council, and the Santa Clara Valley Water District.

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<sup>53</sup>Clipping, "Voters should join tap water rebellion," no source, no date, Folder 6, Box 10, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

<sup>54</sup>"State won't punish IBM for toxic leak," *San Jose Mercury News*, February 21, 1985, Folder 8, Box 12, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

<sup>55</sup>"IBM leak decision criticized," *San Jose Mercury News* February 22, 1985, Folder 8, Box 12, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.



**Figure 6.4:** Frustration with the argument for “acceptable levels of risk.” *Silicon Valley Toxics News* 1 (April 1985): 3.

Yet the Regional Board voted 6-1 to grant relief to IBM and voted 4-3 to not fine them for extensive groundwater pollution.<sup>56</sup> The issue of “acceptable” exposure to contaminants had become a key point for SVTC, and they began lobbying for the state and the Environmental Protection Agency to redefine what counted as acceptable levels of exposure.<sup>57</sup> When the EPA released a study of Silicon Valley in 1985 presenting an overview of contamination sites, environmentalists charged that the EPA failed to understand the public health risks.<sup>58</sup> SVTC carried the support of state senators in making their case. In a letter to Governor George Deukmejian, state senator John Vasconcellos argued that the State Health Department was “unable to rule out the possibility that TCA might have been a factor in the excess rate of birth defects and miscarriages around the Fairchild site.” If the state failed to fully understand the “potential health risks associated with TCA,” Vasconcellos argued, then the State Health Department risked violating its own Action Level regulations. How could the Health Department continue to treat TCA as having a safe level of exposure, Vasconcellos wondered, if TCA is discovered to be a carcinogen?<sup>59</sup>

The debate over carcinogens and safe exposure to chemicals reveals another facet of SVTC’s focus on environmental justice. SVTC framed their concerns within the language of science, invoking groundwater pollution, epidemiology, and chemistry in their arguments over the shifting landscapes that intimately and unknowingly affected communities. The environment took on a different hue for

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<sup>56</sup>“IBM Markets New Product—‘Acceptable Risk’”, *Silicon Valley Toxics News* (April 1985): 8, Folder 3, Box 18, SVTC records, SJSU.

<sup>57</sup>“Analysis in Support of Conclusion that Existing ‘Action Level’ for TCA is Too High,” n.d., Folder 14, Box 12, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives; “IBM Fouls Our Nest,” *Silicon Valley Toxics News* 4 (Spring 1986): 1, 5, 1986, Folder 64, Box 3, League of Women Voters, SJSU.

<sup>58</sup>“SVTC’s Public Voice in Decision Making,” *Silicon Valley Toxics News* 3 (Winter 1985): 2, Folder 64, Box 3, League of Women Voters, SJSU.

<sup>59</sup>Letter from John Vasconcellos to George Deukmejian, February 22, 1985, Folder 3, Box 18, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

social justice activists, in contrast to the mainstream liberal environmental organizations and their traditional concerns of conservation. Rather, their energy focused on health, disease, the disenfranchised, and the structural problems of society that exposed communities to dangerous environments. The mainstream environmental groups, Ted Smith argued, were “too elitist” and “too often care more about trees and birds than they do about people.”<sup>60</sup> Their claims were grounded in civil rights and argued for policies that supported equality of health, protection from toxins, and regulations that ensured safety. They placed faith in local laws to protect communities without power, and looked to the federal government to enforce equal protections.

SVTC’s arguments took on a spatiality of their own as well. Not all spaces were created equal. In their analysis, business and government turned a blind eye to poor and nonwhite communities, in some cases offloading pollution onto these communities. Modern space, then, mattered a great deal to SVTC. Where one lived in the Valley, where one worked in the Valley, could have a tremendous impact on a person’s health. Health became spatialized as well, used as an indicator for a particular sort of landscape that threatened bodies. Ill health, they argued, could result from a particular place they occupied rather than individual causes of disease. In contrast to the claims of public health experts, the modern landscape did not automatically confer clean spaces.<sup>61</sup>

Specific spaces were polluted places. South San Jose was only one major area of concern for the Bay Area’s environmentalists. Another significant contamination site was located in Mountain View in what became known as MEW—an area of land bounded by Middlefield, Ellis, and Whisman roads. By 1989 the site was found to have the highest chemical concentrations and largest plumes

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<sup>60</sup>Smith oral history, Berkeley, 6.

<sup>61</sup>Nash,, *Inescapable Ecologies*, 204; Henri Lefebvre, *The Production of Space*, trans. by Donald Nicholson-Smith, (New York: Wiley-Blackwell, 1992), 194–205.

than any other site in the Valley. The EPA estimates for cleanup varied widely, in best cases aquifers would be returned to usable states between two and forty-five years. But the EPA's worst-case scenario estimated that it could take three hundred years for cleanup to resolve the contamination of surface waters and shallow aquifers.<sup>62</sup> Even worse was the unforeseen consequence of chemicals mixing underground. The MEW plume migrated to Moffett Airfield's space, a nearly two-mile long and 500 foot deep layer of contamination. The mixing of the MEW plume and Moffett's own leaks and spills resulted in the alarming appearance of a chemical not used by any nearby facilities. In 1989 vinyl chloride was discovered in the groundwater under Moffett. The mixing of perchloroethylenes and trichloroethylenes with petroleum byproducts on the Moffett site began breaking down the compounds into dichloroethylenes and vinyl chloride.<sup>63</sup> Chemical reactions underground were introducing new contaminants and reshaping the Valley's subterranean environment.

The spatialized pollution landscape took on greater importance as SVTC, state and county health officials, and local politicians raced to comprehend the plume size and spread of chemical leaks. The widespread presence of waterborne chemicals appeared to be getting out of hand. Despite efforts to identify leaks and the passage of local laws to regulate the storage of chemicals, local governments were unprepared to shoulder the burden. In the wake of the leaks, San Jose established a new Office of Environmental Management tasked with overseeing the implementation of the city's hazardous materials ordinance. But in many cities the hazardous ordinance went unfollowed or difficult to enforce in cities that had passed the ordinance. Sunnyvale reported in 1986 that only 189

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<sup>62</sup>"Mt. View Sites May Take 300 Years to Clean Up," *Silicon Valley Toxics News* 7 (Winter 1989): 4, Folder 64, League of Women Voters; Ted Smith oral history, Berkeley, 27.

<sup>63</sup>Smith oral history, Berkeley, 62; "Mt. View Sites May Take 300 Years to Clean Up," *Silicon Valley Toxics News* (Winter 1989): 4, Folder 64, Box 3, League of Women Voters, San Jose/Santa Clara chapter Records, MSS-2006-09-01, San Jose State University Library Special Collections and Archives.

out of 745 companies had passed inspection of hazardous chemicals storage. The Bayview Industrial Park in south San Francisco was leveled after an illegal fireworks factory exploded in early April 1986. Firefighters responding to the scene had no knowledge of what materials were on-site. City fire officials admitted after the blaze that it had not implemented the hazardous ordinance program passed by the city. County-wide, cities had processed only forty-nine percent of permit applications for the storage of chemicals.<sup>64</sup>

In early 1984 environmentalists were pointing to the federal Superfund program as a potential solution to the problem of local inadequacies. SVTC argued that local agencies “simply do not have sufficient resources to solve—much less control—our toxics crisis.”<sup>65</sup> The occasion also allowed Ted Smith, Michael Belliveau, and Peter Cervantes-Gautschi to criticize the EPA’s seemingly slow response to the crisis.<sup>66</sup> Although the EPA had identified fifteen to twenty sites as eligible for the National Priority List (NPL), “not a single site has been listed . . . as a superfund site,” Smith complained to Representative Norman Mineta. SVTC appealed to the EPA through the “imminent hazard” provision of Superfund, but was notified that the Valley’s toxics problem did not qualify. To Smith, any threat

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<sup>64</sup>“Slow progress in cataloging toxic threats,” *San Jose Mercury News*, April 13, 1986, Folder 5, Box 10, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives; “Cities lag on enforcing toxics laws,” *San Jose Mercury News*, January 1, 1986, Folder 5, Box 10, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

<sup>65</sup>“Groundwater Toxics Crisis in Silicon Valley,” Silicon Valley Toxics Coalition Press Release, 1, Folder 3, Box 11, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

<sup>66</sup>Belliveau claims that the EPA knew about the presence of contaminated water since 1979 but made no moves to require cleanup of toxic chemicals until 1984. EPA documents seem to confirm the organization knew about contamination sites in 1979. “EPA explains what it’s doing,” *Times Tribune*, August 17, 1984, Folder 8, Box 12, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives; Environmental Protection Agency, “Superfund National Priorities List Sites in the South Bay,” July 1986, 1, Folder 114, Box 4, League of Women Voters, San Jose/Santa Clara chapter Records, MSS-2006-09-01, San Jose State University Library Special Collections and Archives.

to drinking water should convey an immediate “imminent hazard” and an immediate release of emergency funds.<sup>67</sup> Smith’s criticisms of the organization was echoed by residents. Barbara Fenster, who lived near the IBM leak in San Jose, asked: “EPA stands for Environmental Protection Agency. I’d be glad to know what part of the valley the EPA protects, because it sure isn’t drinking water.”<sup>68</sup>

The Bay Area demanded more help. In an August 1984 letter to William Ruckelhaus, the director of the Environmental Protection Agency, and Carole Onorato, the chairwoman of the California State Water Resources Control Board, Representative Norman Mineta wrote to express his “extreme concern over the growing problem of hazardous waste leaks in Santa Clara County.” Mineta cut to the chase: the EPA’s site-by-site evaluation of Superfund sites was inadequate and too slow-moving. Mineta argued that leaks threatened the health of “several hundred thousand local residents” and called for “immediate action” to “place the entire Santa Clara Valley on the Superfund National Priority List.” The leaks were difficult to identify and the near inability to map the size and number of plumes meant that “contaminants have continued to spread unchecked.” Despite collaboration between federal, state, and local officials, Mineta concluded, “effective action cannot begin without Superfund assistance. The cost of clean up is simply too great, and time is too short, to rely solely on local and state agencies.”<sup>69</sup> The Bay Area’s pollution landscape was no longer thought of as localized

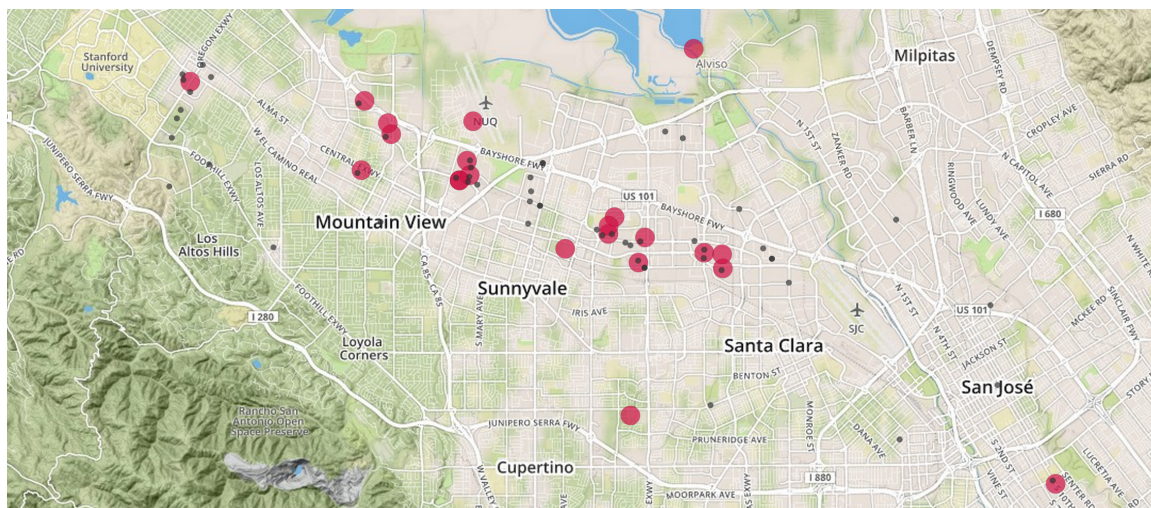
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<sup>67</sup>Letter from Ted Smith to Norman Mineta, July 23, 1984, 2, Folder 3, Box 11, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives; “No More Poison In Our Water” flier, Silicon Valley Toxics Coalition, Folder 3, Box 11, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives; “Waste Sites on Coast Debated,” *New York Times*, August 19, 1984. See also Smith oral history, Berkeley, 23.

<sup>68</sup>“EPA explains what it’s doing,” *Times Tribune*, August 17, 1984, Folder 8, Box 12, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections & Archives.

<sup>69</sup>Letter from Norman Mineta to William Ruckelshaus and Carole Onorato, August 7, 1984, Folder 3, Box 11, Santa Clara County Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coalition (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special

to specific neighborhoods. The problem had become so great that many thought of the entire place as contaminated.<sup>70</sup>



**Figure 6.5:** Bay Area Superfund sites (large circles) and toxic leak sites. Map by author. Interactive version is at <http://dissertation.jasonheppler.org/visualizations/companies/>

The EPA announced in May 1986 that six out of nineteen investigated sites of Bay Area would be added to the National Priority List. AMD, Intel, Raytheon, and Westinghouse became declared Superfund sites in Sunnyvale, Mountain View, and Santa Clara.<sup>71</sup> By 1990 the EPA listed twenty-nine Superfund sites on the National Priority List, twenty-four of which resulted from the mishandling of chemicals by high tech industries.

A SIMILAR APPROACH TO THE BAY AREA'S POLLUTION LANDSCAPE focused on air pollution. The anti-toxics environmentalists, in contrast to the mainstream liberal environmentalists and their concern over smog, focused their attention on the

Collections & Archives. See also "Waste Sites on Coast Debated," *New York Times*, August 19, 1984.

<sup>70</sup>The Regional Water Quality Control Board also called on the EPA to view the entire Peninsula as a single Superfund site. See also "EPA explains what it's doing," *Times Tribune*, August 17, 1984, Folder 8, Box 12, SVTC records, SJSU.

<sup>71</sup>Environmental Protection Agency, "Superfund National Priorities List Sites in the South Bay," July 1986, 1, Folder 114, Box 4, League of Women Voters, Santa Clara chapter Records, MSS-2006-09-01, San Jose State University Library Special Collections and Archives.

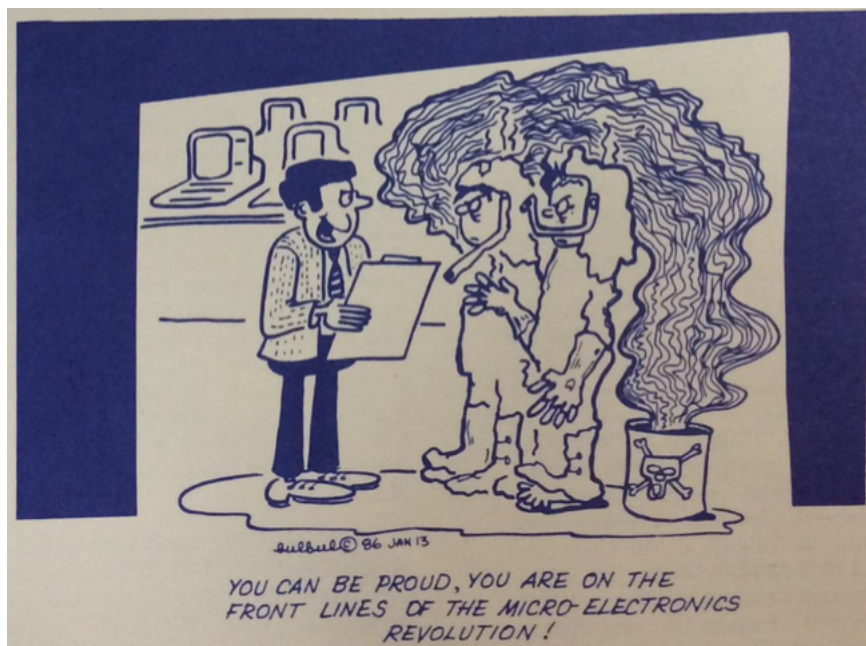
presence of toxic gases used by the technology sector. Like water, air pollution had become a political issue by the mid-1960s. Air quality monitoring began in 1955 with 250 stations established in American cities throughout the nation by 1961. Early air quality efforts, under the U.S. Public Health Service (PHS), were mainly concerned with the presence of smog. According to mid-century experts, smog threatened both human and non-human nature. Three main air pollutants were identified as significant health hazards in the 1960s—asbestos, mercury, and beryllium—and came under federal regulation under the 1970 Clean Air Act. Throughout the decade the EPA expanded its list of air pollutants that could introduce hazardous to the public.<sup>72</sup>

Various gases are used for the manufacturer of semiconductor chips. The chemical element silicon cannot carry electricity. At an atomic level, silicon leaves no space for electrons to carry electrical currents and naturally works as an insulator. In the manufacturing process of silicon chips and wafers, manufacturers adjust the chemical properties of silicon by adding or subtracting electrons that allows it to carry an electrical charge. Adapting the silicon to carry a charge involves a process called “doping” with “dopant gases”—arsine, phosphine, boron, and other metal hybrids—in which silicon wafers are exposed to gases that give them electrical conducting properties.<sup>73</sup> Throughout Silicon Valley manufacturers stored various amounts of compressed doping gases. The concern of environmentalists did not revolve around a lack of regulation regarding potentially toxic gases. Rather, environmentalists feared what would happen to the Bay Area in the event of an earthquake or fire. Bay Area manufacturers lacked smokestacks, but stored vast quantities of chemicals.<sup>74</sup>

<sup>72</sup>Hays,, *Health, and Permanence Beauty*, 195–197.

<sup>73</sup>N.A. Downie, *Industrial Gases* (New York: Kluwer Academic Publishers, 1997, 396-397; Roland Albert Levy, *Microelectronic Materials and Processes* (New York: Kluwer Academic, 1989), 6–7; Ted Smith oral history, Berkeley, 53–54.

<sup>74</sup>“Toxic gas leak is ‘inevitable,’ doctor warns,” *San Jose Mercury News* June 6, 1982, Folder 5, Box 10, Santa Clara Center for Occupational Health (SCCOSH) and Silicon Valley Toxics Coali-



**Figure 6.6:** *Silicon Valley Toxics News* 7 (Winter 1989).

Concerns about the presence of toxic gases on the Peninsula led SVTC and the SCCFCA to pursue a second toxic model ordinance focused on the regulation of gases in 1986. Under a \$100,000 budget granted to them by a state bill proposed by Assemblymen Ernest Konnyu of Saratoga and Byron Sher, the fire chiefs' drafted a model bill that laid out similar guidelines as those contained in the Hazardous Materials Ordinance three years earlier. The draft bill called on businesses to report the type and volume of gases stored on their property, inform nearby communities of what materials they stored on-site, and install an alarm system to alert neighboring communities in the event of a gas leak. Businesses would be exempt from the alarm system if their storage containers were double-walled and they maintained air purification systems around storage tanks.<sup>75</sup> For anti-toxics activists and state officials, gas leaks could be more threatening than liquid chemical leaks. Leaking liquids can be detected and spread slowly enough

tion (SVTC) Records, MSS-2007-04-06, San Jose State University Library Special Collections and Archives.

<sup>75</sup>"Toxic Gas Proposal Stirs Row," *San Jose Mercury News*, August 8, 1986; "Fire Chiefs Seek Toxic Gas Controls," *San Jose Mercury News*, July 8, 1986.

that they could be contained and managed, but gas leaks are instantaneous and spread rapidly.<sup>76</sup>

Just as Love Canal gave water contamination a sense of urgency, the deadly gas leak by Union Carbide outside Bhopal, India, in late 1984 that killed more than 2,000 people provided a political impetus for the Bay Area's toxic gas regulation. The Konnyu-Sher bill for funding a draft ordinance passed in the shadow of the Bhopal Incident, one of the worst industrial accidents of the twentieth century. The Bhopal Disaster occurred in December 1984 when Union Carbide's pesticide plant experienced a failure of a holding tank that released thirty metric tons of methyl isocyanate within an hour. The resulting cloud drifted southward over Bhopal. Within days, nearby trees dropped all of their leaves, thousands of animal carcasses needed disposal, and nearly 200,000 people received treatment at hospitals. A Bhopal-like disaster was the nightmare scenario for the Bay Area's anti-toxics environmentalists and only confirmed the need for additional regulation.<sup>77</sup>

The potential of a toxic gas leak reshaped how environmentalists thought about space. Whereas the presence of water contamination focused on specific places, the release of gases obliterated any sense of space affected by pollution. One study by San Jose State University using the EPA's air models found that a gas leak in the Bay Area had the potential to spread as far as twelve-and-a-half miles.<sup>78</sup> Such a leak would nearly encompass the entire city of San Jose and would certainly cover the narrow stretch of land between the Pacific Ocean and the San Francisco Bay. Although difficult, water-borne chemical plumes could be mapped and cleaned-up. The instantaneous release of gases, however, meant that specific

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<sup>76</sup>"Gas leaks, contaminated water are top priorities on the list of threats," *San Jose Mercury News*, December 31, 1989.

<sup>77</sup>On the Bhopal disaster, see Sheila Jasanoff, "Bhopal's Trials of Knowledge and Ignorance," *Isis* 98, no. 2 (2007): 344–350; Jasanoff, .

<sup>78</sup>"Report Warning of Disaster Readiness at Silicon Valley," *New York Times*, February 25, 1987; Smith, oral history, Berkeley, 53.

space mattered less.

Industry immediately rejected the guidelines of the new ordinance, arguing that the fire chiefs' plan was too strict and costly to implement. A second draft created in collaboration between industry and Bay Area cities assigned hazard classification to toxic gases, required new storage and alarm systems for detecting and responding to accidental leaks, and a system of neutralizing emission gases before their release into the air. The law extended to common gases like chlorine and ammonia, meaning municipal facilities, sewage treatment, and swimming pools were subject to the law's regulations.<sup>79</sup> By 1991, all cities in the Bay Area had adopted the ordinance.

End-of-the-century environmental justice advocates insisted on the spatiality of health. The attention given to bodies, ecology, pollution, and justice, as Linda Nash has noted, drew upon earlier notions of environmentalism from the 1960s. Rachel Carson and others had insisted that anyone could fall ill to the modern environment, but environmental justice advocates took those claim further. Environmental and structural factors, rather than the individuality of genetics, poor hygiene, poor sanitation, or chance, were pointed to as causes for disease. By pushing the claim that health and environment went hand-in-hand, justice activists went beyond the middle-class and suburban concerns of Carson and others. Justice advocates saw in the geography of pollution a racial and class bias that disproportionately affected non-white and poor communities. While they might agree with Carson's claim that nobody was immune to the modern environment's potential dangers, they saw a specific geography that offloaded pollution to certain communities while government and business turned a blind eye.<sup>80</sup>

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<sup>79</sup>"Landmark Toxics Law Up for OK in Valley," *San Jose Mercury News*, January 9, 1989; "Toxic Containment the County, Industry and the Public Cooperated in Writing is a Worthwhile Plan," *San Jose Mercury News*, January 22, 1990; "Toxic Gas Law Adopted," *San Jose Mercury News*, January 31, 1990; "Palo Alto Gets Tough on Toxics," *San Jose Mercury News*, March 28, 1990.

<sup>80</sup>Nash, *Inescapable Ecologies*, 203–204. See also Matthew Klinge, *Emerald City: An Environmental History of Seattle* (New Haven: Yale University Press, 2007); Laura Pulido, *Environmentalism and*

Silicon Valley's justice advocates argued that the spatial pattern of health emerged from a particular form of land use. Rather than seeing the landscape as a place for business or a place for pleasure, the landscape was redefined as a place for health (or lack of it). Within this perception of the landscape, the Silicon Valley Toxics Coalition and others saw Santa Clara Valley as contaminated. The use of the land for business, however clean and modern it had appeared, proved to generate a dangerous landscape. The presence of sick bodies or the potential for adverse health formed a critique of the modern environment that was spatialized.

Certain places in the landscape were more dangerous than others, a point activists insisted upon as evidence for rendering the "clean" landscape as a perpetual failure. Human bodies became indicators of a specific kind of landscape where bodies were inextricably tied to contaminated waters and polluted air. The locality of the polluted landscape had repercussions through local, county, regional, state, and federal law. Proximity to businesses mattered, but even communities seemingly distant to the location of industrial parks and business centers could be affected by migrating chemical plumes or the explosive release of gases.

But by the end of the century, activists no longer saw specific places as polluted spaces. Criticisms of industrial pollution no longer focused on MEW or Los Paseos. Instead, justice advocates saw the entire San Francisco Peninsula as a place under threat. "The danger is that if this can happen in Mountain View, it can happen anywhere in the valley," Smith told the *San Jose Mercury News* in 1986.<sup>81</sup> By thinking of the entire region as a Superfund site, by acknowledging the difficulty in tracking the spread and size of chemical plumes, and the recognition

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*Economic Justice: Two Chicano Struggles in the Southwest* (Tucson: University of Arizona Press, 1996); Laura Pulido, "Rethinking Environmental Racism: White Privilege and Urban Development in Southern California," *Annals of the Association of American Geographers* 90, no. 1 (March 2000): 12–40; Robert D. Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* (Boulder: Westview Press, 1990); Andrew Hurley, *Environmental Inequalities: Class, Race, and Industrial Pollution in Gary, Indiana, 1945–1980* (Chapel Hill: University of North Carolina Press, 1995); Pellow, and Park,, *The Silicon Valley of Dreams*.

<sup>81</sup>"Toxics at Deep Level," *San Jose Mercury News*, May 4, 1986.

that toxic gas releases would recognize no discernible boundaries, environmental justice advocates perceived Silicon Valley as a landscape burdened by the anxiety of illness.

"WE THOUGHT WE WERE LIVING WITH A CLEAN INDUSTRY," Lorraine Ross told a reporter from the *San Francisco Chronicle*.<sup>82</sup> Indeed, a key selling point for promoters and boosters of the Bay Area's new high technology sector was the cleanliness of such manufacturing facilities. The language of booster promotion attached the language of "clean," the absence of smokestacks, and the prohibition of noise and emissions to their materials. Preventing pollution was a very real goal for promoters.

But the booster's claims for "clean" industry referred to aesthetics. The process of producing the components that would run the computers of the future were far from environmentally friendly. "I remember thinking about smokestacks in other industries," Mayor Janet Hayes recalled, "I didn't expect this problem in my own backyard."<sup>83</sup> IBM, Fairchild Semiconductor, and other companies did not belch smoke into the air but the use of highly toxic chemicals—trichloroethane, chlorinated solvents, heavy metal gases—produced serious health problems causing damage to circulatory and reproduction systems, liver and kidney failure, and cancers. As investigations by state and federal officials uncovered widespread chemical spills and the EPA declared Superfund sites, the perception of clean industry declined while creating an environmental justice wing of the environmental movement in the Bay Area. The "clean" industries in the garden permanently altered land and human bodies.

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<sup>82</sup>Newspaper clipping, "Silicon Valley's Fear Over Tainted Water," *San Francisco Chronicle*, May 16, 1983, Carton 20, Folder 12 Hazardous Waste, California Tomorrow Records, MS 3641, California Historical Society.

<sup>83</sup>Quoted in Pellow, and Park,, *The Silicon Valley of Dreams*, 76.

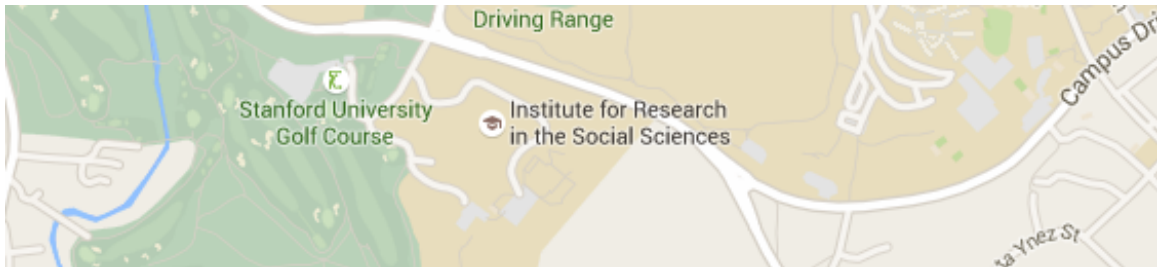
## Epilogue: Eco-Region

If America is the land where the world goes in search of miracles and redemption, California is the land where Americans go. It is America's America, the symbol of raw hope and brave (even foolish) invention, where ancient traditions and inhibitions are abandoned at the border. Its peculiar culture squirts out—on film and menus and pages and television beams—the trends and tastes that sweep the rest of the country.

—*Time*, November 18, 1991

The Ronald Reagan Presidential Foundation anticipated little opposition to their plans to build the Ronald Reagan Presidential Library on the campus of Stanford University. Coupled with the Hoover Institution, whose officials advised Reagan and shared his conservative outlook, the selection of Stanford University for the presidential library, museum, and public affairs research center seemed like a natural fit. The Spanish-mission style architecture designed by Hugh A. Stubbins Jr., would nestle in the hills above the university. Administratively, the Library would be overseen by the Hoover Institution. Yet when Stanford's Board of Trustees approved the plan in February 1984, the outcry was swift. Faculty and students objected to the library's presence, fearing it would only serve to "politicize" Stanford. Critics of the Reagan Library also couched their argument in the environment. The Reagan Foundation hoped to situate the presidential library in the foothills on unincorporated Stanford property next to the Center for Advanced Study in Behavioral Sciences, a decision locals and university members perceived as a threat to the land. "They want to put it on one of the last undeveloped hills in the community," Samuel Brain, a senior researcher in Stanford's radiology department and a vocal critic of the plan told the *New York Times*.

“There are a lot of people who are attached to that hill, and they don’t want it ruined.” Furthermore, Palo Alto residents worried about the potential of tourists flooding their town with traffic and upsetting the hill’s seclusion.<sup>1</sup>



**Figure 6.7:** Proposed location of the Reagan Presidential Library, next to the Center for Advanced Study in Behavioral Sciences and Institute for Research in the Social Sciences.

The desire to preserve hillsides would serve to motivate political action nearly a decade later. In 2000, the Committee for Green Foothills helped organize a campaign against the City of San José for plans to build a corporate research park in the Coyote Valley for Cisco Systems. CGF helped create a grassroots organization called People for Livable and Affordable Neighborhoods (PLAN), which initiated a referendum campaign in an attempt to halt the campus’s creation. CFG argued that the Coyote Valley, located at the narrowing of the southern end of the Santa Clara Valley, served an important agricultural purpose, was used by many for recreation, and remained an important thoroughfare for wildlife crossing between the Santa Cruz and Diablo ranges, as well as holding the distinction of being the largest freshwater wetland in the county. While the referendum managed to secure enough signatures to place a vote on the ballot, the City of San José disallowed the petition on the grounds that the text of the referendum was incorrect.<sup>2</sup> The collapse of the dot-com boom in the early 2000s led Cisco to withdraw its plans. Debates over the Coyote Valley continue between environmentalists and

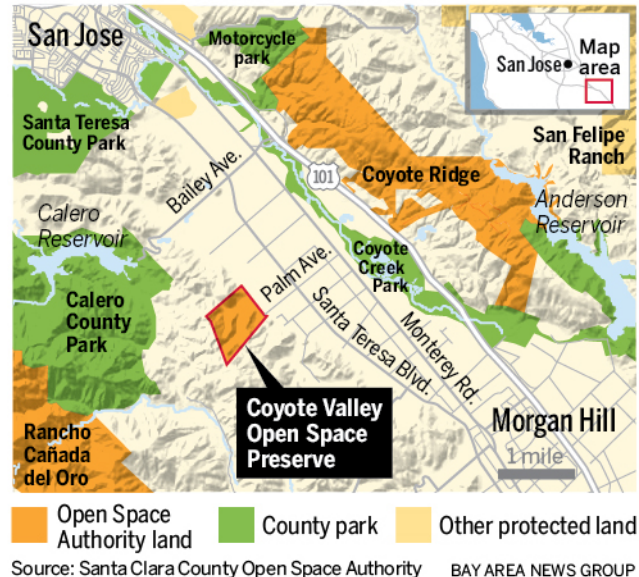
<sup>1</sup>“Reagan Library Site Choice Stirs Opposition in Palo Alto,” *New York Times*, December 24, 1986; “Reagan Library Site in Palo Alto Comes Under Fire,” *Los Angeles Times*, November 29, 1986.

<sup>2</sup>The denial of the referendum petition has been charged by environmentalists as a sign of corruption in San José Mayor Ron Gonzales’ administration. Gonzales was a supporter of the project.

developers, where the land is zoned for light industrial under San José's mid-1980s master plan. In 2015, environmentalists won what they hope will become a widespread move in the Coyote Valley. A new 348-acre park called the Coyote Valley Open Space Preserve opened in the summer. "There are 1.8 million people who have access to the last vestiges of the Valley of Heart's Delight," Marc Landgraf, external affairs manager of the Santa Clara County Open Space Authority, told the *San José Mercury News*. "And we want to keep it that way."<sup>3</sup>

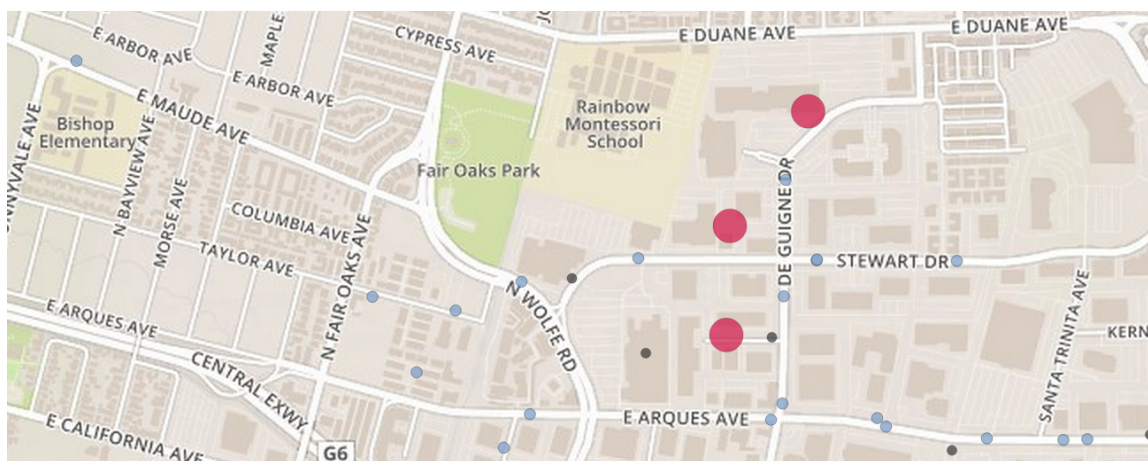
### New Open Space Preserve

The Santa Clara County Open Space Authority on Saturday afternoon will open to the public the new 348-acre Coyote Valley Open Space Preserve on San Jose's southern edge.



**Figure 6.8:** Coyote Valley Open Space Preserve. *San José Mercury News*, June 24, 2015.

<sup>3</sup>"New park in Silicon Valley opens Saturday, rekindling debate over future of Coyote Valley," *San José Mercury News*, June 24, 2015.



**Figure 6.9:** The “Triple Site” in Sunnyvale. Red circles indicate superfund sites; light blue indicate technology companies; dark blue indicate other toxic leaks and spills. Map by author. <http://dissertation.jasonheppler.org/visualizations/companies/>

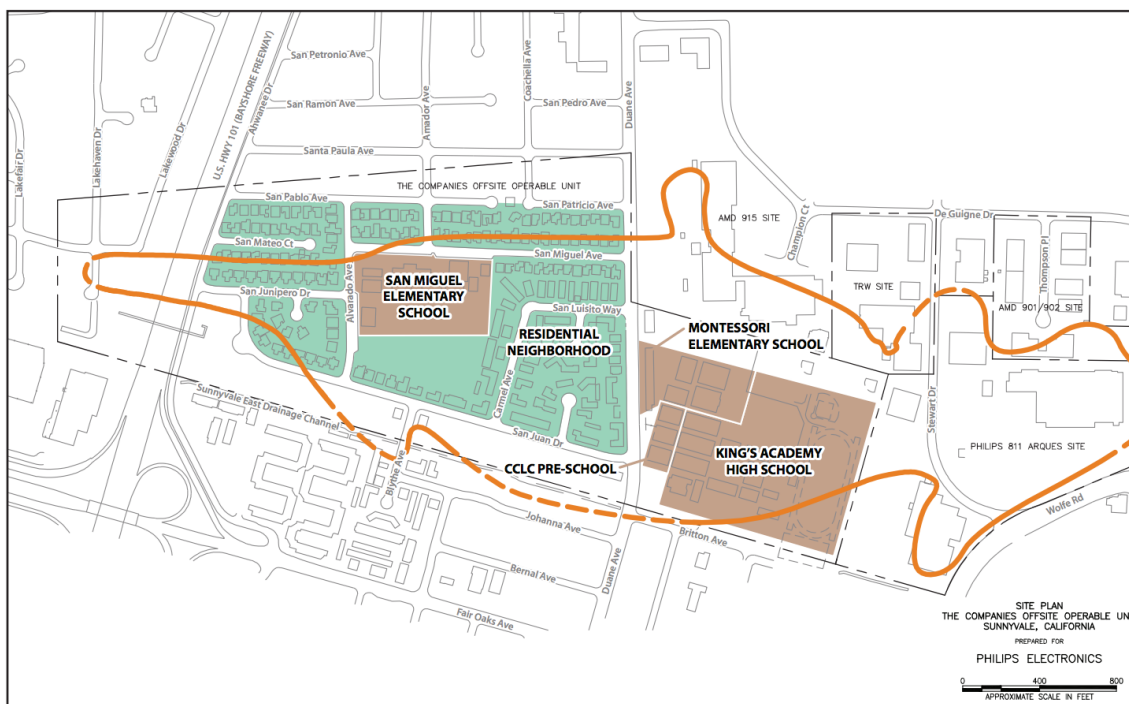
While particular places were secured as wilderness preserves, other areas of the county were fraught with the legacy of industrial pollution. At the end of 2014, the Environmental Protection Agency announced a town hall meeting in Sunnyvale. The topic: indoor air quality testing of homes. The EPA planned to test homes and a nearby school for the presence of trichloroethene (TCE) dispersed into the air from evaporating contaminated groundwater, a process known as “vapor intrusion.”<sup>4</sup> The area, known as the Triple Site under monitoring by the EPA, were the remediated Superfund sites of AMD Electronics, TRW Microwave, and Philips Semiconductors.<sup>5</sup> Volatile organic compounds were discovered in 1981 leaking from storage tanks on company property at levels past acceptable standards. Should the EPA discovered vapor intrusion in homes or schools, they will assist in the installation of mitigation systems to filter and vent the air.<sup>6</sup>

The hazardous and toxic landscapes lived on in other areas of the Peninsula

<sup>4</sup>“Sunnyvale: EPA plans on testing indoor air quality for vapor intrusion,” *San José Mercury News*, December 5, 2014 [http://www.mercurynews.com/my-town/ci\\_27080114/sunnyvale-epa-plans-testing-indoor-air-quality-vapor](http://www.mercurynews.com/my-town/ci_27080114/sunnyvale-epa-plans-testing-indoor-air-quality-vapor).

<sup>5</sup>More about the Triple Sites can be found at <http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/3dec8ba3252368428825742600743733/d18e8a81d96408d588257d32005da7f0>.

<sup>6</sup>“EPA School Sampling Update,” EPA Factsheet, August 2014 <http://sunnyvale.ca.gov/Portals/0/Sunnyvale/OCM/CMBlog/2014/Aug25/TripleSiteSchoolsAug2014.pdf>.



**Figure 6.10:** The extent of TCE contamination in groundwater. EPA, “EPA School Sampling Update” Factsheet, August 2014 <http://sunnyvale.ca.gov/Portals/0/Sunnyvale/OCM/CMBlog/2014/Aug25/TripleSiteSchoolsAug2014.pdf>.

as well. In East Palo Alto, a group calling themselves Youth United for Community Action initiated a campaign against the Romic waste treatment facility, arguing that the facility’s presence constituted environmental racism.<sup>7</sup> YUCA claimed that Romic has exacerbated risks of cancer and asthma for East Palo Alto, going so far as to conduct their own health surveys that found one-out-of-four 13-to-21 year-olds had asthma and that cancer rates were far higher than average for the rest of San Mateo County. A 2006 explosion that severely burned employee Frolan Chan-Liongco, a sudden Romic tanker chemical leak that released fifteen different chemicals, and decades of hazardous material stored on-site led activists to argue Romic was no longer welcome in their community. “Romic feels that since it is located in a community of color that they don’t have to abide by regulations,” argued Annie Loya, an activist with YUCA. “But also it is the regulatory

<sup>7</sup>For more on Romic and environmental racism, see Chapter 4.

system that is failing. The result is that there is a blind eye cast upon how businesses operate in communities like ours.”<sup>8</sup> In 2005, YUAC filed a federal civil rights suit against Romic claiming “environmental racism” against the California Department of Toxic Substances Control, arguing that DTSC allowed Romic to operate with an expired permit and failed to force the company to complete an environmental impact report.<sup>9</sup> A year later, the East Palo Alto City Council voted to appeal to the State to deny Romic an extension on its operating permit. That fall, San Mateo County officials made the same case, arguing that Romic constituted “great environmental and public health risks.”<sup>10</sup> The state acted in 2007 when DTSC announced it revoked Romic’s permit for handling and storing liquid waste after its investigation of environmental violations included the release of 4,000 solvents in June 2006 and two incidents of employees seriously burned in June 2004 and March 2006.

THESE VIGNETTES ARE PRODUCTS OF THE POSTWAR PAST. During the postwar era, confrontations over the landscape gave expression to a political project in Santa Clara County that attempted to meld bucolic naturalism with suburban capitalism. Across the landscape changes to the land remain perceptible yet sometimes invisible: fenced-off military installations, protected wilderness areas, capped wells, and the small, white PVC pipes that occasionally dot the manicured lawns of businesses that allows chemical contaminants to evaporate into the air.

The debate over land use in Palo Alto, San Jose, East Palo Alto, and other Santa Clara County cities reflected a longer debate about western land use, and specifically about the presence of natural places near urban areas. Richard White’s

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<sup>8</sup>“Silicon Valley’s Dirty Secret,” *Metroactive*, January 3, 2007 <http://www.metroactive.com/metro/01.03.07/environmental-racism-0701.html>; “Waste-facility foes rally at City Hall,” *San José Mercury News*, December 20, 2006.

<sup>9</sup>“State shuts down chemical plant,” *The Daily Journal*, May 31, 2007.

<sup>10</sup>“State shuts down chemical plant,” *The Daily Journal*, May 31, 2007.

observation about the West's public lands—that "land cannot be simultaneously range, parking lots, and wilderness"—applies to Santa Clara County urban landscape.<sup>11</sup> People give spaces definition through cultural processes that determine how land and space should be utilized for economics, shelter, food, and transportation. These are not necessarily historical realities; they are cultural understandings of how particular places are defined, used, and protected. Silicon Valley, then, is two types of places. The first conjures images of iPhones, computers, and Steve Jobs. This Silicon Valley is a set of assumptions and attitudes defined by technology, invention, innovation, venture funding, and capital revolving around high technology. But Silicon Valley is also a place positioned in geographic space, an area of work, leisure, domesticity, and segregation. These two views into Silicon Valley—as a geographic place, and as a social construction—illustrate how we can come to understand the Valley's spatial history. People of the past attached meaning to this place through lived experiences and imagined geographies. When Samuel Brain criticized the plans for the Reagan Library, he was drawing from a history of people defining the Valley landscape for specific purposes. He also encapsulated fifty years of land use debates about whether land should be left in a "natural" state or put to some other use.

Environmentalism emerging out of the suburbs shaped cities. While city boosters sought to expand their municipal boundaries under the aegis of growth-as-progress, suburbanites reacted fiercely when the natural amenities they had come to enjoy were threatened. Hill regrades, channeled creeks, and high traffic roads became visible expressions of landscape changes that threatened the aesthetics suburbanites had come to enjoy. The shape of the Valley's cities, in other words, were shaped by suburban desires for an idyllic urban form that promised

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<sup>11</sup>Richard White, "Trashing the Trails," in *Trails Toward a New Western History*, Patricia Nelson Limerick, Clyde A. Milner II and Charles Rankin, eds. (Lawrence: University Press of Kansas, 1991), 37.

clean industrialization and access to natural amenities. Urban-dwelling knowledge workers turned to these places for their property values, good education for their children, and quality of life, reflecting the individualist political and class priorities of suburbanites. But in the process of shaping the city and countryside, middle- and upper-class environmentalists relied upon or crafted peculiar narratives about place. Socioeconomic, class, racial, and spatial boundaries determined where suburbanites looked for nature. That nature, more often than not, existed on the hillsides and in their backyards. The suburban countryside formed the core of their motivations, leaning on an aesthetic ideal and agricultural mythos to argue for placing limits on growth and protecting particular places. By the 1990s environmentalists could claim their efforts a success through the legal efforts to protect the natural resources of the Bay Area.

But among minority populations in Silicon Valley, “environment” represented something else: rather than aesthetics and recreation, their pursuit of an environmental agenda grounded itself in health, housing, and access to livable metropolitan spaces. In Silicon Valley, as in much of the American West, remarkable economic growth was accompanied by social and environmental costs. The decade-long battles over open space, farmland preservation, and toxics contamination were significant challenges for federal, state, county, and local agencies to manage as people pressured for protection, access, and cleanup of these lands. But so where the health risks due to air and water quality that disproportionately affected minority and working-class neighborhoods. Environmentalists were less inclined to care about issues and places less “natural” than those they identified with, places often less privileged than those areas occupied by affluent middle-class knowledge workers. Pressures for growth and preservation continue to collide in places like Coyote Valley and East Palo Alto as debates about health, air pollution, and wilderness, shaping a public discourse first forged in the battles of

mid-century environmental politics.

Government officials, civic leaders, and ordinary residents fortified their ideas for a high tech urbanism in the half-century after World War II, and in so doing laid conceptual and physical boundaries on the land to promote their city as “cleaner” than past industrialization. But separating out the idealism of this urban imagery reveals the mixed legacies that the landscapes of technology and knowledge impart. With the political project that began in 1940s Santa Clara County, civic leaders envisioned an urbanism free from the problems plaguing American cities. For business leaders and residents, Silicon Valley had plenty of advantages: a lack of racial strife, weak unions, low taxes, abundant land for development, and a highly-educated white-collar workforce, nestled in the natural environment of the valley. Like the Gold Rush a century before, this new California Dream promised a forging of a pastoral vision with a pioneering industrialization focused around high technology.

Yet these changes introduced new challenges at the verge of the 21st century as the economic focus of Silicon Valley drifted from hardware manufacturing to software development. Warehouses and factories were repurposed as hip development shops, building the backbone that would democratize access to the World Wide Web and personal computers. As manufacturing facilities moved overseas to cheaper and less-regulated labor markets, thousands of working-class manufacturing jobs disappeared. The software-oriented economy also attracted influxes of new populations, in particular large Asian populations that filtered their way into middle-class neighborhoods throughout the Peninsula. Environmental challenges in Silicon Valley have not gone away in this transition. Activists, residents, civic leaders, and government officials continue to confront the legacies of the region’s industrial past.

High tech continues to cultivate an image of clean and green—from Google’s

touting of its solar-panel-roofed campus buildings to Apple's environmental reports on its server farms, while those with the means drive luxury electric or fuel-efficient cars. Today, places like San José and Mountain View promote their image of "sustainable cities" that place an emphasis on bike rentals, friendly pedestrian environments, electric car charging stations, and the software of "smart cities" that promises to do a way with messy and inefficient bureaucracies. Digital technology provides much promise, allowing more flexibility in work, transportation, and leisure, empowering individuals with access to information, building social capital and social movements, and opening positive possibilities for the environment and democratic politics. But this technology also comes with costs—segregation by education, access to technology, the servers and hardware that create such possibilities.<sup>12</sup> Pressure for urban growth and revitalization will lead to future controversies over the environmental costs of high tech economies and urban development on the western landscape.

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<sup>12</sup>Margaret Pugh O'Mara, "The Environmental Contradictions of High-Tech Urbanism," in *Now Urbanism: The Future City Is Here*, ed. by Jeffrey Hou et al., (London: Routledge, forthcoming), 26–27.

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