

SANITIZING HISTORY:
ENVIRONMENTAL CLEANUP AND HISTORIC PRESERVATION IN U.S. WEST
MINING COMMUNITIES

By

NICHELLE STEPHANIE FRANK

A DISSERTATION

Presented to the Department of History
and the Graduate School of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy

June 2020

DISSERTATION APPROVAL PAGE

Student: Nichelle Stephanie Frank

Title: Sanitizing History: Environmental Cleanup and Historic Preservation in U.S. West Mining Communities

This dissertation has been accepted and approved in partial fulfillment of the requirements for the Doctor of Philosophy degree in the Department of History by:

| | |
|-----------------|------------------------------|
| Marsha Weisiger | Chairperson |
| Julie Weise | Core Member |
| Steven Beda | Core Member |
| Ocean Howell | Institutional Representative |

and

| | |
|---------------|--|
| Kate Mondloch | Interim Vice Provost and Dean of the Graduate School |
|---------------|--|

Original approval signatures are on file with the University of Oregon Graduate School.

Degree awarded June 2020

© 2020 Nichelle Stephanie Frank

DISSERTATION ABSTRACT

Nichelle Stephanie Frank

Doctor of Philosophy

Department of History

June 2020

Title: Sanitizing History: Environmental Cleanup and Historic Preservation in U.S. West Mining Communities

Residents in mining towns of the U.S. West face a troubling quandary in their attempts to preserve historical evidence of their town's industrial past, because that evidence threatens their health. The 1980 Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, or "Superfund") authorizes the Environmental Protection Agency to clean up toxic sites, but these sites are often where the most marginalized residents have lived and are sometimes the only evidence of those residents. How have mining communities preserved the past while ensuring the community's health and safety?

My dissertation, "Sanitizing History: Historic Preservation and Environmentalism in U.S. West Mining Communities," is the first book-length study that weaves together the histories of historic preservation and environmentalism to demonstrate that the answer lies with interagency cooperation and site-specific solutions. Focusing on Butte, Montana; Globe, Arizona; and Leadville, Colorado, my study relies on a wide array of source material, including archival collections and site visits. Chapter Two shows how some narratives about mining towns, rather than boosting the towns, derided them for their physical and moral uncleanliness. Chapter Three traces Progressive Era urban reform while Chapter Four documents infrastructure modernization from the 1920s to 1940s and the resulting destruction of historical resources related to marginalized populations. Chapter Five explores

redevelopment in the early postwar years. Chapter Six demonstrates how historic preservation and environmental policies coalesced in the 1960s, and Chapter Seven reveals that previously marginalized residents leveraged 1980s environmental laws to gain cleanup of mining landscapes. By employing lenses of intersectionality and agency, my project concludes that, in the process of asserting their right to bodily health and safety, mining town residents have perpetuated a pattern of forgetting that allowed cultural ills to continue. My work thus prompts scholars, activists, and members of the general public to search for policies that preserve painful pasts while allowing for healing.

CURRICULUM VITAE

NAME OF AUTHOR: Nichelle Stephanie Frank

GRADUATE AND UNDERGRADUATE SCHOOLS ATTENDED:

University of Oregon, Eugene
Colorado State University, Fort Collins

DEGREES AWARDED:

Doctor of Philosophy, History, June 2020, University of Oregon
Master of Arts, History, August 2012, Colorado State University
Bachelor of Arts, History, December 2009, Colorado State University

AREAS OF SPECIAL INTEREST:

U.S. West History
Environmental History
Historic Preservation

PROFESSIONAL EXPERIENCE:

Assistant Professor of US History, Utah State University, beginning August 2020

Graduate Teaching Fellow, University of Oregon, 2013-2020
Department of Women's, Gender, and Sexuality Studies, 2019-2020
Department of History, 2013-2019

Digital Pedagogy Fellow, University of Oregon, 2019

Graduate Student Assistant, Historic Preservation Program, 2015

History Instructor, Arapahoe Community College, 2012-2013

Historian, Golden History Museums, 2012-2013

Graduate Teaching Assistant, Colorado State University, 2010-2012

Research Assistant, Public Lands History Center, 2010-2012

GRANTS, AWARDS, AND HONORS:

- M. Gregg Smith Fellowship, College of Arts and Sciences, 2019-2020
- Travel Award, Organization of American Historians, 2019
- Graduate Award, National Council on Public History, 2019
- Leah Kirker Memorial Award for Outstanding Teaching, Department of History, University of Oregon, 2019
- Richard D. Brown Summer Research Award, Department of History, University of Oregon, 2016, 2017, 2018, 2019
- Conference Travel Grant, Department of History, University of Oregon, 2017, 2018, 2019
- Risa Palm Graduate Fellowship, College of Arts and Sciences, University of Oregon, 2017
- Travel Grant, National Science Foundation, 2017
- Doctoral Research Fellowship, Oregon Humanities Center, 2016
- Research Grant, Mining History Association, 2016
- Student Award, Rocky Mountain Cooperative Ecosystems Studies Unit, 2012
- Jeffrey Weiss Award Theatre History Writing, Theatre Historical Society of America, 2012
- Outstanding Graduate Student, Department of History, Colorado State University, 2012

PUBLICATIONS:

- Frank, Nichelle. “‘Merely Cosmetic’: Industrial Heritage and Environmental Reconciliation, 1983 to 2015” (article for submission to *Environmental History*).
- Frank, Nichelle. Review of *Flames of Discontent: The 1916 Minnesota Iron Ore Strike* by Gary Kaunonen (2017). *Indiana Magazine of History* (forthcoming).
- Frank, Nichelle. Review of *A Kennecott Story: Three Mines, Four Men, and One Hundred Years, 1887-1997* by Charles Caldwell Hawley (2014). *Pacific Northwest Quarterly* 106, no. 3 (Summer 2015): 153.
- Frank, Nichelle. “Estella Bergere Leopold.” Colorado Encyclopedia website.

<http://coloradoencyclopedia.org/article/estella-bergere-leopold>

Frank, Nichelle. Review of *Vacationland: Tourism and Environment in the Colorado High Country* by William Philpott (2013). *Madison Historical Review* 11 (2014): 117-121.

Frank, Nichelle. "Architectural Survival in a Dynamic Western Town." In *Inside the Astor House*. Golden: Golden History Museums, 2013.

Frank, Nichelle. "The Best Show in Town: Motion Picture Theatre Architecture and Social Class in Denver 1900-1940." *Marquee*, Volume 45, Number 3 (2013): 4-15.

Frank, Nichelle. "Florissant Fossil Beds National Monument Oral History Project Report." Public Lands History Center website (2013).

ACKNOWLEDGMENTS

“If I have seen further, it is by standing on the shoulders of giants” echoed in my head throughout the research and writing of this project. My advisor, Marsha Weisiger, shepherded me through every stage of the process with expert opinions and eagle-eye editing. I am forever grateful for her insights, but most of all for the confidence she gave me while I stumbled my way through this thicket. Thanks to Julie Weise’s constant reminder to journal about my research—it always freed my thoughts. Steve Beda not only kept me attuned to significant trends in labor history, but also showed me how to give engaging lectures. Ocean Howell was an excellent sounding board for urban history. Linni Mazurek taught me how to navigate the current academic world and was an endless fount of insights. Thank you also to many of the other faculty at UO, especially Jamie Bufalino, Kingston Heath, Ryan Jones, Brett Rushforth, and George Sheridan. I also would not have come to UO without the encouragement from faculty at Colorado State University, especially Jared Orsi, Tracy Brady, Ruth Alexander, Mark Fiege, and Janet Ore.

My UO graduate colleagues have been an exceptional community. Thank you, Rebecca Hastings, for being the best office mate and friend I could ask for. You are one of the strongest people I know, and I will miss having you just a desk away. Many thanks to many of my other graduate colleagues, especially Hayley Brazier, Emily Cole, Jesse Engebretson, Lacey Guest, Tara Keegan, Hillary Maxson, Annie Reiva, Olivia Wing, and Moeko Yamazaki. You are wonderful human beings who are doing amazing things.

Thank you to the many librarians, archivists, museum professionals, and local residents who shared their resources with me, including Arizona Heritage Center Library at Papago Park; Arizona State Library and Archives; Arizona State University Special Collections; Butte-Silver Bow Public Archives, especially Ellen Crain and Aubrey Jaap; Bob

Calder; Janice Fox; Gila County Historical Museum; Holly Henning; HistoriCorps; Linda and Carl Lopez; Christine Marin; the National Mining Hall of Fame; Jay Spehar; and Krista Zampacorta.

The University of Oregon's Department of History, Oregon Humanities Center, and College of Arts and Sciences all provided generous funding for this project. The Mining History Association, the National Science Foundation, the Organization of American Historians, and the National Council on Public History also funded research and conference travel for this project.

I have always been a verbose writer, but I do not believe any number of words could encompass the appreciation I have for my closest family and friends. Leslie, the friend I know is always there, whether to proof read emails, watch movies, listen to my greatest worries, or dream up the next Darcy Day. Tonya, the sister I will never stop looking up to. Someone once said that when we speak to one another, it is like we speak our own language. What would I do without you to speak to? Bryce, the brother whose generosity and thirst for knowledge inspire me every day. I hope you find the answers you seek. My parents. Where to begin? Dad, who worked two jobs simultaneously for most of my childhood and, even still, was there every day to care for things around the house, shuttle me to Irish step dance lessons, and go on hiking adventures. Mom, who was a chameleon in the job world, from artist to technology guru, a supermom at home, and the kind of strong woman I have always aspired to be. Most importantly, you both taught me that, even if there is no immediate answer to a problem or question in life, it is worth continuing to pray for one.

TABLE OF CONTENTS

| Chapter | Page |
|--|------|
| I. INTRODUCTION | 1 |
| Historiography | 6 |
| Theory | 11 |
| Sources and Methodology..... | 12 |
| Organization..... | 15 |
| II. CREATING EDEN..... | 19 |
| Cloud City Creation: Leadville, Colorado..... | 22 |
| Disastrous Dawn: Globe, Arizona | 33 |
| Hazy Halcyon: Butte, Montana..... | 43 |
| Conclusion..... | 55 |
| III. DESIGNING PARADISE, 1860s-1910s | 56 |
| A Clean Place to Live: Mining Town Houses..... | 60 |
| Keeping Them Clean: Mining Town Laundries | 68 |
| Moral Cleaning: Mining Town Redlight Districts | 79 |
| Conclusion..... | 88 |
| IV. FROM THE STREETS, 1910s-1930s..... | 90 |
| Healthy Lifestyles: Butte, Montana..... | 96 |
| Paving the Way: Leadville, Colorado | 118 |
| Reversible Change: Globe, Arizona | 130 |
| Conclusion..... | 137 |

| Chapter | Page |
|--|------|
| V. “PLEASE DO CLEAN THIS TOWN,” 1940s-1970s | 138 |
| A New Use: Globe, Arizona..... | 142 |
| Preservation and Planning: Leadville, Colorado..... | 150 |
| Mining Expansion: Butte, Montana | 161 |
| Conclusion..... | 167 |
| VI. “A BLIGHTING INFLUENCE,” 1970-1983 | 169 |
| Best Laid Plans: Butte, Globe, and Leadville..... | 174 |
| Planning for History: Butte, Montana..... | 184 |
| Cleaning Up Ghosts of Mining Past and Yet to Come: Leadville, Colorado | 189 |
| Image in Crisis: Globe, Arizona..... | 194 |
| Conclusion..... | 202 |
| VII. INDUSTRIAL HERITAGE, 1983-2015..... | 204 |
| Denial in Globe | 207 |
| Legacy in Leadville..... | 217 |
| Reconciliation in Butte | 230 |
| Conclusion..... | 239 |
| VIII. CONCLUSION: DETOXIFYING HISTORY | 242 |
| REFERENCES CITED..... | 254 |

LIST OF FIGURES

| Figure | Page |
|--|------|
| 1. Fig. 2.1, Disarrayed East Third Street, Leadville, CO, circa 1875. | 27 |
| 2. Fig. 2.2, Broad Street in Globe, AZ, after 1894 fire, looking north. | 38 |
| 3. Fig. 2.3, Sam Kee’s store, Globe, AZ, 2017. | 43 |
| 5. Fig. 2.4, Butte in 1875, looking southwest. | 49 |
| 6. Fig. 3.1, Tabor House, Leadville, CO, c. 1879. | 63 |
| 7. Fig. 3.2, August Meyer’s Sampling Works, Leadville, CO, 1879. | 67 |
| 8. Fig. 3.3, View northeast from California Gulch, Leadville, CO, 1879. | 68 |
| 9. Fig. 3.4, 400 block East Park Street, Butte, MT, 1900. | 70 |
| 10. Fig. 3.5, Chong Wing’s Chinese laundry, Butte, MT, 1890. | 74 |
| 11. Fig. 3.6, Neighborhood surrounding Chong Wing’s laundry, Butte, MT, 1890. | 75 |
| 12. Fig. 3.7, Map depicting Troy Steam Laundry, Butte, MT, 1890. | 77 |
| 13. Fig. 3.8, Redlight district, Sanborn Fire Insurance map, Globe, 1906. | 81 |
| 14. Fig. 3.9, Redlight district, Butte, MT, 1884. | 83 |
| 15. Fig. 3.10, Redlight district, Butte, MT, 1916. | 84 |
| 16. Fig. 4.1, Samuel Barker’s home, Butte, MT, 1907. | 100 |
| 17. Fig. 4.2, Unidentified garden, Butte, MT, c. 1900-1930. | 102 |
| 18. Fig. 4.3, Mrs. Evatz garden, Butte, MT, c. 1900-1930. | 103 |
| 19. Fig. 4.4, Miners’ Union Hall, Butte, MT, 1914. | 105 |
| 20. Fig. 4.5, Miners’ Union Hall, Sanborn Map, Butte, MT, 1916. | 106 |
| 21. Fig. 4.6, Storm sewer construction map, Butte, MT, 1930s. | 108 |
| 22. Fig. 4.7, “Cabbage Patch,” Butte, MT, 1921. | 118 |

| Figure | Page |
|--|------|
| 23. Fig. 4.8, Harrison Avenue in Leadville, CO before 1930 paving project | 123 |
| 24. Fig. 4.9, Harrison Avenue in Leadville, CO after 1930 paving project..... | 124 |
| 25. Fig. 4.10, Detail of Sanborn Fire Insurance Map, Leadville, CO, 1937..... | 128 |
| 26. Fig. 4.11, Eighth Street looking west, Leadville, CO, 1920s..... | 129 |
| 27. Fig. 4.12, Martin Theater, Globe, AZ, c. 1910-1930 | 133 |
| 28. Fig. 4.13, Elk’s Theatre and Martin Theatre advertisements, Globe, AZ, 1916..... | 134 |
| 29. Fig. 5.1, Globe asbestos mine map, c. 1961-1968..... | 147 |
| 30. Fig. 5.2, Mine drainage tunnels map, Leadville, CO, 1943..... | 152 |
| 31. Fig. 5.3, Portraits of Augusta, Horace, and Baby Doe Tabor..... | 155 |
| 32. Fig. 5.4, Baby Doe Tabor’s cabin interior, Leadville, CO, 1935 | 156 |
| 33. Fig. 5.5, Baby Doe Tabor’s cabin interior, Leadville, CO, 1953 | 157 |
| 34. Fig. 5.6, Plan for Community Facilities map, Leadville, CO, 1963..... | 159 |
| 35. Fig. 5.7, Berkeley Pit Mine postcard, Butte, MT, 1950s | 162 |
| 36. Fig. 5.8, Model neighborhood survey map, Butte, MT, 1969..... | 166 |
| 37. Fig. 6.1, John and Elaine Insalaco, Globe, AZ, 1983..... | 170 |
| 38. Fig. 6.2, Model neighborhood map, Butte, MT, 1966 | 177 |
| 39. Fig. 6.3, Central Business District map, Leadville, CO, 1979..... | 180 |
| 40. Fig. 6.4, Dump truck burying Holy Savior Church, Butte, MT, 1979..... | 185 |
| 41. Fig. 6.5, Mike Wood and Alvin Gerhardt portraits, 1982 | 195 |
| 42. Fig. 6.6, Metate Asbestos mill, Globe, AZ, 1969..... | 198 |
| 43. Fig. 7.1 Metate Asbestos mill, Globe, AZ, 1983, 2019 | 209 |
| 44. Fig. 7.2, Common types of asbestos..... | 212 |

| Figure | Page |
|--|------|
| 45. Fig. 7.3, Yak Tunnel acidic mine water spill map, Leadville, CO, 1983..... | 220 |
| 46. Fig. 7.4, California Gulch Superfund Site, Leadville, CO, 2016..... | 223 |
| 47. Fig. 7.5, The Original Mine, Butte, MT, 1980..... | 233 |
| 48. Fig. 7.6, The Berkeley Pit, Butte, MT, 1995 | 237 |
| 49. Fig. 8.1, Interpretive sign at the Berkeley Pit, Butte, MT, 2016 | 245 |
| 50. Fig. 8.2, Main level of Dumas Brothel, Butte, MT, 2017 | 248 |
| 51. Fig. 8.3, Metal silhouettes, Pleasant Alley, Butte, MT, 2017 | 248 |
| 52. Fig. 8.4, Former site of Mountain View Mobile Homes, Globe, AZ, 2019 | 250 |
| 53. Fig. 8.5, Matchless Mine Headframe restoration, Leadville, CO, 2017..... | 252 |

LIST OF TABLES

| Table | Page |
|---|------|
| 1. Laundries in Butte, Montana, by race. | 72 |

CHAPTER I

INTRODUCTION

On August 5, 2015, contractors for the Environmental Protection Agency were clearing away dirt and debris from the entrance of a tunnel at the Gold King Mine above Silverton, Colorado, when three million gallons of acidic mine-water burst from the tunnel and spilled into the Las Animas River. The employees were there to reduce the amount of water backed up in the mine and thereby avoid a gush, but their actions prompted a gush instead. Despite the EPA and the state of Colorado having conducted several mitigation projects at Gold King since the 1990s, they had failed to understand the potential for such a disaster. This type of disaster was not unheard of. Nor are the slow disasters of mining town residents suffering illness or the threat of illness resulting from years of heavy metals building up in the air, water, soil, and bodies of living organisms, including human bodies.

Such disasters have occurred in mining towns across the United States, despite—and sometimes because of—the Environmental Protection Agency’s activities. Historical mining landscapes are evidence of the past in mining towns, but they contain contaminated soil, water, and air. EPA scientists list such areas as “Superfund” sites under the 1980 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLA authorizes the EPA to clean up toxic sites and demand payment from the group or individual responsible for the contamination. These sites are often where the most marginalized members of a given community have lived since the 1860s, so changes to these areas can mean the loss of their historical landscapes. As such, this dissertation draws on theories of power and agency in historical narration to revise our understanding of how to

preserve the dirty, dark, and dangerous pasts in the U.S. West while promoting health and safety.

Indeed, residents in mining towns across the U.S. West face a troubling quandary in their attempts to preserve historical evidence of their towns' industrial past, because some of that evidence threatens their health. How have they addressed this problem? Have their efforts succeeded? Focusing on Butte, Montana; Globe, Arizona; and Leadville, Colorado, this dissertation chronicles historic preservation and environmental efforts from the 1860s to the present to gauge the extent to which residents and nonresidents have shaped these efforts. In these processes, residents and nonresidents have followed patterns that have been dangerous to the historical narrative and to residents' health and safety. I argue that at the root of these patterns is an impulse to clean up, to create order, and to sanitize our surroundings, which dates back to at least the mid-nineteenth century. Moreover, the very composition of mining landscapes and their messy pasts have rendered them unsuitable to many such impulses, resulting in continued tension among different groups of residents as well as between residents and nonresidents. Progress in preserving some of this messiness has only emerged in the most recent years as a result of improved communication among all involved parties.

Mining towns in the U.S. West boomed and busted during the initial Gold Rush years between the 1840s and 1870s, but by the mid-twentieth century, most had become ghost towns or turned to other industries, such as tourism. No longer was survival just about ensuring the availability of natural resources like water and trees, but also about promoting a town's heritage. When the demand for heavy metals declined after the early boom years and especially following World War II, historic preservation and environmental efforts in mining

towns shifted from a focus on promoting mining as the modern lifeblood of the community to portraying mining as an artifact of the past, even when mining efforts continued.

Local environmental and historic preservation efforts gained new clout in the 1960s with the passage of the 1966 National Historic Preservation Act (NHPA) and the 1970 National Environmental Policy Act (NEPA). In order to list a property on the National Register of Historic Places, NHPA requires the resource to meet at least one of four criteria, including association with a significant historical event, person, or architectural design, or potential for yielding prehistoric information. These policies have often favored properties associated with members of the white upper and middle classes, despite the presence of resources associated with socioeconomic minorities. NEPA promoted, among other items, the prevention or elimination of damage to the environment. But this often meant destroying historical resources, like homes, businesses, and even toxic waste, that damaged the environment in the eyes of government officials, but provided insight into the lived experiences of people who once occupied those contaminated landscapes. Adhering to NHPA and NEPA standards focused attention on mining town sites that fit certain criteria while ignoring those that did not. State legislation also influenced the ways in which historic preservation and environmental projects progressed during the late-twentieth century, resulting in a quagmire of bureaucratic red tape and conflicting ideas about what was “best” for the public good.

Beyond the strict standards of environmental and historic preservation regulations, some of the processes required in federal law have also strained mining communities. Under NHPA, for instance, federally-funded projects that may have adverse effects on historic resources must complete the process outlined in Section 106 of that act, which requires the federal, federally-funded, or federally-permitted agency in charge of the project to consult

with a State Historic Preservation Office (SHPO) to determine which resources might be affected and to what extent, and to develop measures to mitigate those effects. The process, however, does not require the agency to actually follow any of the SHPO's recommendations. Thus, the entity may legally destroy cultural resources. Similarly, NEPA requires that federal agencies assess the potential effects of their actions on both the natural and human environments, including cultural resources. One of NEPA's six pillars promises to provide healthy and "culturally pleasing" environments to the public, and another pillar promises to "preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice." The language to support diversity of environments is there, but framing it under the more subjective "pleasing" notion has left room for those in positions of power to enforce their definitions of what qualifies as pleasing. Both Section 106 and the NEPA process require that the federal agency seek public comment regarding historical and cultural resources, but neither contains real legal teeth by which to enforce the recommendations of SHPO or other consulting parties.

Furthermore, although consulting parties might suggest mitigation, the consultants themselves represent a particular perspective that does not always reflect the interests of local residents. Some of these outsiders have been sympathetic to the interests of the local residents, but their duties as federal or state employees have constrained their actions. The resulting tension between nonresidents and residents has led some residents to resent federal or state involvement, even in the moments when their community desperately needs it, whether to assist the failing economy or to address a public health threat.

Despite these tensions, those interested in historic preservation and environmental projects share a core value: both seek to save landscapes. In this dissertation, I use the word

“sanitize” to capture the many actions involved in saving these landscapes, because it further demonstrates how deep the roots of the legal-based actions are and how those roots simultaneously liberate and limit historically marginalized residents. Preservationists have often cleaned up sites and narratives in order to make them safer and easier for visitors to understand. Environmentalists sanitize sites in mining towns to clean up toxicity, but might also include restoration through reclamation (for example, sowing seeds for grass to cover a tailings pile). The goal was often with health and safety in mind, but it sometimes backfired, such as when cleanup led to wholesale demolition of working-class housing. These sanitizing efforts carried a connotation of “good,” but by definition, they also meant “elimination,” which could be good, bad, or in-between, depending on one’s perspective. By the end of the twentieth century, mining landscapes encapsulated this problem; they posed issues for both environmental and historic preservation projects, because mining extensively altered the landscapes, but those changes represented the lived experiences of residents that have not been so apparent in the buildings and structures that preservationist groups or individuals have saved.

This pattern of environmental versus historic preservation, of outsider versus insider, of professional versus self-taught, and of sanitized versus messy has led to battles that have cost people their livelihoods and quality of life. Although these battles came to a head after the passage of NHPA and NEPA, their roots are much deeper. In fact, their ideologies are descendants of the urban renewal and sanitation efforts of earlier eras, both of which purported to have the interests of the public good at heart, but resulted in displacement of already-marginalized populations. Therefore, this impulse to clean up, to create order, to *sanitize* has achieved exactly what it intended. But at what cost?

The result of sanitizing landscapes and historical narratives has created safer environments and streamlined stories to better serve the visiting public, but doing so has perpetuated a pattern of forgetting that allows tension between residents and non-residents to persist. Residents have challenged this pattern by asserting their local knowledge, sometimes influencing the course of federal or state action. But the stubbornness of people and policies on all sides has stymied action and created lasting resentment. As long as the socioeconomically powerful have been the ones in charge of identifying and conducting historic preservation and environmental projects, they have been slow to recognize the contributions of not just the marginalized populations of the past, but also the marginalized populations of the present. And if policies do not change, this pattern of erasure will continue for the foreseeable future. Therefore, the pattern runs deeper than might seem at first glance. Moreover, it is not just that the pattern is deep, but that the pattern itself—while beneficial in some respects—creates problems just as it solves others.

Historiography

By engaging with historic preservation and environmental projects, this dissertation intervenes in many fields, but most significantly as the first book-length study that weaves together the histories of historic preservation and environmentalism. This woven history demonstrates that the answers to environmental and historic preservation challenges lie with interagency cooperation and site-specific solutions. The histories of historic preservation and environmentalism, however, are not separate, and in the context of this dissertation, they are at play with histories of the U.S. West and several of its subfields.

Indeed, both environmental and historic preservation scholarship interrogate matters of identity in the U.S. West. Scholars have explored notions of the frontier, for instance, as a

deeply entrenched aspect of identity in the U.S. West, debating over whether or not the frontier was a place or a process. Despite the urbanization of many locations in the U.S. West, the region west of the Mississippi has represented to many people the epitome of a wild, gritty, and invigorating environment.¹ Robert G. Athearn's seminal book, *The Mythic West in Twentieth-Century America*, crystallized this concept of an imagined West. He chronicled how the popular American imagination, by which he meant that of the white middle-class, latched onto a simplified narrative about the West that emphasized ranching, farming, mining, and Indian fighting.² This dissertation tests some of the most widespread and comprehensive narratives about Butte, Leadville, and Globe against this notion of the mythic West to weigh their accuracy and their effect on historic preservation and environmental efforts.

At heart, this project is an environmental history. Scholars speak often of “built” and “natural” environments, but this dissertation adopts a broad definition of “environment” that covers many features and scales, from rocks, waterways, plants, soils, and animals to houses, sewers, streets, and towns—that is, the environment in which most humans live. It also challenges the separation of urban and rural studies in broader scholarship by examining how urbanized such rural towns could be.

¹ William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W. W. Norton, 1992); Patricia Nelson Limerick, *The Legacy of Conquest: The Unbroken Past of the American West* (New York: W. W. Norton, 1987); John William Reys, *The Forgotten Frontier: Urban Planning in the American West before 1890* (Columbia: University of Missouri Press, 1981); Frederick Jackson Turner, “The Significance of the Frontier in American History,” 1897, *Empire Online*. http://www.empire.amdigital.co.uk/libproxy.uoregon.edu/Documents/Details/The_Significance_of_the_Frontier_in_American_History_. The idea of the West as process versus the West as place has been under debate since Frederick Jackson Turner contended that the West was a process that ended when Anglo-Americans had settled across the West and ended the idea of the “frontier.” Among many others, both William Cronon and Patricia Nelson Limerick have challenged Turner's thesis.

² Robert G. Athearn, *The Mythic West in Twentieth-Century America* (Lawrence: University Press of Kansas, 1986). See also Chris Wilson, *The Myth of Santa Fe: Creating a Modern Regional Tradition* (Albuquerque: University of New Mexico Press, 1997), which covers the creation of the mythic West based on historic preservation activities in Santa Fe, New Mexico.

Like broader histories of the U.S. West, some environmental histories of mining in the U.S. West have emphasized labor while others emphasized environment. Mining labor strife has dominated the experiences of mining town life for many residents, and recent scholars have explored how those labor conflicts linked to the environment.³ Thomas Andrews' *Killing for Coal*, for instance, demonstrated how the differing relationships that miners and company owners had with the environment antagonized their relationships with one another.⁴ Other mining historians, like Kent Curtis in *Gambling on Ore* and Timothy LeCain in *Mass Destruction* have examined the role of the environment in the mining industry as a whole and its relationship to larger economic practices of mass consumption.⁵ I find, like Curtis and LeCain, that the national-level mining industry influenced how Americans viewed their relationship to the natural environment. But unlike Curtis and LeCain, I argue for a closer analysis of how the social identities that informed the national-level environmental *as well as* historic preservation concerns manifested not just in the mines but in the communities as a whole.

Historic preservation literature about, and practice within, U.S. West mining towns has raised questions about preserving sites and stories that challenge a celebratory narrative. In the majority of mining towns, capital flight in the early and mid-twentieth century led to a

³ Ronald C. Brown, *Hard-Rock Miners: The InterMountain West, 1860-1920* (College Station: Texas A&M University Press, 1979); Jerry W. Calvert, *The Gibraltar: Socialism and Labor in Butte, Montana, 1895-1920* (Helena: Montana Historical Society, 1988); David M. Emmons, *The Butte Irish: Class and Ethnicity in an American Mining Town, 1875-1925* (Urbana: University of Illinois Press, 1990); Elizabeth Jameson, *All That Glitters: Class, Conflict, and Community in Cripple Creek* (Urbana: University of Illinois Press, 1998); Laurie Mercier, *Anaconda: Labor, Community, and Culture in Montana's Smelter City* (Urbana: University of Illinois Press, 2001); Kathryn Morse, *The Nature of Gold: An Environmental History of the Klondike Gold Rush* (Seattle: University of Washington Press, 2010); William Philpott, *The Lessons of Leadville, or, Why the Western Federation of Miners Turned Left* (Denver: Colorado Historical Society, 1995).

⁴ Thomas G Andrews, *Killing for Coal: America's Deadliest Labor War* (Cambridge, Mass.: Harvard University Press, 2008).

⁵ Kent Curtis, *Gambling on Ore: The Nature of Metal Mining in the United States, 1860-1910* (Boulder: University Press of Colorado, 2013); Timothy J. LeCain, *Mass Destruction: The Men and Giant Mines That Wired America and Scarred the Planet* (New Brunswick: Rutgers University Press, 2009).

lack of available funding for, and interest in, historic preservation. After the 1960s, federal grants and tax breaks increasingly funded historic preservation projects. These projects mimicked the celebratory histories of earlier years by preserving the most “significant” buildings, which tended to be the homes and businesses of the most elite. More recently, preservationists have promoted the preservation of historic resources that provide insight into more diverse histories as well as the darker or more dangerous aspects of a place’s past.⁶ In mining towns, preservation literature and projects within at least the last twenty years have paid greater attention to preserving the sites of racial, ethnic, and class minorities, which often carry environmental hazards.⁷ Fredric Quivik and Donald Hardesty in particular have been vocal proponents of preserving toxic mining sites in ways that capture the visual character of the site, but ensure the safety of residents and visitors.⁸ This dissertation explores the profits and pitfalls of doing so, particularly in light of what this means for the histories of and current quality of life for marginalized residents.

Of all the scholars who have combined the topics of mining, preservation, and the environment, David Robertson in *Hard as the Rock Itself*, Gillian Klucas in *Leadville: The*

⁶ William J. Murtagh, *Keeping Time: The History and Theory of Preservation in America* (Hoboken: John Wiley & Sons, 2005); Robert E. Stipe, *A Richer Heritage: Historic Preservation in the Twenty-First Century*, (Chapel Hill: University of North Carolina Press, 2003).

⁷ Ellen Baumler, “Devil’s Perch: Prostitution from Suite to Cellar in Butte, Montana,” *Montana: The Magazine of Western History* 48, no. 3 (Autumn 1998): 4–21; Kara Mariko Miyagishima, “From Brothels to Buddhism: A Walking Tour of Denver’s Red-Light District,” in *Preserving Western History*, ed. Andrew Gulliford (Albuquerque: University of New Mexico Press, 2005); Monica Perales, *Smelertown: Making and Remembering a Southwest Border Community* (Chapel Hill: The University of North Carolina Press, 2010); Benjamin Hayes, Elizabeth Goetsch, and Angela Smith, “Madams, Prostitutes, Alcohol, and Gambling, Oh My: Interpreting Vice by Challenging Dominant Narratives,” panel presented at the *National Council on Public History Annual Meeting*, Las Vegas, NV, April 20, 2018; Alison K. Hoagland, *Mine Towns Buildings for Workers in Michigan’s Copper Country* (Minneapolis: University of Minnesota Press, 2010); Andrew Gulliford, ed., *Preserving Western History* (Albuquerque: University of New Mexico Press, 2005). For Gulliford’s edited volume, see in particular the sections “Hispanic Culture” and “Native American Preservation Issues.”

⁸ Donald L. Hardesty, “Issues in Preserving Toxic Wastes as Heritage Sites,” *The Public Historian* 23, no. 2 (2001): 19–28; Fredric L. Quivik, “The Historical Significance of Tailings and Slag: Industrial Waste as Cultural Resource,” *LA. The Journal of the Society for Industrial Archeology* 33, no. 2 (2007): 35–52. For examples of preservation and adaptive reuse of Superfund sites in particular, see Daniel Bluestone, *Buildings, Landscapes, and Memory: Case Studies in Historic Preservation* (New York: W. W. Norton, 2010).

Struggle to Revive an American Town, and Brian Leech in *The City That Ate Itself* have most closely examined the complicated social identities that have prompted preservationists, environmentalists, and residents to consider bodily health and emotional well-being in U.S. West mining towns.⁹ Robertson used the stories of three coal mining towns to understand how residents and the U.S. government have preserved mine waste sites. He concluded that the outcomes vary, depending on the level of involvement from local citizens as well as the government's willingness to listen.¹⁰ Klucas chronicled the debate between the Environmental Protection Agency and Leadvillites that ensued when the EPA named Leadville, Colorado, a Superfund site in 1983. Leadvillites did not want the Superfund designation since it implied their homes were unfit for living. Instead, many residents believed that the toxins in their surroundings had not caused them enough harm to justify the EPA's effort to clean up.¹¹ Brian Leech examined Butte, Montana, to explain how the transition from underground to open-pit mining destroyed ethnic neighborhoods, intensified division among workers along ethnic lines, and ultimately led to new hazards during and after the open-pit mine's operation. Building on extensive research in company records as well as drawing on and conducting oral history interviews, Leech concluded that preservation of the ethnic neighborhoods and the pit itself are ongoing and shape how companies approach community involvement around the globe.¹² My dissertation analyzes

⁹ See also John M. Findlay, *Magic Lands: Western Cityscapes and American Culture After 1940* (Berkeley: University of California Press, 1993); William Philpott, *Vacationland: Tourism and Environment in the Colorado High Country* (Seattle: University of Washington Press, 2013); Earl Pomeroy, *In Search of the Golden West: The Tourist in Western America* (Lincoln: Bison Books, 2010).

¹⁰ David Robertson, *Hard as the Rock Itself: Place and Identity in the American Mining Town* (Boulder: University Press of Colorado, 2006).

¹¹ Gillian Klucas, *Leadville: The Struggle To Revive An American Town* (Washington, D.C.: Island Press, 2004).

¹² Brian James Leech, *The City That Ate Itself: Butte, Montana and Its Expanding Berkeley Pit* (Reno: University of Nevada Press, 2018).

the degree to which residents and nonresidents have navigated practice and law in historic preservation and environmental efforts in order to show that even though historic preservation and environmental goals sometimes conflict, they share core values.

This combination of environmental and preservation literature engages with one final major field: environmental justice. Because of the efforts of recent environmental historians, scholars have a better understanding of how and why environmental problems have disproportionately affected racial, ethnic, and class minorities.¹³ Race, according to scholars like Carl Zimring, Carolyn Finney, and Connie Chiang, is key to understanding environmental attitudes and problems in the United States. The study of environmental justice directly involves issues of power and agency for certain portions of the population. The notion of justice in environmental projects inspires this dissertation's theoretical approach in exploring the effects of "unjust" historical narratives.

Theory

Environmental justice is not just about the landscape, however, but also about the narrative. Diverging from traditional approaches to understanding the production of historical knowledge that focus on who controlled production, my research analyzes how marginalized communities influenced their built environments and thus the historical narrative. Michel-Rolph Trouillot argued that history is not simply what happened, but also a

¹³ For example, see: Elizabeth D. Blum, *Love Canal Revisited: Race, Class, and Gender in Environmental Activism* (Lawrence: University Press of Kansas, 2008); Matthew Morse Booker, *Down by the Bay: San Francisco's History between the Tides* (Berkeley: University of California Press, 2013); Connie Chiang, *Shaping the Shoreline* (Seattle: University of Washington Press, 2008); Carolyn Finney, *Black Faces, White Spaces: Reimagining the Relationship of African Americans to the Great Outdoors* (Chapel Hill: University of North Carolina Press, 2014); Linda Nash, *Inescapable Ecologies: A History of Environment, Disease, and Knowledge* (Berkeley: University of California Press, 2007); Ellen Griffith Spears, *Baptized in PCBs: Race, Pollution, and Justice in an All-American Town* (Chapel Hill: University of North Carolina Press, 2014); Julie Sze, *Noxious New York: The Racial Politics of Urban Health and Environmental Justice* (Cambridge: MIT Press, 2007); Carl A. Zimring, *Clean and White: A History of Environmental Racism in the United States* (New York: New York University Press, 2016).

position one takes in narrating events. Individuals or groups that hold the greatest political power, he contended, control this narrative, resulting in a “silencing” of some groups or individuals. Trouillot recognized that such silencing extends beyond verbal and written narratives to the physical evidence of the past.¹⁴ Yet, silencing can be an act of the oppressed, not just an act perpetuated against the oppressed. This self-silencing is often a survival strategy to protect mental and emotional well-being, since remembering oppression can be traumatizing. In their efforts to erase a narrative that has harmed them, oppressed populations have asserted their right to health and safety but perpetuated a pattern of forgetting that allows cultural harm to continue. At the same time, many attempts by marginalized populations to assert their power over the historical narrative in order to diversify it and confront destructive aspects of the past have also been suppressed, often due to the constraints of preservation and environmental laws. In analyzing the roles of marginalized residents in historic preservation and environmental projects, this dissertation is thus a guide about past efforts to preserve mining history, which could assist policymakers and activists in balancing a need for historical accuracy in historic preservation with a need for health and safety.

Sources and Methodology

To explore the construction and reconstruction of historical narratives in these towns based on residents’ understandings of the environment, this dissertation uses a wide variety of sources, including planning documents, U.S. Federal Manuscript Census data, Sanborn Fire Insurance maps, autobiographies, court hearings, photographs, government

¹⁴ Michel-Rolph Trouillot, *Silencing the Past: Power and the Production of History* (Boston: Beacon Press, 2015).

documents, newspaper articles, and correspondence. In order to formulate a sense of the lived reality for people of the past, my searches led me deep into newspaper accounts, which, though filtered by journalists, provided insight into individuals' experiences through the words of local residents themselves as well as descriptions of local environments. In a similar vein, census data and Sanborn maps were invaluable in forming my understanding of how newspaper narratives corroborated or challenged these more official records of where people lived, including the housing and infrastructure of their neighborhoods.

This dissertation combines methods from social, labor, and environmental historians with methods from historic preservation, particularly the study of cultural landscapes. In addition to documentary archival sources, preservationists are largely concerned with material artifacts of the past. This dissertation explores the places where discussions of historical accuracy overlap with environmental conservation, much like the scholarship in the edited volume, *Cultural Landscapes*. Taking the notion of “cultural landscapes,” or the “combined fabric of the natural and man-made environments,” this dissertation integrates my own visits to the towns with archival research in order to understand not only what was, but also what was lost.¹⁵

Many mining histories address a single town or a single company in order to pinpoint the causes of labor strife and environmental catastrophes, but this dissertation takes a comparative approach to understanding the relationship between narrative and the environment by analyzing three cities. The selection of the cities in this dissertation stemmed from my interest in studying cities with links to current mining efforts as well as cities that

¹⁵ Hoagland, *Mine Towns Buildings for Workers in Michigan's Copper Country*; Richard V. Francaviglia, *Hard Places: Reading The Landscape Of America's Historic Mining Districts* (Iowa City: University of Iowa Press, 1997); Beth Sagstetter and Bill Sagstetter, *The Mining Camps Speak: A New Way to Explore the Ghost Towns of the American West* (Denver: BenchMark Publishing, 1998); Richard Longstreth, ed., *Cultural Landscapes: Balancing Nature and Heritage in Preservation Practice* (Minneapolis: University of Minnesota Press, 2008).

represented a swath of the Rocky Mountains running from north to south. By studying towns where mining still occurs nearby, I could better explore how residents continuously reshape their histories to further demonstrate the longstanding power of myth, but also recent challenges to that power. Tracing history along a geographical swath allowed me to capture the broader patterns of mining history beyond a single community's idiosyncrasies. Taken together, the three towns illustrate which problems are specific to mining towns and which are part of larger patterns in historic preservation and environmental projects.

But even with these parameters in place, there were many towns available for my choosing. I ultimately selected Butte, Globe, and Leadville, because they had readily available primary and secondary sources. Butte is both the best known and most studied of the West's mining landscapes, but questions about the nexus of the Superfund and historic preservation were under-examined. Globe's history is largely unknown, but my doctoral advisor's historic preservation survey, including the ruins of a red-light district and Chinatown were tantalizing. Little did I know that a treasure trove of information about the town's relationship to the asbestos industry would emerge during research. And finally, there is Leadville. I grew up in Colorado, the descendant of nineteenth-century miners. My family frequented the Colorado Rockies, and during those trips, the mine tailings "ponds" (more like lakes) outside of the Climax Molybdenum Mine near Leadville always fascinated me. The juxtaposition of this open-pit mining site with Leadville's beautiful historic district a few miles down the road was as breathtaking as the ten thousand-foot altitude. As the United States' highest incorporated city, Leadville is unparalleled. But I always wondered how mining transformed from the kind of industry that tunneled deep into the hillsides and produced heaps of black slag to the kind that destroyed a mountain and produced lime green tailings ponds. Who really did this? Why? And did they know the consequences? Studying

Butte, Globe, and Leadville allowed me to uncover the answers to these questions and so much more.

Organization

This dissertation follows a roughly chronological rather than a case study approach. The early stages of research revealed that these towns shared so many features that a case study approach would result in needless and distracting repetition of material. I also realized that readers would need some way to track what was happening and where. Thus, each chapter follows a rough chronological order combined with case studies within each chapter to highlight features that are both representative and unique.

To this end, the overarching narrative chronicles the development of Butte, Globe, and Leadville within the context of national historic preservation and environmental efforts from the 1860s to the present. Chapter Two describes how, even though celebratory narratives about mining towns were widespread, some residents and visitors pointed to barren mining landscapes, unsanitary water, choking smoke, and literally and figuratively dirty residents as reasons not to celebrate the towns. These competing narratives laid the groundwork for residents to preserve some landscapes over others. As a result of narratives that derided the towns, elite residents during the Progressive Era targeted “unsanitary” areas for cleanup, like redlight districts and Chinese laundries, which I explore in Chapter Three. Analyzing the types and locations of structures within each town revealed that residents from the working class and from racial or ethnic minorities often carved out spaces for themselves that made them valuable to the community’s operation and identity. Even so, their residences and businesses are among those least-preserved.

After about 1920, mining towns in the U.S. West faced a bout of booms and busts once more, but not quite so extreme as in the 1800s. They grappled with how to modernize in order to keep up with the rest of the nation without sacrificing the historical fabric on which they could build a tourist economy. Chapter Four traces the modernization of town streets and sewers during the 1920s to 1940s, which fueled the destruction of housing that had belonged to some of the most marginalized residents, including eastern European and Mexican American workers. These efforts were intended to further clean up the towns by bringing modern conveniences, but most of them applied only to the central business districts of each town. Chapter Five focuses on local debates about how best to appeal to tourists: redevelopment or preservation? Town leaders pursued both redevelopment and preservation, focusing their efforts on the strongest candidates for preservation, which were usually houses and businesses that had belonged to the wealthiest residents of a bygone world.

The urban renewal that swept the nation in the mid-twentieth century reached mining towns as well, but newly enacted historic preservation and environmental laws—many in response to the ravages of urban renewal—led to complex battles over which resources to save. Chapter Six chronicles historic preservation and environmental policies coalescing in the 1960s and 1970s. Acting under these new laws, environmentally and preservation-minded residents suddenly had to argue for why their resources—historic, natural, or both—were worthy of the federal government’s attention and funding. Finally, Chapter Seven reveals that, while unpopular with locals interested in fostering tourism, Superfund status provided previously marginalized residents with leverage to force the cleanup of mining landscapes. These residents were not interested in restoring the environment to some mythical pristine past; they merely sought safety from toxins that

threatened public and personal health. Throughout this story, town leaders sought to erase inconvenient evidence of the past, a pattern that has resulted in harmful narratives that have changed only when historic preservation and environmental policies have broadened their definitions of “significance.”

A goal in writing this dissertation was to illuminate untold stories to revise historical narratives in public arenas as well as advocate for better environmental health. As I wrote this dissertation, I constantly thought about an episode of the *Andy Griffith Show* called “Stranger in Town.” The show’s events occur in the fictional small town, Mayberry, North Carolina. In this episode, a man living in New York City reads all of Mayberry’s newspapers without ever having lived or visited the town. One day, he visits. No one in Mayberry recognizes him, but he seems to know everyone and what’s been happening. His knowledge baffles and even frightens the residents. They had never told him this information! How could he know so much?

While I hardly know everything about everyone in Butte, Globe, and Leadville, I often felt like that man and worried that my writing about the towns would come across as an imposition, another outsider weighing in on something she does not really know. I read the news about these towns, both historic and current, and got to know the locals in a way that felt as if I was a resident. But like the man who came to Mayberry, I too was a visitor. Because of this, I do not purport to speak for the residents. Instead, I have done my best to faithfully represent a fraction of these towns’ histories. While I was the one who constructed this narrative, I shared my authority as much as possible by incorporating the differing perspectives of residents with evidence from the archives and the cultural landscapes. No

single historical narrative is absolute, but I hope that the narrative in the following pages is at least a just narrative, in every sense of the word.

CHAPTER II

CREATING EDEN

In the heart of Colorado, tucked in a high mountain valley and surrounded by snow-capped mountains, is Leadville, a city rich in history, abundant in outdoor recreation, and home to down-to-earth residents ready to welcome you with a smile.

--“Welcome to Leadville,” City of Leadville website

Butte, as the first major city in Montana and, at one time, the largest city west of the Mississippi River between Chicago and San Francisco, can accurately lay claim to the title of “Montana’s most historic city.” From its early days as a mining camp, to the rise of the Copper Kings and the resulting birth of the labor movement, through the industrialization and decline of mining, and down to a present marked by an environmental and urban renaissance, Butte’s history is as colorful and diverse as the landscape of Montana.

--“History & Culture,” City-County of Butte Silver Bow website

Welcome to the City of Globe: City of Hospitality. We are happy you are interested in our historic city. We are a community with great landscapes, family values, friendly neighborhoods, & a rich history.

-- “About Us,” City of Globe website

Today, boosters of Butte, Globe, and Leadville, trumpet access to outdoor recreation, striking surroundings, and rich history as the attractive features of historic mining towns. Such narratives draw on a deep history of stories about mining towns in which the environment figures prominently as a resource, either for extracting or for appreciating “untouched” landscapes. These stories date back to the creation of the towns and the preconceived notions that newcomers brought with them about how cities and social relationships should function. In cities east of the Mississippi, marginalization of women and racial minorities persisted, reinforced by local laws and social practices. Cities, moreover, functioned on the basis of efficiency, and many residents viewed industrial features, such as factories, as signs of this efficiency. The possibility of—and often the necessary labor

involved in—creating a new community prompted newcomers to relax some social hierarchies and divisions of labor. And yet, they soon replicated much of the social division that existed in their former communities. One window into understanding the origins of these divisions is the built environment. How did these newcomers construct a new community?

Community construction in the U.S. West relied on several environmental and social factors. For one, this construction required abundant building materials and water. Mining towns in particular strained nearby tree populations and water sources, because early mining operations required their extensive use and caused newcomers to compete with Native communities. As a place like Leadville matured, mining operations altered the landscape, including eroding soil, rechanneling streams and rivers, and releasing small amounts of mercury into the water. In Globe, the accounts of a series of fires and flood revealed that, although some racial minorities found new opportunity in the West, they continued to occupy the bottom levels of the social hierarchy, including living in the areas of town that bore the brunt of fires and floods. Similarly, the early creation of “neighborhoods” in Butte reflected a division of residents along racial lines. Moreover, early histories of Butte reveal conflicting portrayals of the town and its surroundings. This chapter explores each of these examples below and highlights the presence of rhetoric that signals the newcomers’ desire to create order in both their environment and social relations. Doing so introduces the notion of “sanitization” that anchors this dissertation’s overarching narrative. By creating order in places they deemed disorderly, newcomers sanitized their communities, and because their communities were born out of that impulse, they would struggle to reconcile a messy or “wild” West with a desire for order for the years to come.

In analyzing the built environment of the nineteenth-century U.S. West, this chapter engages with several subfields of scholars who study the nineteenth-century U.S. West. Historians Robert G. Athearn, William Cronon, and Patricia Limerick argue that the mythic West has affected the ways in which people interact with one another and their environments. They are part of a larger conversation surrounding how Americans have conceptualized the frontier, including a belief in the racial inferiority of Indigenous people and in the idea that natural resources ought to be commodified.¹ As scholars like Susan Lee Johnson, Elliott West, and Quintard Taylor have shown, the new communities offered opportunities for populations who had been marginalized in larger American society, such as racial minorities and the working class. These scholars also note, however, that the moment of opportunity was brief and social hierarchies soon developed in which racial minorities were disproportionately represented in the working classes.² Attitudes linking racial minorities to cleanliness and health also rapidly developed, as Nayan Shah described about San Francisco's Chinatown and contagious diseases.³ Social relations in new communities of the U.S. West during the nineteenth century also linked to the various attitudes that newcomers had about natural resources. Carl Abbott, Thomas Andrews, William Cronon, and Duane Smith are among the many scholars who have chronicled how newcomers constructed cities in the West and commodified the environment on industrial scales.⁴ This

¹ Karl Jacoby, *Shadows at Dawn: An Apache Massacre and the Violence of History*, Reprint edition (New York: Penguin Books, 2009); Katherine Benton-Cohen, *Borderline Americans: Racial Division and Labor War in the Arizona Borderlands* (Cambridge, Mass.: Harvard University Press, 2009).

² Julie Roy Jeffrey, *Frontier Women: The Trans-Mississippi West, 1840-1880* (New York: Farrar Straus & Giroux, 1979); Julie Roy Jeffrey, *Frontier Women: "Civilizing" the West? 1840-1880*, (New York: Hill and Wang, 1998); Susan Lee Johnson, *Roaring Camp: The Social World of the California Gold Rush* (New York: W. W. Norton, 2000); Quintard Taylor, *In Search of the Racial Frontier: African Americans in the American West, 1528-1990* (New York: W.W. Norton, 1998); Elliott West, *The Contested Plains: Indians, Goldseekers, & The Rush to Colorado* (Lawrence: University Press of Kansas, 1998).

³ Nayan Shah, *Contagious Divides: Epidemics and Race in San Francisco's Chinatown* (Berkeley: University of California Press, 2001).

chapter argues that once the new communities coalesced into cities with gridded streets, active mills, and sturdy structures, social boundaries reappeared and favored those who could most strongly adhere to American middle-class notions of cleanliness. The earliest narratives about the built environment that I chronicle in the following pages illustrate how residents carried competing attitudes about the proper use for, and appearance of, the natural environment.

Creating order for nineteenth-century western towns took many forms, but among the most important were notions of conquest and civilization as symbolized by wrangling with nature, removing Native communities to reservations, and erecting substantial structures. In examining how the earliest published sources about Butte, Leadville, and Globe discussed the environment, we gain further insight into how these towns shaped their identities not just according to economic values, but also according to an impulse to sanitize. Indeed, these early stories and the ideals therein encouraged patterns of literal and moral sanitization that celebrated the corralling of rather than the accommodation to what newcomers perceived as unruly environments and people.

Cloud City Creation: Leadville, Colorado

In Leadville, the topics that most dominated the earliest narratives included relationships with Native communities and descriptions of the available natural resources. Some of these narratives encouraged social health through peaceful relationships with Native

⁴ Carl Abbott, *How Cities Won the West: Four Centuries of Urban Change in Western North America* (Albuquerque: University of New Mexico Press, 2008); Thomas G. Andrews, *Killing for Coal: America's Deadliest Labor War* (Cambridge, Mass.: Harvard University Press, 2008); Gunther Barth, *Instant Cities: Urbanization and the Rise of San Francisco and Denver* (New York: Oxford University Press, 1975); Cronon, *Nature's Metropolis*; Mark Fiege, *Irrigated Eden: The Making of an Agricultural Landscape in the American West* (Seattle: University of Washington Press, 1999); Duane A Smith, *Rocky Mountain Mining Camps: The Urban Frontier* (Niwot: University Press of Colorado, 1962).

communities while others encouraged demonstrations of U.S. virility through aggressive relationships. During the 1860s, the dominant ideal of manhood in the U.S., particularly for men in the western states and territories, centered on notions of whiteness, “civilization,” and virility.⁵

One observer played on these notions of ideal masculinity in order to encourage peaceful encounters between newcomers and local tribes, particularly emphasizing land use and ideas of ownership. In the *Rocky Mountain News Weekly* on June 12, 1861, this observer—going only by the name of “Union”—noted that, “we are upon [Ute] hunting grounds, and we are trespassers; but still, we are friends and we wish to remain so.” By referring to the Leadville area as Ute hunting grounds, the author recognized the Ute people’s entitlement to the land and its animals. The author did not stop there, however, and discouraged newcomers from bringing members of other Native tribes: “If white men from Denver, or any other locality, so far forget their *manhood* as to come among us with hostile tribes of a necessity we shall be compelled to shoulder our rifles and make common cause with the Utes.”⁶ The link to manhood jabbed at what would have been a precious piece of identity for many men in the vicinity. That he appealed to this sense of manhood to maintain peaceful relationships with a specific local Native community reveals both that the author realized the nuanced relationships with different Native communities and that he believed respecting the relationships was essential to maintaining one’s manhood. Notably, not only did he play on ideals of white manhood, but also on recognizing the role of the landscape in shaping relationships between Native communities and newcomers. The comment might not have

⁵ Gail Bederman, *Manliness and Civilization: A Cultural History of Gender and Race in the United States, 1880-1917* (Chicago: University of Chicago Press, 1996); Matthew Basso, Laura McCall, and Dee Garceau-Hagen, *Across the Great Divide: Cultures of Manhood in the American West* (New York: Routledge, 2001).

⁶ Union, “Indian Matters,” *Rocky Mountain News Weekly*, June 12, 1861.

been the prevailing opinion, but as a published one, it became part of the story of Leadville's beginnings. In doing so, it established the idea that only some Native groups, like the Utes, were peaceful and encouraged relationships with those groups, thus excluding wholesale the members of other tribes.

But negative stories about the Utes appeared as well, often in relation to how their actions affected natural resources and contributed to what many newcomers viewed as an unruly landscape. As was characteristic of other Ute areas, relations between the Utes and the newcomers worsened in California Gulch during the 1870s. The newcomers increasingly occupied locations with clean and plentiful water as well as abundant forests, which were also necessary for Native communities, thus creating competition. The U.S. government brokered treaties that, by 1873, pushed Utes onto a reservation in western Colorado Territory.⁷ But that did not stop the negative portrayal of the Utes. On October 30, 1877, the *Colorado Daily Chieftain* reported that “There is very little timber along the river valley for ten miles above Granite, and in fact I did not see much till we struck California Gulch.” “The vandal Ute Indians,” the author explained, “have not got in their work here as badly as in all the other localities.” The Ute, who previous authors identified as the peaceful local Native tribe, were now “vandals,” or “destroyers of something beautiful,” because of their impact on local tree populations. Yet, earlier in the article, the author recognized that the Anglo newcomers were the ones who had been cutting millions of railroad ties. Moreover, the author, despite explaining how the Utes stripped bark off of trees for medicinal purposes, ultimately portrayed the stripping as a means of killing the tree so that Anglo newcomers could not use it. The author complained that, “If the lazy cusses would cut down a tree and

⁷ Sondra G. Jones, *Being and Becoming Ute* (Salt Lake City: University of Utah Press, 2019), 149.

use all of the bark there might be some excuse for the destruction of the trees.”⁸ What if the Utes did use all of the bark? Or what if they waited for the tree to die before coming back to use the wood? The author had a cleaner, simpler narrative about the Utes and did not consider if the local Utes were nomadic and passed through a location multiple times in a year or over the course of several years. This account reveals a fear that the Utes would destroy or use up the trees that the author believed were necessary for the health of new communities and railroads. But in this story about the newcomers, the Utes were the roadblock to the newcomers’ progress.

The linking of the Utes to the availability of natural resources was part of another pattern of sanitization in early white-published accounts about the Leadville area: what qualified as the proper use of resources. In addition to the examples of the Utes stripping bark for medicinal purposes and of Anglo newcomers felling trees for railroad ties, Anglos also created a narrative about an abundance of trees and a fear that the abundance would soon dwindle. People moving into the Leadville area relied on trees for shelter, fuel, and mining. In the 1860s, the newcomers cut boughs to make shelter, which survived a fire in 1860 because “they were too green to burn.”⁹ Even by 1879, several accounts mentioned that the newcomers “contented themselves with erecting four posts and covering the top and sides with green pine boughs. Among other curiosities of architecture at that time was a great gambling saloon 150 feet long and 75 feet wide, made out of boughs.”¹⁰ The area apparently had enough wood to support the creation of a large structure, and the boughs were a quick way to create shelter from the most available material with minimal effort. The

⁸ Bona, “California Gulch,” *Colorado Weekly Chieftain*, November 8, 1877.

⁹ J.B.C. Boyd, “Letter from the Arkansas,” *Western Mountaineer*, July 5, 1860, 5.

¹⁰ “Back in Fifty-Nine,” *Leadville Daily Chronicle*, April 7, 1879, 1.

use of boughs was extensive enough that some reporters called the growing assemblage of shelters “Boughtown.” Such examples supported the emerging narrative that the town’s physical appearance stemmed from its residents’ resourcefulness. In this narrative, cutting the healthy green boughs for shelter was an acceptable use of the local tree population, whereas the stripping of bark for medicinal purposes was not, since that was a Ute practice.

But as the prospectors found promise in rich ore veins, they began to develop sturdier structures whose construction and style imposed strong straight lines of sawn, measured wood or molded brick in an otherwise “unruly” landscape. Some reports noted that even as early as 1860, some people were building “good and substantial houses for the purpose of staying here this winter.”¹¹ By July 31, 1862, there was even a structure nice enough for a newspaper correspondent to praise the establishment’s owner, Julius Londoner and his “attractive wife” for the “neat” Madison House they had built in Oro City at California Gulch.¹² For the correspondent, one of the notable characteristics of the Madison House was not just that it was an established structure, but a “neat” one. In the midst of the muddy roads and structures made of tree boughs, a “neat” structure would have been noticeable indeed and, like the “substantial houses” of 1860, signaled the locals’ desire to create a permanent as well as aesthetically pleasing place to live. Whether or not they were successful is difficult to track, but images from the mid- to late-1870s show a city very much in messy transition with very little “neatness” (Figure 2.1). These structures contributed to a simplified story about the town’s quick shift from the early days of bough and rough-hewn log structures to wood-frame structures with cleaner lines and stylish elements.

¹¹ Lewis Dow, “From California Gulch,” *Rocky Mountain News Weekly*, July 11, 1860, 2.

¹² Hans Jacobus, letter to the editor, *The Weekly Commonwealth and Republican*, July 31, 1862, 3.



Figure 2.1. Looking west down a disarrayed East Third Street, Leadville, Colorado, circa 1875. Source: Denver Public Library.

Central to the mining process as well as the construction of a vibrant, healthy community was the availability of clean water. Early reports frequently called the headwaters of the Arkansas River, of which California Gulch was one source, “clear” and “abundant.” Abundance was important for placer mining and sluicing, but it was also important as a source of drinking water for livestock at the local farms and ranches as well as for humans. California Gulch certainly had a ready supply of water, as long as each winter’s snowpack was heavy enough. An 1866 account called the water “clear and cold as ice,” though an earlier account noted that the sight of so much water—and therefore mud—“disgusted” some people enough that it inspired them to leave.¹³ A May 15, 1867, *Rocky Mountain News* report linked a robust water supply with a thriving community: “water is abundant, the snow

¹³ Cal, “From Colorado,” *The Saturday Evening Press*, August 7, 1866, 1; MLB, “A Trip to California Gulch,” *Western Mountaineer*, August 9, 1860, 1.

is going off very rapidly; our people are coming home, and it begins to look lively here.”¹⁴ And when the supply dipped, so too did the population. On Sept 7, 1871, the *Colorado Weekly Chieftain* reported that “the very light fall of snow last winter was followed by a dry summer, consequently a small supply of water and short season seriously affected the gulch mining interest and very considerably reduced the production of gold from that source.”¹⁵ A dip in water supply meant not only that there was less available for human consumption, but also that there was less available for mining operations that relied on sluicing ore. By 1879, the town solidified its claim on the water supply with a new waterworks to supply hydrants for the fire brigade on Chestnut, Harrison, Pine, and State streets.¹⁶

By 1880, questions about the water’s quality emerged. American geologist Ferdinand Vandever Hayden reported that the area’s “supply of water is brought from a distance by means of ditches and pipes, while an immense reservoir has been built near by [*sic*] to hold a reserve. The water is pure, wholesome, ample, and never-failing.”¹⁷ Just a year later, American feminist and author Caroline Wells Healey Dall agreed that the source of water was “pure” but that “the absolute want of drainage and the putrid condition of the water, which is kept in hogsheds [barrels] filled at discretion” was a source of many illnesses.¹⁸ The “want of drainage” and the practice of storing water in barrels made Leadville water quite visible, and not in a good way. Over the course of Leadville’s next phase of development, such comments emerged in the battles over the image the town’s residents wished to present

¹⁴ A.S.W., “Lake County Letter,” *Rocky Mountain News*, May 15, 1867, 2.

¹⁵ F.B., “From Pike’s Peak to the Twin Lakes,” *The Colorado Chieftain*, September 7, 1871, 1.

¹⁶ “The Water-Works,” *Leadville Daily Chronicle*, February 15, 1879, 1.

¹⁷ Ferdinand Vandever Hayden, *The Great West* (Bloomington: Charles R. Brodix, 1880), 147.

¹⁸ Caroline Wells Healey Dall, *My First Holiday* (Boston: Roberts Brothers, 1881), 36, 38.

to the world versus the lived reality of its residents, particularly those on the social and geographic margins.

Wood and water formed the basis for whether or not newcomers found an area worthwhile to develop, but the promise of good ore cemented their dedication. In early Leadville, one mining method, known as “sluicing,” not only shaped the written narrative, but also the narrative being inscribed on the landscape. With mining activity comes significant environmental change. These early efforts tended to be small-scale and individualized, but their processes introduced lasting environmental changes and set the stage for how newcomers in future years perceived the local landscape. In the 1860s, significant underground mining was still several years away, but sluicing wrought environmental changes, including exhaustive use of the local wood supply, redirecting and consolidating water routes, and introducing unnatural concentrations of natural elements. Because of these early changes, Leadvillites pursued many mining practices that created unhealthy environmental conditions for the miners and other residents.

To see if there was truth to the promise of good ore, many miners used sluicing, because it was simple and did not require major capital investment. In the Leadville area, a “ground sluicing” method fascinated one visitor—going by the name “Cal”—in the 1860s. In Cal’s description, sluicing meant “washing the earth down to what is called the bed rock, then running the top of the bed rock through a flume, which contains quick silver [*sic*] [mercury].”¹⁹ Cal’s description reveals several major environmental factors in sluicing: erosion, water, wood, and quicksilver.

¹⁹ Cal, “From Colorado,” 1.

Step one of Cal's sluicing— "washing the earth"— instigated changes to the earth's crust that affected local ecosystems. For one, it changed soil composition. Washing large portions of earth meant exposing long-buried elements, which could include concentrated deposits of precious metals. Second, washing the earth shifted water flow. To wash the earth as Cal described, a miner needed to have a source of water. Sometimes the minerals they wanted to sluice were not near a natural stream or river, so miners had to divert the water flow to approach the area they wished to wash. In some of the more advanced hydraulic operations, miners pumped water through hoses and blasted a hillside, creating a mixture of water and dirt that flowed away, producing new rivulets. All of these actions created small-scale environmental changes that started Leadvillites down the path to large-scale changes.

Cal's second step of sluicing— running the soil through a flume— required several other sub-steps that altered local environments, both in using local resources and introducing new materials. First was the construction of the flume itself. The miner constructed the channel, usually of wood, then captured the waterflow and conducted it to a sluice box, thus diverting water away from its natural course. Since wood was the main material in both the sluice box and the flume, and since the process required steady water flow, this type of mining consumed much of the local woodlands and water supply.

Beyond the use of local materials, step two of sluicing introduced new materials into local environments. The sluice box, as Cal described, contained quicksilver (mercury), a naturally-occurring element that is dangerous to humans and animals when inhaled, ingested, or absorbed through the skin. Miners might set the sluice box directly in a waterway or prop it up at the end of a flume. Mercury, which miners brought with them from other locations, pooled at the bottom of the box along some riffles. Water and earth washed over the mercury while heavier elements, such as gold, amalgamated with the mercury. Once material

collected in the riffles, the miner washed the sluice box, collected the amalgam, then heated it to separate the gold and mercury.²⁰

This process posed danger to the miners and to the waterways, because the mercury might escape the sluice box and flow downstream, where it could enter the water supply and the bodies of aquatic life. “Impurities” could cause the mercury to ball up and lose its amalgamating quality, so the resulting beads washed out of the sluice box and into the main waterway and the ground.²¹ Any organism that ingested the water or soil could ingest the mercury. Ingesting mercury by drinking contaminated water or eating fish that had ingested contaminated water can cause mercury poisoning.

Furthermore, mercury vapors might affect miners and other organisms. Vapors could occur when bits of mercury separated from the main globule. More significantly, miners usually heated the mercury-gold amalgamation, creating more vapors in higher concentration. When humans inhale mercury vapors, they can experience tremors, loss of sleep, anxiety, memory problems, irritability, numbness, and decreased motor skills.²²

Although the toxic effects of quicksilver are widely recognized in the twenty-first century, the first recorded report linking it to major health effects was not until 1865, and that knowledge was not widely dispersed until the mid-twentieth century.²³ Since medical professionals of the mid- to late-nineteenth century were only just beginning to recognize

²⁰ Eric Twitty, “Historic Context Interstate-70 Mountain Corridor” (Lafayette: Mountain States Historical, June 2014), 88-89; Eugene Delos Gardner and C. H. Johnson, *Placer Mining in the Western United States* (Washington, D.C.: U.S. Bureau of Mines, 1934), 88-89.

²¹ Eugene Delos Gardner and C. H. Johnson, *Placer Mining in the Western United States*, Information Circular 6787 (Washington, D.C.: U.S. Bureau of Mines, 1934), 90-92.

²² Justice Afrifa et al., “The Clinical Importance of the Mercury Problem in Artisanal Small-Scale Gold Mining,” *Frontiers in Public Health* 7 (2019), 2.

²³ Philippe Grandjean et al., “Adverse Effects of Methylmercury: Environmental Health Research Implications,” *Environmental Health Perspectives* 118 (August 2010), 1137.

mercury as the cause of certain symptoms, the number and intensity of cases of mercury poisoning in these early mining communities is impossible to trace. In the 1860s and 1870s, miners likely would not have known what their mercury was doing to the water, the trout, and their bodies. Physicians could easily have interpreted anyone with poisoning as displaying symptoms of other illnesses or even as personality quirks. Moreover, these early mining efforts were fairly small scale, so the amount of mercury exposure could have been under the threshold of toxicity. Humans encounter mercury daily and can tolerate small amounts, so perhaps these small mining efforts were not enough to cause noticeable effects on the newcomers. Even so, mercury entered the local ecosystem and its continued use over the next decades meant that it became part of the local environment such that studies of California Gulch in the twenty-first century still identified levels of mercury high enough to be considered a contaminant of concern.²⁴

Since the negative environmental effects of these small-scale mining efforts were generally beyond the scope of scientific knowledge in the mid-to late-nineteenth century, they either do not appear in the early stories about the towns or they appear as positive changes that allowed newcomers to build their town and feel accomplished. Because of this absence of negativity, the towns had fertile ground on which to build not just a thriving community, but also an image of a beautiful, modern town—contaminants not included. Once neighborhoods developed, however, residents would soon face social and physical conditions that made it difficult for everyone to conform to this image.

²⁴ U.S. Environmental Protection Agency and Syracuse Research Corporation, “California Gulch Superfund Site Risk Addendum: Evaluation of Risks from Mercury in Irrigated Meadows and Fluvial Deposits Along the Upper Arkansas River” (Denver: U.S. EPA, April 9, 2007), 1, 11; U.S. Environmental Protection Agency, “California Gulch Contaminant List,” California Gulch Superfund Site, accessed April 3, 2020, <https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.contams&id=0801478>.

Disastrous Dawn: Globe, Arizona

While Leadvillites formed their early community and pushed Native tribes off the land and out of the narrative, the population in the area that became Globe was more diverse early on in the town's development. In the midst of Arizona's first growth spurt during the 1870s, a correspondent to Tucson's *Arizona Weekly Citizen* deployed the Spanish phrase "¿Poco tiempo, poco mas?" after a report on the growing unity between miners and merchants. Meaning "a little time, a little more," it seems the author intended to encourage patience while unity and harmony took time to develop.²⁵ But despite such promises of equal opportunity, Globe's residents of color occupied positions in the local economy and society that automatically barred them from the chances at prosperity available to the town's white residents. Key to this problem was that it was not a matter of time, as the correspondent's Spanish phrase suggested, but a matter of place. And Globe's residents of color occupied spaces in town that were among the most challenging for building a steady, prosperous existence.

Globe was a late bloomer among mining towns of the U.S. West, but the area had long provided Indigenous communities with a place to call home. In ancient times, the Salado people had built an adobe settlement, now known as Besh-Ba-Gowah. The settlement died out, but the structures eroded slowly enough that they were still visible when miners began a camp about a mile and a half to the northwest.²⁶ After the Salado, one of the major Native communities in the area were the San Carlos Apache.

²⁵ Pioneer, "Globe Correspondence," June 7, 1878.

²⁶ David E. Doyel, "Salado Cultural Development in the Tonto Basin and Globe-Miami Areas, Central Arizona," *Kiva* 42, no. 1 (1976), 10.

When Anglo-Americans began traveling through the land west of the Mississippi in the nineteenth century, they were wary of the Apache people and found little promise of natural resources in the area that became Globe. Their visions of life often centered on mining, ranching, farming, or retail. The area around the ancient Salado settlement was very dry and quite warm—great for a nomadic life and traveling light, but not great for creating towns and cities. The area did have one source of water at times, a small trickle (actually dry most of the year) that newcomers named Pinal Creek.

The newcomers to the area came first as part of the U.S. military campaigns against the Apache. Among the first Anglo-American news accounts about the area were stories about an 1864 expedition. Following that, reports in 1870 chronicled the military expeditions along Pinal Creek, such as destroying a wheat field believed to belong to the Apache.²⁷ Unlike when newcomers had arrived in the California Gulch area in what became Colorado, the U.S. government had already sequestered the Native communities of Arizona Territory to reservations. Moreover, relations with the Apache were tense from the moment Anglo-Americans began eyeing the region.²⁸ In 1873, for instance, a widely dispersed story described how the Apache killed a prospector named William Sampson.²⁹ True or not, this was one of the stories most associated with Globe in its earliest years and as such, primed the community with stories of violence.

Mining, however, drew newcomers who quickly created an enterprising, bustling town. Prospectors had discovered silver and gold ores in the region and began developing a

²⁷ E.W. Stone, "Accounts of Successful Operations Against the Apaches," *Weekly Arizona Miner*, August 6, 1870, 2.

²⁸ For more detailed histories of Apache-Anglo relations, see: Karl Jacoby, *Shadows at Dawn: An Apache Massacre and the Violence of History* (New York: Penguin Books, 2009); Katherine Benton-Cohen, *Borderline Americans: Racial Division and Labor War in the Arizona Borderlands* (Cambridge, Mass.: Harvard University Press, 2009).

²⁹ "Arizona News," *San Francisco Examiner*, September 23, 1873, 3.

community in the Globe area during the 1860s and 1870s. They formed the Globe mining district in 1875, and soon there were butchers and bakers and “other luxuries” at the site along Pinal Creek.³⁰ News of the settlement spread through local and national newspapers, which remarked on the atmosphere of excitement, the construction of substantial structures, and the conversion of the desert landscape from wild to urban. “This district is sure to create an excitement, in the not distant future,” a Tucson newspaper asserted, “as great as Leadville, and will soon be looked upon as one of the greatest bullion producing sections of Arizona.”³¹ Characteristic of Globe, according to the earliest accounts, were mills, furnaces, and smelters. One description reported that “the first impression is depressing; but riding a little further up the creek one comes upon Morrell & Ketchum’s mill in full blast and then rides into a busy little town, insensibly becoming stimulated by the activity and stir around him.”³² It was not the spectacular Pinal mountains or the forests that assuaged weary travelers. Instead, the sight of a mill operating at full blast was exciting enough to uplift a traveler from the “depressing” impression the area outside of town had given. Visibility of industrial operations shaped how visitors felt about the town as a whole.

Indeed, if the town’s appearance was any measure of progress, it was a town with an established population. By the 1890s, residents of Globe could purchase goods at Kellner’s general store, earn money at the mills or mines, send letters at the post office, or otherwise partake in fairly typical small town life. Yet despite residents’ ability and desire to have reached this point, first flood, then fire, then another flood devastated their town in the 1890s. They had been willing to build up their town slowly, but would they be willing to

³⁰ “Local Mining News,” *Arizona Weekly Citizen*, May 20, 1876, 3.

³¹ “Some Facts from Globe City,” *Tucson Citizen*, October 14, 1879, 1.

³² “Globe City,” *Arizona Sentinel*, October 27, 1877, 2.

rebuild? And how would ideals of order and cleanliness shape their approach? As the following examples demonstrate, neither flood nor fire destroyed residents' desires to create a modern city in the middle of a desert landscape, and these stories shaped Globe's written and physical narrative.

On February 16, 1891, rain drizzled from a cold afternoon sky and soaked into the banks of Pinal Creek, recently saturated with melted snow. Residents awoke the next morning to more rain. The creek consumed the rain and then the earth, gaining turbulence and crossing boundaries with each bite. It cut new channels and scooped away at the ground beneath several buildings, then at the buildings themselves. The blacksmith shop fell into the creek, then the school house, too. Rather than see their homes completely waterlogged, some owners tore at the frames and saved the lumber. Those with adobe homes and businesses lost everything, the packed-earth constructions unable to withstand so much water. New and old properties alike sustained the creek's days-long binge. A week after the flood, a reporter noted that "the loss is largely irreparable." The reporter associated only two properties with people of color: a peach orchard "of the old colored man, 'Uncle Joe' Thomas, on which he has spent years of patient toil" and "an adobe cabin occupied by Chinamen." "While falling heavily upon a few families and individuals," the reporter observed, the loss "is felt and deplored by the entire community."³³ A great equalizer, it seemed.

But then there was another disaster. Just three years later on June 9, 1894, a fire swept the crowded blocks from Pinal Creek where it crosses Broad Street southward to Cedar Street—the same area that had experienced the worst of the 1891 flood. The 1891

³³ "A Disastrous Freshet," *Arizona Silver Belt*, February 21, 1891, 3.

flood had not deterred construction. Indeed, by 1893, frame and adobe structures again packed that section of Broad Street. Photographs and the 1893 Sanborn Fire Insurance map depict wooden and adobe rectangular structures with street-facing gabled roofs and generous awnings over wooden sidewalks. As with Leadville, timber was a popular resource for construction, but one that was susceptible to fire. The other popular building material, adobe, was less susceptible to fire, but highly susceptible to flood. Brick was present, but rare, likely due to the time and expense to manufacture it.³⁴ The news reported that the fire had engulfed two-thirds of the business sector with an estimated loss of \$80,000 (close to \$2 million in 2018). After the fire, the town appeared less like the bustling town the 1877 visitor had praised and more like the nearby Besh-Ba-Gowah ruins.

Several of the initial accounts about the fire named the properties destroyed in conjunction with naming the property's owner, thus creating a narrative about the town's early years in which only some property owners appeared. In doing so, the accounts deemed only some people important enough to name. E.F. Kellner, for instance, had a store, which, as several accounts noted, was supposed to be fireproof. The fire completely destroyed it. Almost entirely absent from these lists were the Chinese business owners. In fact, the one account that does mention the Chinese mentions them only in passing and from a negative perspective: the fire is "supposed to have started from a Chinese chop house" attached to the Rolling and Rogers saloon.³⁵

The fire devastated Globe's Chinatown, near Pinal Creek. Besides being absent from the written accounts, Globe's Chinatown, so devastated by the fire, is also absent from photographs of the fire's destruction. Such photographs are few, but in all of them, the

³⁴ Sanborn Map Company, *Globe, Gila, Arizona, May 1893* (New York: Sanborn Fire Insurance Company, 1893).

³⁵ "Globe in Ruins," *Arizona Silver Belt*, June 9, 1894, 3; "To Close Down," *Arizona Silver Belt*, June 16, 1894, 3.

perspective shows only the wreckage of the structures that bordered Broad Street, not the ones in the rear. One photograph shows the street in ruins (Figure 2.2). There are shells of structures, many of which appear to be adobe brick. Behind some of these walls were the sites of the Chinese structures. The 1893 Sanborn map reveals that there were at least two wood-frame buildings and one stone structure belonging to the Chinese. These were all small buildings, the largest of them being the laundry. None of these is visible in the pictures. The absence of the Chinese from descriptions of the town's loss is not unusual nor unexpected for its time and place, but without it, there is no sense of the degree to which the Chinese residents versus the non-Chinese residents suffered. Not only did they lose their properties, but there was no attempt to record what they had lost. The newspaper account of the 1891 flood suggested that disasters could be equalizers—or so the story went.

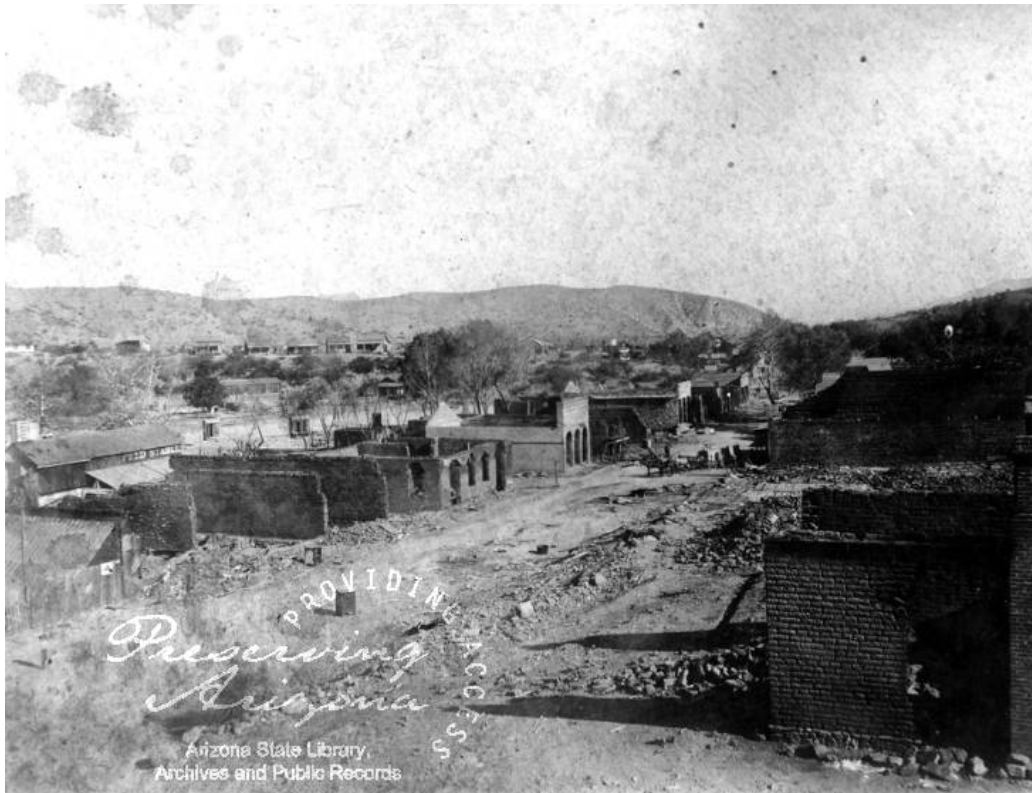


Figure 2.2. Broad Street in Globe, Arizona, after 1894 fire, looking north. Source: Arizona State Library Archives and Public Records, Phoenix, Arizona.

Residents rebuilt after these disasters, but a third event leveled the town in 1895. In early October of that year, Pinal Creek swelled again. Wood and adobe structures sagged as they soaked up too much water. Chunks of buildings broke off, and sometimes entire structures washed away, the frames no longer able to support their distended walls. Water rushed over shops built freshly that summer and belonging to some of the people who could still remember when the same thing happened four years prior.

People of color received more attention in the newspaper coverage for this flood, but often remained nameless. One group of residents that rarely appears in early accounts of gold-seeking but show up in accounts of the 1895 flood was the group of Mexicans or Mexican descendants.³⁶ Between 1880 and 1900, *Globe's* newspaper often reported on the Mexican population's annual celebration of Mexican independence, portraying such events as light-hearted and popular with both Mexican and American residents. Individual Mexicans rarely appeared in association with their names, however. The account of the 1895 flood was no different. The reporter noted that an area behind the O.K. corral and the property of T.A. Pascoe and James Wiley was "where a number of Mexican families live." Moreover, "the women and children, many of them thinly clad, were carried out and given shelter in neighboring houses. The dwellings and household effects of the Mexicans were greatly damaged by mud and water."³⁷ The account provided no names or details, and one can only imagine the impact the damage had on the possessions of these families. The generalizations about the impact of the flood, while lacking specificity, reveal at the very least that many

³⁶ Sources from this time period refer to these residents as "Mexican" rather than Mexican Americans, so I use that term here. The population, however, included a mix of Mexican-Americans and Mexicans who had not become naturalized citizens.

³⁷ "Storm-Swept," *Arizona Silver Belt*, October 5, 1895, 3.

Mexican residents did not just work in a location that was prone to natural disasters, but also lived there. Their property loss meant the loss of both business and home.

Here, it would be helpful to illuminate the history of Mexican population in order to determine whether or not social and physical marginalization had always been a practice in Globe. But doing so is extremely difficult, not only because stories like the 1895 news report omitted their names, but because other records omitted them as well. The only reason there is any information about the location of their housing is because of this one account. Any other records of the existence of the Mexican community in 1895, such as Sanborn Fire Insurance maps, photographs, and historic structures, are rare or nonexistent. In this instance, there are many factors in the erasure of the Mexican population, but the fact that the only readily available record fails to name them has left Globe with a story that documents individual devastation mainly for white residents.

This practice of excluding the names of individual people of color extended to the Chinese population as well. One illuminating example of how race and location shaped the written and physical narratives is how the 1895 account depicted the impact of the flood on different people in the same city block. S. Klein, for instance, owned a property on the “east bank,” and the article reported that “the wall is cracked and the carpets and some of the furniture ruined.” The story named Jennie Scott as an occupant. Scott appeared in some newspapers during the 1880s, but rarely, usually asking someone to repay a debt. When the flood hit the dwelling she occupied in 1895, Scott had been in Globe since at least 1882. In the story of the flood, the reporter names her, a white woman who had enough socioeconomic standing to have owned property a few years prior, but he does not name other occupants, such as the Chinese on the same property. In this instance, a white female occupant received recognition via her name while the newspaper referred to the occupants

of the Chinese wash houses “under the hill in the rear of the Klein property” without naming them.³⁸ This humanized Scott and dehumanized the Chinese. The inherent racism is even more striking when one learns that Jennie Scott was a sex worker.³⁹ In a town that merely tolerated sex work, the reporter’s willingness to name the sex worker and not the Chinese created a narrative that granted personhood to the sex worker over the Chinese.

Although people of color by and large did not emerge as individuals in the newspaper, there were several exceptions. Sam Kee, a Chinese merchant, appeared by name in other newspaper stories throughout his nearly thirty years in Globe. Kee was a prominent Globe citizen. He owned and operated a store that had been in business since at least the 1880s, so he was there for the disasters. His business was on Broad Street, but the reports about the destruction of the flood and fire—the reports that list in detail the names of other residents and their property—leave him out completely. It is impossible to know how the Chinese population in general felt about Kee. But the newspaper reporters, who sometimes printed anti-Chinese rhetoric, praised Kee in 1906: “his reputation for honesty and fair dealing is well known, and after 18 years experience in Globe as a merchant and as a resident for 25 years, he has a large trade, not only in the camp, but among the mines and miners as well.”⁴⁰ They published a glowing obituary in 1910.⁴¹ After his death, a local businessman, with the assistance of Kee’s son, sold the remainder of Kee’s stock and then leased the property to a tailoring company. For such a prominent citizen to be absent from the accounts of environmental disaster reveals just how large the hole is in that written record.

³⁸ “Storm-Swept,” 3.

³⁹ Current scholarship promotes the use of the term “sex worker” rather than “prostitute.”

⁴⁰ “Sam Kee,” *Arizona Silver Belt*, May 17, 1906, 21.

⁴¹ “Prominent Chinese Merchant Dies Suddenly,” *Daily Arizona Silver Belt*, March 20, 1910, 3.

Perhaps most telling of all is the lack of visibility of the Chinese population's presence in the physical landscape. In many cases, the structures marginalized residents occupied were simply not strong enough to withstand time, and if they did, preservationists for much of the twentieth century paid them little attention. Sam Kee's store is just such a structure. As of 2019, the building still exists. It is an unimposing portion of the streetscape. It appears like a store, but there are no signs, and papered-over windows prevent prying eyes from peering inside. No one has marked Kee's presence down in the typical stories told about Globe. One cannot expect all stories to document every individual, but it is telling that someone prominent like Sam Kee has not received such recognition while men like Cicero Grimes and Curtis Hawley, violent stage robbers who did not live in Globe and whom Globe residents loathed and feared, have a historical marker. The marker is small and likely escapes the attention of most visitors, but it exists and, being made of granite, it is unlikely to disappear any time soon. Just several doors south, Kee's unmarked storefront continues weathering storms.

The stories about Globe's early years demonstrate the types of stories that received preservation attention and those that did not. While the flood and fire did affect some of the most prominent residents, those residents were able to rebuild and obtain success in Globe. Some of them, like businessmen G.S. Van Wageningen and William Kellner, have even been memorialized in building or street names. Many people of color did not have the same capital on which to rebuild. Many continued to live in the flood areas into the early twentieth century, but even the more prominent ones like Sam Kee did not receive the same memorialization efforts as the more prominent white men.⁴² As a result, such early major

⁴² The discussion here refers to memorialization through monuments and civic naming practices. There has been effort to document Chinatown. See more in Weisiger and Associates, *Globe Central Business District Historic Resources Survey*, 1986.

events in Globe’s history laid a strong but incomplete framework for the image Globe could portray and have lost some of the stories that could, in fact, contribute to themes of resilience that many residents have hoped to convey through the years—all we have to do is look to Kee’s storefront for evidence.



Figure 2.3. Left of La Casita Café and behind the tree is Sam Kee’s store, unmarked in any way, Broad Street, Globe, Arizona, 2017. Source: author’s collection.

Hazy Halcyon: Butte, Montana

Buried beneath a swath of prairie sloping west from the Continental Divide is a nest of copper veins at least a mile beneath the earth’s crust and at least six miles in diameter. Copper might peek from the earth’s surface at times, but usually gold or silver escaped first, flaking off of quartz and carried through rivulets and streams by rainwater. A

Marsha Weisiger reported, in conversation with the author in April 2020, that the National Register resisted memorializing Chinatown because it was an unexplored archeological site.

giant cap of granite crowned the great nest for many years. Grasses grew beneath a sunny sky, a soft, swaying carpet between two small mountain ranges. Just west of the granite cap rose one small butte, as if to mark the location of hidden treasure.

The ancient history of the environment is easier to tell here than the ancient history of humans. But humans, loved, fought, laughed, cried, and died in this cluster of mountain ranges. Ancestors of the Blackfeet, Flathead, and other Indigenous tribes hunted and fished in the lands around the copper nest. Perhaps they stopped for a while, pitching tents, maybe even packing moist soil into earthen structures and tilling the earth to cultivate vegetables. If so, evidence of these activities has disappeared after years of wind, rain, and snow.

The written record of this area began after newcomers seeped into the little valley during the mid-nineteenth century. Most of these newcomers sought some way to earn money—could this be grazing land? Mining land? Could it support a hefty permanent population? Might railroads traverse the terrain? The earliest written accounts from these newcomers disagreed in their answers to such questions. As the Civil War concluded, some of these newcomers to the Great Plains and Rocky Mountains reported what they were seeing. One correspondent believed that the area would not prosper as a mining county, but would be excellent as grazing land.⁴³ Just a couple of months later and only days after Robert E. Lee surrendered to Ulysses S. Grant, another correspondent reported that mining there would be good but expensive.⁴⁴ A reporter calculated only two years later that there were fifty or sixty houses, four stores and three saloons that all appeared to be doing

⁴³ C.H.S., “A Trip Through the New Mines,” *The Montana Post*, February 18, 1865, 1.

⁴⁴ Viator, “From Last Chance,” *Montana Post*, April 15, 1865, 1.

a “thriving business.”⁴⁵ So the narrative began, creating an image of a bustling town and often skipping any mention of former inhabitants.

The narrative not only chronicled these early efforts to construct town buildings, but also introduced a theme of perseverance in the face of conditions that were less than ideal for health. With its harsh winters, its rocky soil, but most importantly, its aridity, residents struggled in this landscape. “The scarcity of water has been the trouble for the last year,” a correspondent wrote, “but the difficulty is all overcome, as there are three large ditches already completed to bring water to this camp.”⁴⁶ Like newcomers to Leadville, newcomers to Butte overcame the environmental challenges by shifting the water to the places they wanted it to go. Water was, indeed, essential for maintaining health. In 1869, *New North-West*, Deer Lodge’s newspaper, clarified this when reporting that “Silver Bow and Butte cities are, when fully supplied by water, two of the most extensive camps in the Territory. At present they are completely dried up; a slight breeze would remove them from existence.”⁴⁷ The matter of an unreliable water supply acquired racialized tones when, in 1870, a reporter pointed out that many white people were “selling out” to Chinese residents. “The Chinamen,” the reporter wrote, “are negotiating for the streams which supply the mining grounds. If they make the purchase they will hold in their possession the water of life for that vicinity, and consequently their mining camps will be filed and ruled by this class of people.”⁴⁸ Though the author never outright states it, the implication is that the land would be lost to the rule of a different people, a nonwhite people. The chiding use of the phrase

⁴⁵ J.K.M., “From Deer Lodge,” *Montana Post*, January 18, 1867, 2.

⁴⁶ J.K.M., “From Deer Lodge,” 2.

⁴⁷ Neal, “From Highland Gulch,” *New North-West*, July 30, 1869, 1.

⁴⁸ Tecumseh, “Montana,” *St. Joseph Gazette*, June 25, 1870, 2.

“selling out” assumed that the water belonged to white people. The story portrays white people as both intelligent, for not wanting to live where they could find work only “sixty days out of the year,” but also as ignorant for potentially forfeiting the right to “rule” the area. A steady supply of water as well as access to it could make or break the viability of a white man’s mining camp.

The historical record, however, reveals that Butte was not a white man’s camp in its earliest years. At least as early as 1870, the camp’s residents were largely non-white. The 1870 manuscript census listed 98 Chinese residents, who accounted for about forty percent of the population; they were a notable presence. Census-taker W.W. Jones did not list the ages for any of them, and only listed the names for the two who were laundrymen rather than miners, Hee Gee and Lee Sam. Besides Gee and Sam, all of the Chinese men were miners. The only two Chinese women were “prostitutes” (the only ones listed in the entire population).

For white residents, on the other hand, Jones filled in the census columns far more thoroughly, including dwelling, name, age, sex, race, occupation, value of personal property, and birthplace. These details created a more comprehensive picture of the white population and one that humanized them. There were, for instance, sixteen white families (out of fifty white households, the rest of whom were single men). In two households, women were the sole occupants—one was twenty-six-year old Catherine Harris, a woman living by herself “keeping house,” and the other was forty-year-old Mary Ford and ten-year-old Mary Ford (presumably the forty-year-old Mary’s daughter). These single women are difficult to trace in other official records, but at least here in the manuscript census, the record suggests that women might live without the support of a male head of household in Butte. We know, for instance, that Chastine Humphrey (brother of one of the men credited with the discovery of rich ore veins at Butte) had his entire family with him at least as early as 1870, including his

wife Viana, twelve-year-old daughter Luella, two-year-old son Chastine Jr., and five-month-old daughter Alice J. We can deduce other aspects of their lives, such as how much the parents traveled, since Chastine was from Virginia, Viana from Maryland, Luella from California, and the two younger children from Montana. Chastine was valued at \$5000, the third richest man in the town.

But without this level of detail about the Chinese population, we are left with almost no information about how this group of the population lived in the early years. We might make assumptions from context, such as the growing national antagonism towards Chinese immigrants to the U.S. in the 1870s culminating in the 1882 ban, that they were unwelcome. Butte's Chinese represented a large proportion of the population, so perhaps they were not necessarily "unwelcome." If the order in which the census lists residents is any indication, the Chinese clustered in one area while non-Chinese residents lived elsewhere. It is possible that the Chinese assemblage was not far, but it is also telling that, like many places in the nineteenth-century West, there was little mixing of Chinese and non-Chinese households. Moreover, the census is one of the few written records that shows evidence of a Chinese population in the early years. Without the detailed information about the Chinese presence making it into the more popular early accounts, Butte was already creating a narrative in which white men came out on top, but with a notable Chinese presence, particularly in a town with just under 250 residents.⁴⁹

We could consider also the built environment to find clues about this early version of Butte and the health of people and their environments. One of the earliest visual depictions is an 1875 photograph (Figure 2.3). A wide valley with misty mountains in the

⁴⁹ U.S. Department of Commerce. Bureau of the Census, "Manuscript Census, Gila County, Arizona" (1870).

background dominates the scene. Log and frame structures speckle the valley floor in a loose cluster. The grainy quality and distant perspective obscure most details of the structures.⁵⁰ It's clear, nonetheless, that in 1875, Butte occupied a tenuous position on the American landscape, much like other mining camps of the U.S. West. If mining proved prosperous, the town would have the promise of at least a few years of success. If not, these structures would quickly fade into a ghost town. According to what is visible in the frame of this photograph, the changes that the newcomers had wrought on the landscape by this point in time were negligible. If everyone had simply left, the structures would have decayed, and the mining tunnels would have filled with water and debris. But since the discovery of rich copper veins coincided with a rising demand for the metal during the 1870s, Butte boomed.

By 1875, in fact, there were at least two opposing portrayals of the Butte area. One reporter encompassed the two in describing how “Those Montanians who have never visited Butte can have little idea of its wonderful fertility, fine scenery and amazing mineral richness. At so great an altitude we might naturally suppose there would be little else than bleak and desolate plateaus surrounded by gloomy snow-capped mountains.”⁵¹ The comment juxtaposes the apparent expectation that a place at around 5,500 feet in elevation would be bleak, desolate, and gloomy with the supposed reality of fertility, fine scenery, and financial wealth from mineral riches. Early residents soon found themselves posturing to defend the town they were creating. Indeed, after just ten rocky years, there were at least two concise newspaper histories published on Butte and one brief book. Examining each of these in turn reveals that the accounts relied on environmental descriptors to boost the current and future vitality of the town.

⁵⁰ Harry Cass Freeman, *A Brief History of Butte, Montana* (Chicago: The Henry O. Shepard Company, 1900), 14.

⁵¹ W.E.S., “From Butte City,” *New North-West*, June 25, 1875, 2.



Copyrighted. Printed by kind permission of Mrs. Simon Hauswirth. BUTTE IN 1875.

Figure 2.4. Butte in 1875, looking southwest. Source: Henry Cass Freeman, *A Brief History of Butte* (1901).

The first thorough newspaper history appeared in October 1875, and it focused on signs of development to measure the health of the community. Entitled “The Butte Mines: A Sketch of the Past and Present of the Camp,” the piece introduced the idea that Butte was still a “camp,” despite the development of housing and increased population. More importantly, it crafted a historical narrative about the town. With a celebratory tone, the sketch focused on the development of the mines themselves, describing the construction and number of mills as well as the most recent production. The reporter described the area namely as a quartz camp with placer mining as the primary method of extraction, but he noted that the region was “believed for many years to be the richest mineral region yet discovered in all the Rocky Mountains.” The reason it had not yet been tapped? The nest of

the richest veins of gold, silver, lead, and copper was locked beneath the hard granite cap. Hard rock mining required machinery, which required greater capital investment. Without explaining why, the reporter noted that investors for larger ventures had not been interested, but that placer mining had proved successful. Mineral strikes in the area occurred first in 1864. The earliest smelting works went up in 1866 to process copper for Joseph Ramsdell, William Parks, and the Porter Brothers. The works did not last, however, because they relied on horsepower, and the horses tired so quickly that the metal cooled in the furnace. In 1868, Hendrie and Ray erected a 5-stamp mill and furnace. That, too, failed, for want of completion. Both structures, by 1875 still stood, but were idle. The one that caused the most excitement at the time of the article's publication was the Farlin mill, a large operation built about a mile southwest of Butte. These details of Butte's history read mainly as a list of continued efforts and perseverance despite setbacks.⁵²

In 1876, the *Butte Miner* narrated a more detailed history of Butte, written by local resident Charles S. Warren. He delved little into the prehistory of the area and began instead with Butte as “the first fixed white settlement” in Montana. When Indigenous people appeared in Warren's account, they were “savage tribes.” He attributed the first discovery of gold to G.O. Humphreys and William Allison in 1864 at the Missoula Lode. The rest of his account chronicled various discoveries from 1864 on as well as naming some of the earliest Euro-American leaders in the area. Warren revealed his personal views with comments showing “the residents of Silver Bow and Butte and vicinity were not as law-abiding as we are now.” Comments like this contributed to one of the two narratives that dominated stories about Butte's early history. One narrative claimed a morally upright citizenship while

⁵² “The Butte Mines,” *New North-West*, October 22, 1875, 2.

the other claimed that residents reveled in sinfulness. The battle over these characterizations became a central point of contention in creating a popular image of Butte for many years to come. Warren's account ended with a description of the first ditches constructed in the area for mining. Because his account was one of the earliest known written histories of Butte, it set a precedent for all following histories. With its emphasis on mining developments and naming early successful residents, the narrative offered information about only select individuals. There was little information about the difficulties the newcomers to the Butte area faced, and there was little information about Indigenous populations. When there was information about the Indigenous people, it was negative, thus feeding a negative attitude toward Indigenous people and erasing any sense of what they had lived like prior to the arrival of the newcomers. Butte's early history was white man's history.⁵³

From its first issue, the *Butte Miner* constructed a narrative about the greatest successes in Butte, but provided some insights into great struggles as well. Butte faced challenges similar to Leadville and Globe in addressing some of the concerns about water and about fire. But because of its mining focus, the *Butte Miner* reveals that residents harbored concerns about another environmental aspect: air. Miners expressed concerns about air quality in the mines themselves, and miners demanded better ventilation.⁵⁴ Absent from early accounts about Butte air quality was smelter smoke, but those concerns emerged by the 1880s.

Not all mining towns had smelters, but many did (including Leadville and Globe), and the smelters as well as the smoke emanating from their chimneys were highly visible. Smelters helped mining companies save money. A smelter processes the ore that has been

⁵³ Charles S. Warren, "Historical Address of the Territory of Montana," *Butte Miner*, July 27, 1876, 1.

⁵⁴ "Ventilation of Mines," *Butte Miner*, June 1, 1876, 1.

extracted from the mines, meaning that workers can then ship only the most precious materials elsewhere. In other words: since heavier or more voluminous materials cost more, it was cheaper to process materials like ore closer to the extraction site so that a smaller amount of material would be shipped at less cost. Some mines process ore by crushing it; smelting requires heating the ore in order to melt metals. To create this heat, miners built coal-fired furnaces. When miners heated the ore in the furnaces, the smelters emitted particulates of heavy metals, including lead, zinc, arsenic, and cadmium. Buoyed by smoke, the particulates traveled up the large smokestacks and floated out into the atmosphere, settling over the town. Smelters might run twenty-four hours per day, therefore creating massive clouds of smoke that obscured sunlight.

As mining efforts grew, so too did the smelting plants, but the smoke they produced prompted numerous comments from visitors and locals alike. Some people remarked on the smoke as a signal of Butte's prosperity. In 1885, a reporter noted, "The swarms on the streets, the smoke from the smelters and mills, and the other evidences of material prosperity was far more than [a group of visiting men] were prepared for, and in departing they carry away with them the best of impressions."⁵⁵ Another account a year later chimed in: "as an evidence of the prosperity of the mines in and about the camp, it is only necessary to see the smoke which never ceases rising from the stacks of the mills and smelters."⁵⁶ Constant smoke meant money.

But not all residents were so keen on the smoke, even if it might signal prosperity. A resident living outside of Butte chided town residents for perhaps mistaking the smoke for a more natural "dreamy haze of Indian summer," pointing out that "you cannot mistake the

⁵⁵ "The Union Pacific," *Butte Semi-Weekly Miner*, September 23, 1885, 2.

⁵⁶ "Mills and Smelters," *Butte Semi-Weekly Miner*, April 14, 1886, 4.

odor for the fragrance of an atmosphere.”⁵⁷ Even some residents wondered about the health effects of the smoke. A woman referred to only as Mrs. Estabrook apparently worried that, despite being able to grow a lovely garden full of flowers, she seemed unable to grow certain more delicate plants. She blamed the smelter smoke.⁵⁸ In another instance, a reporter sang the virtues of the springs in Deer Lodge Valley and commented that “the smelter smoke and begrimed [*sic*] of Butte can here have an opportunity to wash themselves white.”⁵⁹ Here was not only a clear identification of smelter smoke as a characterizing feature of Butte, but in particular that it was dirtying Butte residents who, in a less “begrimed” state would be white. It assumed that many residents were dirty and also that their desired skin color was white, despite the many residents who would have been viewed as “nonwhite,” such as the Chinese population.

Additionally, some observations linked smelter smoke to health. In December 1886, a reporter claimed, “as to the smoke the very slight percentage of the fumes of sulphur [*sic*] which it contains holds no germs of disease. On the contrary it is an excellent disinfectant. This is shown by the entire absence of cholera and many other epidemics at Swansea and in the neighborhood of other large smelting and refining works elsewhere.” The author clearly felt the need to respond to someone else who had been claiming the smoke was unhealthy. The absence of such diseases might have been true, but the author did not note the presence of other dangerous elements. The author concluded that Butte was “one of the healthiest cities in the West.”⁶⁰ Days later, a rival newspaper, the *New North-West*, apparently claimed

⁵⁷ Rural, “A Chatty Letter,” *Butte Semi-Weekly Miner*, October 24, 1885, 1.

⁵⁸ “Local News Notes,” *Butte Daily Miner*, May 12, 1886, 4.

⁵⁹ Joe Bush, “Deer Lodge Drops,” *Butte Daily Miner*, June 20, 1886, 3.

⁶⁰ “The Health of Butte,” *Butte Daily Miner*, December 10, 1886, 2.

that smelter smoke and bad water poisoned the town. The *Butte Weekly Miner* retorted that, “the water here is as pure as the mountain streams from which it is taken, while the winds which sweep over the place are as bracing, health-giving and invigorating as those which raise the dust in [Deer Lodge].”⁶¹ Regarding the winds and air, the *Miner* was not quite correct. The smoke would have contained more than just sulfur, and it would have been unhealthy to breathe regularly.

By the 1890s, the city had an active Health Office whose reports reveal that sanitary conditions were regularly inspected and reported on. But absent in these reports is any mention of air quality. Year after year, the reports chronicled contagious diseases, mortality data (including death rates and causes), food inspections, and conditions of waterways, sewers, and the city dump. In sampling the annual reports from 1893 to 1921, it appears that the health officer noted deaths due to some conditions like “consumption,” but did not identify air quality as a potential problem.⁶² Despite the negative comments about smelter smoke, the emphasis on portraying the smoke as a symbol of productivity dominated the written record, including those focused on health, and those stories shaped how readers understood Butte’s early years.

Written and photographic evidence about the earliest years of Butte is rare, but the records that do exist emphasized the efforts of white men and celebrated the progress of mining. The stories of Butte, which could not ignore obvious characteristics that appeared quite unnatural and concerning, like smelter smoke, portrayed negative effects as progressive. For years to come, the same attitude shaped how residents and visitors viewed the town and its past—they had all the evidence to show that their predecessors had

⁶¹ “An Unjust Thrust,” *Butte Daily Miner*, December 19, 1886, 2.

⁶² Butte Health Officer Records (1892-1921), Butte-Silver Bow Public Archives, Butte, Montana.

persevered and made Butte a success. As the next chapter shows, perseverance was certainly rife, but so too were the environmental problems associated with mining and with constructing a new town.

Conclusion

In all three towns, the construction of the towns relied largely on not just the promise of mineral riches, but also the availability of water and wood. As the towns transitioned into larger, more urbanized environments, each developed its own character, but under the umbrella of a larger narrative of westward development. Some of the ways in which different types of structures and neighborhoods developed laid the groundwork for this character and the future of how residents and visitors would understand the history of these towns.

The early histories of Butte, Globe, and Leadville therefore launched a story of success, which prompted residents in later years to use such tales to justify a continued dedication to mining, even when forced to confront some of the health problems mining had caused. There is often more than meets the eye with these towns, however. As the next chapters reveal, even when faced with opportunities to capitalize on the true history of their towns, residents chose to revisit the same old tales, resulting in not only a false narrative, but false historic landscapes that have led to the perpetuation of environmental inequalities

CHAPTER III
DESIGNING PARADISE,
1860s-1910s

The stories, then, preceded as well as coincided with the creation of the towns. Newcomers carried with them preconceived notions about how an American city should look and function, including houses made of milled timber planks, businesses that promoted a middle-class lifestyle, and an overall aesthetic that emphasized geometric structure. As mining towns like Butte, Leadville, and Globe matured during the 1870 to 1910s period—a period commonly known as the Progressive Era in U.S. History—construction reflected these visions. During this period, Progressive-thinking residents employed rhetoric that emphasized cleanliness and health to argue for the destruction of any structures or ways of using space that challenged these visions. I argue that these residents’ progressive-motivated actions eliminated structures or ways of using space related to the majority of residents, because of their impulse to create visual and social order. Their efforts to morally and physically clean these landscapes failed because the core impulse to clean blinded them to the benefits of incorporating the styles and uses of space from racial and ethnic minority residents. Moreover, analyzing these efforts reveals that the gentrification we associate with later periods first occurred in much earlier periods and created landscapes that erased not just unhealthy or undesirable elements, but also the characteristics that gave the towns a sense of uniqueness that would have served their other purpose of attracting tourists. In other words, their efforts succeeded in attracting the type of individual who sought familiarity but failed in attracting the type who sought the adventure that mythic narratives about the U.S. West promised.

The impulse to clean up certain locations in cities during the late-nineteenth and early-twentieth century stems from a health ideal of creating more sanitary cityscapes as well as in an aesthetic ideal in creating more “beautiful” cityscapes. Mining towns struggled to fulfill these ideals, because mining was a messy business, both for health and aesthetic reasons. Rather than take the opportunity to reinvent the structure of American cities, progressive-thinking residents imposed order on a disorderly environment. In doing so, they subverted their own ability to promote the unique attractions of their towns.¹

Striking vistas, fresh air, sparkling waters, and little towns with quaint cottages and small main streets that evoked a sense of the recent past attracted hikers, day-trippers, fishing enthusiasts, and even new residents. Such attractions evoked the “pristine” imagery in vogue with the late-nineteenth century conservation movement in the United States. The pristine image also meant that in towns like Leadville, Butte, and Globe, which maintained both mining *and* tourist industries, there was a struggle to reconcile the town’s heavy environmental use with a desire to attract visitors to visually appealing landscapes. Piles of rocks, dirt, and slag speckled the hills outside the shafts. These effects of the mining industry challenged the early environmental movement’s vision for natural environments to appear “untouched.” The built environment in these towns also challenged the ideals that middle-class residents held, because it sprawled over hills that made gridded streets more challenging to create and because the majority of residents, who were working-class, constructed houses and neighborhoods that adhered to a different set of ideals and circumstances. As such, even though middle-class ideals dominated city planning from the 1860s to 1910s maturation of

¹ For more on city beautification in the Progressive Era, see Leland M. Roth, *American Architecture: A History* (Boulder: Westview Press, 2001), 287-288, 321-330.

mining towns, working-class and non-white residents maintained their own homes and businesses.

City design in the Progressive Era United States functioned at many scales, from the form and style of individual structures to the organization of the city into residential versus business districts. In mining towns, middle-class and largely U.S.-born residents pursued this type of design. Their houses mimicked the houses in cities on the East Coast, following floor plans that created living spaces to support middle-class lifestyles. But many mining town residents either did not pursue this design or incorporated it with elements that reflected their class, racial, ethnic, or gender status. Indeed, for many mining town residents, being working-class, foreign-born, an ethnic minority, non-white, or a woman influenced the degree to which an individual could shape their built environment. This phenomenon occurred in non-mining towns as well, but mining towns held the unique quality that their economic basis and indeed the way residents constructed their houses and districts, relied on a literally dirty industry. Miners worked around the clock rather than within the confines of daylight business hours, and they worked in dusty, smoky environments, bringing the dirt and smoke home with them. Even for those who did not work in a mining-related job, the presence of mine tailings piles, mills, hoisting works, and other signs of local mining efforts shaped both how the town appeared and functioned. The populations of Butte, Globe, and Leadville differed regarding race, class, ethnicity, and gender, which contributed to varying uses of the built and natural landscapes. Taken together, their stories highlight how the pursuit of sanitary conditions was a tool of both marginalized and middle-class residents, but that the places targeted for cleanup were often cleaner than reformers acknowledged.

The creation of urban environments in the U.S. West is not a new line of inquiry, but this chapter focuses on mining towns in particular to explore how the mining industry

created a unique set of circumstances within which residents designed their cities. In *Rocky Mountain Mining Camps*, Duane Smith argued that residents stabilized communities through engendering institutions like churches, schools, or businesses and thus attracted more investors and funds to construct additional symbols of stability.² Kingston Heath argued similarly in his Ph.D. dissertation, “Striving for Permanence on the Western Frontier,” that mining community residents created new styles or grafted existing national styles onto their buildings in order to create a sense of permanence and familiarity on the mining frontier. One major example of this is false-front architecture, which, when viewed in photographs and drawings, could make the town’s buildings appear more substantial than they were. The perception of permanence raised investors’ confidence in a town’s ability to survive.³ Lawrence Von Bamford has also specifically addressed permanence in Leadville through his discussion of how Leadville’s built environment developed through five phases, the fourth and fifth being when architects designed more technologically advanced structures that added to the town’s sense of permanence.⁴ None of these engages significantly with the intersection of environmental pristineness and urban design as they related to notions of sanitation. By combining the ideas about design and permanence from these works with a closer analysis of sanitary rhetoric in early mining towns, we gain a clearer picture of the degree to which marginalized residents shaped mining town life through the use of their environments.

² Duane A Smith, *Rocky Mountain Mining Camps: The Urban Frontier* (Niwot: University Press of Colorado, 1962), 8-10.

³ Kingston Wm. Heath, “Striving for Permanence on the Western Frontier: Vernacular Architecture as Cultural Informant in Southwestern Montana” (Ph.D. diss., Brown University, 1985).

⁴ Lawrence Von Bamford, “Streets from Silver: Leadville’s History through Its Built Environment,” *Colorado Heritage* 4 (1987): 2–12.

Drawing on census data, city directories, historical maps, newspaper articles, a court case, and writings from visitors, this chapter employs methodologies often used in social histories and spatial studies, including identity formation and construction of urban infrastructure. Identity formation and access to urban infrastructure are only two among many potential factors in shaping a resident's experiences in a U.S. West mining town, but I emphasize them here, because they illustrate how marginalized residents incorporated ideals of sanitation with their own skills and cultures in order to survive in mining towns.

A Clean Place to Live: Mining Town Houses

Houses are one of the best indicators of the ways in which mining town residents adhered to middle-class urban design ideals. Houses often provided living spaces over which even those without major capital or social influence could exert some degree of control. The style and form of houses in mining towns ranged in great degree. If the towns were company towns, the mining company often built workers' cottages.⁵ But in non-company towns, like Butte, Globe, and Leadville, house construction was a private endeavor. In other words, individuals controlled construction of their homes. Several factors limited their control, however, including finances and availability of building materials. Residents with the greatest access to money and materials were often the ones who built the houses that best reflected middle-class ideals. Other residents, namely the rank and file miners or other working-class folk, had less capital and time to dedicate to creating sturdy structures, even if they kept them as clean as they could. Houses were particularly personal expressions and thus reveal not only personal identity but also the degree to which individuals infused their house's

⁵ Hoagland, *Mine Towns Buildings for Workers in Michigan's Copper Country*, 1; Perales, *Smelertown*, 3; Joseph Hill White, *Houses for Mining Towns*, United States Bureau of Mines (Washington, D.C.: GPO, 1914).

form, features, and function with efforts to maintain a clean, neat appearance in the midst of the smoke and dust that characterized their town's industry.

In fact, during the 1860s to 1910s period, the model American house reflected the goals of the rising white middle class. The ideal style shifted from the more romantic and eclectic styles popular in the early-to-mid-nineteenth century to the late-Victorian-era styles that emphasized complex design features. These ideas developed in eastern cities and seeped into mining towns, just at the time when many mining towns' residents endeavored to convey a greater sense of permanence and social standing through architectural display. Prior to identifying major veins of precious metals, residents created mining camps rather than full cities. They erected tents and wickiups, constructed log cabins, and slapped together rough-sawn, plank frame structures as quickly as they could. Their main goal was immediate shelter, not a place to foster permanent life. If the mineral veins were deep and rich, prospectors and local businessmen built more substantial structures that aligned with wood-frame construction designs and benefited from stronger building materials like brick and stone. They adopted house styles and construction practices that were popular in eastern cities as a way to prove that the town had financial resources and could be a nice place to live, thus ensuring its permanence. Houses constructed of sturdy material in ornate Victorian-era styles indicated residents' intent to stay in the area as well as an effort to embody the values of the American white middle class. Core to the ability to convey permanence was a sense of neatness and cleanliness. The greater number of houses that appeared neat, the greater number of people who would believe that the town might be a good place to live. Or so the town builders hoped.⁶

⁶ Lawrence Von Bamford and Kenneth R. Tremblay, Jr., *Leadville Architecture: Legacy of Silver, 1860-1899* (Estes Park: Architecture Research Press, 1996), 84; Heath, "Striving for Permanence on the Western Frontier: Vernacular Architecture as Cultural Informant in Southwestern Montana," xxii.

One example of mining town residents adhering to American white middle class ideals of cleanliness through their house construction is the Tabor House in Leadville, Colorado. Located at 116 East Fifth Street since 1878 or 1879, the house belonged to Horace Austin Warner Tabor and his wife, Augusta (Figure 3.1). The Tabors certainly pursued a Victorian-era white American middle class lifestyle. Mr. Tabor was the son of an English-born woman and a Vermont-born man who was “of some importance in his neighborhood.” At twenty-five years old, Tabor headed to Kansas Territory in the 1850s and established a homestead before marrying Augusta Pierce in 1857.⁷ In 1877, the couple established a store in Leadville and lived in a modest wooden house on Harrison Avenue. Mr. Tabor grubstaked⁸ two prospectors who struck a rich silver vein in 1878.⁹ With his new wealth, Mr. Tabor built the Tabor Opera House on the same site, having moved the modest home to East Fifth Street. This new wealth and investment rocketed the Tabors from middle to elite status in Leadville society. By 1880, they had moved to Denver while maintaining properties in Leadville. The couple divorced in 1883 after Mr. Tabor decided to marry another woman with whom he had a notorious affair.¹⁰

During the time the Tabors lived together in Leadville, they were exemplars of the white American middle class, which was apparent in the style and form of their original house. In form, it followed a simple plan: a gable-ended, rectangular, one-and-a-half story frame residence with a covered, single-story porch on the east entry. The gingerbread

⁷ Lewis Cass Gandy, *The Tabors: A Footnote of Western History*, (New York: Press of the Pioneers, 1934), 2–3.

⁸ “Grubstake” is a mining term meaning to supply material or funds for a mining prospector, in exchange for a promise of a share in any profits.

⁹ Blair, *Leadville*, 48; Duane A. Smith, *Mr. Tabor: His Life and the Legend* (Boulder: Colorado Associated University Press, 1973), 71–72.

¹⁰ W.M. Clark, W.A. Root, and H.C. Anderson, *Clark, Root, & Co.'s First Annual City Directory of Leadville and Business Directory of Carbonateville, Kokomo, and Malta* (Denver: Daily Times Steam Printing House and Blank Book Manufactory, 1879); U.S. Department of Commerce. Bureau of the Census, “Manuscript Census, Lake County, Colorado” (1880).

vergeboard encrusting the eaves, the finial topping the gable, and first-story bay window protruding from the house's façade all gave the house a little extra flair, especially compared to its plainer neighbors.¹¹ This exterior design gestures toward the Gothic Revival style, which was waning in popularity by the 1870s, but had been an ideal for the American middle class since about 1840.¹² The house was a subdued version of the style, suggesting that the couple did not feel the need or did not have the funding to more heavily ornament their home.¹³



Figure 3.1. The Tabor house at its 116 East Fifth Street address, c. 1879. The Tabor Home is the white one and a half story structure with bay window (center). Photo by George D. Wakely. From Denver Public Library's Western History and Genealogy Department, Call number X-6301.

<http://digital.denverlibrary.org/cdm/singleitem/collection/p15330coll22/id/845/rec/365>

¹¹ Clifford Edward Clark, Jr., *The American Family Home, 1800-1960* (Chapel Hill: The University of North Carolina Press, 1986), 104.

¹² Virginia McAlester and A. Lee McAlester, *A Field Guide to American Houses* (New York: Knopf, 1984), 197.

¹³ John Burke, *The Legend of Baby Doe: The Life and Times of the Silver Queen of the West* (Lincoln: University of Nebraska Press, 1989), 65–67.

Beyond exterior style, the interior of a home was another way for residents of mining towns to incorporate middle-class ideals into their lives. Five blocks north of the Tabor House in 1878, August R. Meyer, mining engineer and close associate of Horace Tabor's, built a house for his wife, Emma. In Meyer's house (now known as the Healy House), wood-frame construction and clapboard siding formed the basic structure, like the Tabor House. Unlike the Tabor House, Meyer's house adopted a boxier plan that followed a basic rectangle with an addition in the rear to house the kitchen. Originally consisting of two stories, the interior organization of rooms promoted a middle-class lifestyle of entertaining guests and dedicating rooms to specific purposes. The first story included a parlor with a bay window to the south, a central hall with a black walnut stairway, and a dining room, while the second story contained several suites, including sitting rooms. Combined with opulent furnishings, this form lent to an overall sense of the house's middle, perhaps even upper-class, status. There were rooms available for specific purposes, such as eating and entertaining as well as a second story to separate daytime spaces meant for public use from private bedrooms. So much space was one way for a residence to show off its owner's class status. By infusing the interior with fancy features and finishes, such as the black walnut used in the stairway, the Meyers further touted their wealth.¹⁴

Both the Tabor and Meyer houses aligned with a sense of neatness. On the exterior, each house had even lines and symmetrical features. The Tabor House's façade, for instance, consisted of the bay window and second story window centered in the gabled section. The entrance to the right introduced some asymmetry to the design, but careful attention to the

¹⁴ The State Historical Society of Colorado, *Healy House and Dexter Cabin: State Historic Monument, Leadville, Colorado* (Denver, Colorado: Colorado State Museum, 1962), 3-6.

proportions and a small overhang balanced the overall impression. At Meyer's, the double-door entrance anchored the structure at the center of the first story, one window flanking either side. The second story mimicked the organization and aligned three windows with each opening on the first floor. The Meyer's entry porch with plain columns crested by a second-story balustrade adorned the façade with reserved opulence.

By comparison, houses of non-white, immigrant, and working-class citizens often conformed less to the middle-class ideal of Victorian-era America. Working-class residents, who were often racial or ethnic minorities, could not afford such extravagant use of space or material as the Tabor and Meyers had. Furthermore, they generally rented their homes and would not have the right to alter their structure too significantly. Their houses were often small, made from what material could be scrounged up, did not necessarily represent a particular architectural style, and combined many uses into a single room. In some instances, inhabitants actually valued combining many uses in a single space. Examples of working-class houses are not as well documented as middle-class houses like the Tabor or Meyer houses. But a glimpse at historical maps, census records, and photographs can give some sense of their appearance.

For instance, houses that neighbored August Meyer's Sampling Works on the south side of town did not reflect middle-class ideals to the same degree, particularly in occupying inherently dirtier locations in town. The south side of Leadville was the older part of town, the area from which the town first grew. Around 1880, several ore sampling and smelting companies operated their industries in the area. Because ore sampling involved crushing rocks and smelting involved melting the metals in those rocks, the operations produced clouds of smoke and dust, clearly depicted in some of the early images of Leadville (Figure

3.2). And yet with his house about eight blocks upwind from this concentration of industrial structures, August Meyer, himself, and his wife could theoretically escape much of the noise and dirt that plagued people living more closely.

By contrast, the working-class occupants of the dwellings neighboring the Meyer Sampling Works and Harrison Reduction Works did not enjoy the sanitary conditions of the north side. True, there was an engineer's house on the Harrison Reduction property, and engineers generally counted as middle class. But for the other surrounding dwellings, the 1883 Sanborn Fire Insurance map reveals that all were wood frame, mostly single-story with extremely simple plans; they usually appear as just a small rectangular or square footprint, with no bay windows or porches, though sometimes small additions complicated the footprint. Beyond the structures themselves, however, was the neighborhood in which they stood. Mining towns often had large industrial structures for storing and processing ore brought up from the mines. The processing produced large amounts of dirt, dust, and smoke. Any houses in the area would have a difficult time maintaining a clean appearance. Perhaps one indication of the area's desirability (or lack thereof) is that, by at least 1883, many of the dwellings closest to the Harrison Reduction and Meyer Sampling works were vacant. Although the street bordering the northern edge of these industrial sites, Chestnut, had been Leadville's original thoroughfare, the number of vacant dwellings in that block compared to the occupied ones in blocks further north suggests that residents were fleeing the area to live elsewhere. Moreover, attempting to keep a neat house would have been difficult for those who had little with which to build. The Sanborn map branded anything east of this dismal neighborhood "shanties."

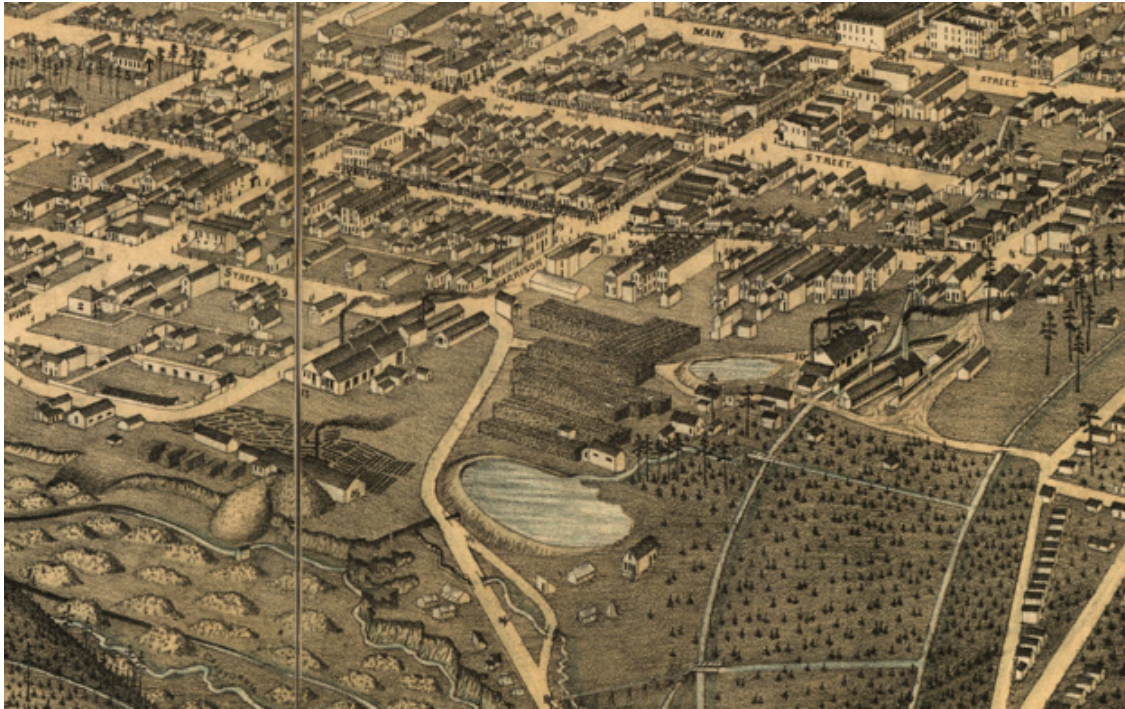


Figure 3.2. Close-up of August Meyer's Sampling Works (labeled #13) and Harrison Reduction Works (labeled #10) showing large smokestacks. Source: Bird's Eye View of Leadville, Colorado, 1879.

Those who built structures that best matched the American middle class ideals of houses, particularly in style and form that lent itself to being read as “neat,” were white residents who had achieved success in the mining industry. But the majority of residents were not so lucky. Looking at the densest, more complex areas of Leadville reveals that many of the dwellings closest to the southern edge of town were simple structures. This suggests they might, too, have been read as “neat,” but the Sanborn map and an early photograph suggest that the southern edge of town was far from legible (see Figure 3.3). Indeed, scattered logs, unhewn log structures, canvas tents, and random piles of rocks, set against the backdrop of Leadville's southern streets filled with structures of all sizes, shades, and materials, creates a sense of chaos. The deeper one looks into the background, however, the lighter colored and larger the structures become. Leadville's newer structures were tidier

and more spacious, which allowed occupants like the Meyers and Tabors to perform lifestyles characteristic of the late-nineteenth century American middle-class, even as the dirty mining industry hummed along at the southern edge of town.



Figure 3.3. View looking northeast from California Gulch, Leadville, Colorado, 1879.

Keeping Them Clean: Mining Town Laundries

The clean lines and neat construction of individual dwellings were one way that residents could signal their middle-class status, but if residents could not themselves achieve middle-class status, they could find a place in society by operating a business that served the middle class, particularly if it contributed to the middle-class desire for cleanliness and sanitation. To do so within the context of a predominantly white masculine mining landscape was tricky, but not impossible. Laundry businesses provide a unique window into this process, since women (married or single) and nonwhite residents dominated the industry during the early years. But as mining towns matured and technologies changed, many white male residents introduced steam power laundries that required more capital investment and

promised even cleaner results. The moment in the boom years when women and nonwhite residents operated their own private laundry businesses signals that it was not inevitable for white men to hold power over all aspects of creating a neat, orderly town.

The development of laundries in Butte, Montana, provides distinctive insights into how women and residents of color built lives in an otherwise white masculine landscape. In a mining town's early years, miners often washed clothing in nearby water sources or paid someone else to do it.¹⁵ By the 1880s, Butte's residents mimicked the gender roles practiced in eastern U.S. cities, including putting women in charge of clothes washing. Many mining town women did the laundry as part of their household duties, and some made it a wage-earning business. In the nineteenth-century United States, the most socially acceptable occupations for women were those that extended women's domestic roles, such as being a laundress. In mining towns, the main occupation was mining, which was male-dominated to the extent that some miners or company owners banned women from being in the mines. White women as well as women of color fulfilled the role of "laundress" or "washerwoman." Being unmarried, too, characterized Butte's class of women launderers. In 1900, for example, only six of the sixty-nine female launderers were married, the others being widowed, single, and divorced. Many of these women worked out of their homes, but at least two had built up their business enough to be listed in Butte's city directory.

Nettie Stone, one of the women launderers listed in the 1900 city directory, exemplified the way a white woman might support herself. The thirty-one-year-old immigrant from Norway lived at 326 East Park Street, but the city directory listed her among

¹⁵ Johnson, *Roaring Camp*, 122–27. I am largely indebted to Susan Lee Johnson for this line of thinking about domestic labor in mining camps. Her work centered on California mining camps during the 1849 Gold Rush, but her discussion of gold rush men doing their own laundry and later having Mexican women or Chinese men do their laundry, was a basis for my analysis here.

the laundries, with her business address at 428 East Park (Figure 3.4). In the census, she boarded with two other people at the 326 Park Street address, and a family (surname McDonald) occupied the dwelling at 428 East Park. This discrepancy could have resulted from a mis-numbering of the house. But mis-numbering or not, the point that Nettie Stone's name appeared as one of two women's names on the directory's list of laundries reveals that women could and did find ways to support themselves within the masculinized mining landscape. That said, their role perpetuated the gender roles from other cities in nineteenth-century United States.



Figure 3.4. East Park Street depicting houses and businesses in the 400 block of Butte, Montana. The 1900 Butte City Directory listed a laundry business with the name “Nettie Stone” at 428 East Park, an address listed here as a dwelling. Source: Sanborn Fire Insurance Map, Butte, Montana, 1900.

Although laundry's association with domestic space made it a socially acceptable wage-earning occupation for women in mining towns, some men operated larger commercial

laundry businesses. Particularly after the invention of electric laundry machines in the 1850s, men entered the “power laundry” business. For instance, John Scovil moved to Butte by 1899 and established the Montana Steam Laundry. In about 1906, he and partner George H. Casey purchased the C.O.D., Troy, Palace, and Star laundries. The C.O.D. Laundry was in the 400 block of East Park in Butte, just a few doors west of Nettie Stone’s laundry (Figure 3.4). At the time that Scovil and Casey opened the C.O.D., many housewives continued to do their family’s laundry, but commercial laundries gained popularity.¹⁶

One reason for the shift to power laundries was their promise of cleaning clothes more effectively. A 1914 text touting the accomplishments of many Butte men noted that C.O.D. had installed a water-softening and filter plant, “which will enable it to turn out a superior class of work, the equal of any in the United States.”¹⁷ Power laundry owners claimed also that, in using machinery, the power laundry business was more masculine than the laundry women who did it by hand in their homes.¹⁸ This meant that laundry businesses and the spaces in which workers washed clothes were less feminized as the mining camps matured.

Men’s larger commercial businesses not only competed with women’s smaller, home-based operations, but also Chinese laundries. In many mining towns, one of the occupations available to Chinese residents was clothes laundering. The Chinese capitalized on this by building laundries and becoming known for their “hand work,” meaning they did not use

¹⁶ Moras Shehan, “Deconstructing Laundry: Gendered Technologies and the Reluctant Redesign of Household Labor,” *Michigan Family Review* 11, no. 1 (2006): 43.

¹⁷ Butte Newswriters Association, *A Newspaper Reference Work: Men of Affairs and Representative Institutions of the State of Montana*, accessed March 12, 2017, <http://mtmemory.org/cdm/ref/collection/p15018coll38/id/197>.

¹⁸ Joan Wang, “Gender, Race and Civilization: The Competition between American Power Laundries and Chinese Steam Laundries, 1870s - 1920s,” *American Studies International* 40, no. 1 (2002): 53.

modern machines.¹⁹ In fact, Chinese residents dominated the lists of laundries in a sample of Butte’s city directories from 1890 to 1900 (Table 1). Because they offered a unique service and generally for a cheaper price, the Chinese laundries competed with the larger white-owned commercial businesses.²⁰

Table 1
Laundries in Butte, Montana, by race²¹

| City Directory Year | # of Chinese Laundries | # of Non-Chinese Laundries |
|---------------------|------------------------|----------------------------|
| 1899 | 27 | 10 |
| 1900 | 20 | 7 |
| 1904 | 30 | 5 |
| 1923 | 18 | 4 |

Chinese laundries have not escaped scholarly attention. In particular, Joan Wang detailed them in her 2002 article, “Gender, Race and Civilization: The Competition between American Power Laundries and Chinese Steam Laundries, 1870s - 1920s.” She argued that white “power laundry” owners emphasized the manliness of power laundries and attacked Chinese laundries with “rhetorical strategies that represented the Chinese laundrymen as blurring separate gender spheres and using primitive or even barbarian methods in their work.”²² The evidence from Butte reveals that it was not just the intersection of gender spheres and work methods that provided white “power laundry” owners with rhetorical

¹⁹ Wang, “Gender, Race and Civilization,” 63.

²⁰ “Money in a Laundry,” *The Dupuyer Acantha*, April 7, 1898; Louis Joseph Beck, *New York’s Chinatown: An Historical Presentation of Its People and Places* (New York: Bohemia Publishing Company, 1898), 59, <http://archive.org/details/cu31924023507217>. Actual prices offered by Chinese laundries and even white laundries in Butte, Globe, and Leadville are difficult to come by. But Butte white owners instigated boycotts during the 1890s, which suggests that the Chinese were offering prices low enough and service good enough to acquire business that the white owners wanted. A very rough comparison of prices offered in Skagway, Alaska, (as reported in a Dupuyer, Montana, newspaper) with prices offered by a New York Chinatown laundry show the Chinese offering services for half the price.

²¹ Data listed in Table 1 collected from Butte City Directories accessed on www.ancestry.com.

²² Wang, “Gender, Race and Civilization,” 54.

ammunition, but also environmental factors. Indeed, Butte's white "power laundry" owners attacked Chinese laundries mainly based on rhetoric that charged Chinese laundrymen and methods with being unclean.

The tensions between Chinese and white laundry owners stemmed from a nationwide anti-Chinese attitude that culminated in the passage of the 1882 Chinese Exclusion Act. Despite the pressure to stay in Butte's Chinatown, however, some Chinese businesses existed beyond Chinatown boundaries. In Butte, Chinese laundries peppered the Central Business District, which radiated outward from the intersection of Park and Main streets. As with white businesses, Chinese laundries offered pickup and delivery services, meaning they could obtain the business of those living within a reasonable distance of their location. As early as 1885, white men began building commercial laundry businesses in similar locations to the Chinese laundries. With such close proximity, Chinese- and white-owned laundries competed for the same customer base.

The two types of laundries certainly offered different modes of laundering from varied locations. Chinese laundries consisted of simple designs, usually a single rectangular wooden structure with a concrete floor. There might also have been large rectangular drying platforms outside. Inside, the men conducted the full laundering process in one large room with tubs for washing and tables for starching and ironing. For instance, a Chinese laundry that operated at 9 West Copper since at least 1890 followed a simple rectangular plan with a small shed addition to the west-facing side (Figure 3.5). It had a concrete floor and drying platform. Notably, this business was not in Chinatown. Instead, it was on the northern margin of town, amidst undeveloped streets, mine tailings, and a "refuse pile." The simplicity of design might have provided the Chinese laundries with a clean, uncomplicated space in which to conduct their business. Such simplicity could have appealed to the overarching

desire of many residents who wished to maintain an overall aesthetic and social sense of cleanliness and efficiency. But its location on the northern edge of town and so close to the Gagnon Hoisting Works would have created a different set of conditions (Figure 3.6). Perhaps some residents would have chosen the laundry for its proximity to their own homes, but others might have found the prospect of having their laundry washed and dried so close to a smoky, dusty mining operation unappealing. That said, there was enough promise of business that two other Chinese laundries operated one block south of Wing's site.

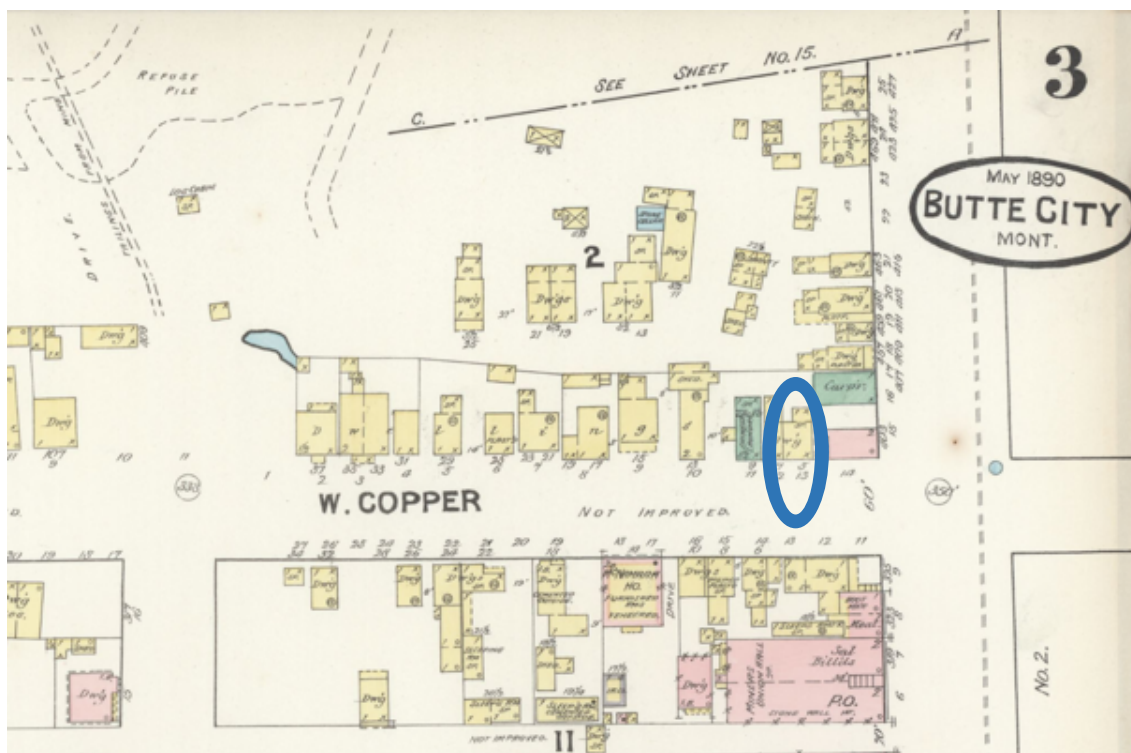


Figure 3.5. Neighborhood surrounding Chong Wing's laundry at 9 West Copper (circled in blue), Butte, Montana. Source: Sanborn Fire Insurance Map, Butte, Montana, 1890.

White laundry businesses, by contrast, were larger, more complex spaces operating with sizable machinery. The power laundries were often large brick structures with several different rooms and perhaps multiple floors. For example, about six blocks south of Chong Wing's operation on Copper was the Troy Steam Laundry at 51 West Mercury. The Troy's

footprint is larger and more complex than that of Wing's laundry. Clear in the Sanborn map are several rooms dedicated to different steps in the laundering process (Figure 3.7).

Chinatown, where three other Chinese laundries operated, neighbored the Troy's location to the east. But despite the white business owners' best efforts to promote their larger mechanized laundry services, many residents continued sending their laundry to the Chinese. Laundry performed in smaller spaces, like those of the Chinese, persisted.²³ Like independent women launderers, the Chinese operations were simpler in a way that served the overall community. Even so, although the continued demand for Chinese launderers allowed Chinese residents to operate the businesses and earn wages, they were, like the independent women launderers, still operating within the confines of a white, masculine society.



Figure 3.6. Neighborhood surrounding the Chinese laundry at 9 West Copper (blue circle) Butte, Montana, 1884. Also visible: Original and Gagnon Mines and Hoisting Works with smoke streaming from tall stacks. Source: W. Coleman & Co.'s Bird's Eye View of Butte-City, Montana, 1884.

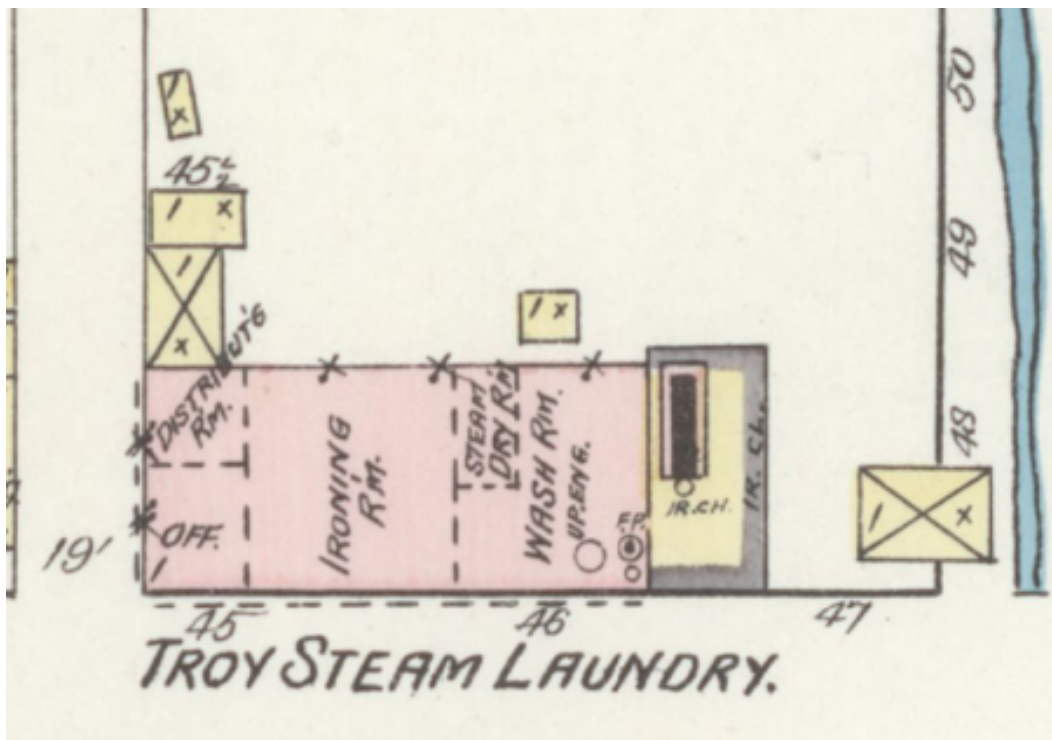
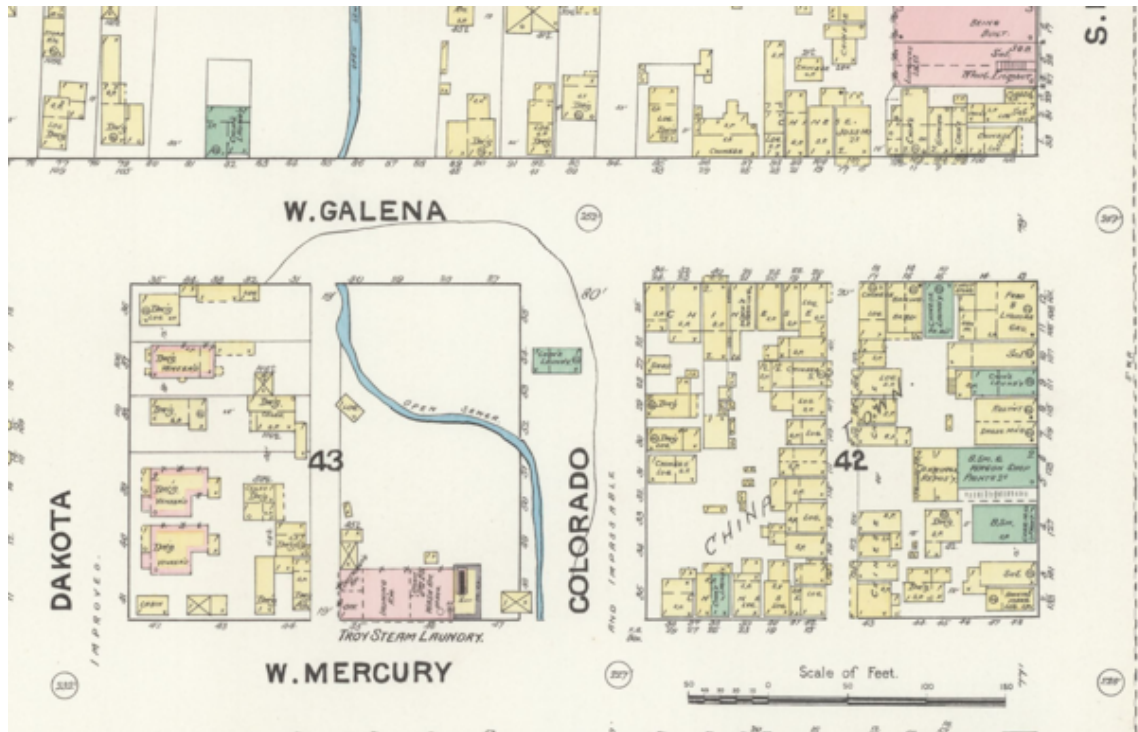
²³ Wang, "Gender, Race and Civilization," 63.

White “power laundry” owners must have felt threatened by the continued presence and successes of independent laundry ventures, because they launched an attack on Butte’s Chinese operations. The attack targeted the Chinese operations only, not the independent women launderers, despite the women operating their businesses in similar neighborhoods. Core to this attack on Chinese laundries were comments regarding sanitary practices. During the 1890s, residents in cities across the United States were increasingly concerned about sanitary conditions, particularly regarding sites where illness could spread easily. Streets, sewers, city dumps, and slums were common targets, but certain businesses, such as laundries, could be a concern as well.

Even though such anti-Chinese sentiment existed, the presence of Chinese laundries continued in cities across the U.S. Some people preferred sending their dirty clothes to Chinese laundries, in part because the Chinese handled batches individually rather than mixing laundry from multiple customers. Commercial owners retorted that other steps in the Chinese method of laundering could still spread disease. In particular, they attacked the Chinese practice of blowing water onto clothes as a way of dampening them before ironing. As the argument went, if the Chinese launderer were ill, he would spread his germs.²⁴ The white owners did not recognize that not all Chinese laundries used that method of spritzing water.²⁵ The white laundry owners had instead linked “Chinese” to “handwork” and then linked “handwork” to “unsanitary.” In these instances, the white business owners attacked the Chinese businesses on the basis of the belief that Chinese people and therefore their spaces were unsanitary.

²⁴ Wang, “Gender, Race and Civilization,” 63–65. Wang cites a case in Chicago in which a health official recommended the creation of a city or state ordinance to prevent unsanitary methods of laundry work.

²⁵ Wang, “Gender, Race and Civilization,” 63.



Figures 3.7. Map and close up of map depicting Troy Steam Laundry in 1890. The structure has rooms designated for office work, distribution, ironing, washing, and steam drying. Note its proximity to Chinatown (right) and an open sewer. Source: Sanborn Fire Insurance Map, Butte, Montana, 1890.

Butte's white owners took this to an extreme in 1896 as part of a larger boycott of Chinese businesses. White male laundry owners had called Chinese laundries "pest houses" and claimed that Chinese laundrymen were "leporous [*sic*] and mouth-spraying."²⁶ Butte's city regulation did not prevent or ban the Chinese from operating laundries, though activists in other U.S. cities attempted to do so.²⁷ In places like Butte, residents took matters into their own hands and boycotted Chinese businesses. Butte's 1896 boycott led to a court case in which Chinese business owners testified about the boycott preventing them from conducting their business. Some of the testimonies reported on the negative images of Chinese that the boycott promoters spread. For instance, the primary Chinese prosecutor, Hum Fay, described an image that boycotters had displayed in which a Chinese man was "spurting water with his mouth and dropping a rat and doing some cooking."²⁸ While the image depicted cooking, the spurting water built on the fears about Chinese service providers spreading disease through spitting, much like the method of water spritzing that white laundry owners claimed Chinese launderers used. But the Butte boycotts were in vain. The Chinese businessmen won. Furthermore, Chinese laundries continued operating at least into the 1950s.

The labor of women and nonwhite launderers allowed other residents to focus on mining efforts, but they also contributed to an overall sense of cleanliness that was difficult to achieve in mining towns where dust and smoke constantly dirtied clothing. As the towns matured, growing in size and filling with houses and structures that reflected middle-class

²⁶ Stacy A. Flaherty, "Boycott in Butte: Organized Labor and the Chinese Community, 1896-1897," in *Chinese on the American Frontier*, ed. Arif Dirlik (Lanham: Rowman & Littlefield Publishers, 2001), 396.

²⁷ Wang, "Gender, Race and Civilization," 65. I have not yet uncovered evidence of such regulation in Butte, but that does not mean it did not exist.

²⁸ "It Is About Finished," *The Anaconda Standard*, April 9, 1898.

ideals of cleanliness, white men increasingly inserted themselves in occupations that had once offered marginalized residents a means of earning wages. They did so by constructing new spaces and attacking the extant ones using rhetoric of uncleanness. In the larger context of Progressive Era concerns about sanitation in urban spaces, the arguments gained traction in urbanizing places like Butte, where town leaders wanted to ensure their town's appeared as clean and health-giving as possible.

Moral Cleaning: Mining Town Redlight Districts

Besides laundries, one of the other spaces in town not quite so dominated by white males were brothels.²⁹ These houses of ill repute clustered in particular areas of town called the “redlight district.” Brothels as a building type varied in their form, style, appearances, and structural integrity, and appealed to white American middle-class desires for cleanliness only to a minimal degree. Often labeled as “female boarding” on Sanborn Fire Insurance maps, brothels ranged in form from single-room “cribs” in rows along streets and alleys to elaborate “parlor houses.” Builders constructed these edifices of wood, brick, or adobe. Cribs occupied long horizontal buildings, usually one or two stories high, such as the structures along Pleasant (aka Venus) Alley in Butte. A single crib consisted of a street- or alley-facing doorway leading to a narrow room. There was also often a window where sex workers would sit, tapping on the glass and gesturing to passersby. Some sex workers operated in gambling or dance halls, where gambling tables and bars occupied the main floors, and bedrooms occupied the upper ones. Other sex workers operated in parlor

²⁹ I use “brothels” as the umbrella term for spaces in which men paid women for sex. They have gone by many other terms, including “houses of ill repute” or “bordellos.” Later in this section, I distinguish between “cribs” and “parlor houses.” “Cribs” refers to establishments of a particular architectural form and style while “parlor houses” is to distinguish a space associated with higher economic class.

houses, which were more elaborate in architectural style and decoration, including bay windows, intricate brick patterning, and decorative wood or copper moldings. The variance in building type and style was a reflection of the class stratification of both clients and inhabitants. Some sex workers became madams and ultimately owned their own parlor houses, but others rented space from a businessman or a madam.³⁰ Despite their varied appearances, these spaces represented how mining towns dealt with spaces that middle-class standards labeled as morally unclean.

Sex work was prevalent in mining towns, though increasingly restricted to particular locations, especially as the towns matured from the 1880s to 1910s. On January 18, 1907, in Globe, for instance, the *Daily Arizona Silver Belt* reported that, “It is a recognized fact, especially in a mining camp or community, that this evil [sex work] must be tolerated, and such segregation into one section of the city would enable better police regulation.”³¹ The newspaper updated on January 31, 1907: “It is understood that several of the councilmen will institute an effort to have the tenderloin section of the city removed from its present location ‘across the creek’ to the southern end of town and it is expected that the plan will meet with opposition”³² (Figure 3.8). Globe’s councilmen tabled the plan on April 4 when other businessmen and citizens spoke up in opposition to the move.³³ The redlight district was still “across the creek” on the 1911 Sanborn maps.³⁴ Similar efforts in other towns were

³⁰ Ellen Baumler, “Devil’s Perch: Prostitution from Suite to Cellar in Butte, Montana,” *Montana: The Magazine of Western History* 48, no. 3 (Autumn 1998): 8; Alexy Simmons, *Redlight Ladies: Settlement Patterns and Material Culture on the Mining Frontier*, *Anthropology Northwest Series* 4 (Corvallis: Oregon State University, 1989): 28–30; Jan MacKell, *Brothels, Bordellos, and Bad Girls: Prostitution in Colorado, 1860-1930* (Albuquerque: University of New Mexico Press, 2007), 93–94.

³¹ “Women in Saloons and Other Evils,” *Daily Arizona Silver Belt*, January 18, 1907.

³² “City Council Meets Tonight,” January 31, 1907.

³³ “Saloons Are to Be Restricted,” April 5, 1907.

³⁴ *Insurance Maps for Globe* (Globe, Arizona: Sanborn-Perris Map Company, 1911).

generally unsuccessful in removing the districts, but were more often successful in restricting them to increasingly smaller areas.³⁵ As Globe’s example reveals, some residents believed that, while undesirable, sex work was also unstoppable. If they could not eliminate it completely, town leaders hoped that restricting its activities to one area would limit its effects on the community.



Figure 3.8. This 1906 Sanborn Fire Insurance map for Globe, Arizona, depicts the redlight district (circled in blue), labeled here as “Female Boarding” to the right (east) of Pinal Creek. Source: Sanborn Insurance Maps, Globe, Arizona, 1906.

Within these districts, sex workers occupied a range of structures, from single-room cribs to large parlor houses. Some of the establishments reflected middle-class values of cleanliness through their neat construction and careful decoration. Ruth Clifford’s Irish World (previously The Windsor), for example, contained several elements that aligned it with

³⁵ Baumlér, “Devil’s Perch: Prostitution from Suite to Cellar in Butte, Montana,” 15.

the American upper class. In 1907, Clifford threw a party to celebrate twelve “beautiful and accomplished young ladies” that were coming to her house. In attendance was newspaperman Warren G. Davenport, who, along with some risqué descriptions of the festivities, praised the structure as an “elegant mansion” in which Clifford “received her guests in the ivory and gold room, which has a rich carpet of bottle green moquet with yellow flowers and Japanese silk portieres in parti-colors producing an effect which on clear nights can be heard as far as Anaconda.”³⁶ The structure was a three-story red brick edifice with arched windows and doors, bay windows, stone trim, and bartizans on each corner of the front façade.³⁷ Satin-covered sofas, gilt-framed mirrors, and red draperies decked the interior.³⁸ Upon arriving in Butte, one sex worker noted (perhaps of the Windsor), “We did not tarry long in either of the two first-class houses. They were interesting only because I had not expected to see girls so well dressed nor houses so elaborately furnished in this out-of-the-way place.”³⁹ The Irish World and Butte’s other high-class houses of ill repute had the makings of the ideal high-class houses for white Americans, but the stigma of sex work marked them as undesirable.

Despite the presence of such high-class establishments, reformers argued that such districts were breeding grounds for physical and moral uncleanness. Markers of social acceptability for white, middle-class women in the nineteenth-century included the pillars of “true womanhood”: piety, purity, submissiveness, and domesticity. Progressive Era

³⁶ Warren G. Davenport, *Butte and Montana beneath the X-Ray, Being a Collection of Editorials from the Files of the Butte X-Ray during the Years 1907-08* (Butte: X-Ray Publishing, 1908), 39–40, <http://archive.org/details/buttemontanabene00dave>.

³⁷ Bartizans are overhanging, wall-mounted turrets projecting from the walls, seen often in late-medieval and early-modern fortifications.

³⁸ Baumler, “Devil’s Perch: Prostitution from Suite to Cellar in Butte, Montana,” 10–11.

³⁹ Madeleine Blair, *Madeleine: An Autobiography* (New York: Harper & Brothers, 1918), Chapter 7, <http://digital.library.upenn.edu/women/madeleine/madeleine/madeleine.html>.

reformers, generally from the white middle class, argued that sex work barred women from fulfilling these white middle-class values, because it necessarily required sexual impurity and because it prevented women from performing domestic duties.⁴⁰ Reformers also argued that clean, ordered living conditions could provide residents with ways to rise above their circumstances.⁴¹

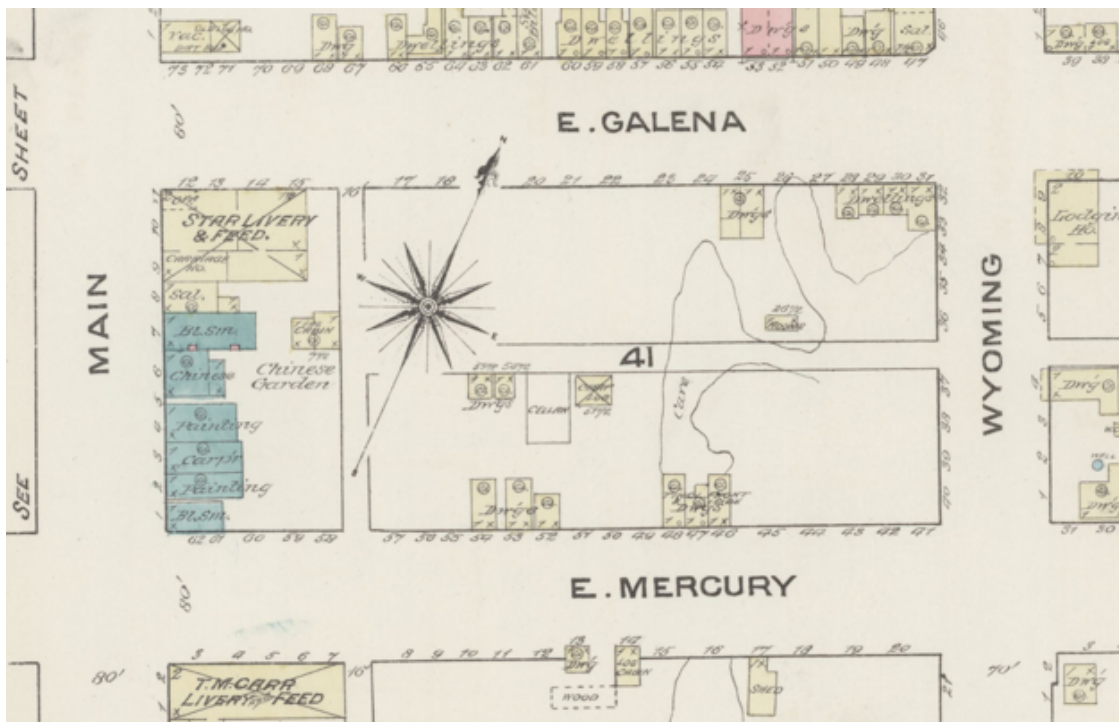


Figure 3.9. Close up of Sanborn Fire Insurance Map for the area between East Galena and East Mercury streets that became the redlight district in Butte, Montana, 1884. Note the relative emptiness of the block as well as the proximity of the Chinese building and Chinese Garden along Main Street.

⁴⁰ U.S. social reformers of the late-nineteenth and early-twentieth centuries made this argument when discussing the general increase in women working outside the home. Reformers believed that domestic duties required a woman's full attention, and that working for wages prevented the woman from having the amount of time required to raise her children while also keep the household running efficiently. See more in Robert Fitts, "The Rhetoric of Reform: The Five Points Missions and the Cult of Domesticity," *Historical Archaeology* 35 (2001): 115–32.

⁴¹ Martin Melosi, *The Sanitary City: Urban Infrastructure in America from Colonial Times to the Present* (Baltimore: Johns Hopkins University Press, 1999), 75.

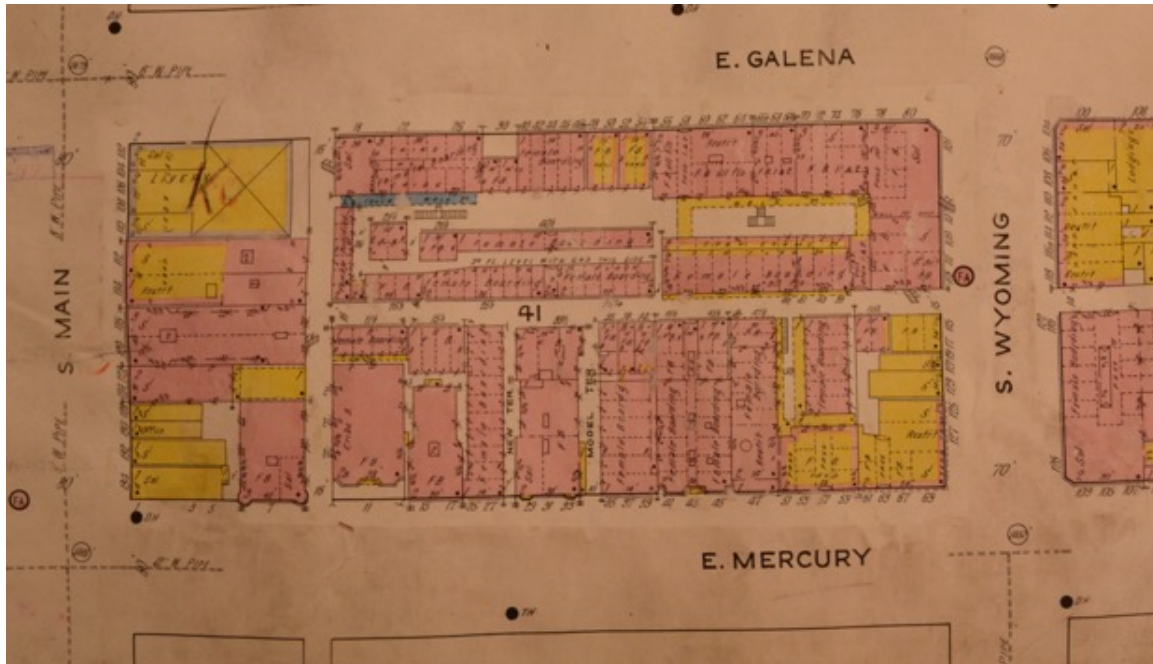


Figure 3.10. Close up of Sanborn Fire Insurance Map for the redlight district between East Galena and East Mercury streets in Butte, Montana, 1916. Note the density of brick “female boarding houses” and “cribs” in Block 41 (including in the alley) and on Wyoming Street.

Moreover, as restrictions tightened, the increasing density created some of the very conditions that city reformers warned against. Reformers had been identifying densely populated areas as some of the most unclean and rife with disease.⁴² When Butte’s reformers pushed the redlight activities into a single district by 1914, they actually subverted their own efforts by increasing population density.⁴³ With such cramped quarters, occupants had little access to clean air (at least, as clean as it could be in a mining town) and illness or disease could spread more easily in such tight spaces (Figure 3.9 and 3.10). Even so, one visitor described one of the cribs, noting attention to cleanliness: a wash basin and a “mixed odor of disinfectant, hair oil and cheap perfume” that permeated everything.⁴⁴ The wash basin

⁴² See detailed discussion in “The Bacteriological Revolution” in Melosi, *The Sanitary City*; Robert Fitts, “The Rhetoric of Reform: The Five Points Missions and the Cult of Domesticity,” *Historical Archaeology* 35, (2001): 115–32.

⁴³ Mary Murphy, “Women on the Line: Prostitution in Butte, Montana 1878-1917” (Master’s Thesis, Chapel Hill, University of North Carolina, 1983), 45.

suggests that at least some sex workers paid attention to personal hygiene and appointed their rooms with the personal paraphernalia one might expect in a middle-class bedroom. The smell of disinfectant suggested even stronger attention to cleanliness. This was not unique to Butte. One sociologist in the early twentieth century reported the scent of disinfectant in some of the lower-class cribs of New York City. Although reports of redlight districts in places like New York City documented appalling dirty conditions, the permeating scent of disinfectant suggests that the women cleaned their spaces regularly and with strong chemicals.⁴⁵

Besides concentrating sex workers into one area, redlight districts encouraged occupants and clients to cross social boundaries. Butte's population and its sex workers were predominantly white, but some observers focused attention on the specter of racial mixing. This practice represented disorder in a social sense, at least from the perspective of those who believed racial mixing was problematic. Moreover, racial segregation sometimes occurred within redlight districts, and Chinese sex workers were almost consistently segregated.⁴⁶ For example, Butte's redlight district in 1900 had sex workers from France, Belgium, Germany, Cuba, Norway, England, Ireland, Canada, Japan, Holland, and Mexico. Interestingly, there were no Chinese sex workers in either the redlight district or Chinatown. According to the 1900 census categories, most of the sex workers in the redlight district were white, but other races included nine African Americans and four Japanese immigrants. The male clients were also from an assortment of racial and ethnic backgrounds. One

⁴⁴ Workers of the Writers' Program of the Works Progress Administration in the State of Montana, *Copper Camp: The Lusty Story of Butte, Montana* (Helena, Montana: Riverbend Publishing, 2001), 187-188.

⁴⁵ George J. Kneeland, *Commercialized Prostitution in New York City* (New York: Century Company, 1917), 5.

⁴⁶ Simmons, *Redlight Ladies*, 11. Simmons also describes how "high status Chinese prostitutes did not take non-Chinese customers, because of the Chinese male view which held that it was degrading for Chinese women to have sexual intercourse with a white. Chinese men did visit Euro-American prostitutes on occasion."

visiting former sex worker commented about the clientele in early 1900s Butte: “but this horrible town, and these awful streets of vice, with the women displayed like so much merchandise in the windows, while the endless procession of leering men of all races—whites, negroes, half-breed Indians, and Chinese—pass them in review, fills me with terror.”⁴⁷ Brothels were clearly a space of racial and ethnic mixing and thereby grated against the sensibilities of those who believed in “racial purity.”⁴⁸

Redlight districts frequently existed next to or mixed with Chinatowns. Although the labels of “redlight district” and “Chinatown” suggested the areas were full of sex workers and Chinese immigrants, many other immigrant groups and nonwhites often made their homes in these neighborhoods. These areas were generally the cheapest land and housing near the Central Business District. Like the Chinese laundries and houses, redlight districts fell subject to social scrutiny and regulation that emphasized an ideal of cleanliness and sanitation. Reformers often lumped redlight districts and Chinatowns together, thus identifying a combination of race, class, ethnicity, and gender that they believed was volatile to the health of the community.

Health and sanitation were not only a concern for home life and mines, but also more public areas. In Butte, the Health Office printed a monthly report documenting the number of cases of different diseases, emergency-room visits, inspections of cesspools and vaults, removal of dead animals, loads of refuse (categorized as slaughter house, rubbish, manure, paper, and night soil) taken to the city crematory, and deaths and their causes. Diseases of major concern were measles, scarlet fever, smallpox, and diphtheria. The 1911-

⁴⁷ Blair, *Madeleine: An Autobiography*, 218.

⁴⁸ For more on Progressive Era reform and notions of racial mixing, see Peggy Pascoe, *What Comes Naturally: Miscegenation Law and the Making of Race in America* (New York: Oxford University Press, 2010); Martha A. Sandweiss, *Passing Strange: A Gilded Age Tale of Love and Deception Across the Color Line* (New York: Penguin Press, 2009).

1913 biannual report specifically called out the redlight district and sex workers. The mayor had proposed that sex workers be inspected, but the city council's Health Committee rejected his platform. So instead, the Health Department insisted "that the prostitutes should be surrounded by the best sanitary conditions that could be made to prevail. Accordingly hot and cold water was ordered in every crib in the [r]edlight district, and a special toilet for every six prostitutes." This apparently decreased the number of patients seeking relief from venereal diseases.⁴⁹ Concerns about health extended to spaces that were even more widely accessible to the general public. Indeed, the Health Office recommended that "street cars, hacks, taxi cabs, public conveyances of all kinds, moving picture show houses and theatres should be fumigated once a day when the records at the City Health Office show that there are twenty (20) or more infectious diseases under quarantine in the City limits."⁵⁰ When progressives could not target the bodies of a particular group of people, they could successfully wield health concerns to sanitize the built environments of those people

Rather than allow the redlight districts to operate under sanitary conditions, including regular disinfecting and visits to doctors, town leaders wanted to remove the districts entirely. Thus, the effort to clean up redlight districts was not merely an expression of a desire for physical health, but also for moral health. The fact that even the highest class establishments, which included architectural and interior décor styles that appealed to middle class sensibilities, fell under scrutiny demonstrates that the cleanup was more about a particular definition of proper use of space and social relationships than concern for preventing the spread of disease.

⁴⁹ C. H. Horst, "Report of the City Health Office from May 1911 to May 1913" (May 1913), 4, Butte-Silver Bow Public Archives, Butte, Montana.

⁵⁰ Horst, "Report of the City Health Office from May 1911 to May 1913," 6.

Conclusion

Houses, neighborhoods, laundries, and brothels reveal how various facets of individual and collective identity manifest themselves in the physical spaces of mining towns. This shaped how individuals interacted with one another in the past as well as how preservationists have preserved and documented those interactions. The matter of where a structure existed within the larger context of the town has been a major factor in why some structures could survive a battle against ephemerality. Part of the issue was environmental: land in these districts was cheaper because the area was too dry, too wet, barren, far from water, polluted, geographically unstable, or otherwise undesirable. Part of the issue was natural disaster: floods, earthquakes, avalanches, drought, and fire have unexpectedly destroyed significant historical resources. But part of the issue was cultural as well. In combination with social and economic power structures, cultural ideas about race, class, gender roles, and ethnicity shaped the ability of people to construct and occupy certain spaces. It also influenced people's willingness to preserve those spaces. In cases where environmental disaster did not strike, if a space did not speak to the dominant cultural ideology, as with redlight districts, some residents actively sought to destroy it. Other times, spaces that did not fit the ideals were simply left to decay, whether they were mine waste sites or ethnic businesses and neighborhoods.

Some white middle class resources have disappeared or decayed as well. But it is also apparent that the towns celebrated and preserved fewer of the resources associated with non-whites and members of the working classes unless those sources helped tell the story the town wanted to sell. Moreover, the destruction of historic resources is also a part of the town's story. This leads to a discussion of a perennial problem of historic preservation: how can preservationists account for change over time? Such a discussion, the subject of the

coming chapters, confronts the reality that, for mining towns from 1910 to about 1960, there was serious economic stagnation and only mild interest in preservation and conservation.

CHAPTER IV
FROM THE STREETS

1910s-1930s

Winter, 1937. A modern car ambles north along an icy street, its driver gripping the wheel, trying to prevent the car from sliding into the other vehicles parked diagonally along both sides of the road. The thoroughfare stretches just ten blocks, a straight and fast shot from one end of town to the other. But cars pass slowly on this road—today because of the snow, but sometimes simply because the drivers and passengers are gazing at the ornate late-nineteenth century buildings. A lone woman, her coat’s hem brushing the tops of her sturdy, heeled shoes, scuttles past the car, picking her way across the smooth pavement treacherous with ice. Collar pulled up to the brim of her hat, she buries her hands deep in her pockets as she reaches a patch of sunlight on her way to the concrete sidewalk. Perhaps she has come from the movie theater a couple of blocks south, its new neon marquee jutting out from the front of a Victorian brick building recently encased with an aluminum façade. The shadows tell her it is getting late, but head bowed and lost in thought, she walks alone. Was she smiling at the weathered old buildings, reminders of the town’s lively past? Or did she frown, wondering if the town was ever going to pull itself into the twentieth century?¹

The cars, the movie theater, the woman walking alone—all of these were signs that Leadville’s Harrison Avenue was changing. Subtract the cars and movie theater, add more people, and the street would look much as it did at the turn of the century. Almost all of the

¹ A photograph inspired this explication. See: “Leadville, Colo, main street (Harrison) south” (1937), X-460, Wlm. L. Ford Collection, Western History and Genealogy Department, Denver Public Library, Colorado.

buildings that lined the street in 1937 had been there in 1900, even if they had new facades and residents used them in new ways. The staying power of boom-era mining towns like Butte, Leadville, and Globe met their greatest challenge to date during the 1920s and 1930s. Residents scrambled to keep their mining towns afloat as the U.S. mining industry dipped after World War I. In the towns, environmental changes were afoot, including the extension of cleanup projects begun in the Progressive Era. Mining towns, like many cities across the United States between 1910 and 1940, pursued modernization projects that streamlined the appearance and flow of day-to-day civic life, including street paving, updated sewers, and sleek architectural styles. But unlike other cities, an identity crisis pervaded western mining towns: were they going to welcome these new changes and modernize or hold onto the buildings and infrastructure (or lack thereof) that had given them their “Old West” grit and offered them what seemed to be the only other option for their economy?

For some residents back East between 1910 and 1940, the West was just an image, an idea born out of movies and dime novels. In 1931, journalist Carey McWilliams reported that, “the West is still ‘strange’ and ‘new.’ Easterners are amazed, so they say, to find street cars and golf courses in the Rockies.”² His comment suggested that easterners in the 1930s still imagined the West as stuck in an earlier time period and were surprised to see modern elements when they visited. McWilliams railed against these visitors and “the persistent and outrageous theory that the West must be maintained as a great outdoor playground for Eastern tourists,” because such a theory went “against [the West’s] wishes and the crying need of the land.”³ McWilliams believed that westerners had to follow “certain corollaries” in order to make a living, such as putting the land to agricultural and industrial use rather

² Carey McWilliams, “Myths of the West,” *North American Review* 232, no. 5 (November 1931): 425.

³ McWilliams, “Myths of the West,” 430.

than maintaining it as a “playground for Eastern tourists” or a place to “remain bucolic.” Some westerners agreed, but others did not. In western mining towns specifically, some residents clung to their mining livelihood as the global demand for metals between 1910 and 1940 dipped and rose and dipped again. Other westerners promoted tourism, hoping to both tout their town’s history as an attraction and offer visitors modern conveniences. For residents of Butte, Globe, and Leadville, therefore, I argue that this period aggravated an underlying division of residents who wanted to preserve their town as historical and their surroundings as a type of “playground” versus those who wanted to continue mining. Moreover, key to this division was the grip of Progressive Era notions about cleanliness that, as the failure of earlier cleanup projects suggested, could not be reconciled with the types of characteristics inherent to mining towns.

This chapter offers an in-depth examination of U.S. West mining towns in the 1910s through the 1930s, a period often neglected when discussing the histories of mining towns. Many mining town histories document the late-nineteenth century up to the 1910s, generally focusing on labor history.⁴ But for residents in towns like Butte, Globe, and Leadville, the 1910s through 1930s were formative years for survival as the mining industry fluctuated. Moreover, the post-1910s histories of these communities reveals the extent to which their social hierarchies have alternately challenged and reinforced what it means to be a “western” mining town. One scholar who has focused on this period, Mary Murphy, argued that consumer culture contributed to the equalizing of relationships between men and women in Butte. This dissertation chapter reveals that it was more than consumer culture that shaped

⁴ Smith, *Rocky Mountain Mining Camps*; Rodman Wilson Paul, *Mining Frontiers of the Far West, 1848-1880* (Albuquerque: University of New Mexico Press, 1980); Blair, *Leadville*; Klucas, *Leadville*; Ed B. Larsh and Robert Nichols, *Leadville U.S.A.* (Boulder: Johnson Books, 1993); Michael P. Malone, *The Battle for Butte: Mining and Politics on the Northern Frontier, 1864—1906* (Seattle: University of Washington Press, 2006).

relationships among social groups, but also a mining town's struggle to reconcile the dirty mining industry with the desire for cleanliness.⁵ As such, this chapter builds on scholarship about the ethnic, racial, gender, and class histories of mining communities.⁶ This chapter also emphasizes the role of the built environment in shaping historical narratives. While many scholars have documented the built environments of these communities for the period before WWI, this chapter uses the post-WWI changes to demonstrate how civic projects in pursuit of providing for the public good persisted into the 1920s and 1930s and successfully streamlined and sanitized central portions of the landscape while ignoring outlying areas, including mining sites.⁷

A key aspect in understanding the post-WWI shift in mining community tourism is understanding the mythos of "the West." Much of this discussion builds on earlier chapters in this dissertation, particularly Chapter Two's discussion about the various narratives about Butte, Leadville, and Globe. By the 1910s, American popular culture still clung to the legendary qualities of those earlier narratives, but by the 1930s, some scholars questioned the staying power of such stories. In his 1931 scholarly journal article "Myths of the West," Carey McWilliams chronicled the development of the mythic West, including Frederick Jackson Turner's famed 1893 claim that the frontier was closed. Like Turner, McWilliams believed that Americans had linked the idea of the West with the idea of the frontier.⁸

⁵ Mary Murphy, *Mining Cultures: Men, Women, and Leisure in Butte, 1914-41* (Urbana: University of Illinois Press, 1997).

⁶ Benton-Cohen, *Borderline Americans*; Anne M. Butler, *Daughters of Joy, Sisters of Misery: Prostitutes in the American West, 1865-90* (Urbana: University of Illinois Press, 1987); Sarah Deutsch, *No Separate Refuge: Culture, Class, and Gender on an Anglo-Hispanic Frontier in the American Southwest, 1880-1940* (New York: Oxford University Press, 1988); Emmons, *The Butte Irish*; MacKell, *Brothels, Bordellos, and Bad Girls*; Perales, *Smeltertown*; Paula Petrik, *No Step Backward* (Helena: Montana Historical Society, 1987).

⁷ Andrews, *Killing for Coal*; Thomas G. Andrews, "'Made by Toile'? Tourism, Labor, and the Construction of the Colorado Landscape, 1858-1917," *The Journal of American History* 92 (2005): 837-63; Curtis, *Gambling on Ore*; LeCain, *Mass Destruction*; Morse, *The Nature of Gold*.

Western communities, McWilliams says, built out their frontier legends to “epic proportions” until “it began to be bruited about that the Wild West legend had a tendency to frighten Eastern capitalists. The rumors of wide-open towns, hilarious mining camps, bloody gun fights, gangs of desperadoes, and politically corrupt States ruled by bosses, had spread to the East. It became, therefore, a problem of making the Wild West legend genteel while preserving its picturesque qualities.”⁹ But taming the “Wild West legend” and preserving the more picturesque qualities divided mining town residents. Many loved the towns because of their grittiness, while others worried, as McWilliams suggested, that the grittiness could be off-putting to potential visitors and investors.

As a result of the problem McWilliams had identified, residents in Butte, Globe, and Leadville hardly knew what to make of their own towns. Were they modern? Were they historical? What should they tell visitors? And what about the workers, the ones who continued to mine, care for households, and run local businesses? How did their built environments affect the town’s ability to maintain an Old West image? A modernized image? This chapter reveals that residents’ answers to such questions divided along the lines of those who worked and those who made the fruits of that work into tourist attractions.

To identify the origins of the internal community divisions, this chapter chronicles how the three towns updated streets and sewers, introduced new architectural styles, and grappled with the physical and social elements that challenged the competing visions of the town as a remnant of the “Old West” or a harbinger of the “New West.” This chapter follows a rough chronology, but the overarching organization rests on themes, emphasizing

⁸ Turner, “The Significance of the Frontier in American History.” Although Carey McWilliams does not specifically discuss Turner, it is likely that Turner’s thesis was influential to McWilliams’ thinking about how Americans thought about the West and the frontier.

⁹ McWilliams, “Myths of the West,” 425, 426.

one town per theme. First, the chapter examines how middle-class Butte residents infused their living spaces with features like Craftsman architecture and vegetable and flower gardens while targeting working-class areas like Meaderville and the Cabbage Patch for moral and physical cleanup. Reformers prioritized health and safety, but targeted particular portions of the population and destroyed property that conveyed the “Old West” image. Newspaper articles, Sanborn Fire Insurance maps, and Health Office records demonstrated the extent of such efforts. Next, the chapter analyzes how, amid their struggle to maintain jobs during the post-WWI slump, photographs, popular literature, and maps show that residents still breathed life into cities like Leadville by reducing the dirt and dust on the main avenues through town. Despite these efforts, decrepit and dangerous structures populated Farm Security Administration photographs and Sanborn Fire Insurance maps in the 1930s. Simultaneously, polarizing impressions about each town’s modern or Old West environs peppered mass-market literature. The introduction of new spaces or reinvigoration of old ones with new purposes, like movie theaters in Globe, encapsulated this moment when mining towns tried to modernize, but found that their environments and their narratives divided residents on deciding how best to proceed.

By the 1930s, the towns might not have looked like eastern cities, but residents were often proud of what they and their predecessors had achieved. Infrastructure changes and promotional literature created cleaner images of the towns, because residents literally cleaned up the streets and buildings while simultaneously cleaning up historical accounts by simplifying them into stories that fit into the more widely understood myths about the West. Rather than touting their complete histories, these towns promoted their modern conveniences and the pieces of their towns that conformed to a more “genteel” “Old West” image. Simultaneously, they ignored resources in the outlying areas, resulting in a

hodgepodge landscape that worsened the overall sense of cohesiveness and cleanliness the reformers so desired. Some mining town residents believed tourism was a necessary means for sustaining their local economies. McWilliams captured the dilemma in noting that, “Despite the enthusiasm of Westerners for their magnificent country, it remains a rather dismal and uncivilized region, threatened with the future of becoming a large National Park devoted to the sickly needs of the tourist and the summer resident.”¹⁰ He found neither the idea of promoting the natural environment nor leaving the West alone appealing; he wanted people to work the land. But some mining town residents believed that they might be able to have the best of both worlds—as long as they tidied things up a bit.

Healthy Lifestyles: Butte, Montana

During the 1910s through 1930s, many Butte residents embraced new architectural styles and gardening as ways to perform and promote middle-class lifestyles. But in areas like Meaderville and the Cabbage Patch, gambling, drugs, and raucous parties permeated residents’ lives. Some residents relished such lifestyles and challenged reformers’ efforts to clean up their neighborhoods. Others had little choice in the matter, being unable to afford to move to another location or even to adorn their house or yard with personal touches.

By the 1910s, Butte residents who hoped their town portrayed a middle-class lifestyle had a great deal of fighting to do. Many residents and visitors spread unflattering descriptions of Butte, emphasizing the destruction of pristine nature and creation of a dirty, dark landscape. Butte resident Helen Fitzgerald Sanders wrote in 1907 that Butte had been called the “ugliest town on earth.” She agreed, blaming “the hand of man” for destroying

¹⁰ McWilliams, “Myths of the West,” 429.

what had been a beautiful area with high mountains, pine groves, clear streams, and grasses and flowers. “Clouds of smoke killed the last bud and sprig, and the hills stood naked, lean and stripped. The approach to the city from the East,” she declared, “bore a startling likeness to Dante’s description of the outlying regions of Purgatory.”¹¹ In 1914, journalist Christopher Patrick Connolly echoed Sanders’s comparison to hell: “As one approaches the city by train or other conveyance at night, Butte seems a veritable inferno.” He, too, noted the environmental destruction, the “barren, treeless city” where “all the roses fade, and the green trees lose their leaves, and there is nothing but sage-brush.”¹² Novelist Gertrude Atherton exclaimed that people writing about the West generally “pick out only the spectacular and ‘picturesque’ things... but, as a matter of fact, the West nowadays isn’t so ‘picturesque.’ Butte, for instance, is hideous to look at.”¹³ It was an image some Butte residents in the 1910s, like Sanders, aimed to change.

One method for cleaning up the town’s streets and image was through improving the physical appearance of the towns; in particular, using architecture to create nurturing environments. The British “Arts and Crafts” style had gained popularity in the United States thanks to architects like Gustav Stickley, whose Craftsman designs—with their low-pitched gabled roofs, porches with tapered square columns, and exposed rafter beams—aimed to rid architecture and furnishings of their pretense and artifice.¹⁴ The interiors stressed low,

¹¹ Helen Fitzgerald Sanders, “Redeeming the Ugliest Town on Earth,” *Craftsman* 12 (June 1907): 315.

¹² C.P. Connolly, “The Labor Fuss in Butte,” *Everybody’s Magazine* 31 (December 1914): 206–7.

¹³ “Gertrude Atherton Turns Her Back on Mad Militants,” *New York Times*, June 14, 1914.

¹⁴ Leland M. Roth, *American Architecture: A History* (Boulder: Westview Press, 2001), 299; McAlester and McAlester, *A Field Guide to American Houses*, 453–63.

horizontal lines, a direct contrast to the verticality of Victorian homes.¹⁵ This tied to a larger shift toward simplification and emphasis on naturalistic motifs.¹⁶

Accordingly, Progressive theory in architecture called for simplification, honesty, and naturalness. In Victorian era plans and styles, there had been rooms for every purpose and decoration encrusted all surfaces. The Craftsman style reduced the number of rooms and ornamentation. Craftsman homes also displayed rather than painted over or altered the colors and textures of building material, such as wood and stone. Popular magazines spread these ideas, stressing that the homes should fit into their surroundings with clean lines and earthy colors. They also warned housewives to clear their homes of dust, which could foster the spread of germs. But what of the places where the surroundings were not beautiful and relaxing? What about the places where dust and smoke had an overwhelming presence in everyday life?

Mining towns were such places, but that did not stop their residents from adopting the Craftsman movement. Helen Fitzgerald Sanders criticized the architecture that formed Butte's initial construction phases, saying that "If architecture, or the lack of architecture, ever spoke, it was here, and its language was unmistakable."¹⁷ Butte, like other mining towns, began with a series of hastily constructed log cabins and then transitioned to larger frame and brick constructions. In some instances, the few who struck it rich built large homes in the high Victorian styles, or, as Sanders put it: "gaudily expensive mansions of mushroom millionaires."¹⁸ But once the smelters moved out of Butte, the air cleared, and people moved

¹⁵ Jessica H. Foy and Thomas J. Schlereth, eds., *American Home Life, 1880-1930: A Social History of Spaces and Services* (Knoxville: University of Tennessee Press, 1994), 41.

¹⁶ Clark, Jr., *The American Family Home, 1800-1960*, 147. There are exceptions to the rejection of English styles, such as Colonial Revival and English Tudor. Clark argues that these styles still had basic simplicity of form.

¹⁷ Sanders, "Redeeming the Ugliest Town on Earth," 316.

up onto the hillsides to new locations. Sanders noted that, “Conspicuous among these places are the Craftsman houses, which are well suited to the austere landscape. The warm shades of russet brown and soft green on the shingles of the houses shown in the accompanying pictures, are a restful and harmonious contrast to the wide vistas of dull earth color.”¹⁹ Much of the popular literature about Craftsman housing advocated that house design should “be developed from the condition imposed, such as the mode of life of the occupants, the site, and the climate conditions.”²⁰ But Sanders appreciated the “russet brown” and “soft green” of the Craftsman homes *in contrast to* the harsh, dull surroundings. It was not the mining-decimated Butte she appreciated, but the idea of creating a home in spite of Butte.

To illustrate the Craftsman style, Sanders’ article included several images, such as the home of Samuel S. Barker, an English-born mining engineer (Figure 4.1). Barker was then forty-one years old and living with his wife, son, mother-in-law, brother-in-law, and servant, the very picture of a pleasant, middle-class American family.²¹ The house had a low-pitched gable roof, exposed roof rafters, sturdy square columns supporting a porch that extended the width of the structure, and clusters of windows. With most of the house dark-colored, the wide, light-colored stairs leading to the front door on the right balanced the light-colored second-story row of windows under the front-facing gable on the left. Little besides the exposed eaves ornaments the house.²² This was the simplicity for which Sanders had argued. Sitting on a street next to a dirt lot, no trees to be seen, and butting up against the

¹⁸ Sanders, “Redeeming the Ugliest Town on Earth,” 316.

¹⁹ Sanders, “Redeeming the Ugliest Town on Earth,” 322.

²⁰ Clark, Jr., *The American Family Home, 1800-1960*, 151.

²¹ U.S. Department of Commerce. Bureau of the Census, “Manuscript Census, Silver Bow County, Montana” (1910).

²² Sanders, “Redeeming the Ugliest Town on Earth,” 320.

neighboring house, the structure broke from the idea that the home should fit with its surroundings and have plenty of greenery. Sanders saw no problem with this. She believed less in the necessity of creating a house *based on* the surroundings and more on using a popular style to give occupants the opportunity and desire to live better lives. She had faith that the greenery of the yards would come soon. Moreover, she emphasized simplicity above all, describing how Butte had “awakened to the desire for something better, and, through that desire, is becoming simplified, which is its salvation.”²³ Simplification led to cleaner lines and fewer spaces, cracks, and crevices to catch dust, dirt, or disease. The sanitation aspect of the Progressive spirit was strong, even in the architecture of the homes.



Figure 4.1. Samuel Barker's home at 845 West Galena Street, Butte, Montana. From Helen Fitzgerald Sanders, “Redeeming the Ugliest Town on Earth,” *Craftsman* 12 (June 1907): 320.

²³ Sanders, “Redeeming the Ugliest Town on Earth,” 327.

The Progressive-era spirit also influenced how mining town residents conceptualized and used their yards. One Butte resident wrote in 1925 about her own efforts to beautify the city through gardening. Green spaces within the city were rare. Columbia Gardens, a large public garden and amusement park, had occupied the eastern edge of town since the 1880s, but by the 1920s, gardens within the city garnered greater attention. Elite Butte women formed a chapter of the Rocky Mountain Garden Club, which, among many civic activities, promoted flower gardening. Color slides of Butte show carefully manicured grass lawns surrounding modern Craftsman-style bungalows. Shade trees and pink, purple, blue, and white flowers line the yards, softening the rocky terrain of the surrounding mining landscapes. But not all gardens were created for beauty.

Some gardens were carefully trimmed while others allowed enough overgrowth to seem lush and inviting, just a touch wild, like the plants bordering a meadow or stream. In two images, however, gardens appeared to be more than just flowers. In one of these images, a child sits in the center of a walkway between rows and rows of green plants, mostly culinary (Figure 4.2). A gated white picket fence borders the sides and rear of the yard, with other houses and fenced yards visible in the furthest reaches of the background. This yard, however, stands out. It is filled with leafy greens, not lawn grass. The child holds a large green plant while standing behind a basket overflowing with fruits of the garden. Indeed, the garden brims with greenery that offers its owner food and sustenance. It was living proof of the ability to grow thriving plants in a Butte yard, daring anyone to call Butte a naked, barren town.



Figure 4.2. Undated, unlabeled color glass slide from Rocky Mountain Garden Club Collection, Butte-Silver Bow Public Archives, Butte, Montana.

Even so, another image of a Butte garden shows that although greenery was attainable, it was atypical. In this second image, mine heaps dominate the background (Figure 4.3). The midday sun burns into the yellow landscape. A few rooftops and a plain house with a few small outbuildings peek from behind the shed at the back of the verdant garden. The slide is undated, but has one clue in its label: “Mrs. Evatz.” According to the U.S. Manuscript Census, Mrs. Anna Evatz lived in a neighborhood that, from 1910 until 1930, consisted of Northern European immigrants and their American-born children. Anna, her bar-keeping husband Martin, four daughters, and one son comprised the Evatz family. Anna and Martin had emigrated from Austria to Montana, where their children were born.

Their neighbors hailed from not only Austria, but also Ireland, Italy, England, Canada, and Sweden. Those of their neighbors who had jobs operated dry goods stores, mined, taught, and nursed, among other occupations. Some owned their homes, some rented, but the Evatz family owned their building by 1930.²⁴ Although they were working-class, their homeownership meant that, unlike renters, they could do as they wished to make their dwelling and the land on which it sat work for their family's needs and wants.



Figure 4.3. Color glass slide of garden belonging to “Mrs. Evatz,” undated, from Rocky Mountain Garden Club Collection, Butte-Silver Bow Public Archives, Butte, Montana.

In 1927 their home was attached to the rear of a saloon, which was on the eastern edge of town and amid other wood frame dwellings and a few mine dumps, and catty-corner

²⁴ U.S. Department of Commerce. Bureau of the Census, “Manuscript Census, Silver Bow County, Montana,” 1910; U.S. Department of Commerce. Bureau of the Census, “Manuscript Census, Silver Bow County, Montana” (1930).

to East Butte Copper Mining Company's Dutton Mine.²⁵ The Evatz's neighborhood was clearly full of working-class immigrants, and, due to its proximity to mines and mine dumps, prone to barrenness. To have a garden, then, was astounding. The image also suggests that it was important as a form of food more than beautification, because the plants are mainly leafy greens. Purple hollyhocks add a touch of color, but they also might have served several medicinal purposes, so perhaps these were practical as well as pretty. Whoever collected photographs of gardens for the Rocky Mountain Garden Club decided to include the image of Mrs. Evatz's food garden from the less fashionable, more working-class east side. So even though the Club relied on middle- and upper-class women for membership, they could not ignore the statement that Mrs. Evatz's garden made about Butte's green potential.

Outside of house and yard life, residents of Butte in the 1910s to 1930s sought cleanliness in their work environments as well. Up until the 1910s, miners' unions had waged long battles with mining companies, demanding better working conditions and pay. The unions achieved some successes, but in the 1910s, labor strife led to several destructive conflicts that harkened back to the Old West image of violence and wanton destruction, while sanitation and safety measures introduced to the workscape demonstrated the ability of workers to partake in an otherwise middle-class movement to clean up the towns. Labor union actions in the 1910s both cleaned up and destroyed elements of the built environment, thus revealing each town's battle with its Old West image and attempts to modernize.

For Butte, a defining moment in the labor movement took place on June 13, 1914, Miner's Union Day. Until this time, members of the Butte Miner's Union had split along conservative and progressive lines. The conservatives dominated union leadership, while

²⁵ *Butte, Montana*, 1927, Sanborn Fire Insurance Maps, Montana, 1927, Butte-Silver Bow Public Archives, Butte, Montana.

many among the rank and file questioned the conservative stance. The rank and file were demanding safer working conditions along with higher wages. The ideological split between conservatives and progressives caused some miners to refrain from marching in the 1914 parade. Instead, a mob attacked the head of the parade and ransacked the Miners' Union Hall (see Figure 4.4), stealing the safe and dynamiting it in a nearby lot. The hall was a mess, no longer a safe space for worker organization.



Figure 4.4. Miners' Union Hall in Butte, Montana on June 15, 1914, shortly after radical union members ransacked it. Source: *Anaconda Standard*.

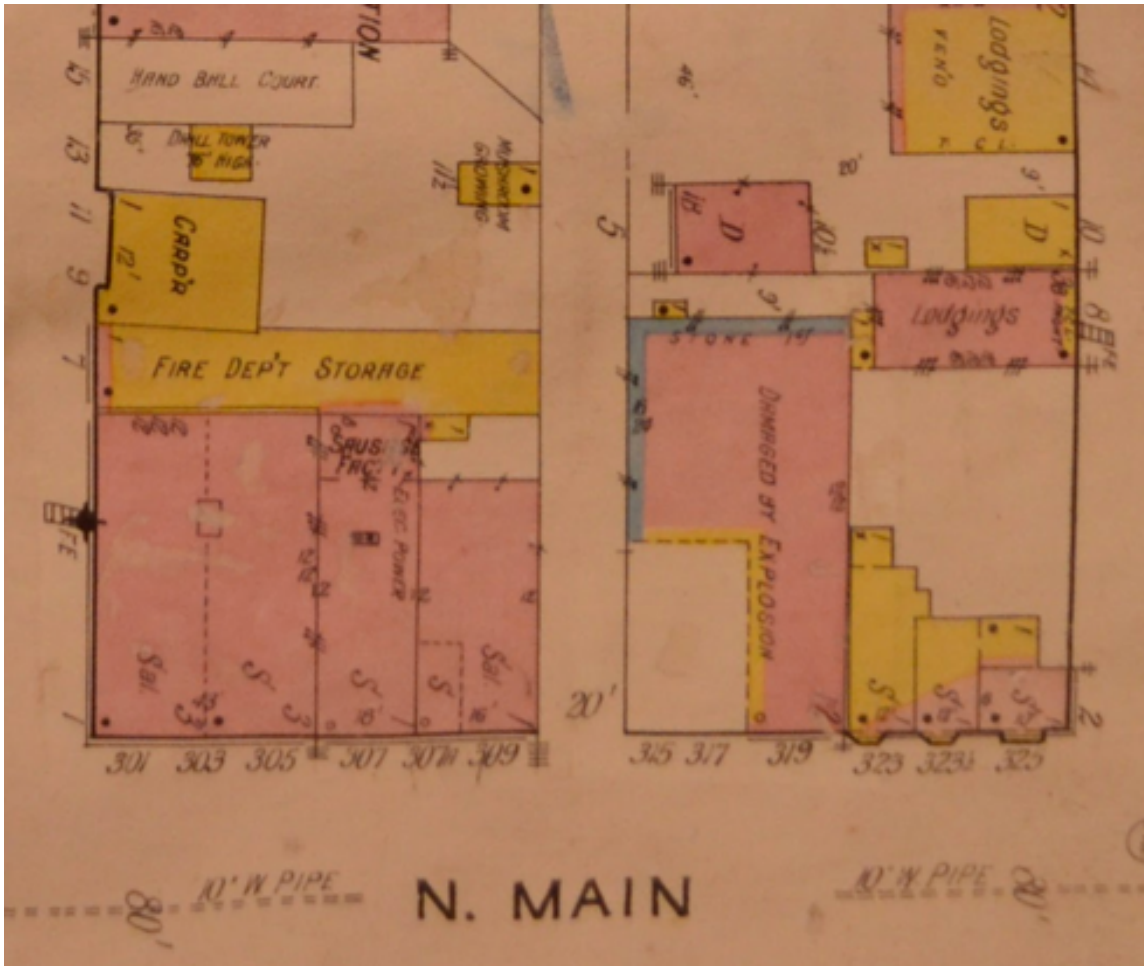


Figure 4.5. This 1916 Sanborn map shows an empty space where the Butte Miners' Union Hall once stood at 317 North Main Street. Source: Butte Sanborn Fire Insurance Map, Sanborn Map Company, 1916.

Then, on June 23, just ten days after the spoiled parade, Western Federation of Miners (WFM) President Charles Moyer was in Butte for a meeting of union loyalists—in this case, union loyalists were the more conservative faction of the radical Butte scene. During the meeting, WFM-supporting miner Peter Bruno entered the hall. Someone inside shot him, mistaking him for an intruder. He tumbled down the stairs, injured, as more shots fired into the crowded street. While some men in the crowd fired back, others ran to the

West Stewart Mine and returned with dynamite.²⁶ The dynamiters—aware or not that those inside had escaped—blasted the building that had housed their meetings since the 1880s.²⁷ These radical miners destroyed a highly visible property—one that was right in the middle of Uptown, the area that bustled with businessmen, shoppers, and tourists all day long—to make a political statement about the lack of safety at the mines. The location of the building then sat empty, a clean slate with a messy past (Figure 4.5).

By August, the property destruction within town had led to safer working conditions. The more radical miners had formed the Butte Mine Workers' Union, whose Executive Committee notified members that “it will be your duty to report to the union any places you consider wholly unfit to work in.” The Committee further admonished, “in the interests of health, sanitation, and common decency... [workers should] use the toilet tanks wherever they are provided,” and to “not throw foodstuffs around the levels and in the stopes and workings, as decaying food in the mine is a dangerous source of disease infection.”²⁸ In this sense, several of the “safety” conditions aimed to clean up the mining workspaces. Miners wanted to avoid illness and disease, including the dreaded “silicosis” that came from constantly inhaling dust laden with heavy metals. Their earlier property destruction motivated them to separate completely from the old union, form their own organization, and begin addressing their safety concerns.

²⁶ It is unclear where the West Stewart Mine was exactly. The Stewart (aka Steward) Mine was about a quarter mile northeast of the Union Hall. Mindat.org, run by the Hudson Institute of Minerology, lists two sites for the Stewart Mine, with one being further west, about half a mile from the Miners' Hall, and bounded by West Copper, West Quartz, North Crystal, and North Jackson Streets; this could potentially be the West Stewart Mine. <https://www.mindat.org/loc-35091.html>

²⁷ Calvert, *The Gibraltar*. Calvert provides a detailed account of the Miners' Union Hall events in Chapter Eight, “The Destruction of the Butte Miners' Union.”

²⁸ Calvert, *The Gibraltar*, 86.

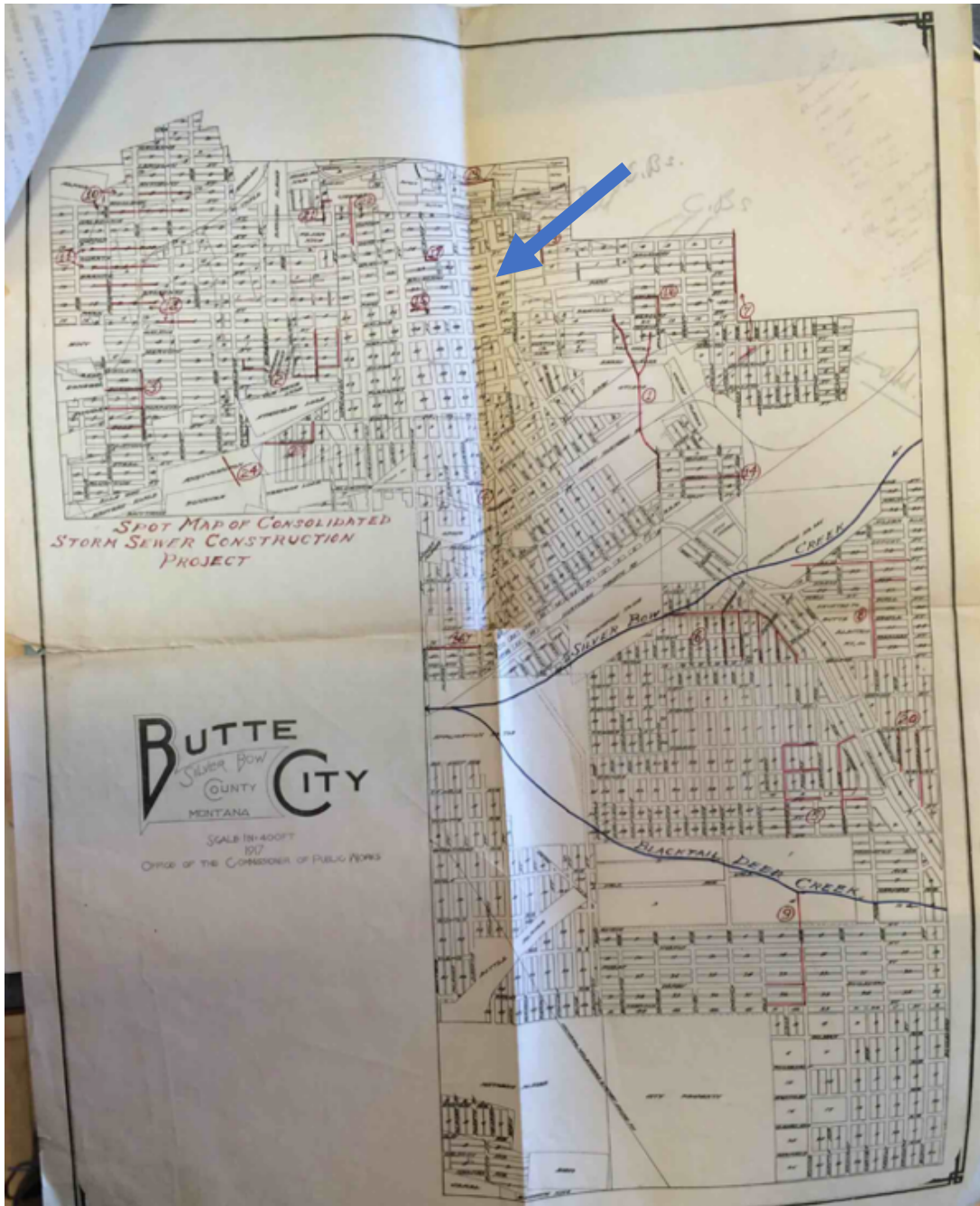


Figure 4.6. Map of Butte, Montana, showing storm sewer constructions in the 1930s. The storm sewers are marked in red. A blue arrow indicates city center. Note that many of the storm sewers are in the southern and western parts of the city, locations of middle- and upper-class suburbs. By contrast, there are just a few sewer projects on the east side. From Works Progress Administration Collection, Butte-Silver Bow Public Archives, Butte, Montana.

By the 1930s, attention turned to public works projects. For mining towns like Butte, this meant a sweep of projects across the city. Throughout the 1930s, the city applied for funding for sewer projects from the Works Progress Administration. Most of these sanitary and storm sewer extensions and constructions were outside the Central Business District. Several were in areas that were more suburban, occupied by Craftsman-style bungalows from the 1900s to 1910s on the west side, and a mix of constructions on the south side (Figure 4.6). Butte proposed projects to the Works Progress Administration that did not extend into the east side, an ethnically diverse and predominantly working-class part of town.²⁹ Modernization efforts, then, were concentrated in the middle- and upper-class parts of town.

Although visitors did not see the sewers, they did view a streetscape that was cleaner because of them. Indeed, the sewers were part of the larger public works program designed for cleaning up. Such efforts had been in place since at least the 1910s, and they continued into the 1930s with federal funding. For instance, a 1937 WPA application was for a “City wide project, the primary purpose of which is to improve the general sanitary condition of the City of Butte.” In this project, workers would clean up “vacant lots and blocks of accumulated trash, waste materials, weeds, etc., not now regularly cleaned and picked up under the existing City Garbage Collection contract.” The justification section of the proposal explained that various “vacant sections of the city are now in very bad need of sanitation because of the accumulation of trash, etc., There is [*sic*] no funds available for the improvement of the sanitary conditions of these areas.”³⁰ An undated handwritten note

²⁹ “Works Progress Administration Project Proposals” (1930s), GR.WPA.US, Butte-Silver Bow Public Archives, Butte, Montana.

³⁰ “Works Progress Administration Project Proposal, Number 22” (April 20, 1937), City Clean-Up Folder, Works Progress Administration Collection, Butte-Silver Bow Public Archives, Butte, Montana.

among the WPA documents also declared that, “This project is of a general nature in cleaning up the city of unsightly and unhealthy piles of debris, [old automobiles?], scrap iron, tumble weeds, [?] abandoned buildings, and covering of old garbage dumps. The location of the work will be in all parts of the city too many to enumerate.” This description indicates extensive cleanup—not just trash and debris, but also old cars and even buildings. Furthermore, its “justification is evident since it will remove many public eyesores, besides contributing to the health and safety of the community.” In order to reinforce the project’s potential contribution to health, the note described covering dumps adjacent to Silver Bow Creek with a layer of sand to seal them off from “objectionable odors, besides preventing the burning of inflammable materials within the dumps.”³¹ Whether or not all of the proposed WPA projects received funding, the interest in sewer extension and construction as well as general cleanup indicated that Butte residents were searching for projects that contributed to the overall modernization and cleanliness of the city. In fact, updated sewers and other infrastructure further linked modernization with cleanliness.

As had been the case since at least the 1910s, cleanliness was a moral as well as environmental ideal. Three different accounts about Butte portrayed the continued gambling culture in 1930s mining communities and their ambiguous status within the community. William G. Shepherd, whose 1930 provocatively titled article for *Colliers*, “Sin in the Desert,” proclaimed that “Butte lets the whole world know that it won’t make her mad at all to call her the ‘widest-open city in the land.’” The reader could sense the tilt of his head, the lift of his brow as he delivered the punchline: “but she is old-fashioned. She bars robbery and murder.”³² And while Shepherd documented several instances of the quick police work in

³¹ “Handwritten Note, State 1727, City No. 22” (no date), City Clean-Up Folder, Works Progress Administration Collection, Butte-Silver Bow Public Archives, Butte, Montana.

Butte, his sarcastic comments about robbery and murder also painted Butte as not quite the debauched place it might have once been. Indeed, he urged readers not to “picture the place as a noisy, shooting, drunken survival of a Western town. Butte takes its pleasures stolidly,” he proclaimed. “It’s used to them. It doesn’t go on the loose. It’s so modern and sophisticated that even the big gambling games are new-fangled.”³³ While Butte might have retained its Old West reputation as a den of iniquity into the 1930s, it did so in a “modern and sophisticated way.” Lastly, Shepherd commented that, “there is one really vicious spot near Butte,” a “foreigners’ suburb” that he called “Meterville.”³⁴ Meaderville then housed a mix of U.S.-born and immigrant residents, the largest portion from Italy.³⁵ Shepherd’s comment was accurate in part, but also linked “one really vicious spot” with “foreigners.” In his view, Butte’s gambling was acceptable, but Meaderville’s was not, though he offered no detailed explanation why that might have been the case. Instead, he closed the article with a comment that drove home his point about Butte’s gambling being somehow more acceptable: tourists were arriving in droves on the railroads from the West to Yellowstone and back East and “most of [these tourists] come, perhaps from dry and moral towns. But part of visiting Montana is to try a little gambling, a little drinking and a little dancing at Butte.”³⁶ With this comment, Shepherd rejected the idea that all cities of the West were still wild and instead argued that Montana, and Butte specifically, were places to experience some of the old wildness, but within reason. Apparently, “modern” and “wild” were not mutually exclusive.

³² William G. Shepherd, “Sin in the Desert,” *Collier's*, August 23, 1930, 10.

³³ Shepherd, “Sin in the Desert,” 11.

³⁴ Shepherd, “Sin in the Desert,” 42.

³⁵ U.S. Department of Commerce. Bureau of the Census, “Manuscript Census, Silver Bow County, Montana,” 1930.

³⁶ Shepherd, “Sin in the Desert,” 42.

In another *Collier's* account of Butte, published seven years later, reporter Walter Davenport also described Butte's gambling halls, but with greater attention to class, gender, and race. According to Davenport, Butte's mines were "a beehive of activity" so intense that he proclaimed, "here's Butte's prosperity, gaudy, Western, rough-and-ready, but all in a spirit of fun."³⁷ Butte's "Western" style was fun, not dangerous. It was a place that tourists could visit without too much trepidation. Davenport reported that the "gambling shops" in the center of Uptown, such as the M&M, Walker's, and the Board of Trade, served a higher-class clientele in a scene "reminiscent of the days Butte mourns and is struggling bravely to reproduce."³⁸

As Davenport sought out the experiences of the working class, he found that even among the working-class establishments, there were gender, racial, and ethnic distinctions. In fact, he reported that gambling had become particularly popular amongst working-class women of the town. Many of the women in the Liberty—a theater converted to a gambling house—were miners' wives, who played keno until about 5:00, when they needed to get home to cook dinner. This instance of women gambling in a converted theater reveals that, although gambling was a continuation of Butte's "wildness," it was now more open to women—but not too open. One woman, Mary Canary Goe, protested Davenport's characterization of Butte as a "wide open town." She informed Davenport, "if this town was an honest-to-God open town like you think and the Main Street places like Walker's wasn't for men only like they are, they'd have crap tables, blackjack, poker, chuck-a-luck, faro and that there *panguingui* game for the women too instead of just skill ball, dart throwing, and

³⁷ Walter Davenport, "The Richest Hill on Earth," *Collier's*, February 6, 1937, 9.

³⁸ Davenport, "The Richest Hill on Earth," 11.

such keno games with a trained wheel now and then.”³⁹ Also, the Liberty was a converted theater. As a theater, it was a social norm for even single women to attend alone. As a keno joint, it was a social norm for miners’ wives to gamble alone. As such, architecture informed behavior. Davenport interviewed one Butte faro-dealer who believed that gambling women were trouble, though. According to the dealer, if housewives and mothers lost all their money, their children would be in trouble, and the home would bust up. Clearly, he ignored how that very same thing happened when men lost all their money. But the dealer also maintained that “no lady has any business hanging around crap tables and the like. Butte likes its women to be ladies.”⁴⁰ Again, he seemed to be ignoring the glaring truth: Butte had many women who would not be considered “ladies,” such as the women working in the cribs on Mercury Street. Women were allowed to gamble, but they were still limited to certain gambling spaces due to class and gender. In other words, Davenport would likely have said that a woman who gambled in a place like the Liberty was “no lady” at all.

In Meaderville, though, women gambled alongside their men. Shepherd’s 1930 comments about Meaderville suggested that the settlement north of town was *worse*, a particularly “vicious” spot in Butte. But Davenport described Meaderville as the place for “white-collar workers,” with “such ‘fuss-and-feather establishments’ like the Spanish Village, The Rocky Mountain, the Arro and the rest of them. Meaderville’s night clubs lack the vigor, the hairy chests and the call of the wild that you’ll find in the city.”⁴¹ The criticisms he raised against Meaderville were not that it was a foreigners’ area, like Shepherd said, but that its white-collar reputation made it less interesting and too akin to places like St. Paul or Denver.

³⁹ Davenport, “The Richest Hill on Earth,” 9.

⁴⁰ Davenport, “The Richest Hill on Earth,” 11.

⁴¹ Davenport, “The Richest Hill on Earth,” 53.

He also noted that, “there is a suggestion of racketeering that you don’t immediately scent in the city places,” which could perhaps link it to Shepherd’s comment about the place being “vicious.” For Davenport, though, the key distinguishing features were that women could gamble alongside the men, that there were swing bands, and that there were many-course dinners. By including these details, he aligned the mixing of men and women with characteristics of a different class, one that lacked the “vigor” and “wild” of the city gambling spaces. Thus, the city gambling establishments evoked Butte’s old gambling reputation. Indeed, Davenport believed Butte was “still a mining camp” that was “resisting with all its waning strength the inexorable encroachment of an enervating civilization.”⁴² Butte had a reputation for being wild and “uncivilized,” as Davenport’s characterization suggested, and the continuation of gambling, even in new forms, lent Butte’s streetscape to that image. This was in spite of the “professional Butte Boosters” who “besought us to forget the gambling, the bars, the roughness and readiness of the town.”⁴³ The battle between the working class and these boosters culminated in the battles over the image Butte projected through its built environment.

Indeed, not two years after Walter Davenport’s article, Montana resident and historian Joseph Kinsey Howard published “Boisterous Butte” in *Survey Graphic* to refute Davenport and anyone else who claimed Butte was a mining camp. “It is not a camp at all,” he proclaimed, “but a northwestern metropolis, industrial center of its state and region, metropolitan in aspect and influence.”⁴⁴ Howard’s claim echoed what then-mayor Charles A. Hauswirth had to say: “The very first thing we should do...is to refrain absolutely from

⁴² Davenport, “The Richest Hill on Earth,” 10.

⁴³ Davenport, “The Richest Hill on Earth,” 53.

⁴⁴ Kinsey Howard, “Boisterous Butte,” *Survey Graphic*, May 1939, 317.

boosting Butte as a mining camp (we can still give due recognition to the industry) and prepare to advertise it in every conceivable way as an up and coming city.”⁴⁵ Unlike Shepherd and Davenport, Howard and Hauswirth had closer ties to the community, and they lived in or near the town. They viewed the community’s image from the standpoint of how it would affect other Americans’ views of the town and its status. They were in the business of boosting Butte, so their claims about whether or not Butte fit that Old West image reflected their efforts to gain business. For them, that meant tempering rather than accepting the Old West image. Instead, it was “an up and coming city.” Howard used the recent WPA projects as evidence of this modernization, where sewers had improved “298 blocks or about twenty miles of Butte’s streets,” along with an improved airport, a new playground at Clark Park, freshly landscaped vacant lots, and mine dumps that were either removed or cleaned up and planted with grass.⁴⁶ His comments built on the earlier efforts to introduce clean and green spaces. Such efforts, though, continued to target and even destroy working-class spaces and spaces considered immoral.

Some of those spaces, like the redlight district, were the gnarly weed that never died. By the late 1930s, the redlight district posed a new problem, because it was “just two and a half blocks from [the] new modern high school, and on the same street.”⁴⁷ Rather than closing the district, as the city had attempted in the past, Howard claimed the city deemed it “necessary.”⁴⁸ Necessary in which way? Howard did not elaborate. But he did note that the city compromised. They closed off the three entrances to the alley where most of the cribs

⁴⁵ Howard, “Boisterous Butte,” 319–20.

⁴⁶ Howard, “Boisterous Butte,” 320.

⁴⁷ Howard, “Boisterous Butte,” 319.

⁴⁸ Howard, “Boisterous Butte,” 319.

remained. “Men Under 21 Keep Out” emblazoned the green fences that barred the alley entrances.⁴⁹ Thus, activity within the space was blocked from immediate view, though green fences with bright white words made its purpose quite obvious. That the old redlight district contrasted with the “modern” high school and its young attendees was also a case of how Butte struggled with integrating “modern” and Old West.

According to Shepherd, Davenport, and Howard, gambling and places of vice were particular targets for modernization. Such places had deep roots in Butte’s history, but were still morally questionable and thus challenged any claim Butte might make of being a respectable place to live and work. Some residents did not want Butte to be respectable, and some visitors sought Butte out as a place to get a taste of the wild and wooly West. But community leaders wanted to promote Butte’s reputation as a modern, thriving city. In doing so, they targeted areas like gambling dens and redlight districts for cleanup and change, because such spots otherwise made the city appear too much like a mining camp.

Besides places like the gambling dens and the redlight district, one neighborhood represented an effort to replace housing rather than displace poor residents. According to newspaper clippings, this neighborhood, known as the Cabbage Patch, had been “rough and tough in its time,” but by 1940 was “practically a thing of the past.” The area was just east of the redlight district. Many working-class residents from a variety of racial and ethnic backgrounds lived on East Mercury in the late 1800s and early 1900s. By the 1920s, the residents were a mix of U.S.-born and northern European, mostly common laborers, such as miners, carpenters, and livery workers.⁵⁰ The area had a reputation for being the local haunt of drug users and dealers, as seen in the caption of an image in a January 23, 1921, issue of

⁴⁹ Howard, “Boisterous Butte,” 319.

⁵⁰ U.S. Department of Commerce. Bureau of the Census, “Manuscript Census, Silver Bow County, Montana” (1920).

the *Anaconda Standard* below (Figure 4.7).⁵¹ By the 1930 census, the area remained quite similar, but with some additions—Austrians, Slavs, and Mexicans, who were generally miners and other common laborers.⁵² By 1940, it was relatively unchanged in racial, ethnic, and class makeup. At that point, “the principle [*sic*] objection of the public was that it constituted an eyesore.”⁵³ The news clipping elaborated: “There were many nice homes in the old Cabbage Patch and they were occupied by fine people, but, on the other hand, there also were the unpainted, shabby shacks which at times housed people considered by the police to be definitely undesirable.”⁵⁴

Although nice houses intermixed with the shacks, the city decided to tear down the entire block “to make room for new, modern dwellings of the Butte Housing Authority—dwellings which will eliminate the squalid frame buildings and make an attractive section.”⁵⁵ The idea was to modernize the old neighborhood. The structures that went up were plain and rectangular with virtually no ornamentation. Each housed six units, and all units had a backyard that ran almost up to the front of the next building.⁵⁶ These were row houses. The housing development was built for low-income residents, so the spirit of the working-class neighborhood lived on, but the buildings were new, simple, cleaner, and at least somewhat more structurally sound. They were also standardized and regulated by the landowner, meaning residents had a decent home, but less control over its appearance. In any case, it

⁵¹ “Conditions in ‘Cabbage Patch’ Attract Attention of Officials,” *Anaconda Standard*, January 23, 1921, VF1605, Butte-Silver Bow Public Archives, Butte, Montana.

⁵² U.S. Department of Commerce. Bureau of the Census, “Manuscript Census, Silver Bow County, Montana,” 1930.

⁵³ U.S. Department of Commerce. Bureau of the Census, “Manuscript Census, Silver Bow County, Montana” (1940); “Old Cabbage Patch Death Knell Sounds,” April 21, 1940, VF1605, Butte-Silver Bow Public Archives, Butte, Montana.

⁵⁴ “Old Cabbage Patch Death Knell Sounds.”

⁵⁵ “Old Cabbage Patch Death Knell Sounds.”

⁵⁶ *Butte, Montana*, Montana Sanborn Fire Insurance Maps, 1957.

certainly no longer looked like houses one might expect to find in a mining town and exemplified Butte's dedication to cleaning up blighted areas as well as an effort to provide low-cost housing in the same location rather than building more expensive options.



Figure 4.7. A 1921 image of a house in the "Cabbage Patch" neighborhood of Butte, Montana. The caption identifies the area as one infested with "dope users" and a general sense of squalor. Source: "Conditions in 'Cabbage Patch' Attract Attention of Officials," *Anaconda Standard*, January 23, 1921.

Paving the Way: Leadville, Colorado

As residents in Butte grappled with the presence of landscapes that did not fit the clean, more streamlined visions of the 1910s to 1930s, Leadville reformers pursued their own projects to increase sanitary conditions and to welcome some of the era's new culture. The spread of disease through the built environment became a special concern in U.S. cities, including mining towns, when influenza reached epidemic proportions in 1918. Officials and businesses suggested countless methods for altering physical environments to combat the flu. When the virus reached Leadville by at least October 7, 1918, the *Herald Democrat*

reported twenty cases of influenza and published Mayor Pro Tem J. E. Cummings' orders to close places of public assembly, such as churches, schools, and theaters. The newspaper also reported that doctors believed "the present dusty condition of the city streets provides an excellent medium for the transmission of germs, and they recommended immediate action looking towards effectual sprinkling of the thoroughfares [*sic*]." Sprinkling dirt streets was something that many towns implemented prior to the flu epidemic. In fact, Leadville had ordered a motorized sprinkler in the spring of 1918. But in October 1918, there was new motivation to sprinkle, because residents believed "dry dust, carried about by the high winds which have obtained in the town several days, carries a myriad of germs."⁵⁷ Leadville's lofty altitude might have offered dry air, but the gusty conditions made heavily trafficked streets like Harrison the special target of sprinkling.

Street sprinkling assuaged some fears and reduced dirt, but when the number of reported flu cases jumped from twenty on October 7 to fifty on October 10, reports became less about dust and germs and more about where exactly each case originated within Leadville. The accusations took a racialized tone. For example, an October 10 report mentioned that six of the fifty cases were Mexican men in Stringtown, an area on the southwest end of Leadville.⁵⁸ The report was fairly straightforward, but naming six of the cases as "Mexican men" from Stringtown was a racial barb. While other reports on other days often identified sick individuals by name and general address, this referred to these men only as "Mexicans," not bothering to identify them by name. After a rash of reports about various cases, the December 12, 1918, issue reported that, "Leadville has apparently fought

⁵⁷ "Outbreak of Influenza," *Herald Democrat*, October 7, 1918.

⁵⁸ "Fifty Cases of Influenza," *Herald Democrat*, October 10, 1918.

the influenza epidemic to a standstill. For the time being at least it is wiped out locally.”⁵⁹ The *Herald Democrat* ate its words the next day in a report buried on the fifth page, stating that there were six new cases of influenza, all from Stringtown, all Mexican. Four were the children of Manuel Norez and his wife, who had been diagnosed with flu symptoms the previous day. The other two new cases were Joaquin Lafana and E. Manuelo. All were taken to the city hospital for treatment.⁶⁰ Although the reports had no blatant, vicious language, they pulled no punches in identifying these cases as being among the Mexicans of Stringtown, while adding that no new cases had appeared in “Leadville proper” in eight days.⁶¹ Apparently, Stringtown was not really “Leadville.” Even so, Leadville could not claim to be mostly free of the Spanish influenza until about February 1919. Moreover, Stringtown might as well have been Leadville, since it was a mere half mile beyond the southwesternmost street.

In general, stricter enforcement of rules to keep public spaces clean and free of germs reflected not only the larger concern about the flu epidemic, but a hardening of the sanitary practices that changed how the built environment appeared and how people acted as they moved through it. The crackdowns diminished the public gatherings that had fostered the Old West wildness in past years. They also instilled in residents a sense of caution about sanitation, particularly in public spaces.⁶² In combatting the flu, mining towns like Leadville generally did not demolish buildings and structures; however, closed communal spaces during the epidemic and increased regulation of sanitary conditions were enough to shift the

⁵⁹ “A Twentieth-Century Plague,” *Herald Democrat*, December 12, 1918.

⁶⁰ “Around the City-- ‘Flu’ Cases Increase to Eight,” *Herald Democrat*, December 13, 1918.

⁶¹ “Around the City-- ‘Flu’ Cases Increase to Eight.”

⁶² “Fighting the Epidemic,” *Herald Democrat*, October 8, 1918.

appearance and use of the town's structures. Part of the Old West spirit was overcoming environmental challenges, ranging from dirty streets that caked one's shoes with mud to deadly working conditions. As 1910s reform efforts eliminated those challenges, residents had to use the memory and myths of the West rather than physical realities to claim the Old West image. But it was not until the 1920s that additions to the cityscapes made the physical realities noticeably different from the Old West image.

Mining town residents, like their bigger-city counterparts, adopted automobiles into their communities as soon as they were able to do so. By 1922, tourists visited mining towns like Leadville with great regularity, and residents realized the benefit of such traffic. But this was a particular clientele, one whose members had to commit to a lengthy drive, but could still do so without having to "rough it" in a campground. In the past, people arriving in mining towns via train or wagon put in the effort to be there. Mining towns were remote, and most early accommodations catered to engineers and newly-arrived miners. They may have been itinerants, but not tourists. In the 1920s, though, the growth of the auto industry brought motorists looking for a pleasant place for a day trip. In fact, the *Herald Democrat* described how "those who can afford to travel at all in motor cars are as a rule well-to-do, accustomed to comfortable living, and are not inclined to change their habits while touring the country."⁶³ This was the seed that grew into new efforts to modernize the town.

As residents and tourists alike relied more and more on cars for transportation, they had to change their towns to accommodate auto traffic. In doing so, they continued to sanitize their cityscapes. Pavement, parking spaces, and repair shops were necessary to ensure residents of safe and efficient use of their cars. These vehicular spaces showcased

⁶³ "What Auto Tourist Traffic Means," *Herald Democrat*, August 23, 1922.

safety and sanitation while perpetuating older concerns about pollution by adding car exhaust to smelter smoke.

For one, cars required smooth surfaces. Streets in Butte, Leadville, and Globe had long been simple dirt, which turned to mud in the wet seasons. Paving was minimal, though the city governments attempted to lay some material in a few cases. In many mining towns, smelter slag, the byproduct of heating ore so that metals melted and separated from other minerals, was a popular paving material.⁶⁴ West Chestnut Street in Leadville, for instance, had cinders from the zinc plant for its pavement.⁶⁵ In September 1922, Leadville's *Herald Democrat* trumpeted, "Harrison Avenue Being Paved With Silver," referring to a silver-iron ore the city had obtained from the ore bins of a local mine.⁶⁶ These types of paving remained the norm for most mining communities throughout the 1920s. Still, anything more substantial, such as laying asphalt or concrete, posed larger financial and material challenges than the cities were willing to pursue in the 1920s. Moreover, how could they sell themselves as "old" without sacrificing their own and their visitors' desires to have the comforts and conveniences of the modern era?

One answer was to pave the roads. While paving had been a constant topic of conversation since at least the 1920s, it was not until the 1930s that many western mining communities actually bit the bullet and paved the streets. Previous paving had included gravel or crushed smelter slag sprinkled over dirt and mud. For Leadville, the move to pave the streets with concrete was not only a shift into the modern era, but a model for other

⁶⁴ "What Auto Tourist Traffic Means."

⁶⁵ "What Auto Tourist Traffic Means"; "Around the City-- Council Discusses Repairs to Avenues," *Herald Democrat*, August 2, 1922.

⁶⁶ "Around the City-- Harrison Avenue Being Paved with Silver," *Herald Democrat*, September 1, 1922.

cities to follow. Author J.D. Wilder praised the city in a 1930 article for the urban planning magazine, *The American City*. He described how, after the boom years, “the town drew in upon itself, until today it stands a prosperous city, but without trace of its early wildness. There are streets where row after row of houses are boarded up, there are numerous commercial structures gone to decay, there are mine holes dotting every hill and valley—but there is also a civic pride which refuses to die.”⁶⁷ To him, although the town lacked its liveliness and the old structures were in disrepair, Leadville exhibited the same spirit it had during what one might call its “Old West days” (Figures 4.8 and 4.9).



Figure 4.8. Harrison Avenue in Leadville, before 1930 paving project. From J.D. Wilder, “Building City Streets 10,000 Feet Above Sea Level,” *American City* 42 (January 1930): 123.

⁶⁷ J.D. Wilder, “Building City Streets 10,000 Feet Above Sea Level,” *American City* 42 (January 1930): 125.



Figure 4.9. Harrison Avenue in Leadville after 1930 paving project, looking north. Note the contrast between muddy and rutted Figure 4.8 to smooth and dry in Figure 4.9. From J.D. Wilder, "Building City Streets 10,000 Feet Above Sea Level," *American City* 42 (January 1930): 123.

Paving the roads in a place like Leadville required creative thinking in order to produce major change. Wilder noted that prior to paving, "in winter [Harrison Avenue] became a rough, frozen mass of dirt, gravel and rocks, and in summer, spring and fall it alternated between impassable mire and choking dust."⁶⁸ The road was a "vehicle wrecker."⁶⁹ Leadvillites had long complained of these issues, but introducing the more permanent smoothness of asphalt or concrete altered their experience of moving through the town. The challenges of the natural environment had always forced Leadvillites to be innovative, and paving the roads was no different. Rather than follow the paving practices of other cities, they sought a material that could withstand the temperature shifts and frost penetration of a

⁶⁸ Wilder, "Building City Streets 10,000 Feet Above Sea Level," 125.

⁶⁹ Wilder, "Building City Streets 10,000 Feet Above Sea Level," 123.

city so high in altitude. Colorado-based engineering firm Watrous and Tipton devised a combination of aggregates to withstand the extreme climate. The result: a concrete mix using local sand, sand from Pueblo, Colorado, and slag from one of Leadville's dumps. Workmen laid the paving material thirty feet wide, with a large gap at the edges, which they filled with "a rolled gravel surfacing," except in cases where individual property owners paid to fill the space with concrete. This resulted in a smoother, easier-to-clean surface that diminished the problems of dirt, dust, and mud. By creating a space more amenable to the movement of modern transportation, like automobiles, the paving project promoted clean, modern streets.

And yet, the increased traffic introduced a new problem: exhaust. Although cars provided residents with new reason to pave their streets and keep them free of dirt and debris, cars also augmented air pollution. The most popular cars coughed up fumes laced with lead. Mining communities in the 1920s often still faced air pollution from nearby smelting plants. Butte's smelter had moved to Anaconda, but Leadville still had the Arkansas Valley Smelter on the south end of town, and Globe had the Old Dominion Smelter on the west end of town. Smelters pumped the air full of sulfuric smoke, a thick, potent cloud that hung heavy, dirtying anything outside and coating any living being's throat and lungs as well as irritating the eyes. The additional pollution did not initially warrant much attention from the mining residents. Perhaps the smelter smoke—even the mere memory of it—had been so intense that car pollution seemed negligible.

Pollution or not, as Leadvillites courted the new automobile culture, they detached themselves from the Old West image. Without dirt roads, the town was visibly different from its nineteenth-century counterpart. What's more, it meant that residents and visitors no longer had to contend with the nuisance of dirt streets. Their experience of walking or driving around town was easier and smoother. Earlier residents had dirty, muddy streets, so

this was a new, less gritty Leadville, indeed. Without that challenge, daily life was at least a small degree easier and demanded less hardiness. Hardiness was part of their identity. At the same time, this change mainly affected the main street. If anyone, such as the working-class residents, had to venture onto the side streets, they continued to encounter dirt roads, even into the twenty-first century.

Changes to residents' and visitors' experience of mining town cityscapes mirrored those below the surface as well. Less visible to visitors were the sewers. In late-nineteenth century United States, sewers were increasingly important to cities. Leadvillites considered installing sewers as early as 1881, claiming that "when Leadville first began to assume the proportions of a western metropolis, the sewer question was discussed, and it was stated that sewers could not be laid, but this idea will not meet with favor at present." The popular system of cesspools was no longer feasible because of the "emanations" from them.⁷⁰ From about 1907 to 1913, the Leadville Sewer Company fought with the city over the right to charge sewer users. Leadville's Mayor Rose argued that the city should maintain ownership and allow residents free use of the sewers, while the company argued that it had the right to continue charging residents.⁷¹ In 1913, the mayor finally won for the city the right to the sewers and no longer charged residents, releasing them from a financial burden of living wherever sewer lines reached.

Looking more closely at the Larsh and Mascarenas family that occupied 415 West Sixth Street demonstrates the extent to which residents from varied racial backgrounds shared experiences during this period of updates to streets and sewers. As the mining

⁷⁰ "Want a Sewer," *Carbonate Chronicle*, May 9, 1885.

⁷¹ "Around the City-- New Sewer Ordinance," *Herald Democrat*, March 22, 1907; "Sewer Issue Is No More," *Herald Democrat*, January 11, 1913.

industry suffered from lack of demand in the 1920s and 1930s, some of the old ethnic groups in mining towns dispersed while new immigrants moved in. People of Mexican descent, for example, gathered on the west side of town and settled in preexisting houses to form new ethnic or racial enclaves. Mexicans had been living in Leadville and the surrounding area at least since the 1870 census, but they did not settle in the Leadville city limits until the early twentieth century.⁷² By 1930, there were eleven Mexican households between West Third and West Sixth Streets. Those residences owned by their inhabitants ranged in value from \$100 to \$300 (with one more substantial house valued at \$800), while two families rented houses for \$3 and \$10 a month. In almost every single one of these homes, the head of house worked for a smelter, likely the Arkansas Valley Smelter, a half-mile west of town. Although the neighborhood was only about three blocks west of the Central Business District on Harrison, the town was so small that the enclave stood on the outer edges, a less desirable location for miners and businessmen who worked on Harrison or in the eastern hills.⁷³

The Mascarenas family exemplifies the ways that Leadvillites preserved the use of west side structures by continuing to use them as homes, though perhaps with ethnic embellishments. In 1930, the family lived at 415 West Sixth Street, where the Anglo-American Larsh family had lived in 1920 (Fig. 4.10).⁷⁴ Larsh recalled that “almost all of the Mexicans in the area lived down near the smelters at Stringtown. The Mascarenas family was

⁷² U.S. Department of Commerce. Bureau of the Census, “Manuscript Census, Lake County, Colorado,” 1880. There were four Mexican-born individuals in Lake County in 1870, at least according to the census. In later years, the census enumerated both Mexicans and Mexican Americans. Labor demand had pulled Mexicans and Mexican Americans from northern New Mexico, southern Colorado, and Mexico, while the 1924 Pueblo Lands Act, which evicted nearly three thousand residents, provided a push. Those Mexicans and Mexican-Americans who settled in Leadville almost always worked at smelters and settled along the western, southwestern, or northeastern fringes of town.

⁷³ U.S. Department of Commerce. Bureau of the Census, “Manuscript Census, Lake County, Colorado” (1930).

⁷⁴ U.S. Department of Commerce. Bureau of the Census, “Manuscript Census, Lake County, Colorado” (1920); U.S. Department of Commerce. Bureau of the Census, “Manuscript Census, Lake County, Colorado,” 1930.

an exception and lived near us.” The 1930 Manuscript Census challenges this memory, enumerating at least nine households with Spanish-surnamed heads of household within less than a four-block radius of the Larshes at 520 West Sixth. No maps or images document the footprint or appearance of the Mascarenas’ house prior to the 1937 Sanborn map, but the shift from the Larsh family to the Mascarenas family occurred during a period of little construction.⁷⁵ It is probable, then, that the Mascarenas family simply moved into the Larsh house.

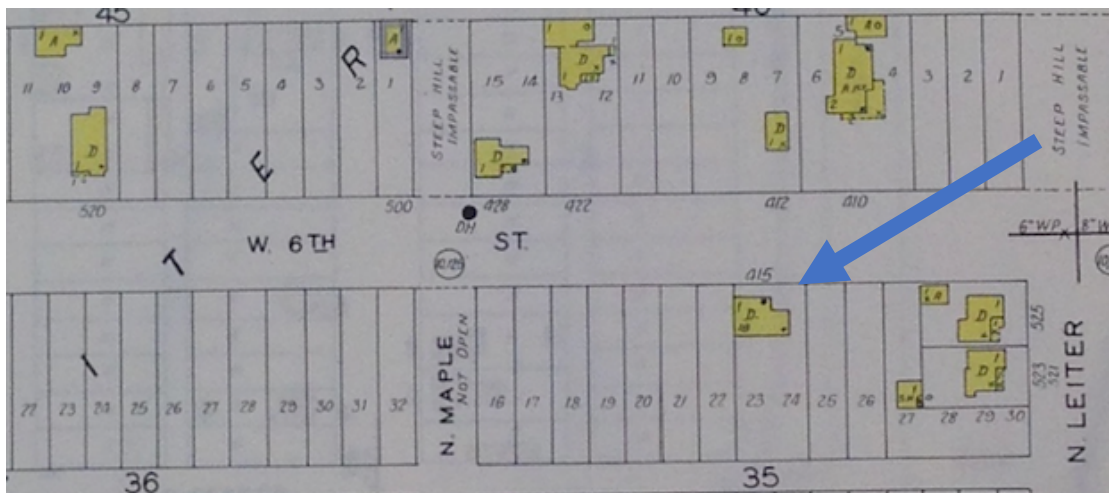


Figure 4.10. Detail of Leadville Sanborn Fire Insurance Map, 1937. Yellow indicates wood frame construction, “D” indicates “dwelling,” “x” indicates composite roof, and “1” indicates one story. Also visible are water pipes indicated by large “+” at the intersection to the right, fire hydrants indicated by a black dot and “DH,” and elevation in circles at intersections. Source: Denver Public Library Western History & Genealogy, Denver, Colorado, Digital Sanborn Maps.

Small details hint at the physical characteristics of the structure. It was a single-story wood frame dwelling with a “slate or metal” roof. Edward B. Larsh, one of the Larsh family members who grew up down the street, specifically recalled the roof material in recalling his childhood, when he and his friends tormented the Mexican family: “It began with Bud

⁷⁵ U.S. Department of Commerce. Bureau of the Census, “Manuscript Census, Lake County, Colorado,” 1930; *Leadville, Colorado Sanborn Fire Insurance Map*, Denver Public Library Western History & Genealogy, Denver, Colorado, Digital Sanborn Maps, <http://sanborn.umi.com.ezproxy.denverlibrary.org/cgi-bin/auth.cgi?command=AccessOK&CCSI=2555n>.

lobbing a few well-chosen stones down on the resonant slope of the tin roof. In an instant three raging Mascarenases came roaring out of the side door, hollering and cussing in righteous (and justified) indignation.”⁷⁶ The tin roof distinguishes the home from the surrounding houses, even those belonging to miners, which had shingled roofs, such as those in the image below (Figure 4.11).



Figure 4.11. 1920s image of Leadville, looking west along Eighth Street. This was a fairly well-off neighborhood and shows that many of the houses had shingled roofs. The Larsh/Mascarenas home would be just beyond the left frame of this image. Source: Call Number CHS.X5369, <http://digital.denverlibrary.org/cdm/search/searchterm/CHS.X5369> Denver Public Library Western History and Genealogy, Denver, Colorado.

Despite the scarcity of information about the house at 415 West Sixth, we might assume that Mexican families in Leadville used their properties in ways that ethnic Mexicans did elsewhere in the West. According to scholars of southwestern city planning and

⁷⁶ Larsh and Nichols, *Leadville U.S.A.*, 56.

community building, Mexican settlements commonly revolved around a town square, usually near the church, the governor's house, and the market. Mexicans immigrating from rural areas and even some of the old Spanish mission cities moved from more circular town layouts or plazas to the strict grids of the town sites of the western U.S. Even in mining towns, where planning had been minimal early on, the city streets followed grid patterns in many of the city center areas where a Mexican city would have had a town square. While Mexican immigrants used preexisting houses as dwellings, an emphasis on outdoor space for domestic labor could have given the Mexican neighborhood an atmosphere unlike the bustling businesses on Harrison.⁷⁷ Thus, while the main thoroughfares of mining communities changed in the 1930s to accommodate tourists, housing—even if only in its use and not in its appearance—along the side streets changed to accommodate the workers and their sociocultural backgrounds. These side streets often maintained a physical appearance more akin to the rustic Old West image, since they experienced fewer modernization efforts.

Reversible Change: Globe, Arizona

Like Leadville and Butte, Globe also experimented with some civic changes in the 1910s to 1930s period that reflected larger cultural shifts and a grappling with their mining town identity. Phoenix-based journalist Angelia Newton, who visited Globe in 1910, noted that “if here and there on the face of things a gap is conspicuous, an old front or some other relic of the mining camp that was, it does not make an impression” and how “up and down Broad street [*sic*], the main thoroughfare, frame porches and other unsightly features have

⁷⁷ David Samuel Torres-Rouff, *Before L.A.: Race, Space, and Municipal Power in Los Angeles, 1781-1894* (New Haven: Yale University Press, 2013), 265; Albert Camarillo, “The Mexican Pueblo of Santa Barbara,” in *Chicanos in a Changing Society: From Mexican Pueblos to American Barrios in Santa Barbara and Southern California, 1848-1930* (Cambridge, Mass.: Harvard University Press, 1996), 8–9.

given place to uniform, up-to-date glass fronts, street grades have been established and cement sidewalks laid” where “no part...is subject to destructive floods.”⁷⁸ Newton emphasized the extent to which Globe, in 1910, was “modern.” Her words made Globe seem like a nice place to live with enough capital coming in to fix up the old buildings. But that meant the disappearance of “the mining camp that was.” Newton wrote these words for publication in a magazine intent on giving tourists, particularly auto tourists, ideas of places to visit in Arizona.⁷⁹ Her words suggest that visitors wanted clean lines and modern elements, not relics of the past.

Movie theaters might answer this demand for new structures with cleaner lines and modern elements. Movie theaters refreshed the cityscapes with shiny new facades and bright lights. Although moving pictures had been around since the late-nineteenth century, it was not until the 1910s that theater programs included feature-length films on a weekly or even daily basis. Theaters, of course, had been part of the mining landscape almost from the beginning, but they differed from those of the 1920s. Early theaters usually incorporated dance halls or saloons. In some instances, “legitimate” theaters (that is, those built for plays and musical performances, generally appealing to the middle and upper classes) also peppered mining town cityscapes. The class of clientele could range widely for either type of theater. In the 1920s, residents of mining towns like Butte, Globe, and Leadville adapted their theaters to accommodate moving pictures, sometimes constructing new theaters altogether. The alterations to old theaters as well as the new constructions were generally acceptable for members of all classes. Movie theater culture thus allowed mining

⁷⁸ Angelia Newton, “Globe, the World’s Coming Copper Capital,” *Arizona: The New State Magazine* 1, no. 2 (April 1910): 13.

⁷⁹ Sam G. Riley and Gary W. Selnow, eds., *Regional Interest Magazines of the United States* (New York: Greenwood Press, 1991), 6.

communities to make yet another change that drew their physical appearance further from the Old West image while continuing to offer theater entertainment as they had in Old West days.

In Globe, theaters had come and gone since at least 1893, but by 1921, there were three theaters, all offering moving pictures as part of their entertainment. The Globe Theater was the only hall built specifically for showing movies, but the Martin and Dime theaters played movies as well. The Martin Theater in particular reveals that adaptive reuse allowed theaters to survive and even boost the rest of the main business thoroughfare (Figure 4.12). The Martin had graced South Broad Street since at least 1911, with two stories that almost equaled the Old Dominion Hotel's four stories. By rivalling the height of the most impressive hotel in town, the theater anchored itself in the cityscape. The Martin also looked distinctively like a theater, as opposed to the older venues that had begun as dance rooms, saloons, and vaudeville halls. The Martin's façade split into three sections: two tower-like, horizontal-roofed sections flanking a central, gable-roofed section. The tower facades are identical, with ocular windows over narrow doorways, substantial arches cresting a row of three windows, and a rectangular depression in the brick just below the cornice. The center section contained a wide-arched entry with doors set back to create a small anterior lobby. A heavy stone arch topped a row of four windows, just slightly higher than the rows of three windows on the two tower sections. Finally, the gabled roof with dentil molding on the cornice matched and unified the cornicework on the two towers. In the world of movie theaters, the Martin was modest. But in the world of Globe's main street, the theater was eye-catching and impressive due to its inviting entryway and architectural flair.



Figure 4.12. The Martin Theater, Globe, Arizona. Source: *Globe-Miami Times*, www.globemiamitimes.com.

In addition to changing mining town cityscapes from Old West to cosmopolitan American, these theaters shifted residents' views of theaters as a social space. In earlier decades, mining town theaters had generally catered to one class or another, from working-class vaudeville and variety shows or upper-class plays and musical performances. But movies created a new theater-going culture that appealed to a middle-class clientele. Although members of the working-class were the first ones to welcome movies into their entertainment worlds, members of the middle and upper classes soon embraced feature films as well. The Martin Theater's simple Moorish flair evoked a sense of the exotic, which appealed to the middle and upper class. Movie theaters also fostered particular social behaviors, including an increase in the number of single young women attending movies alone as well as an increase in young couples attending and spending the duration of the film

“necking.”⁸⁰ So, although theaters offered a modern young woman a way to exercise her independence, they also maintained some reputation as sites that fostered morally questionable behavior. These places were not quite clean in a figurative sense, but they were modern.

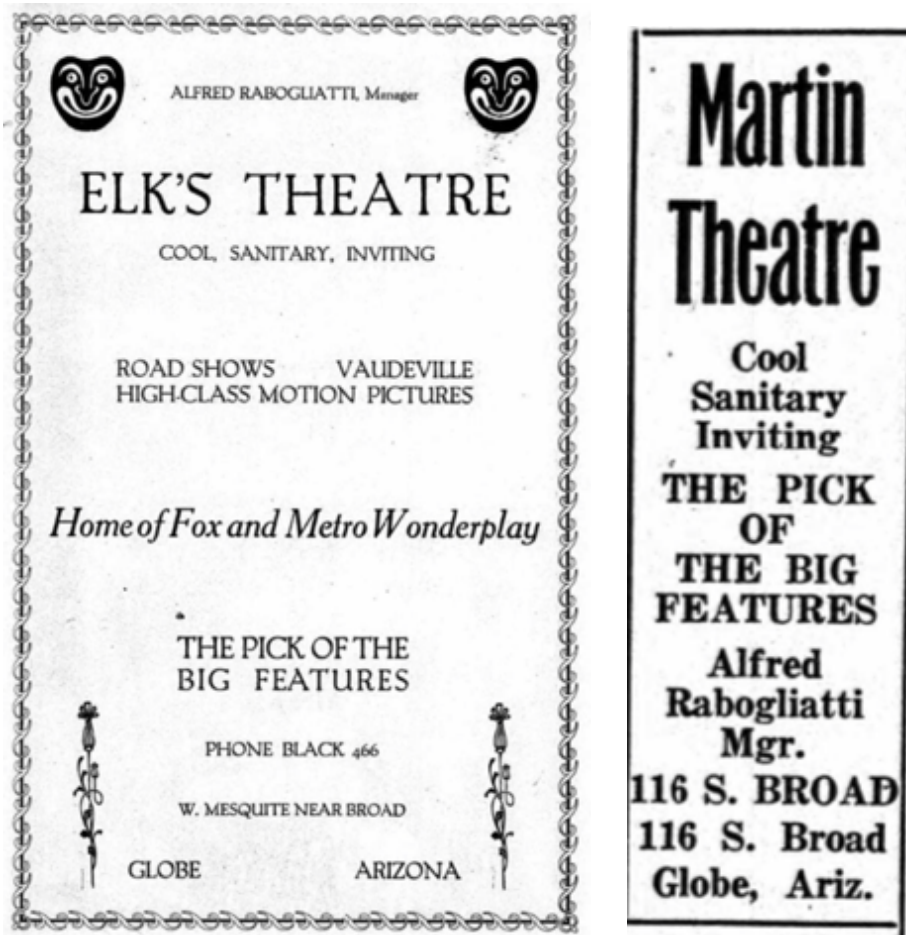


Figure 4.13. Left: Advertisement for Globe’s Elk’s Theater, Globe City Directory, 1916. Right: Advertisement for Globe’s Martin Theater, Globe City Directory, 1921.

Despite—or perhaps because of—the theater’s reputation as a dirty, morally questionable gathering place, theater owners in mining towns linked their introduction of movies to “modern” sanitary concerns. In Globe, the sanitary conditions of theaters were a

⁸⁰ Kathy Peiss, *Cheap Amusements: Working Women and Leisure in Turn-of-the-Century New York* (Philadelphia: Temple University Press, 1986), 162.

point for advertising. A 1916 ad for Globe's Elks Theater, even before the 1918 flu epidemic had heightened concerns about theaters as a prime space for fostering the spread of germs, one of the features in the tagline is "sanitary" (Figure 4.13). The Martin Theatre used the exact same term—"cool, sanitary, inviting" in an ad for the 1921 City Directory (Figure 4.13). Indeed, ventilation and cleanliness were major concerns for theater architecture in the 1920s, even as far away as New York.⁸¹ Theaters were not just places to go for entertainment. They were also clean and healthy places, a far cry from the dirty, smoky, loud theaters of the Old West.

Keeping the theaters up to this sanitary standard required dedicated cleaning. In Globe's Iris Theater in 1920, that responsibility belonged to fifty-four-year-old Texas-born black man named George Wilson. The historical record is silent about Wilson's story. Did he ever watch movies himself? Would he have wanted to watch the films chosen to screen there? Or was he just the janitor? It is difficult to say. The census tells us that he lived in a canyon, about a fifteen-minute walk up the hill from the theater. He, his wife, and stepson were the only blacks living in the mostly working-class white neighborhood; most other blacks in Globe lived on the east end of town. Did Wilson choose to live away from the other blacks? Was his house in the canyon better than what blacks on the east side had? Again, the historical record is silent. But the record does tell us that he was responsible for cleaning a popular gathering space for the general public. His presence in the record tells us that he was a member of that class of workers who did the dirty jobs so that others could enjoy a clean setting, harkening back to the women and Chinese independent launderers who kept everyone's clothes clean. Additionally, like the hidden work of miners underneath

⁸¹ Sonya Levien, "New York's Motion Picture Law," *The Chautauquan: A Weekly Newsmagazine*, December 27, 1913.

the towns, the janitors and other sanitation workers often performed unseen, but vital labor. Here, that labor fostered cleanliness, which was crucial in movie theaters.

Despite this attention to incorporating or refreshing facades, Globe maintained ties to its mining identity on special occasions, like Pioneer Days. In a 1936 radio program, announcer Stephen C. Shadegg brought listeners on a journey to and through Globe, “past the old Dominion Mine, now abandoned, up the paved street, into the modern business section.”⁸² He had carefully addressed the historical background, but also highlighted the paved street and “modern” business section. He continued, “Nice little city, but then you say it looks like many another of similar size. Maybe it does now, but few cities have the history of struggle, violence, hardship and fabulous wealth, that belongs to Globe.”⁸³ If that had been the case, and he meant “cities” as in “U.S. cities” more broadly rather than just western cities, Globe had since then modernized enough to look contemporary. In fact, Shadegg’s comments imply that the struggle, violence, hardship, and wealth were quite invisible in the modern district. Shadegg sold the image of 1936 Globe as “a modern, up-to-date city of more than seven thousand population. A city of beautiful homes, excellent schools, and the center of Gila county which is a paradise for sportsmen. Opportunity for fishing and hunting is only one of the many inducements for a visit to Globe.”⁸⁴ It was a friendly town, despite its riotous past. Indeed, visiting during “Pioneer Days” meant “parades, old time dancing, prize fiddle contests, costume contests, and more than this” as a way to “step back

⁸² Stephen C. Shadegg, “Tales of Pioneer Days” (May 10, 1936), 4–5, Stephen C. Shadegg Papers, Arizona State University, Tempe, Arizona.

⁸³ Shadegg, “Tales of Pioneer Days,” May 10, 1936, 4.

⁸⁴ Shadegg, “Tales of Pioneer Days,” May 10, 1936, 5.

in the past, to visit an era of long ago.”⁸⁵ Globe could adorn an Old West image, but saved it for special occasions.

Conclusion

Although mining communities physically and visually changed between the 1910s and the 1930s, sometimes they kept elements of the Old West spirit. Gambling continued, even if in an old theater or an old building with a modernized façade. Sex workers still had their redlight districts, though perhaps a little subdued and doing a little less business as population dwindled. Such elements were important to the spirit of the Old West and to any effort to sell that image to tourists. Although Carey McWilliams had decried the myth of the West, mining communities struggled to decide whether they wanted to own or reject it. Yet even when they owned the myth, they owned only the pieces of it that they felt would attract tourists. Some residents believed that the wildness was part of their identity, not something to hide. Others believed that even though the wildness was part of their identity, it should not prevent the towns from being modern.

The contrast between McWilliams’ rejection of myths of the West and the efforts of some residents to exploit those myths reveals how westerners waged the battle over image in the 1930s. Residents of Butte, Globe, and Leadville handled the battle somewhat differently, but each rested on the issue of old versus new, how much of the historic landscape should they preserve versus how much to destroy, how should they decide when a piece of the past was too much of a threat to moral and physical health. By 1940, the battle had only just begun.

⁸⁵ Stephen C. Shadegg, “Tales of Pioneer Days” (May 12, 1936), Stephen C. Shadegg Papers, Arizona State University, Tempe, Arizona.

CHAPTER V

“PLEASE DO CLEAN THIS TOWN”

1940s-1970s

“This town is terrible,” Globe, Arizona, resident Edna Howe wrote in 1942. She complained of a corrupt police force consisting of a nepotistic chief and of officers who allowed wide-open gambling and were all “open dope sellers . . . with the Chinese some time ago,” and “had two white girls dead with dope.” She begged Arizona’s governor, Sidney Osborn, to send a new FBI agent.¹ In her closing plea, she beseeched him, “Please do clean this town...”²

Howe solicited *moral* clean up that targeted the same groups that earlier civic cleanup efforts in Globe and other western mining had attacked prior to the 1940s, but large-scale shifts in mining methods and technology during the mid-twentieth century coincided with a rise in the involvement of nonresident urban planners and historic preservationists to create a climate in which nonresidents imposed their ideas of how mining towns should appear and function onto a historic landscape. Just as residents and nonresidents preserved new historic sites, the mines on which they depended wreaked a new level of havoc on surrounding ecosystems and geological structures. While mining had long meant burrowed tunnels and washed-away hills, the post-1940s era favored open-pit mining that gouged the earth’s crust a mile or more in diameter. These changes increasingly challenged the communities as they

¹ Edna Howe, “Letter from Edna Howe to Arizona Governor Sidney Osborn,” 1942, File Folder “Globe Crimes,” Gila County Historical Museum, Globe, Arizona.

² Howe, “Letter from Edna Howe to Arizona Governor Sidney Osborn,” 1942.

attempted to build tourist economies that riffed on historical characteristics of the towns and the “untouched” beauty of surrounding landscapes.

Howe’s plea also raises some questions that situate this chapter in several methodological approaches and historiographical arenas. Who generated the civic plans for the mining towns during the 1940 to 1970 period? How did they grapple with historic mining landscapes and new ones? Did their efforts to modernize, as discussed in the previous chapter, succeed? To answer these questions, I employ methods from environmental and architectural studies, such as the reading of physical landscapes and structures as historical artifacts, as well as women’s and gender studies, such as the analysis of intersectional identities.

With these questions and methodologies in mind, this chapter joins U.S. West, urban planning, architectural, environmental, and social history scholarship. When addressing mining towns in particular, scholars often focus on the late-nineteenth and early-twentieth centuries.³ This chapter thus extends analysis into the mid-twentieth century. Not only does this chapter fill a chronological gap in the scholarship, but it also deepens the analysis of mining towns by incorporating discussions of the mining itself with discussions of which narratives historic preservation projects supported to demonstrate how infrequently the projects addressed obvious environmental concerns.⁴ Moreover, it examines the existence of toxic mining landscapes alongside historic preservation efforts in order understand the roots of 1970s and 1980s historic preservation and environmental organizations, as discussed in the next chapter.

³ Barth, *Instant Cities*; Paul, *Mining Frontiers of the Far West, 1848-1880*; Smith, *Rocky Mountain Mining Camps*; Morse, *The Nature of Gold*.

⁴ Andrews, *Killing for Coal*; Andrews, ““Made by Toile?””; Deutsch, *No Separate Refuge*; Johnson, *Roaring Camp*; LeCain, *Mass Destruction*.

For stakeholders in U.S. West communities during the postwar era, concerns about both the built and natural environments revolved around cleanliness—at least on the surface. How did the postwar climate of national defense and urban planning change mining towns? Did their dreams of attracting tourists succeed? Why did their urban planning fail? How did federal historic preservation legislation change mining town preservation projects? In the postwar era, the political climate and its pro-national defense rhetoric coincided with a rise in historic preservation organizations in mining towns, prompting town leaders to seek external funding and advice for civic projects. Simultaneously, some towns experienced a rise in new mining methods and demand for raw metals and minerals, which reinforced the battle between those who wanted to preserve the past and those who wanted to modernize. When these goals—to mine or to preserve—encompassed the same site, a conflict arose: the site with houses, shafts, headframes, and tailings piles that represented the labor and lives of past residents might also be the place with the most promising ore veins. When towns avoided this conflict, because mining interests had dipped or their mining took place elsewhere, they had the opportunity to incorporate some of the historical fabric into their urban plan. Did they? And if so, how? This chapter argues that the stories of Butte, Globe, and Leadville in the postwar years reveal a tension between nonresident and resident visions for the future of the towns, which included active attention to preserving the past only when it supported the larger, preexisting celebratory narratives about the past.

By the 1940s, Globe, Leadville, and Butte had boomed and busted and were hanging onto hope that they might boom once more, despite dwindling and stagnant populations. Residents divided over which industry they should pursue most: mining or tourism. The battle over modernization versus preservation that had begun at least in the 1920s continued into the mid-century. A 1951 *Saturday Evening Post* article about Butte summed it up perfectly

when describing how, “in this strange and confusing game, the participants are trying to make their town of Butte live up to its colorful past and, with equal effort, to emerge from it.”⁵ During the 1950s and 1960s, nonresidents increasingly engaged in the decision-making processes about changes the town might make to its appearance. Some nonresidents got involved for the promise of metals and minerals to be reached with new mining technologies, some for minerals that would have a place in postwar manufacturing, and some for historic preservation. Preservationists and planners hoped to save properties that reflected the old narratives of mining towns as wild places with endless opportunities, but their preservation methods and urban plans sanitized historic resources and the narratives surrounding them. Moreover, they focused their efforts on resources associated with lore rather than reality, resulting in preservation of houses that had belonged to prominent citizens and the central business districts while ignoring resources that would have represented a wider segment of the historic populations, such as worker’s houses or mining infrastructure. Simultaneously, new mining projects, motivated by the discovery of new purposes for minerals like asbestos and the popularization of large-scale open pit mining, destroyed some of the historic fabric and generated massive environmental change. Mining destroyed historic fabric, but it was the very same industry that historic preservation projects celebrated. Because of this conflict, residents accelerated preservation and mining projects during the 1950s and 1960s, and, in the process, both subverted and supported previous efforts to sanitize the towns.

⁵ Edmund Christopherson, “The Cities of America: Butte,” *Saturday Evening Post*, December 8, 1951, 40.

A New Use: Globe, Arizona

During WWII and the postwar era, American popular culture, including vibrant and widespread literature, photographs, and films, played up notions of the Old West as a wild place with loose laws and excitement. Within this context, mining towns in particular continued to face the battle between modernization and preservation that had shaped their cultures during the early-twentieth century. Rising concerns about national defense and increased interest in technological advancement reinvigorated many mining towns, either in the demand for metals and minerals or for reaching those metals and minerals in new ways. For Globe, Arizona, this national context prompted the development of the asbestos industry.

Just prior to the development of the asbestos industry, Globe appeared in the federal Works Progress Administration (WPA) travel guide for Arizona. Authors for these guides varied in their familiarity with the places they documented but were often people who did not live in the places about which they wrote. The Arizona guide described how Globe's buildings "line neat streets over the rolling hills, looking much the same as they did when automobiles were still the doubtful gadgets of the rich," though it also noted that Globe's houses were "built with a mixture of hasty mining-camp planlessness [*sic*] and the ornate stiffness of early twentieth-century architecture."⁶ The images contrast sharply—was this a place with "neat streets" on "rolling hills" or a place of "planlessness [*sic*]" and "ornate stiffness"? The guide further commented that, "When [the houses] were new they must have appeared raw and out of place against the tremendous backdrop of the Pinal and Apache Mountains. But now they have the quaintness of outmoded things, and are as much at home

⁶ Writers' Program of the Work Projects Administration in the State of Arizona, *Arizona, the Grand Canyon State: A State Guide* (New York: Hastings House, 1940), 193–94.

below the purple-blue peaks as the venerable tailings dumps.”⁷ The comment that they *used* to be raw and out of place suggests that, like the tailings dumps, they had become part of the landscape as quaint, “outmoded things.”

It was not just about the built environment of the town versus a larger landscape, however. The guide also informed the reader that within the town, there had been a series of ethnic enclaves, which had dwindled to only two: the English (i.e. Cornish) and the Mexicans. Other ethnically-distinct residents still resided in Globe, but did not, according to the guide, gather in separate neighborhoods. The guide focused on the Mexican neighborhood in Ruiz Canyon: “Some of the adobe houses must be fifty or sixty years old, but few things look decrepit” and “the yards are artfully fenced and ingeniously gated with discarded bedsteads perfectly balanced and latched. The yards contain flower beds bordered with dun-colored beer bottles; black wash tubs set over primitive fire pits; rabbit pens, wood piles, children and their little red wagons—and yet they are neat and orderly.”⁸ The guide recognized that the houses were old, and thus not modern. It also pointed out that they were made of adobe rather than the stone, brick, or wood of downtown Globe and other neighborhoods. Simultaneously, the guide affirms that despite the age and building material, “few things look decrepit.” The rest of the description could be interpreted as either condescending or complimentary. For instance, calling the discarded bedstead fencing “artful” and “ingenious” might seem snide within the context of calling the fire pits “primitive” and pointing out the beer bottles. At the same time, the guide praises the yards for being “neat and orderly,” *despite* their hodgepodge of materials. Considering the guide’s

⁷ Writers’ Program, *Arizona, the Grand Canyon State*, 194.

⁸ Writers’ Program, *Arizona, the Grand Canyon State*, 195.

goal was to attract tourists, emphasizing neatness is a clear effort to praise the neighborhood, even if the author couched the praise with “and yet.”

Although WPA Guides provided some insight into how the towns appeared in the 1940s, residents had their own ideas about the cleanliness and appearance of their surroundings. Contrast the WPA’s description of Globe with Edna Howe’s 1942 plea for the FBI to clean up the town and the difference between making sense of the environments according to one’s own personal identity versus one’s desire to attract tourists is quite stark. Howe was a white middle-class American, with family background in Pennsylvania and a husband who was a railroad engineer.⁹ She prioritized her sense of safety and personal moral beliefs as a middle-class white woman living in Globe, while the WPA guide assured readers that Globe was quite orderly, even in an area it also described as having “primitive” fire pits. At a time when African Americans were widely harassed during their travels and thus followed the suggestions of their own guide book, a WPA book would have been geared more toward Americans who could travel freely, namely the white middle and upper class.¹⁰

Globe of the 1940s sought to preserve some of this sense of neatness, despite preoccupation with World War II. Ads in Globe’s *Arizona Silver Belt*, for example, urged readers to “clean up for the holidays” in November 1945.¹¹ One ad claimed that, “a clean town is attractive to the traveler, as well as the returning soldier,” clearly recognizing the dual service to both resident and nonresident. The ad leveraged the war to play off of viewers’

⁹ U.S. Department of Commerce. Bureau of the Census, “Manuscript Census, Gila County, Arizona.”

¹⁰ William H. Green, ed., *The Negro Motorist Green-Book* (New York: Victor H. Green, 1940), <http://digitalcollections.nypl.org/items/dcb66a80-83d3-0132-5b00-58d385a7b928>.

¹¹ During the 1940s, the *Arizona Silver Belt* was published in Miami, Arizona, the town next to Globe. Miami and Globe were and continue to be quite closely linked, often referred to as “Globe-Miami.” Moreover, the *Arizona Silver Belt* was established in Globe and had moved to Miami, so it continued to be a news source for Globe residents even though it most frequently addressed its stories to Miamians.

sympathies: “Leaves, papers, old boxes, barrels, parts of cars and other equipment scattered about the premises are an eyesore, and your son and your neighbor’s son have seen enough eyesores to last them a life time [*sic*].”¹² Accordingly, after years of intense industry and—for some returning residents—searing images of death and destruction, landscapes that portrayed a sense of order would have been a welcome sight.

Although the streets received some cleanup attention during the 1940s to assuage the chaotic zeitgeist of World War II, mining landscapes were of less concern until new market demands pinpointed Globe as a source of a rare mineral: chrysotile asbestos. Globe’s copper days had dwindled during the 1920s and virtually ended when the Old Dominion Mine closed in 1930, so residents turned to other nearby copper, uranium, and asbestos mines. Although asbestos had been mined in the area since at least the 1910s, the federal government launched a large-scale purchase program in 1950 to stockpile asbestos, which it considered a “critically scarce strategic non-metallic” mineral.¹³ Among asbestos sources around the world, Arizona chrysotile asbestos was particularly desirable for its long fibers in uses like fireproof exterior wall sheathing, electrical insulation, and cement sewer pipes. It was also the only source of pure asbestos in the United States.¹⁴ As a result, Globe could claim in earnest that it had something unique to offer not just residents but the nation. In 1952, twelve men formed the Arizona Asbestos Producers Association to regulate asbestos production, support small producers, and “to promote the financial success of Gila County asbestos industry in general.”¹⁵

¹² “Clean Up for the Holidays,” *Arizona Silver Belt*, November 8, 1945.

¹³ “Iron-Free Asbestos Find Made,” *Arizona Republic*, August 9, 1953.

¹⁴ Johns Manville, *Asbestos: A Matter of Time* (U.S. Bureau of Mines, 1959).

¹⁵ “Green Heads Asbestos Unit,” *Arizona Republic*, June 9, 1952.

The reliance on asbestos mining differed from Globe's earlier copper mining years since most of the mining occurred within a one hundred mile radius, but ore processing still occurred in town, making Globe the center of operations. Also new was the reliance on maintaining relationships with the San Carlos Apache, since asbestos deposits were often on San Carlos Reservation land and because mine owners employed Apaches alongside non-Indian workers (Figure 5.1).¹⁶ Moreover, many of the Apache workers for a company like Jaquays not only worked for the company, but also remained with the company longer than many of the non-Indian workers. This would later play into issues surrounding exposure to asbestos and the latency of asbestos-related diseases, as discussed in Chapters Six and Seven.¹⁷

The reality of reliance on mining hit again in the late 1950s when federal funding for Arizona's asbestos industry was up for renewal, but the mines were operating at a deficit. Metate Asbestos Corporation General Manager Jack L. Neal peppered Arizona Senator Carl Hayden with letters begging him to advocate for continued funding. From the start, Neal's pleas consistently mentioned the Apache people as examples of why ending the asbestos funding would be harmful.¹⁸ In 1958, he wrote to Senator Hayden: "Without an extension of these funds for stockpile purchase, all of these miners will be added to the unemployed, which is very serious for these Apaches, as many know no other form of work and there is no other sort of employment on their Reservation." Here and in other letters, he

¹⁶ "Glia Asbestos Mine Activities Increase," *Arizona Republic*, March 29, 1953.

¹⁷ "Information on Current Indian Employees at Jaquays When X-Ray/Function Study Started" (circa 1973), File Folder 10, Box 5, Wood-Gerhardt Asbestos Study Collection, PP-MS 256, Arizona Heritage Center, Papago Park, Phoenix, Arizona; "Information on Ex Indian Employees of Jaquays When X-Ray/Function Study Started" (circa 1973), File Folder 10, Box 5, Wood-Gerhardt Asbestos Study Collection, PP-MS 256, Arizona Heritage Center, Papago Park, Phoenix, Arizona; "Information on Current Non-Indian Employees at Jaquays When X-Ray/Function Study Started" (circa 1973), File Folder 10, Box 5, Wood-Gerhardt Asbestos Study Collection, PP-MS 256, Arizona Heritage Center, Papago Park, Phoenix, Arizona.

¹⁸ Chiricahua Apache, Yavapai, and Apache.

foregrounds the Apache's loss of employment as a reason not to end funding for asbestos mining.¹⁹

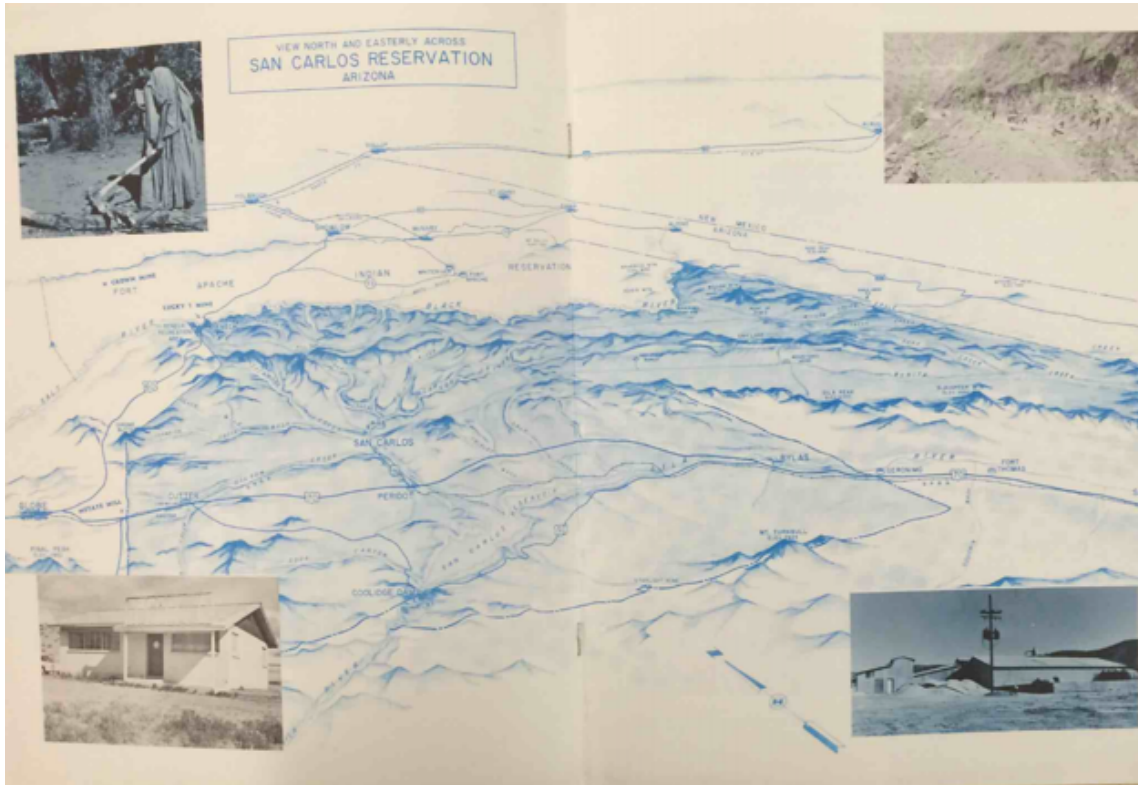


Figure 5.1. Image of asbestos mine area. Globe is on the far left, just above the image superimposed on the lower left corner. Metate Mill is labeled just to the east (right) of Globe. The blue shading represents the San Carlos Reservation. Asbestos mines were typically along the western border of the reservation and north (above) Globe. Circa 1961-1968. Source: Carl T. Hayden Papers, Arizona State University, Tempe, Arizona.

Neal was not alone. Two years prior, Arizona Senator Barry Goldwater used Apache employment to justify a bill that would continue funding the asbestos industry.²⁰ San Carlos Tribal Council Chairman Jess J. Stevens visited Washington, D.C., in 1957 to provide testimony before a congressional committee. He argued that “someone is going to have to take care of these Indians if this bill should not go through in our favor” and that it “would

¹⁹ “Letter from Jack L. Neal to Arizona Senator Carl Hayden” (March 27, 1958), Asbestos Station, Globe- requests stockpiling fabric, correspondence, 1957-1962, Folder 2, Box 412, Series XXXV, Carl T. Hayden Papers, Arizona Collection, Arizona State University, Tempe, Arizona.

²⁰ “Production of Nonferrous Chrysotile Asbestos,” in *Congressional Record*, vol. 102, pt. 4, S 3499, Eighty-Fourth Congress, Second session, 1956, 5227.

mean the destruction [*sic*] of my tribal government” and of “human resources among my Apache people.”²¹ The Arizona asbestos industry and worker representatives fought a hard battle, but federal funding petered out, and the mines and mills closed in 1968.²²

These economic concerns echoed those of earlier areas, but less apparent in the readily available narratives about this period in Globe’s past are the relationships between mining asbestos and worker’s health. The potential negative human health effects of asbestos milling and mining, in fact, are absent from company correspondence and Congressional records. One might think that this was prior to general knowledge about the health effects of asbestos. But it was not. The U.S. government released a report in 1918 that recognized abnormally high risk of early death among asbestos workers.²³ In 1930, British physician Edward Merewether published his findings about “asbestosis” as a disease affecting asbestos workers.²⁴ The link of asbestos to cancer was first reported in 1935.²⁵ Even so, a 1959 U.S. Bureau of Mines film, “Asbestos: A Matter Time,” described asbestos’ many uses, without mentioning the effects on the health of asbestos miners.²⁶

Perhaps, then, the Arizona companies and residents were less familiar with this information. Mention of lung disease, asbestosis, and any other indication of asbestos and

²¹ “Letter from Jess J. Stevens to Arizona Senator Carl Hayden” (February 12, 1957), Asbestos Station, Globe- requests stockpiling fabric, correspondence, 1957-1962, Folder 2, Box 412, Series XXXV, Carl T. Hayden Papers, Arizona Collection, Arizona State University, Tempe, Arizona.

²² “Letter from Jack L. Neal to Representative Sam Steiger” (July 10, 1968), Globe Asbestos Station, correspondence, data (SBA, Mining, Tariff), 1961-1968, Folder 19, Box 322, Series XXXV General Services Administration, Carl T. Hayden Papers, Arizona Collection, Arizona State University, Tempe, Arizona.

²³ F.L. Hoffman, *Mortality from Respiratory Disease in Dusty Trades Inorganic Dusts*, Bulletin No. 231, Industrial Accidents and Hygiene Series 17 (Washington, D.C.: Government Printing Office, 1918), 178–79.

²⁴ E. R. A. Merewether, “The Occurrence of Pulmonary Fibrosis and other Pulmonary Affections in Asbestos Workers.,” *Journal of Industrial Hygiene* 12 (1930): 198–57.

²⁵ K. M. Lynch and W. A. Smith, “Pulmonary Asbestosis III: Carcinoma of Lung in Asbesto-Silicosis,” *The American Journal of Cancer* 24, no. 1 (May 1, 1935): 56–64.

²⁶ Johns Manville, *Asbestos: A Matter of Time*.

miners' illness or death is noticeably absent from the *Arizona Silver Belt* from 1940 to 1975. There was a mine, mill, and smelter worker strike in 1954, but it was a sympathy strike called by the International Union of Mine, Mill, and Smelter Workers to support workers in Butte, Montana, who were demanding better pay and insurance from the Anaconda Copper Company.²⁷ In letters from Neal, Stevens, and senators Goldwater and Hayden, there is no mention of health, just economics. They were either unaware or prioritized employment over health. The mining companies and even some residents pursued mining of minerals that posed known health risks. Not only did the mining labor put workers into potentially lethal contact with asbestos, but it also created a lasting problem by scattering asbestos residue into the soil where it remained for decades and was the site of a mobile home community through the 1970s, as discussed in the penultimate chapter of this dissertation.

By the 1960s, then, Globeites might attract investment based on the availability and processing for asbestos, which was considered valuable, but they struggled to attract tourist dollars. They did not attempt to spin mining itself as a tourist attraction, as Anaconda Copper Company would with its Berkeley Pit Mine in Butte, but instead pivoted tourists' attention to the town's access to outdoor recreation opportunities. For instance, in "The Gila County Story," a 1969 tourist booklet, many of the short essays and advertisements tout camping areas, parks, ancient Native cultures, and recent public projects, such as dams and highways. There is, however, a full-page story in the center of the booklet chronicling the area's relationship to mining (Figure 5.2). Notably, it does not direct visitors to visit historical mining sites. Instead, there is a picture of the abandoned Old Dominion Mine structure and, on the next page, a note about touring the active copper mine in nearby Miami. Mining, in

²⁷ "IAM May Settle Strike This Weekend," *Arizona Silver Belt*, August 26, 1954.

this sense, was very much past and present, with a visual and textual focus on the productivity of the mining industry and no mention of its environmental impact.

The government's interest in Globe-area asbestos reinvigorated Globe's economy and centered Globe as the source of a unique, scarce mineral. It was not Globe itself, nor the town's attachment to its Old West days that made it a desirable location during the 1950s, but its relationship to a larger context. The attention to natural resources and outdoor recreation in mid-twentieth century tourist literature reinforced this idea. In doing so, the notions of cleanliness that shaped the development of mining towns like Globe did not apply to the mining industry.

Preservation and Planning: Leadville, Colorado

Simultaneous with the postwar federal interest in stockpiling raw materials that reinvigorated towns like Globe, mining towns began facing the environmental consequences of their industrial past. In some cases, they celebrated that history through preservation projects that saved the houses and business buildings of those who achieved wealth as a result of mining. In other cases, the towns used urban renewal-type projects to erase some elements of the industrial past while preserving others. Leadville's mining and urban planning projects in the mid-twentieth century increased nonresident influence. Moreover, the success of the historic preservation projects versus the problems of the mining and urban development projects reveals that residents supported projects that contributed to a celebratory narrative about the past and promoted the promises of future mining rather than those that modernized the Central Business District. It also deepened the division between town leaders and the general population, as well as between residents.

The water supply had long influenced the direction and type of mining operations in Leadville, but large-scale concerns emerged in the 1930s, coinciding with federal involvement in local mining affairs. Water drainage in particular preoccupied Leadvillites during the 1930s and 1940s. Discussions about constructing the Leadville Mine Drainage Tunnel (LMDT), for instance, began at least in the 1930s, but gained traction in the 1940s when several companies pushed for government support of tunnel construction. Drainage tunnels are common in mining landscapes, because when miners dig shafts and tunnels, water trickles down the walls and pools, making it difficult to mine. A drainage tunnel offers a place for that water to go and, if deep enough, also relieves mining companies of the cost and maintenance required to pump the water out of mines. By 1940, several drainage tunnels served the Leadville mining district, namely the Canterbury Tunnel (Figure 5.3). But stakeholders considered digging a shallow tunnel leading to a north fork of the Arkansas River or a deep tunnel leading to a southern fork of the Arkansas River.²⁸ Such a tunnel would allow mining to continue in the hills east of Leadville by funneling mine water down to a fork of the Arkansas River.

Mine drainage water, however, could contain higher levels of metals and minerals than those which naturally occurred in nearby waterways. In correspondence between mine company owners and federal employees during the 1940s, there is little evidence of concern about the hazards of drain water, despite it being a known concern covered in 1930s scholarly journals.²⁹ Whether these particular stakeholders knew it or not, mine drainage

²⁸ Lawrence P. Brown and Edward D. Dickerman, "Water Holds Back the Production of 2,000,000 Tons of Vital Metals," *Mining Year Book*, 1943, 64–66.

²⁹ C. F. Drake, "Effect of Acid Mine Drainage Water on River Water Supply [with Discussion]," *Journal American Water Works Association* 23 (1931): 1474–94; "Health Service Seals Many Old Coal Mines To End River Pollution From Acid Seepage," *New York Times*, May 22, 1938; "WPA Is Reducing Mine Acid," *New York Times*, April 15, 1939; Robert A. Shanley, "Franklin D. Roosevelt and Water Pollution Control Policy," *Presidential Studies Quarterly* 18 (1988): 319–30.

tunnels could release water that contained toxic levels of heavy metals and acid, and they also shifted the geological structures of the earth.

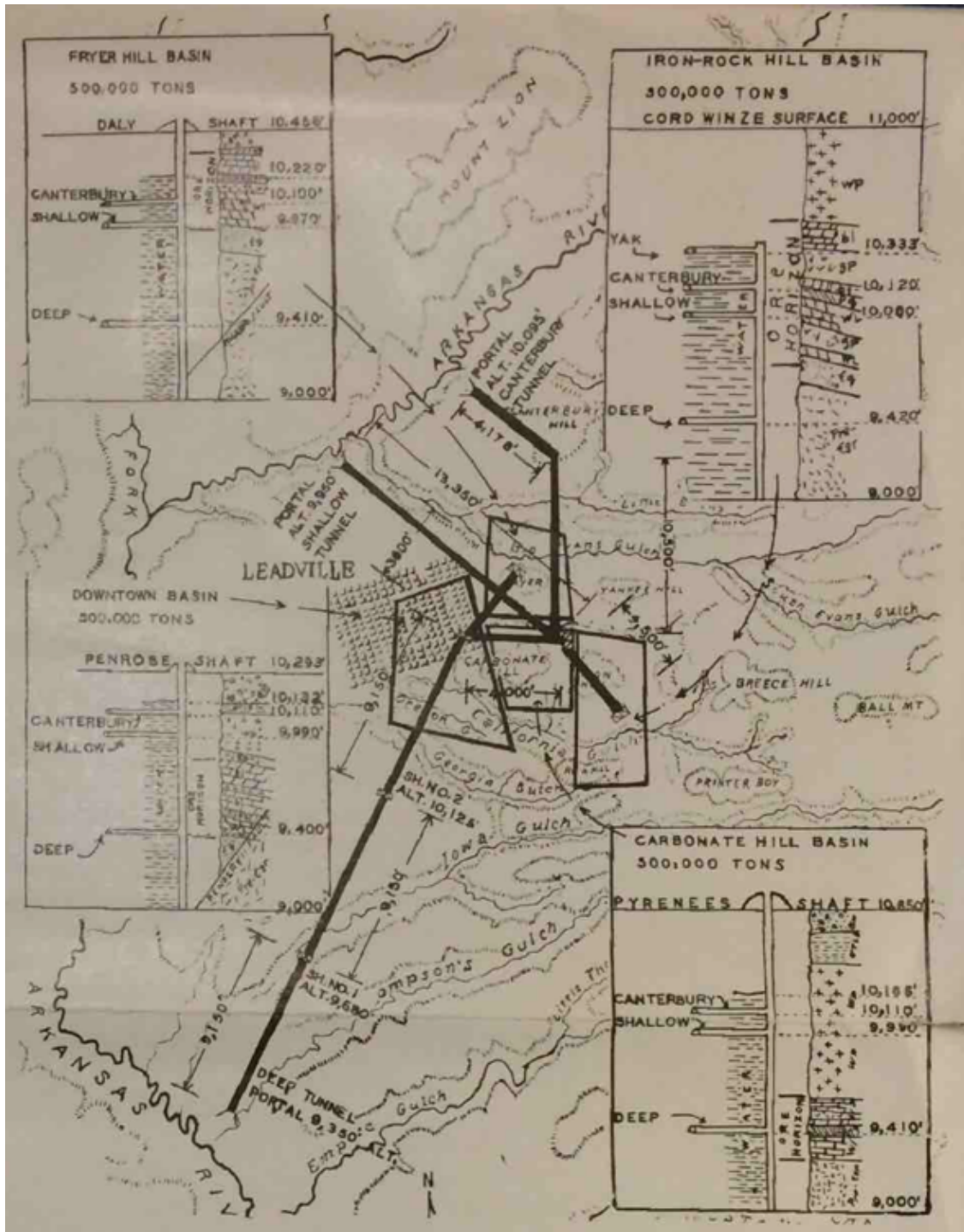


Figure 5.2. Map depicting location of mine drainage tunnels in Leadville, Colorado, 1943. Source: 1943 *Mining Year Book*.

Mine drainage was one problem for mining communities; so too were water sources intended solely as drinking water. Key actors in the Leadville water discussions were Leadville Water Company President Vernon F. West and Springfield City (Missouri) Water Company Superintendent Wilbur H. Dewey. Initial correspondence among Leadville Water Company employees, headquartered in Portland, Maine, centered on gaining water rights. Not until 1942, about a year into the heaviest flurry of correspondence on record for the company, did someone mention the water quality. Dewey wrote to West that “When the epidemic of diarrhea occurred at the Smelter last spring, the chemist from the State Board of Health said that, ‘this water supply should be chlorinated.’ We convinced him that it was not the drinking water that caused the trouble, but he still insisted that the water used from this service was dangerous to use, as there are several squatters’ homes on the property which is part of the water shed.”³⁰ Water company owners, then, were conscious of the relationship between humans and a larger ecosystem, but unconvinced that their water was the problem. Significantly, although the State Board of Health believed the water near the smelter was contaminated, its comment that the water “*should be chlorinated*” [emphasis added] suggests that the choice was left to the Leadville Water Company. The example also involved a complex relationship of nonresident and resident actors. In this instance, Vernon F. West was president of the Leadville Water Company, but the company’s headquarters were in Maine. With no evidence of him ever living in Leadville or even visiting frequently, one might wonder if West truly understood what the water was like for those squatters’ homes.

Simultaneous with the increased focus on water, both residents and nonresidents stepped up efforts to preserve some of Leadville’s historic resources. By the 1950s, Leadville

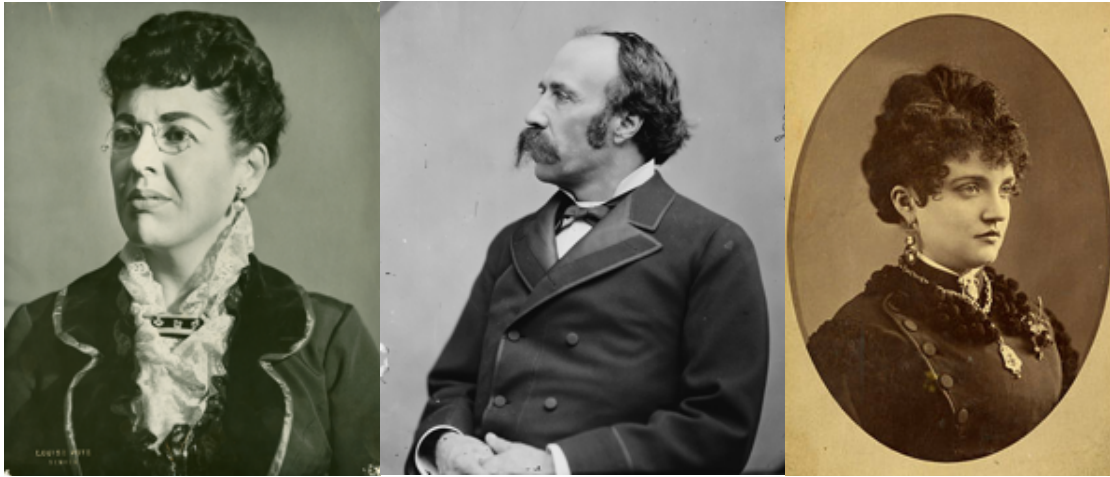
³⁰ “Letter from Wilbur H. Dewey to Vernon F. West” (December 28, 1942), LWC & LLL&WC Correspondence, File Folder 8, Box 1, Leadville Water Company Collection, 1878-1971, Stephen H. Hart Library, History Colorado, Denver, Colorado.

was over seventy-five years old. Many of the prominent citizens from the boom years in the 1880s had passed away, leaving their legacies in the form of sturdy, stately structures. As the experiences of building Leadville passed out of living memory during the 1950s, efforts to preserve Leadville's history gained traction with the creation of "Leadville Assembly, Inc.," a non-profit organization. The general goal of the Assembly was to rehabilitate "the buildings of the old Tabor Matchless Mine and those objects of interest connected with the history of H.A.W. Tabor, his wife Baby Doe, and the Matchless Mine" and to "bring back to mind the old glories of Leadville during the mining days."³¹ The goal was quite narrow and focused on a unique (rather than representative) Leadville family, the Tabors (Figure 5.4).

Along with many other people, Horace Tabor and his first wife, Augusta, traversed the Great Plains in the late-nineteenth century. Their story diverged from the majority of others living in the West when Tabor struck it rich. To be more specific, he backed a couple of prospectors in exchange for a cut of whatever they found, and the prospectors struck a vein in what became one of the top-grossing mines of the Leadville district, the Little Pittsburg. He sold his interest in the Little Pittsburg and bought the Matchless Mine. As Tabor's riches skyrocketed, his marriage to Augusta plummeted, and the two divorced in January 1883. In March 1883, Tabor married the woman he had been seeing since before the divorce and twenty-four years his junior: Baby Doe McCourt. They lived a lavish lifestyle in Denver until the 1893 silver market crashed, forcing them into bankruptcy. Horace died in 1899, leaving Baby Doe with the then-defunct Matchless Mine. Baby Doe moved back to

³¹ "Certificate of Incorporation for Leadville Assembly, Inc." (April 20, 1953), File Folder 76, Box 12, Caroline Bancroft Family Papers, WH1089, Western History Collection, The Denver Public Library.

Leadville and lived in a cabin next to the Matchless's main shaft until she froze to death on March 5, 1935.³²



Figures 5.3. Portraits of the Tabors—Augusta Tabor, Horace's first wife (left); Horace Tabor (middle); and Baby Doe Tabor, Horace's second wife (right). Source: Denver Public Library.

With this background in mind, it is apparent that the Leadville Assembly's 1950s goal of preserving the buildings relating to the Tabors favored structures associated with some of Leadville's richest and most storied residents. The goal of the Assembly was in part to "bring back to mind the old glories of Leadville during the mining days."³³ Interesting, then, that they chose a modest cabin—a "shack," even—as their first project. It certainly had been part of Horace Tabor's rise. When Baby Doe occupied the structure, it was run-down, cramped, drafty, and, frankly, a mess. Some of the mess the Assembly encountered when photographing the image shortly after her death might easily have been a result of neglect in her dying days (Figure 5.5). But considering that Baby Doe was known for having "gone mad" in her final years and considering the accumulation of material, this state of disarray

³² Caroline Bancroft, *Tabor's Matchless Mine and Lusty Leadville*, Third Edition (Boulder, Colo.: Johnson Books, 1960); Gandy, *The Tabors*; Duane A. Smith, *Horace Tabor: His Life and the Legend* (Boulder: Colorado Associated University Press, 1973); Judy Nolte Temple, *Baby Doe Tabor: The Madwoman in the Cabin* (Norman: University of Oklahoma Press, 2007).

³³ "Certificate of Incorporation for Leadville Assembly, Inc."

reflected her emotional and mental state: the bereaved, aged woman whose life of riches was in shambles.



Figure 5.4. Interior view of Baby Doe Tabor's cabin at the Matchless Mine near Leadville Lake County, Colorado, 1935. Source: Denver Public Library.

Almost exactly eighteen years after Baby Doe's death, the Assembly met and agreed that the "Cabin will be refurbished to the state of repair that it was at the time of Baby Doe Tabor's death in 1935."³⁴ A year later, they opened to the public, offering a version of the cabin with papered walls, sparse shelves, and a clean, carpeted and wood floor (Figure 5.6). Clearing the piles of newspaper and re-papering the walls reflected the Assembly's desire to make the cabin accessible and public-friendly. In doing so, they cleaned up the reality of

³⁴ "Leadville Assembly Club Meeting Minutes" (April 29, 1953), File Folder 76, Box 12, Caroline Bancroft Family Papers, WH1089, Western History Collection, The Denver Public Library.

Baby Doe's world in her dying days, a reality that so poignantly highlighted her journey from Denver socialite to "mad woman in the cabin." On the one hand, it was likely dangerous to leave the cabin too close to the state it had been in when Baby Doe lived there. Dust, mold, and rodents might threaten visitors' well-being. On the other hand, the cleaned up version was certainly not the "state of repair that it was at the time of Baby Doe Tabor's death" and presented a version to the public that failed to portray the cabin's messiness during her final years. Doing so suggested that Baby Doe lived a fairly comfortable, though modest, life in the end, when in reality, she struggled.



Figure 5.5. Interior view of Baby Doe Tabor's cabin, in 1953 after restoration, at the Matchless Mine near Leadville, Lake County, Colorado. A door on the stove reads: "Flash."

The Assembly's membership also influenced the project and why the public encountered a romanticized version of Baby Doe's dying days. The founders of the Assembly were, in fact, Denver area residents, white, middle- or upper-class, and only one

(Caroline Bancroft) was a woman. Still, quickly after forming, the Assembly incorporated residents into the rank and file, and made a point that residents would be the majority, but there was still a heavy middle-class, white emphasis.³⁵

Preservation efforts like the Assembly's Baby Doe Cabin project fit with a narrative about the West that celebrated the late-nineteenth century as a time when eastern, U.S.-born, generally white, men and women "pioneered" the West, finding some success and some failure. But the Leadville that existed during the Tabor saga was one where people of various ethnicities lived in separate neighborhoods, the streets were quagmires of mud, trash, and manure, and many residents barely scraped by. Of course, some narratives about the West capitalized on the darker aspects of mining towns—the crime and vigilantism, the gambling, the saloons and bordellos. But for a 1950s town to appeal to tourists, who were largely white, middle-class U.S. families, the towns believed they needed to squelch the evidence of some of the wilder aspects of their past. Indeed, it would have been logistically difficult to visit a town for a fun trip where the streets were a mess and crime persisted. Needless to say, the places that had long been labeled as areas of vice and disease—workers' housing, ethnic businesses, and redlight districts, especially—went without preservation assistance in the mid-twentieth century.

The 1960s wrought more change for Leadville's urban landscape. The sporadic, often "private-interest-turned-public-service" historic preservation efforts of the 1940s and 1950s successfully saved a few key historic properties, but a national push for "urban renewal" in cities during the 1960s prompted Leadville's town leaders to invite the input of nonresident urban planners. In 1963, a group of all-male residents formed the Leadville-Lake

³⁵ "Leadville Assembly Inc. Partial Records" (February 3, 1953), Scrapbook 1, Box 1 1952-1971, Leadville Assembly, Inc. Records, WH206, Western History Collection, Denver Public Library. Founding members were Caroline Bancroft, Carl Morse, Paul Kohlberg, Paul C. Cook, John W. Fishback, Frank E. Kendrick (Jr.?), Barney Greenlee, and Gerard Fairchild.

The Commission had several suggestions: Lake County had a need for a “Unique Attraction” and for “maintaining a Desirable Environment, having Adequate Facilities, carrying out Effective Promotion, and achieving Seasonal Balance” (Figure 5.7).³⁷ To them, the desirable environment was “giving [tourists] what they have come to find, with a minimum of discomfort and unpleasant surprises.” The Commission adopted a monolithic view of tourists. Revitalizing the business center assumed tourists could not only afford the time and money to drive up to Leadville, but also the money to spend while actually in Leadville. It also assumed that there was some sort of basic expectation that tourists had about what they would find in Leadville. It is likely that the Commission envisioned tourists would be more of the same people who had been coming practically since the start: white middle- and upper-class.

But how did they decide which resources to preserve and the method to preserve them? They tell us: “the decision of whether or not to modernize or to restore to historical character can be made mostly on the basis of who does the business serve primarily—tourists or local residents[?]”³⁸ And what about mining landscapes? They had thought about that, too: “In the Carbonate Hill Mining Park, with possibly some additions on the east edge of town, near the Unique Attraction Center, it will be desirable to preserve some of the mine and smelter dumps for historic character.”³⁹ In the next sentence, they noted that “in locations closer in or quite distant from Carbonate Hill, renewal should take these eyesores into account with the intent of removing them and re-using the land.”⁴⁰ The Commission’s

³⁷ Leadville-Lake County Regional Planning Commission, *Leadville and Lake County, Colorado*, 72.

³⁸ Leadville-Lake County Regional Planning Commission, *Leadville and Lake County, Colorado*, 137.

³⁹ Leadville-Lake County Regional Planning Commission, *Leadville and Lake County, Colorado*, 141.

⁴⁰ Leadville-Lake County Regional Planning Commission, *Leadville and Lake County, Colorado*, 141.

effort to include the mining landscape as well as the Central Business District reinforced the focus on telling the “glory” story of Leadville, since they did not include the redlight district or the outlying neighborhoods where workers had lived. Moreover, they identified some mine and smelter dumps as something that brought visual “historic character” but then called others “eyesores,” the only difference being where the dumps were in relation to the planned park—and it was the ones closer to the park that they believed would augment historic character. All planning aside, the 1963 Master Plan never came to fruition. Later documents cite the cause for its failure as resistance from the community, at least partially because the Commission had never even sought general community input.⁴¹

As a period when external influence to update Leadville while saving historical resources increased, things were not looking good. Leadville was not benefitting from an influx of investment that Globe saw (and lost), but it was also not facing the wholesale destruction that plagued other mining towns, like Butte.

Mining Expansion: Butte, Montana

Indeed, residents of Butte in the postwar era witnessed one of the vastest, fastest changes to their environment. As with Globe and Leadville, the mining industry in Butte during the 1940s saw a small boost to serve the war effort. The *Copper Commando*, which provided weekly updates on the local mining industry, encouraged intense industry, to the point of touting, “Smoke’s got to belch from chimneys, day and night, for a long time to come. Wheels must turn in the factories, or the drums won’t roll on the battlefields. Vital metals must be produced or the whole war effort bogs down.”⁴² By the 1950s, the mining

⁴¹ Gage Davis and Associates, “Leadville, Colorado: A Study in Urban Conservation” (1979), 9, Colorado Mountain History Collection, Lake County Public Library.

industry in the U.S. relied on providing stockpiles of metals and minerals for Cold War weapons and technology production. In response, mining companies increasingly turned to open-pit mining. Rather than dig tunnels and shafts to follow mineral bodies and metals veins, open-pit mining began on the surface and spiraled downward. Its scale is so massive that it wipes out mountains and sometimes entire neighborhoods.⁴³

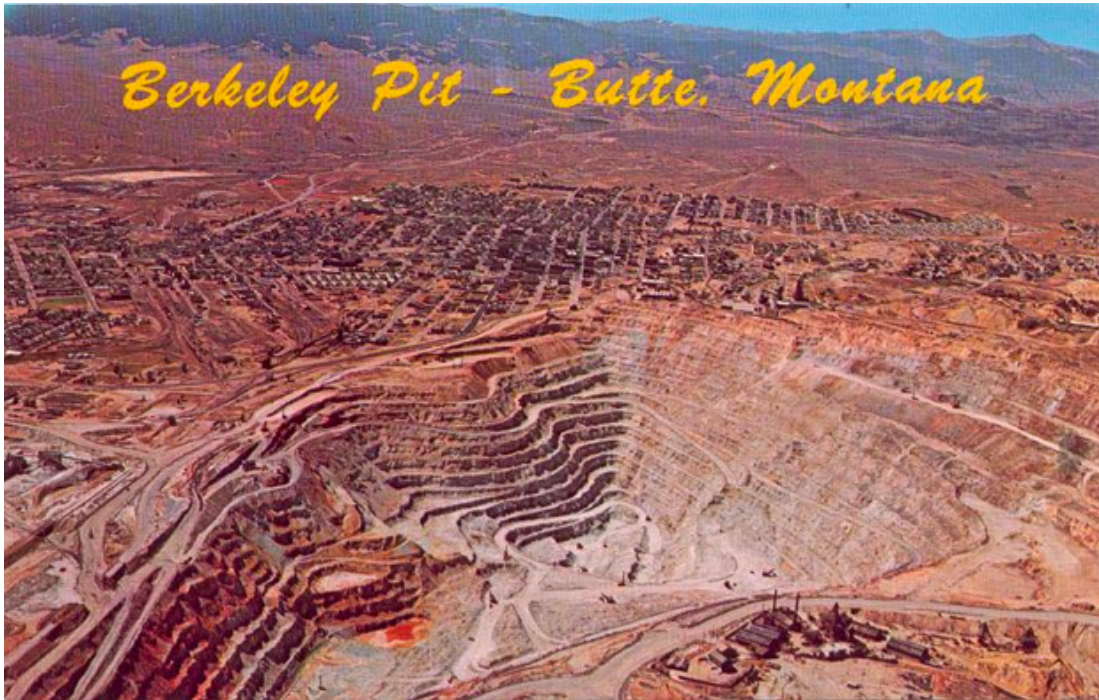


Figure 5.7. Postcard showing the Berkeley Pit Mine in Butte, Montana. The point of view is looking westward with the oldest sections of Butte being in the center. Circa 1950s.

In July 1955, the Anaconda Company, owner and operator of the Berkeley Mine in eastern Butte, began open-pit mining (Figure 5.8). The Berkeley and other surrounding mines were underground mines dating back to the late-nineteenth century, creating a massive network of tunnels. But in the 1950s, Anaconda decided to shift its operations to the open-

⁴² "That Smoke Means Business!," *Copper Commando* 1, no. 10 (January 1, 1943): back cover.

⁴³ See, for example, Bartlett Mountain at Climax, Colorado. The mountain was a 13,400-foot peak, but as of 2018, the Climax Molybdenum Mine has removed the western face of the peak.

pit method, which involved the removal of ore through drilling, blasting, and then trucking. After drilling and blasting, truckers drove ore to a waste dump, a leach dump, or a crusher. For promising batches, the ore was then sent to a concentrator, which contained floatation operations that mixed ground ore with chemicals. After concentration, came smelting and conversion, where blowing air burned off sulfur and oxidized iron, resulting in gaseous waste. Smelter workers dumped the unwanted molten metal, or “slag,” in piles outside the smelter and poured the desired molten metal into molds, which they shipped to be further purified at processing sites outside of Butte, such as one in Great Falls, Montana.⁴⁴

The pit operation grew quickly during the 1950s and 1960s, introducing massive change to the local environment, including the destruction of neighborhoods and the creation of environmental dead zones. Meaderville, the neighborhood that popular journalists had touted as a holdout of Butte’s vice culture, was an immediate victim of this destruction, as was the nearby McQueen neighborhood to the east. Historian Brian Leech argues that Anaconda did not *target* the ethnic neighborhoods, because the company was merely pursuing the richest ore bodies, which were underneath Butte’s eastern ethnic neighborhoods. Leech noted that the relationship between class, race, and ethnicity and the mines stemmed back to mines beginning in that area; workers tended to live closest to the mines in order to reduce the commute to their jobs.⁴⁵ Assuredly, Meaderville continued to be home to many of Butte’s ethnic communities in the 1950s when pit operation began. Eventually, the pit’s boundary extended east *over* Meaderville. As the pit expanded, Anaconda bought up the houses, often offering residents a company-owned house in exchange.

⁴⁴ Brian James Leech, *The City That Ate Itself: Butte, Montana and Its Expanding Berkeley Pit* (Reno: University of Nevada Press, 2018), 144-147.

⁴⁵ Brian James Leech, *The City That Ate Itself*, 227-228.

Residents disagreed over how well Anaconda handled the situation. At any rate, the pit's expansion and, as Leech notes, the loss of Meaderville, caused residents in other locations to feel hopeless about fighting for the preservation of their own neighborhoods. Their loss meant the loss of the historic homes and businesses relating to some of Butte's most ethnically diverse residents.⁴⁶

Even after residents of Meaderville and McQueen moved, environmental issues that accompanied pit operations plagued workers as well as residents of other neighborhoods. For example, although miners had escaped the stagnant silica-filled air of the underground mines, exhaust fumes from diesel machinery as well as endless dust and dirt permeated the air in the pit. "If you can't see it, smell it, or taste it, it ain't real air," truck driver Bill Long joked.⁴⁷ Residents, too, complained of pollution, shifting and sinking ground, and noise. Concentrators on the southern edge of Anaconda's property kicked up dust and emitted strong odors.⁴⁸ A line for transporting tailings, or waste rock mixed with water, ran through McQueen streets and leaked onto the streets, created dust or sludge. Some residents complained about the effect of these processes on their respiratory health, others complained about the cosmetics. One McQueen resident, for example, complained about the siding of his house being "chalked, yellowed, and covered with accumulating dust."⁴⁹ The rise of the open pit mine, while it preserved the spirit of former mining operations and encouraged the pursuit of a mining identity, subverted the efforts of many of the town's residents who had worked so hard to create a cleaner appearance in the town.

⁴⁶ Leech, *The City That Ate Itself*, 229-231.

⁴⁷ Leech, *The City That Ate Itself*, 155.

⁴⁸ Leech, *The City That Ate Itself*, 187.

⁴⁹ Leech, *The City That Ate Itself*, 188.

Despite the pit's messy operation, town leaders pursued civic cleanup. Like Leadville's town leaders, Butte's leaders joined the 1960s urban planning trend. In the 1960 "Overall Economic Development Plan," committee members wrote that Butte was "pushing back the deterioration and dilapidation of its former grandeur and replacing it with a new, modern concept of community planning."⁵⁰ Their plan was to replace rather than refurbish, much like the mass razing of dilapidated—but sometimes historically significant—properties in cities across the United States that embarked on urban renewal projects in the 1960s. Building on knowledge about some of the environmental health issues previous city planners and reformers had identified, Butte's leaders also conducted a health survey in 1966. Among other concerns, the survey listed a lack of adequate housing as a problem. To identify their future courses of action, the surveyors produced a map that categorized areas of Butte as "high," "middle," and "low" (Figure 5.9).⁵¹ The map echoes the practices of 1930s New Deal's Home Owners' Loan Corporation (HOLC), whose redlining maps categorized neighborhoods as "best," "still desirable," "definitely declining," and "hazardous."⁵² The Butte survey measured "housing condition, family income and education level of adults."⁵³ Although these criteria are somewhat objective, the *selection* of the criteria meant that the map, much like a redlining map, identified working-class, minority-occupied areas as the "low" areas and thus targets for cleanup. In this case, "cleanup" held the danger of displacement by improving the area so much that it priced out former residents out of their

⁵⁰ "Overall Economic Development Plan, Silver Bow County, Montana" (circa 1960), Box 2, Chamber of Commerce Collection, Butte-Silver Bow Public Archives, Butte, Montana.

⁵¹ Silver Bow County Health Personnel, Montana State Board of Health, and Communicable Disease Center U.S. Public Health Service, "Butte Metropolitan Area Public Health Survey" (October 1966), Vertical File 1603, Butte-Silver Bow Public Archives, Butte, Montana.

⁵² James Greer, "The Home Owners' Loan Corporation and the Development of the Residential Security Maps," *Journal of Urban History* 39 (March 1, 2013): 275–96.

⁵³ Silver Bow County Health Personnel, "Butte Metropolitan Area Public Health Survey."

own neighborhoods. The red, or the “low,” area on Butte’s health survey map coincides with some of Butte’s oldest working-class neighborhoods.

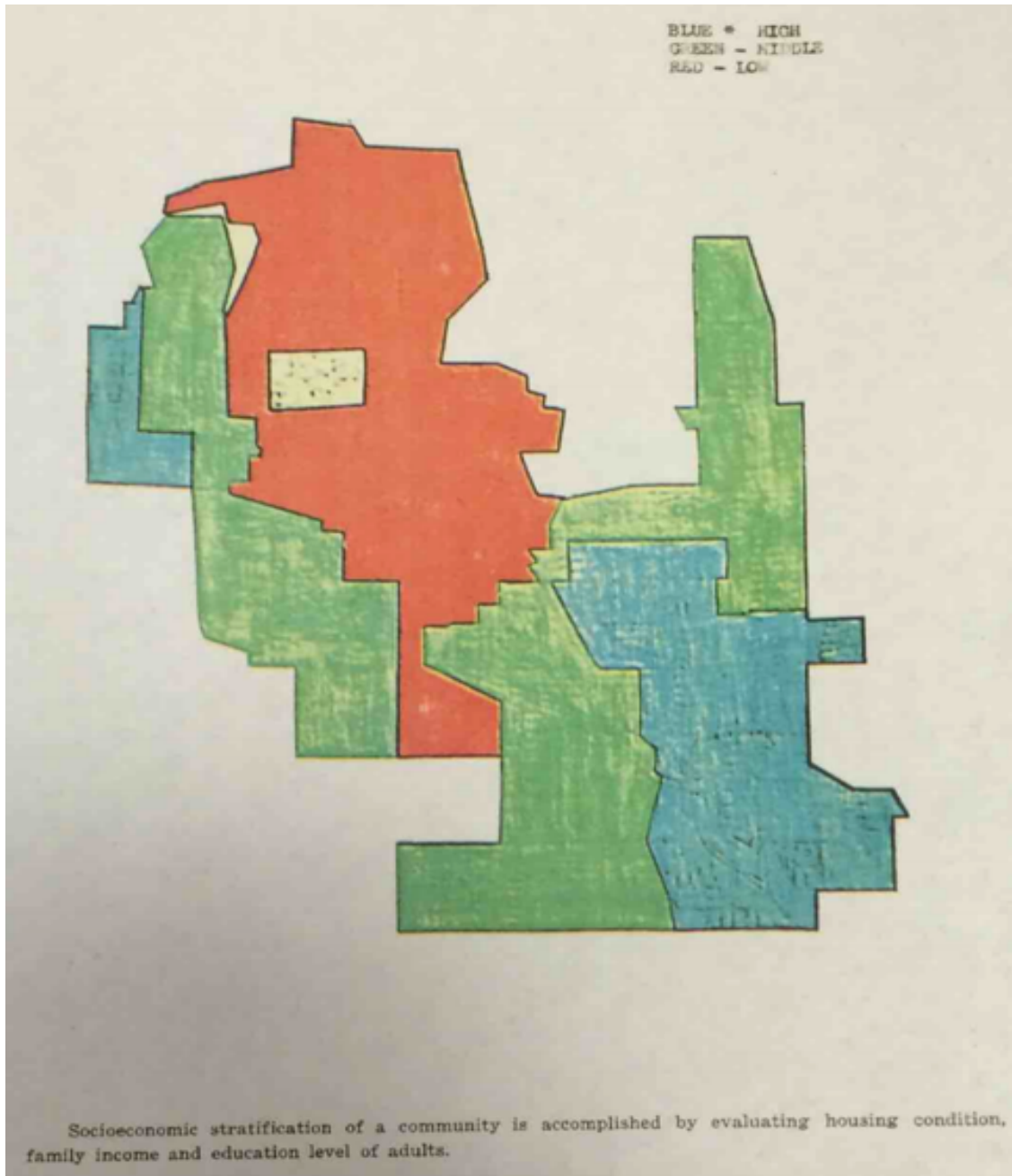


Figure 5.8. Map from “Butte Metropolitan Area Public Health Survey” to show “model neighborhoods,” 1966. Shows areas outlined and colored according to housing condition, family income, and education level of adults. Blue represented “high” socioeconomic status, green was “middle,” and “red” was low. The red areas are mainly old portions of Butte, including the Central Business District. Green and blue areas were generally developments from the 1940s and 50s. Source: Silver Bow County Health Personnel, Butte-Silver Bow Public Archives, Butte, Montana.

Although it is unclear how town leaders ultimately used the survey, the fact that they categorized the neighborhoods based on housing condition, family income, and education level of adults meant that they were more concerned with the present condition and perhaps potential for being an “up and coming” neighborhood, with income and education as indicators. Moreover, the red “low” area was closest to the Berkeley Pit and therefore susceptible to the presence of environmental hazards and the threat of relocation. Finally, there is one area that is noticeably colored but uncategorized. That small rectangular section within the red area represented Butte’s Central Business District. The crudeness of the map obscures the exact streets, so it is difficult to say if the rectangle includes or excludes places like Chinatown or the redlight district. And perhaps that obscurity is just as telling: leaders were looking only for a generalized idea of neighborhood health. And what of the Central Business District? As Chapter Six reveals, the CBD development after the 1960s fell subject to a whole new set of concerns, particularly as the federal government made federal funding available for environmental and historic preservation projects.

Conclusion

All of these major changes to the mining town environments—drainage tunnels, open-pit mining, asbestos, the creation of local historic preservation organizations, and postwar urban planning—reflected the input of both residents and nonresidents. In the instances of historic preservation and urban planning, groups of residents and nonresidents decided what to do about local environments based on what they perceived nonresidents would like or expect to see. In the mining-related landscapes, nonresidents and residents pursued mining methods and interests based on economic factors. In every case, there remained an attitude that the mining environments were separate from the urban

environments. Furthermore, the separate actions of historic preservationists and those interested in the natural environment led to a continued division of activists, which then led to environments that purported to tell the history of the towns but lacked characterizing features. Finally, even with resident input, there remained a particular class and race bias to these efforts, since most of those who got involved in preservation and planning were white and middle-class. Some had working-class histories—their parents or grandparents having been fairly poor miners or something similar—but they themselves were largely middle- or upper-class and believed their views represented those of most residents, past and present. The rise of federal historic preservation and environmental legislation changed many, but not all, of these issues.

For the immediate postwar era, however, mining town landscapes reflected the interests of a small portion of their population as well as nonresidents. Some early preservation efforts cleaned up mining landscapes, at least to some extent. Being conscious of health dangers certainly mattered, but to claim a cleaned-up landscape was a representation of the past without explaining the realities, such as at Baby Doe's cabin, was dangerous, because it sanitized the historical narrative. Finally, it is unclear if Edna Howe would have been happy or disappointed with how Globe appeared ten, twenty, or even thirty years after her 1940 plea for the government to “clean this town,” but one thing is certain: U.S. West mining towns of the postwar era often sought a level of cleanliness that contradicted the Old West image they claimed to portray. In doing so, they provided the basis for future legislation that limited which resources were preserved and how.

CHAPTER VI

“A BLIGHTING INFLUENCE”

1970-1983

When someone handed John Insalaco his birthday gift, he opened it, read the card inside, closed the box, and walked out of the room. He was hurt, perhaps infuriated.

In May 1983, members of the Breakfast Club in Globe, Arizona, had gathered to celebrate Insalaco's birthday. They decided to joke about Insalaco's living in the Mountain View Mobile Home community, an area just outside of Globe that the U.S. Environmental Protection Agency was in the process of listing as a Superfund site. The Superfund program identified hazardous locations throughout the nation and then sank millions of dollars into cleaning up each location. For some people living in or near a toxic area that becomes a Superfund site, Superfund status creates a stigma. Their hometown becomes a place that tourists refuse to visit. Some residents do not see evidence of the negative health effects on their bodies and the environment and thus see no reason to label their home “toxic.” Other residents want out. They trust the EPA's evaluation, even if they have not seen any negative effects in their or their neighbors' bodies. They would rather move from the place they have called home than take a chance in sacrificing their health.¹

In the 1970s, the presence of an asbestos mine polarized residents of Mountain View and the town of Globe more broadly. Many residents living in Globe believed that the Superfund status would disgrace the whole town. A warning sign posted on the site would

¹ Jane Kay, “Exodus Under Way at Globe Subdivision,” *The Arizona Daily Star*, May 31, 1983.

be like saying “Globe is contaminated, keep out,” local newspaper editor Tom Anderson wrote.² For local businessmen, this was a terrible possibility. *How can my business thrive if no one comes to Globe?*, they wondered. They also believed that Globe’s asbestos, the “chrysotile” form, was not a harmful type of asbestos. *Why create a stigma and make a bunch of people move (using taxpayer’s dollars) if there was no substantial evidence that this particular form of asbestos was harmful to health?*, they insisted. But Insalaco and his wife Elaine were also Globe business owners who actually lived in the mobile home community. “We can’t pick up and move,” Insalaco explained. They had a business. “How could we earn a living in Tucson? A bird in the hand is worth two in the bush.”³ Although some Globe residents feared what the Superfund status brought, Insalaco—an actual resident of the Superfund site—demonstrated no fear that the status would kill his business. He was not about to pick up and move out of Globe entirely. His Breakfast Club friends and other Globeites like them had been attacking the government and the press for making such a big deal out of the asbestos contamination.



Figure 6.1. John and Elaine Insalaco, residents of Mountain View Mobile Homes, Globe, Arizona, *Arizona Daily Star*, May 31, 1983.

² Tony Davies, “Controversy Over Hazards of Asbestos Has Fathered Bitter Feelings in Globe,” *Tucson Citizen*, June 17, 1983.

³ Kay, “Exodus Under Way at Globe Subdivision.”

John Insalaco might have been a business owner like other residents in and outside Mountain View, but he was also the butt of many rude and insulting comments and gestures, including his birthday gift. He opened that gift box just days after returning from Washington, D.C., where he had joined two other Mountain View residents, Catherine Scott and Sarah Luckie, to testify before a House of Representatives subcommittee about the EPA's actions.⁴ Inside the box was a piece of greenish brown rock. *Serpentine*. It was the type of rock in which asbestos is found. There was also a note: "Happy birthday, Johnny. This innocuous looking rock may or may not bring you the best of health over the next 20 years, take or give a few. But if you feel this may or may not be harmful to your health, you may redeem, not for one or two million, but for \$15.75 in merchandise at Gibson's. Yours truly, The TBC (The Birthday Club)." Laughter filled the room. Only Insalaco and Pinal County supervisor Bob Cosillas were unamused. Cosillas called it a "sick joke."⁵

Sick, indeed.

Although activists in urban areas had been sanitizing and cleaning up elements of their environments since the nineteenth century, it was not until the 1980s that efforts in historic preservation and environmentalism clashed and thus revealed a core issue: preserving dark and dangerous history was important, but doing so was often not aesthetically appealing and could even prolong the danger. This was particularly visible in mining towns in the 1970s. By that point, the historic preservation and environmental movements had coalesced and organized at the federal level. They standardized how to save and clean up historical environments, but in doing so, prioritized the places that fit a

⁴ "Residents Testify On Asbestos, EPA," *Arizona Silver Belt*, May 5, 1983.

⁵ Kay, "Exodus Under Way at Globe Subdivision."

particular ideal and either reshaped, ignored, or destroyed those that did not. I argue that these standards resulted in a crisis of identity for the towns where the artifacts of the past were too ugly and sometimes even unsafe to preserve. Moreover, the larger concerns about urban development and urban flight led many towns across the United States to confront their dying central business districts in ways that further contributed to the demise of historical elements in urban landscapes. Mining towns were no different. Or so they and their planners thought.

In the fields of environmental history and U.S. western history, scholars have been eager to document mining towns. Thomas Andrews' *Killing for Coal* and Brian Leech's *The City That Ate Itself* examine the relationships between mining town residents and their environments, emphasizing how miners depended on their relationships with the environment in order to make a living, even while those relationships destroyed their environment and aggravated tensions between miners and mining company owners.⁶ Other scholars, like Jessica Van Horssen in *A Town Called Asbestos*, have argued that some of this tension was not just environmental, but also closely tied to a global economy.⁷ In a similar vein, but with greater emphasis on specific localities, David Robertson's *Hard as the Rock Itself*, Gillian Klucas's *The Struggle to Revive an American Town*, and Bradley D. Snow's *Living with Lead* have chronicled the extent to which mining communities have grappled with the environmental hazards mining had created.⁸ This chapter digs more deeply into the

⁶ Thomas G Andrews, *Killing for Coal: America's Deadliest Labor War* (Cambridge, Mass.: Harvard University Press, 2008); Brian James Leech, *The City That Ate Itself: Butte, Montana and Its Expanding Berkeley Pit* (Reno: University of Nevada Press, 2018).

⁷ Jessica Van Horssen, *A Town Called Asbestos: Environmental Contamination, Health, and Resilience in a Resource Community* (Vancouver: University of British Columbia Press, 2016).

⁸ David Robertson, *Hard as the Rock Itself: Place and Identity in the American Mining Town* (Boulder: University Press of Colorado, 2006); Gillian Klucas, *Leadville: The Struggle To Revive An American Town* (Washington, D.C.: Island Press, 2004); Bradley D. Snow, *Living with Lead: An Environmental History of Idaho's Coeur D'Alenes, 1885-2011* (Pittsburgh, Pennsylvania: University of Pittsburgh Press, 2017).

intersection of urban planning, historic preservation, and environmental law in the 1970s. Evidence from planning documents, court hearings, photographs, newspaper articles, correspondence, and other archival treasures reveals that historic preservation and environmentalism have pursued similar goals, and yet their practitioners have erased or ignored environments due to their unrealistic ideals.

This chapter addresses each of the towns in order to emphasize various events and approaches that have affected their physical appearances. In the first section, I describe how each town adopted particular planning strategies, which determined much of the action regarding historic resources as well as mining. Each of the towns emphasized what to do about their central business districts (CBDs), comprising businesses, government buildings, hotels, restaurants, and shops. In the section, “Planning for History,” I analyze how Butte residents addressed the issue of planning for the future while simultaneously wanting to save some of the town’s historical structures. “Cleaning Up Ghosts of Mining Past and Yet to Come” describes Leadville, Colorado, during the 1970s, when mining projects, like a mine drainage tunnel, threatened to cause sinkholes, contaminate municipal water supplies, and flood a nearby mobile home community. Finally, “Image in Crisis” explores how the residents of Globe, Arizona, divided over their reaction to the Environmental Protection Agency designating a Superfund site on the eastern edge of town as a hazardous location needing extensive and expensive clean up. In planning their futures, these towns ultimately realized that they needed to confront their pasts. In the 1970s, federal legislation and regulations led some residents to reject the government’s assistance and others to plead for it.

Best Laid Plans: Butte, Globe, and Leadville

Silence makes a city street ghostly. Mining towns in the western United States have long had the reputation of “liveliness.” The general public viewed these towns as lively, in part, because they were noisy. In their late-nineteenth and early-twentieth century heydays, the towns reverberated with creaking wagons, whinnying horses, shouting freight drivers, and booming dynamite from deep in the earth. But by the 1970s, these towns lacked the din that had made the West “wild.”

Stillness also makes a city street ghostly. In the late-nineteenth and early-twentieth centuries, men, women, and children crowded the streets; wagons, cars, and trolleys crammed up against one another; and lifts carrying loads of miners ascended and descended the mine shafts. If, however, the dust and smelter smoke lay undisturbed in the street, gathered on a fireplace mantel in an abandoned boarding house, or settled deep into an old miners’ lungs, it signaled death. By the 1970s, such was the case for mining towns that had not already succumbed. In Globe, asbestos-laced dust drifted into the mobile home community on the eastern edge of town. In Butte, water pumps at the Berkeley Pit ceased their glugging, and water pooled to hundreds—eventually thousands—of feet deep and one mile wide. In Leadville, smaller pools of acidic mine water dotted the hills east of town and underground in abandoned tunnels. These were not the bustling “Wild West” towns they once had been. Furthermore, there were health concerns from mining’s legacy that were, by the 1970s, scientifically documented as threats.

The town leaders, however, wanted to revive that noisy, bustling Wild West image. Ever since the mining industry had slowed in the early-twentieth century, towns like Butte, Leadville, and Globe tried to attract tourists by hyping their locales as places to experience a bit of the Wild West. By the 1970s, they were still struggling. Even so, it seemed there was a

chance to revive the noise and bustle. With the passage of the National Historic Preservation Act in 1966, they could preserve that legacy. And with the creation of the Environmental Protection Agency in 1970, there was opportunity to face the environmental legacies of mining. The trick was figuring out how to preserve the reality of mining, which had undeniably altered the landscape, while eliminating the health threats that stemmed from that reality.

Performing that trick involved gaining the funds to do so. For towns like Butte, Globe, and Leadville, federal funding was an enticing new opportunity. The federal government began offering funds to towns for “urban renewal,” or redevelopment of urban areas. Although many of the cities applying for urban renewal could have been seen as risky investments (urban renewal was, after all, intended to revive dying urban corridors by building new businesses and sprucing up old ones), mining towns were particularly risky because of their reliance on a turbulent industry. Thus, in the 1970s, town leaders subdued their previous efforts to promote the towns as relics of the Old West in favor of claims that the towns could be remade into modern—indeed, “model”—American cities.

Butte took full advantage of the opportunity to gain federal funding by becoming a “Model City.” The Model Cities program followed earlier nationwide federal urban renewal. Several pieces of federal legislation in the 1960s coincided with the Model Cities program, including the 1966 Demonstration Cities and Metropolitan Development Act and the 1968 Housing and Urban Development Act, which joined the 1954 Housing Act in pushing cities to clear slums and blighted areas. From 1967 to 1973, the Model Cities program intended to improve urban renewal projects and awarded communities funding based on merit. Cities used these funds to support studies, development, and implementation of plans for their urban cores. Butte applied immediately in 1967 and received designation in 1971.

Being a “Model City” meant that Butte planned to address the historic core while also considering the ever-expanding Berkeley Pit mine. Butte residents had long battled over the identity of their town and the image it conveyed to outsiders. Mayor Mike Micone remembered that even in the 1970s, the town “had the image of wide open gambling, prostitution, etc.” According to Micone, community leader Don Ulrich believed that by “presenting a good image—of a clean, professional town—the views would change.”⁹ In a 1973 plan for the Central Business District (CBD), the Oregon-based planning agency Stevens, Thompson, and Runyan concluded that Butte’s CBD did “not convey a fresh, forward image of a commercial community which cares about its urban environment.”¹⁰ “Fresh” and “forward” might have been the vision, but the plan also called for rehabilitation and preservation of some of Butte’s older buildings. The consultants recommended demolishing half of Uptown’s buildings immediately, rehabilitating the exteriors and interiors of others, pursuing tourism, implementing an urban renewal program, and placing historic buildings on the state and national historical registers. They also recognized that the Berkeley Pit mine had the potential to expand further west in the future, thus taking over additional portions of the CBD’s eastern edges (see Figure 6.2). Because mining would likely encroach on the old CBD, the plan ultimately recommended some rehabilitation of Uptown, but also the construction of a new CBD in a location that would not be affected by future mining activities.

⁹ Mike Micone, “Interview with Teresa Jordan” (January 5, 1987), 4, Vertical File 1244, Butte-Silver Bow Public Archives, Butte, Montana.

¹⁰ Stevens, Thompson & Runyan Inc., “Preliminary Draft, Butte, Montana, Central Business District Plan” (February 20, 1973), 51, Box 2, Historic Preservation Records: Subject Files and Bound Reports, Butte-Silver Bow Public Archives, Butte, Montana.

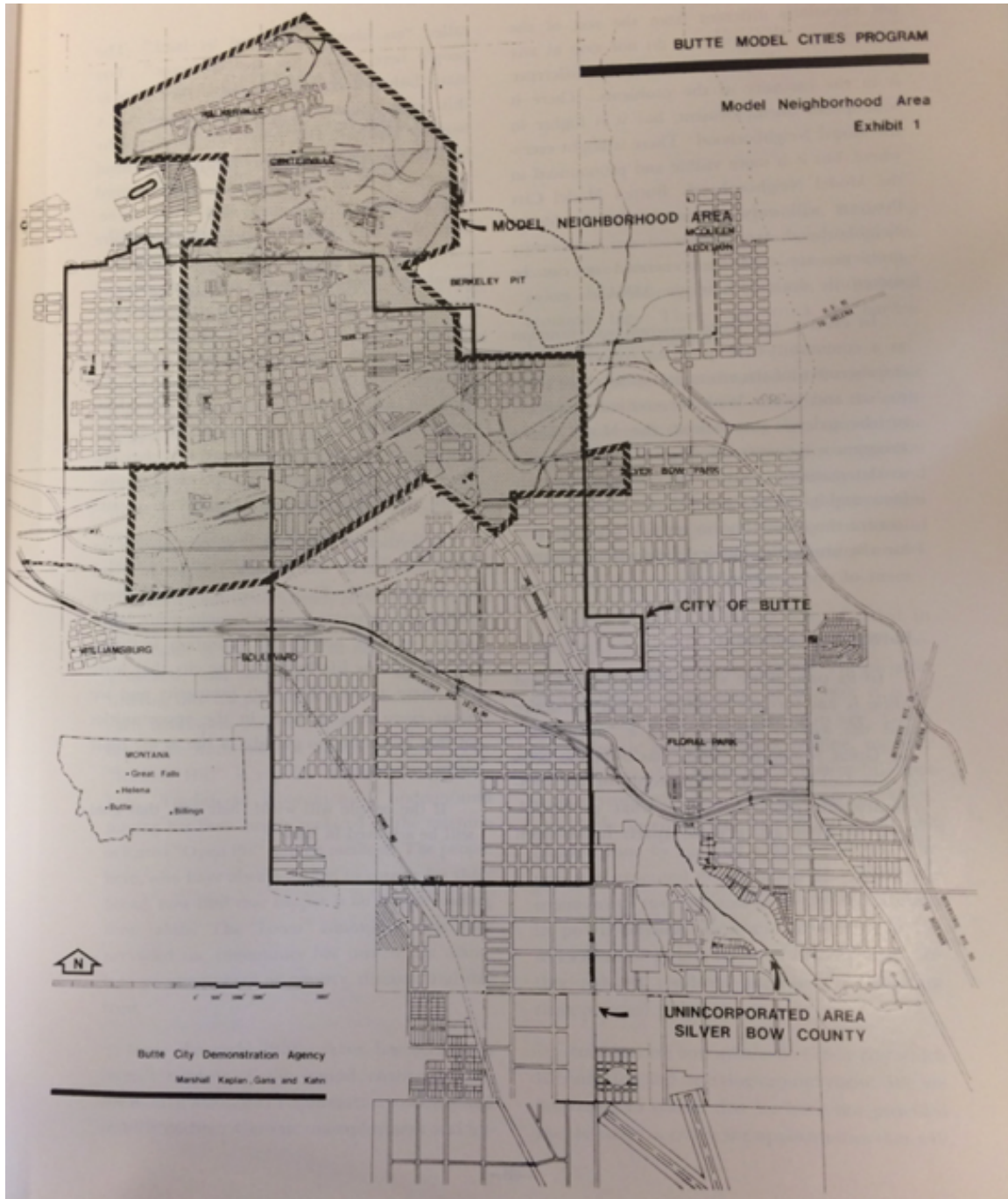


Figure 6.2. Map of Butte outlining target area for building a model neighborhood. The Central Business District is several blocks left of the lower left side of the Berkeley Pit. Source: Butte Model Cities Comprehensive Demonstration Plan, 1969, City of Butte Model Cities Agency Administration collection, Butte-Silver Bow Public Archives, Butte, Montana.

In 1977, a new perspective about the old CBD and mining's threat to its existence emerged. Helena-based consultant Lawrence Gallagher argued in a letter accompanying a

report for Butte-Silver Bow that “it is infinitely wider, cheaper and more rewarding to fix up an old dependable town than to build a new one. The appalling waste of throwing it all away is apparent. The Old Town can be made to heal itself; all that is needed is to recognize the healing forces and to provide the catalyst to set them in motion.”¹¹ He listed all the benefits of reviving the old CBD and urged the local government to do so. But he also looked for the root of the many problems Butte faced and believed that “Butte needs to decide for itself what is best for Butte.”¹²

Of course, best laid plans are just that: plans. In implementing the urban planning strategies, Butte leaders realized just how difficult it was to let go, both emotionally and physically, of Butte’s historic core. The image of being a “Wild West” town still haunted them, just as it haunted other towns, like Leadville.

By the 1970s, Leadville looked tired and worn in a way that did not charm most tourists. Having witnessed the failure of an urban plan in the 1960s, the mayor and city council consulted a new team of professional planners, Gage Davis and Associates. In 1977, the consultants received a federal “Livable Cities” grant and published *Leadville, Colorado: A Study in Urban Conservation*, to describe the urban infrastructure and propose ideas for change.¹³ They noted that Leadville had some assets: its proximity to other towns and its historic architecture and mines. But they also believed the town needed assistance. “Visually, Leadville presents a poor image to the sensitive resident and the outsider,” the consultants

¹¹ Lawrence Gallagher, “A Report for Butte-Silver Bow Government on Community Development and Redevelopment Strategies for the City of Butte,” August 16, 1977, Box 2, Historic Preservation Records: Subject Files and Bound Reports, Butte-Silver Bow Public Archives, Butte, Montana.

¹² Gallagher, 6.

¹³ Livingston L. Biddle, *Annual Report 1978: National Endowment for the Arts and National Council on the Arts* (Washington, D.C., 1979), 10. The “Liveable Cities” Grant was a joint program between the Department of Housing and Urban Development and the National Endowment for the Arts. Potential projects had to have “substantial artistic, cultural, historical, or design merit” and “a significant potential for conserving or revitalizing communities or neighborhoods, and for enhancing community or neighborhood identity and pride.”

argued. There were “uncoordinated strip commercial uses and unattractive signs, each attempting to ‘out-shout’ its neighbor for attention” as well as trash and junk cars out in the open, dangling utilities wires, and “nonexistent” landscaping. The study further criticized the presence of deteriorating buildings for “contributing to the feeling of neglect that too often has been allowed to exist.” Finally, many remnants of the mining industry were still “in close proximity to the city and [had] become a blighting influence on other properties.”¹⁴ Each stab to Leadville’s image—the hodgepodge of buildings, loud signage, and untidy streets bereft of greenery—reflected the consultants’ goal to portray Leadville as needing assistance. The authors twisted the knife by identifying these characteristics as “neglect” and describing how the old mines had *become* “a blighting influence,” as though they had not been before. The authors judged Leadville based on their ideas of what it could be and how to make it more appealing to “the sensitive resident and the outsider.” Many of the characteristics the authors identified as liabilities were, despite their messiness and even their potential as health and safety hazards, historically accurate. Historical characteristics were often an asset for a town attempting to attract tourists, but how could they be if they were also eyesores?

For Leadville, the solution was to refresh the Central Business District in phases, rehabilitating buildings, fixing traffic flow, and adding street trees. Less important to the 1977 plan were recommendations about the visual evidence of mining in and outside the city. In Butte, the Berkeley Pit was so massive and the old hill of mine shafts and headframes so visible, that the town’s mining legacies were difficult to cover or hide. In Leadville, mining shafts and piles of waste rock peppered resident’s yards. They were visible, but not on the scale of Butte’s pit and hill. Nonetheless, a short drive into the hills east of Leadville quickly

¹⁴ Gage Davis and Associates, *Leadville, Colorado: A Study in Urban Conservation* (1979), 2, Colorado Mountain History Collection, Lake County Public Library.

divested visitors of the notion that Leadville might be any less affected by mining. Up in those hills were larger piles of waste rock as well as abandoned wooden headframes and numerous tunnels. But in the forty-five page plan, the only mention of the mining “tailings and debris” was in the “Problem Statement” section. The rest of the plan focused on the CBD (Figure 6.3).

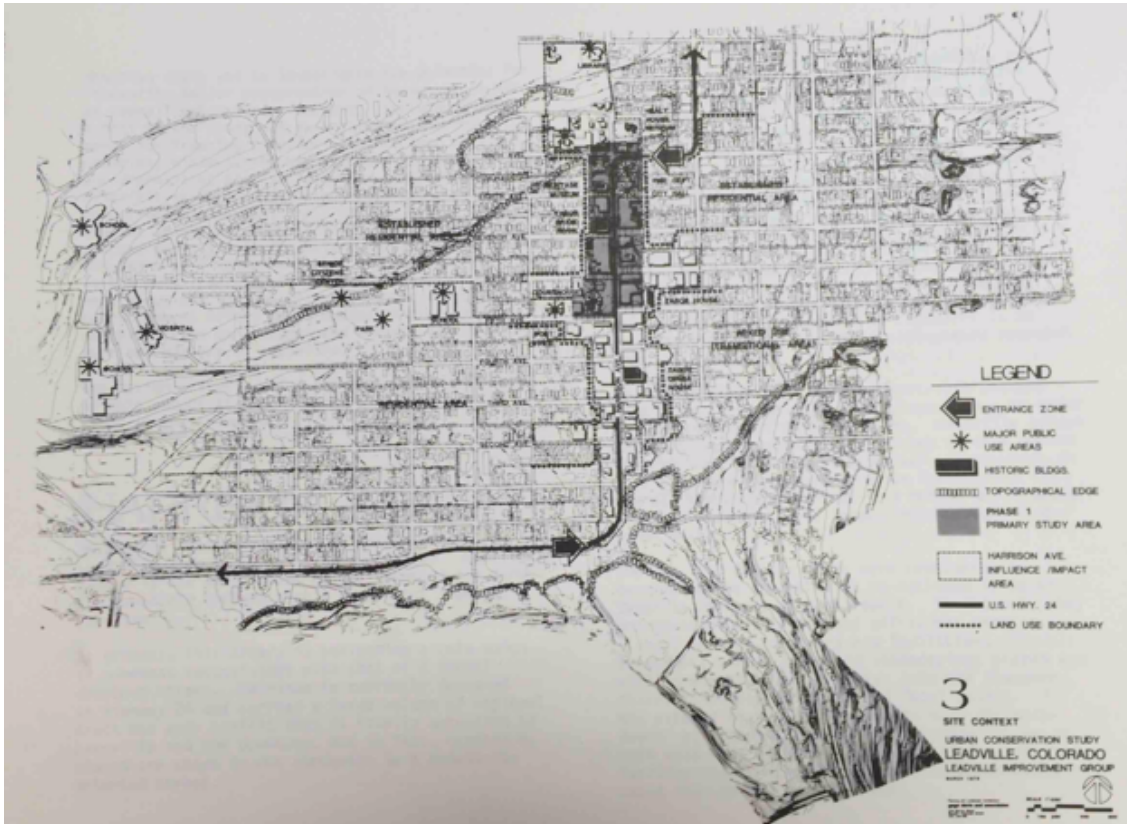


Figure 6.3. Map depicting Leadville, Colorado. The dark shaded area is the Central Business District. There are clearly far more buildings throughout the city that were not included in the 1970s plan for urban renewal. Source: Gage Davis and Associates, “Leadville, Colorado: A Study in Urban Conservation” (1979), 2, Colorado Mountain History Collection, Lake County Public Library, Leadville, Colorado.

Like Butte’s CBD plan, Leadville’s plan emphasized image and how visitors as well as residents viewed and experienced the town. Gage and Associates provided detailed explanations and drawings for adding new visual features to the Leadville cityscape. Some features supported the safety of residents and visitors. For example, “neck-downs,” or

extensions of the sidewalk's curb leading up to street intersections, signaled to drivers and pedestrians how to move through the space.¹⁵ This was particularly important along Harrison Avenue, since it was the highway that ran straight down the middle of town. With ever-increasing motor traffic, the town wanted to ensure safety. Simultaneously, Gage and Associates knew that Leadville was trying to get more people to actually stop in town rather than simply drive through. To this end, the consultants provided recommendations for how Leadville could employ either "simple maintenance or elaborate restoration...to contribute to the character of the neighborhood or setting of the property."¹⁶ They noted that "sensitive work that respects the existing architectural components may well enhance the market value of a significant property." In general, the consultants called for restoration of original storefronts, windows, doors, and canopies; the cleaning and painting of wood and brick exteriors; and simple signage. Historically-inclined but updated visuals, then, could be good for property value as well as eliminating the sense of neglect. The consultants' recommendations also pushed CBD property owners toward changes that allowed the buildings to be more "compatible with the architecture of the period or of other buildings on Harrison Avenue."¹⁷ Such suggestions were part of a larger effort in shaping CBDs to fit a particular ideal. For a town like Leadville, the ideal was any structure that represented the successes during the community's late-nineteenth century heyday. This aligned with the area's designation as a historic district.

While Butte fretted over whether to rebuild their CBD or move it and Leadville grappled with the mine waste piles and abandoned shafts in and beyond the eastern edge of

¹⁵ Gage Davis and Associates, 15.

¹⁶ Gage Davis and Associates, 24.

¹⁷ Gage Davis and Associates, 31.

town, Globe focused on how to spruce up their CBD on Broad Street. The main visual remnant of the mining industry was on Globe's western edge. The Old Dominion mine was an unmistakable landmark for anyone driving into town from Phoenix. The mine had closed in the 1930s, but by the 1970s, a massive pile of black smelter slag still dominated the landscape, mere feet from the edge of the highway. Additionally, visitors could easily see the old mine and mill buildings up above the mountain of slag. But Globe's CBD plans rarely if ever mention the slag or the old mine.

In fact, Globe's plan matched those of Butte and Leadville, at least in the way it discussed and focused on a particular portion of town. Globe had at least two major planning documents in the 1970s that reflected this approach and thus their shift away from the 1950s through 1960s emphasis on an "Old West" image and more toward a more general "historic" image. In a January 1973 Central Business District Plan, for instance, the Scottsdale-based consulting firm Hollinger & Booher advised Globe's City Council to maintain some of the city's historic structures, but the consultants did not mention this because it made Globe uniquely Old West. In a list of primary objectives, they instead recommended the "rehabilitation or condemnation of those buildings which have a questionable future," regulation of remodeling, and "restoration and remodeling of historically significant buildings" in order to enhance the "shopping experience."¹⁸ Clearly, the consultants believed that Globe needed to redo their streetscape if it hoped to attract more business to its downtown.

The recommendations for Globe differed from those of Leadville and Butte in at least two significant ways: they frequently focused on what Globe's surrounding landscapes

¹⁸ Hollinger & Booher, "Central Business District Plan for City of Globe, Arizona" (January 1973), 2, Arizona Collection, State of Arizona Research Library, Phoenix, Arizona.

could offer for recreation and what could be *added* to Globe to make it more visually appealing. Although the consulting firm had clear ideas for Globe’s CBD, Arizona’s Office of Economic Planning and Development also published a “Community Prospectus” in November 1973. This document took a more comprehensive approach. It provided profiles of Globe’s economy, people, services, tax and government, recreation, and real estate. That report was thus more about maintaining and creating jobs. There was, however, some mention of recreation as a tourist draw. “The region about Globe and Miami,” the report declared, “is a scenic and outdoor wonderland with muzzled vestiges of an often unknown and sometimes violent past.”¹⁹ The gaze was outward—not what Globe and Miami themselves offered visitors, but what the *region* offered.

Globeites clearly lacked confidence in their existing historical fabric to evoke the Old West, because there was also mention of creating rather than rehabilitating a resource to draw on the “Old West” idea. The 1973 “Community Prospectus” described the Clara T. Woody Museum (now the Gila County Museum) and Gila Pueblo as the main historical offerings. But it also described “Two-bits, a historic Western town” that would “serve as a museum containing replicas and antique items of the Old West and early Gila County.”²⁰ Rather than using one of Globe’s downtown structures (many of which, by the 1970s, could have benefitted from an occupant), the town decided to construct a fake western town to house its historical artifacts. The construction on the Gila County Fairgrounds, about six

¹⁹ Community Development Section of the Arizona Office of Economic Planning and Development, “Globe/Miami Arizona Community Prospectus” (November 1973), 6, Arizona Collection, State of Arizona Research Library, Phoenix, Arizona.

²⁰ Community Development Section of the Arizona Office of Economic Planning and Development, 3.

miles northeast of Globe, was well out of reach of people going to the real Globe and distant from Globe's defunct mine and giant slag heap.²¹

In planning for their futures, consultants advised mining towns like Butte, Globe, and Leadville to focus on their urban centers or sell themselves through attractions. The highly visible evidence of past and present mining meant that these towns had to find ways to address the views of mining landscapes in ways that allowed them to also build up their urban centers. Their plans, however, stemmed from the ideals of consulting firms that wrote plans for cities based on larger urban renewal standards set by federal grant-giving agencies. As a result, the towns had plans for their urban centers, but few suggestions about how to grapple with the element of their landscapes that represented the core of their identity: mining.

Planning for History: Butte, Montana

The issues of image, aesthetic, and representation challenged mining towns as they attempted to reinvigorate their cities. Not only did past and current mining create visual features that disputed the notion of beautiful cities and surrounding natural environments, but they also destroyed or threatened to destroy much of the historical fabric of these communities. This was highly visible in Butte when the Berkeley Pit took over two historical neighborhoods, McQueen and Meaderville.

On July 29, 1973, the *Montana Standard* reporter Andrea Ciabattari wrote, "Someday McQueen will probably be buried under mountains of mining debris."²² Just six years later, an image of a truck dumping mining debris onto the roof of a church in the nearby

²¹ "Two Bits to Open," *Arizona Republic*, August 10, 1973.

²² Andrea Ciabattari, "McQueen Spirit: Ageless, Endless," *The Montana Standard*, July 29, 1973.

Meaderville neighborhood dominated the front page of the paper (Figure 6.4).²³ There is something surreal about seeing a pile of dirt so tall that it covers the back half of a church. Even more unsettling is watching a dump truck back up onto the pile, level with the church's bell tower, and tip thousands of pounds of rock onto the roof. Unsettling for the viewer, perhaps, but just another day's work for the man in the hard hat walking alongside the truck, his head equal in height to the top of the tire.

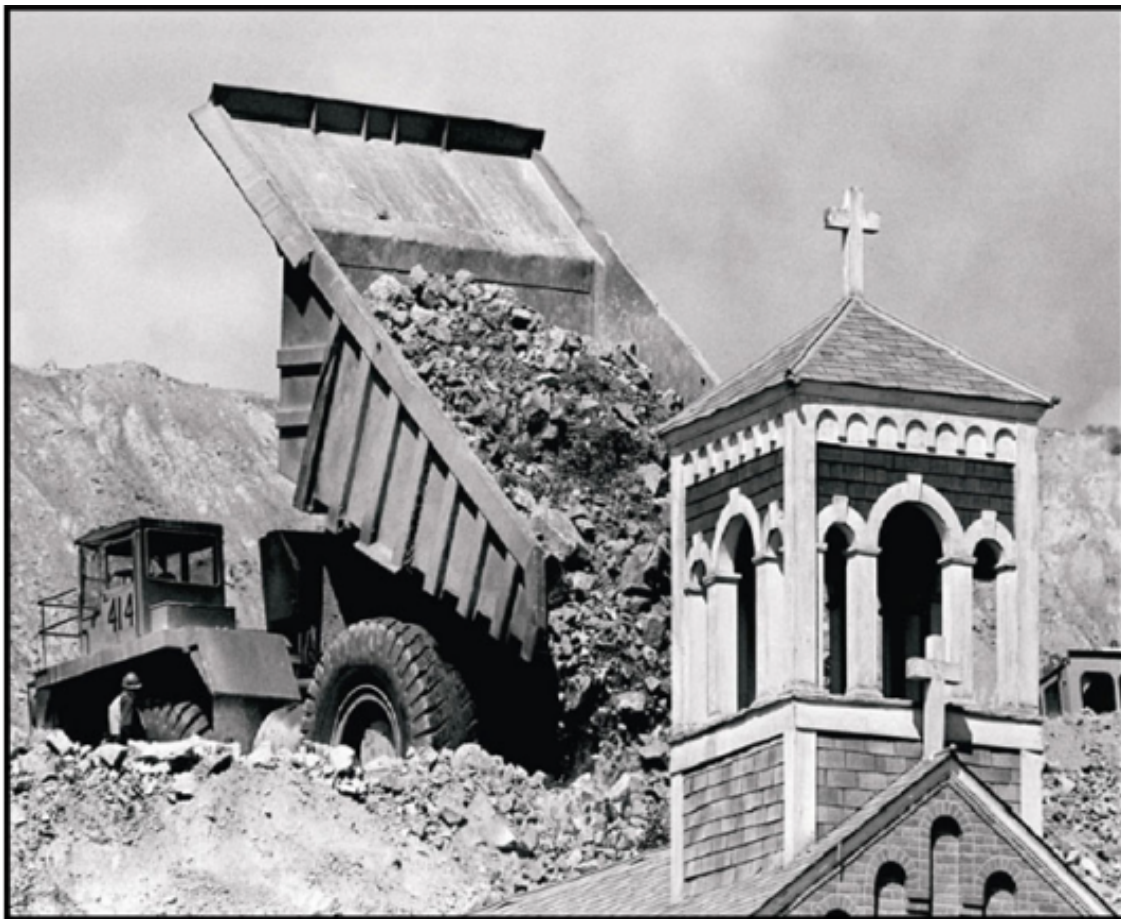


Figure 6.4. Photo of Holy Savior Church, Butte, Montana, from *The Montana Standard*, August 29, 1979. A mine dump truck is burying the church as part of a process to create a new entrance for the Berkeley Pit.

²³ Walter Hinick, "The Last of Meaderville," *The Montana Standard*, August 29, 1979.

The truck and the pile of dirt were all part of the Anaconda Company's Berkeley Pit mine operation. Anaconda had begun open-pit mining in 1955 in an area of Butte that was part of "The Hill." This hill bordered the eastern and northeastern edges of town, where most of the major mine shafts were located. Miners had originally built their homes right next door to the mines to ensure a short commute to work each day. But by 1979, the Berkeley Pit was eating up Butte's eastern neighborhoods, places like McQueen and Meaderville. The state of Montana had two laws that allowed this to happen. One law defined mining as a public use and a public interest, so mining companies like Anaconda could exercise governmental power such as eminent domain (the power of the government to confiscate private property for public use). The second law granted companies with underground mineral rights the authority to condemn surface land for open pit operations.²⁴ With these two laws at its disposal, Anaconda began taking over McQueen and Meaderville, displacing a large population of miners and their families and destroying cultural institutions.

Although the Pit had created a particular kind of visual impact since 1955, it was not until it took over McQueen and Meaderville that it became a reminder of how mining paradoxically advanced and hindered the sustenance of the town. McQueen and Meaderville were significant to Butte's history, because they contained houses and institutions that represented the presence of many working-class Butte residents from a range of cultural backgrounds. With surnames like Vucivich, Woods, Kuga, Kovacich, Ceserani, and Predovich, McQueen's ethnic demographic was clearly a mixture, with a heavy dose of eastern Europeans.²⁵ Meaderville was home to similar ethnic groups, with Italians

²⁴ Brian James Leech, *The City That Ate Itself: Butte, Montana and Its Expanding Berkeley Pit* (Reno: University of Nevada Press, 2018), 231; "An Open-Pit Dilemma for Butte, Mont.," *Business Week*, December 1, 1973; A. R. Gini, "A 'Butte' of a Hole in Montana," *Journal of Business Ethics* 5 (1986): 79–83.

²⁵ "This Is McQueen," *Copper Commando*, November 24, 1944.

predominating. Butte famously had an overwhelming Irish population in the late-nineteenth and early-twentieth centuries, but the McQueen and Meaderville populations revealed that Butte was actually quite diverse. Residents of these neighborhoods lived in modest houses, ran businesses that catered to specific ethnic groups, and supported churches and schools.

Residents became quite attached to McQueen and Meaderville. Marie Mulcahy Cassidy remembered Meaderville as “the place to go for a good time and excellent food.” Blasting in the Leonard Mine swayed houses on their foundations, a constant reminder of the power that threatened to destroy the neighborhood. But in the 1960s, the Anaconda mining company bought up the real estate and residents moved out. Thomas Dry Goods, Sacred Heart School and Church, mom-and-pop grocery stores, a Safeway, shoe repair shops, and neighborhood bars such as Evatz’s, Luigi’s, and Koochie’s disappeared.²⁶ Cassidy remembered all of the names of the neighbors and how each of their houses “had character, each had a front porch, a few had wrap-around porchs [*sic*].” In Cassidy’s eyes, the neighborhood was idyllic—enjoying a cup of tea or a pint of beer on a summer’s day, watching kids play outside, clothes drying on a line and wafting in the breeze. “Progress?” Cassidy asked at least twenty years later. “Who am I to say? I have only feelings and memories, and a sorrow [that] I can’t share an old house and neighborhood with my children and grandchildren.”²⁷ Mining’s legacy remained deeply entrenched in the environment, but the burial of McQueen and Meaderville laid to rest some of its laborers’ legacies.

The loss of neighborhoods like McQueen and Meaderville meant the loss of places to foster ethnic cultures. Although there were many houses in other areas of Butte that

²⁶ Marie Mulcahy Cassidy, “Mam Mam’s House and the Pit” (undated), Vertical File 1620, Lost Neighborhood Project, Butte-Silver Bow Public Archives, Butte, Montana.

²⁷ Cassidy.

looked like the ones in McQueen and Meaderville and schools and churches that were larger and more visually impressive, the McQueen and Meaderville structures were significant *because* they were modest, rather than elaborate. Holy Savior Church, for instance, was one of Butte's smaller churches (Figure 6.4). Parishioners entered a shallow vestibule through the brick church's south façade. Just a few steps and they were inside the sanctuary. The exterior was simple, with small flourishes. A series of arches traced the eaves and crested the main door and the windows. A single ocular window surrounded the stout cross atop the vestibule's roof. The bell tower, with trios of arches on each of its four sides, eclipsed a slender cross on the church's roof. All of this detail, and the church was under fifty feet high.²⁸ In its modesty, Holy Savior Church offered its largely Italian-Catholic community a place to meet regularly, and it became a landmark along the road connecting Meaderville with McQueen. Then it was buried.

As significant as the destruction of McQueen and Meaderville was, so too was the thing that replaced them: more of the Berkeley Pit. The Pit's visual dominance continued to challenge city leaders in the 1970s who wanted to attract tourists based on the appeal of a beautiful city set within an impressive natural landscape. Some consultants recommended boosting Uptown's appeal through urban renewal. But they also recommended adding natural features to the cityscape. This reflected urban renewal plans in cities across the nation, including the addition of street trees, flowers, and parks.

In mine towns, the visual presence of past and present mining operations challenged this "city beautiful" aesthetic. Past and present mining left shafts, piles of rock, and tailings ponds. In an effort to combat the Berkeley Pit's visual dominance, consultants suggested

²⁸ "This Is McQueen."

that reclaiming abandoned mine lands and “screening the unreclaimable lands with trees” would visually enhance the urban area.²⁹ It was an “eyesore” for those wandering through Butte’s CBD, but an enticing spectacle if visited up close. Anaconda had a viewing stand at the Pit since at least the 1960s and built a new one in 1978.³⁰ Taking into account the loss of Meaderville and McQueen as visual elements in Butte’s landscape as well as the spectacle of the Pit, residents of mining towns like Butte faced a rocky issue of image. They might lose some significant visual representations of what made their town distinct and even appealing, such as ethnically diverse working-class neighborhoods, to the continued reliance on mining and its highly visual effect on the landscape.

Cleaning Up Ghosts of Mining Past and Yet to Come: Leadville, Colorado

The issue of image wasn’t just aesthetic, though. It was also structural—geological even. During the 1970s, Butte had faced the problem of continued mining, but Leadville faced a different issue: a defunct mine drainage tunnel that might be needed in the future. Since the 1940s, the United States Bureau of Mines owned and operated the mine drainage tunnel. Due to the area’s geological structure, mines east of Leadville flood with water if there is no pump or drainage system in place. When the United States government was casting about for any and all mines that could produce material for the war effort during World War II, Leadville’s mines offered some resources. Although much of Leadville’s gold, silver, lead, and zinc deposits had been mined prior to the 1940s, the federal government was convinced that there were still deposits that could be reached—and would need to be

²⁹ High Country Landscape Consultants, “Urban Tree Plan” (December 1983), 5, 22, Box 2, Historic Preservation Records: Subject Files and Bound Reports, Butte-Silver Bow Public Archives, Butte, Montana.

³⁰ “Anaconda Co. and Civic Dignitaries,” *Montana Standard*, June 8, 1978.

reached—for the war. They dug the drainage tunnel from an elevation in the hills east of Leadville toward the northwest and downhill to a fork of the Arkansas River. The tunnel then expelled its waters into that stream, which flowed eastward out of the mountains and onto the plains of southeastern Colorado, southern Kansas, and northeastern Oklahoma, and through central Arkansas until it finally dumped into the Mississippi. After World War II, however, the Bureau of Mines decided against supporting Leadville mines, and in 1959, the Bureau of Reclamation bought the tunnel.³¹

Buying a drainage tunnel, it turns out, is a risky venture, particularly in a place with wide fluctuations in precipitation, like Colorado's high country. By 1968, the Bureau of Reclamation was forced to implement emergency measures as the tunnel began collapsing in various locations along its length of about 2.5 miles. The collapses near Highway 91, which followed the east fork of the Arkansas River, were particularly alarming.³² Highway 91 connected Leadville to Colorado's newest major highway, I-70. Some of the state's most popular recreational peaks shot up just west of Leadville, so accessing them via a trip along Highway 91 was a necessity. Moreover, some tourists traveling from Denver to Aspen might take the Highway 91 route through Leadville, down to Twin Lakes, and then west over Independence Pass. These tourists were important as potential customers in the local economy. But locals depended on Highway 91 for their own daily use as well. In the 1970s, most locals who were still employed by the mines worked at Climax, which connected to Leadville via Highway 91. Workers often lived in Leadville and drove up Highway 91 to

³¹ U.S. Department of the Interior, Bureau of Reclamation, *Leadville Mine Drainage Tunnel Risk Assessment* (Denver, Colorado: Technical Service Center, 2008), 36, https://www.usbr.gov/gp/eca/leadville/combined_risk_assessment.pdf.

³² U.S. Department of the Interior, Bureau of Reclamation, 39.

work at Climax. It was, therefore, imperative to keep the highway functional by preventing large sinkholes.

Collapse was just one concern. Water in the Leadville hills contained elevated levels of metals, which, left untreated, could make the water unsafe for consumption. This affected two populations. One was the residents of a mobile home community adjacent to the tunnel's mouth, 1.5 miles outside of Leadville. They received water from a nearby well, so officials feared that discharge from the tunnel might seep into the well. The other was the population of Leadville itself. Leadville received water from the Canterbury Tunnel. Officials feared that the tunnel might flood so much that the water would spill over to the Canterbury and contaminate the municipal supply.

In 1976, the state government realized it could no longer handle such a problem on its own and brought the matter before the United States Senate Subcommittee on Energy Research and Water. In the span of twenty-five minutes, a group of men sitting in a hearing room on the third level of the imposing Dirksen Office Building in Washington, D.C., debated how to handle Leadville's Mine Drainage Tunnel, more than 1,700 miles away. That day in June, the Subcommittee discussed a potential bill for the "investigation, stabilization, and rehabilitation of the Leadville mine drainage tunnel and the construction of facilities for the treatment of the drainage effluent." The concern was that the tunnel was causing sink holes. But they also discussed a proposal to construct a water-treatment facility "as necessary to comply with water quality standards established for such effluent, pursuant to the Federal Water Pollution Act Amendments of 1972." The bill proposed, however, that once the investigations and stabilization were complete, "the tunnel may be plugged in lieu of rehabilitation and treatment of the drainage effluent." Assistant Secretary of the Interior John H. Kyl and other members of the subcommittee recommended against adoption of this

plan, foreseeing potential problems with flooding new areas and polluting Leadville municipal water.³³

The tunnel thus exemplified several environmental and preservation issues that faced mining towns like Leadville in the 1970s. There was an issue of maintenance. The government felt it had to maintain the tunnel, because if left alone, it could harm the public. On behalf of the Bureau of Reclamation, engineer Edwin F. Sullivan reported that “the water trapped in the tunnel does not pose a threat to Leadville or the trailer court from the standpoint of a blowout.” More geological issues were, however, a concern. “The buildup of ground water could cause instability in the hill near the tunnel outlet,” Sullivan said. “Landslides might develop...and damage State Highway 91, the Leadville water pipeline, and the trailer court.” At this point in the hearing, Senator Floyd Haskell, a Colorado Democrat, expressed his frustration with how the matter was being handled: “That might be the understatement of the week, Mr. Sullivan.”³⁴

Imagine Haskell’s frustration had he read the Lake County Commissioners statement that was subsequently submitted to the record. The statement revealed how maintenance was both an issue of monitoring water levels and of preserving the tunnel for potential future use. It estimated that eight million gallons—twelve Olympic-sized swimming pools worth—of water were backed up in the tunnel. If all of that surged out at once, not only could it contaminate the mobile home community’s water, it could sweep the homes right off their foundations. The commissioners also recognized that “the need for the tunnel, although not as acute as it was in the 1940’s,” still existed “because if the Leadville mines

³³ United States Senate, *Leadville Mine Drainage Tunnel Act of 1976: Hearing before the Subcommittee on Energy Research and Water Resources of the Committee on Interior and Insular Affairs, United States Senate, Ninety-Fourth Congress, Second Session on S. 3394* (Washington, D.C.: U.S. Government Printing Office, 1976).

³⁴ United States Senate, *Leadville Mine Drainage Tunnel Act of 1976*.

were again called upon to supply the nation with strategic war minerals, the tunnel would have to be operational in order to assist in dewatering the mining district.” Even without reading these statements, however, Haskell pressed those present at the hearing to describe the exact degree of danger. He asked Norman Blake, director of Colorado’s Division of Mines, if the water’s “high metallic content” would have “an adverse effect if it got into the Arkansas River.” Blake’s answer was clear: “if it did blow out it would be a great pollution problem” that would last “six to eight months.”³⁵

Both the Bureau of Reclamation and the Lake County Commissioners were concerned with not just preventing a health and safety problem, but also with ensuring the tunnel’s usability. “We will proceed as fast as I can,” Haskell declared at the end of the hearing. “And I hope you will proceed as fast as you can.”³⁶ Four years later, the Environmental Protection Agency created the Superfund legislation that enabled the agency to appropriate funds for expensive projects like the Leadville Drainage Tunnel. But little work occurred on the LMDT. Then, thirty-two years later, the story broke national news.³⁷ As mining town residents were learning, and as Globe’s residents in particular were soon to see, government officials had an odd definition of “fast.”

With all of these issues of maintenance, the story of Leadville’s drainage tunnel in 1976 revealed that mining’s legacy was not just about aesthetics, it was a public health situation to the residents. While planners had been concerned with reviving the central

³⁵ United States Senate, *Leadville Mine Drainage Tunnel Act of 1976*.

³⁶ United States Senate, *Leadville Mine Drainage Tunnel Act of 1976*.

³⁷ Dan Frosch, “Mine Water Poses Danger of a Toxic Gusher,” *The New York Times*, February 28, 2008, sec. US, <http://www.nytimes.com/2008/02/28/us/28leadville.html>.

business district of the town, mining shaped their choices, especially when the health threat became a reality.

Image in Crisis: Globe, Arizona

February 22, 1982. “Al, will you give your full name and address?” Mike Wood asked his friend, Al Gerhardt, perhaps between coughs. Wood’s bronchiectasis, a thickened lining of the throat he had developed prior to living in Arizona, caused chronic coughing. Now retired from his work as an insurance agent, Wood had befriended Gerhardt in the late-1970s, when they decided to join forces in a battle against the state and federal governments. With that opening question in February 1982, Wood and Gerhardt embarked on a series of 150 interviews that extended into July 1982. Alert eyes peering through dark-rimmed glasses, Wood peppered Gerhardt with the same general line of questioning that the two would follow in subsequent interviews: Name? Address? Occupation? Nature of exposure to asbestos? Length of exposure to asbestos? Signs of illness in the interview subject or subject’s family? Any smokers in the family? Through their interviews, the two men gathered information about “the effect of Chrysotile asbestos on people’s health in Gila County.”³⁸ Their purported purpose sounds non-committal, unbiased, merely an attempt to understand. But the two retirees were really looking for evidence that there had been *no* effect on people’s health—at least, no negative effect.

Medical professionals in 1982 understood asbestos to be a leading cause of lung diseases, but Wood and Gerhardt were on a mission to prove the professionals wrong. “I was astounded,” Gerhardt wrote several years after the interviews, “when Governor Babbitt

³⁸ Alvin Gerhardt, interview by Mike Wood, Tape 1A number (c) transcript, February 22, 1982, Box 8 File Folder 3, Wood-Gerhardt Asbestos Study Collection, PP-MS 256, Arizona Historical Society- Papago Park, Phoenix, Arizona.

came to Globe in 1979 and pronounced the Mountain View Mobile Home Park, in Globe, the most health hazardous place in Arizona.”³⁹ Not only that, but the governor had called for an evacuation of the area, “because chrysotile asbestos had been found on the property which had been an old mill site.”⁴⁰ After Babbitt’s declaration, and much to the Wood-Gerhardt team’s chagrin, in 1983 the Environmental Protection Agency swept in and declared the mobile home park one of its Superfund sites.⁴¹ Even so, Wood and Gerhardt did not give up their fight.

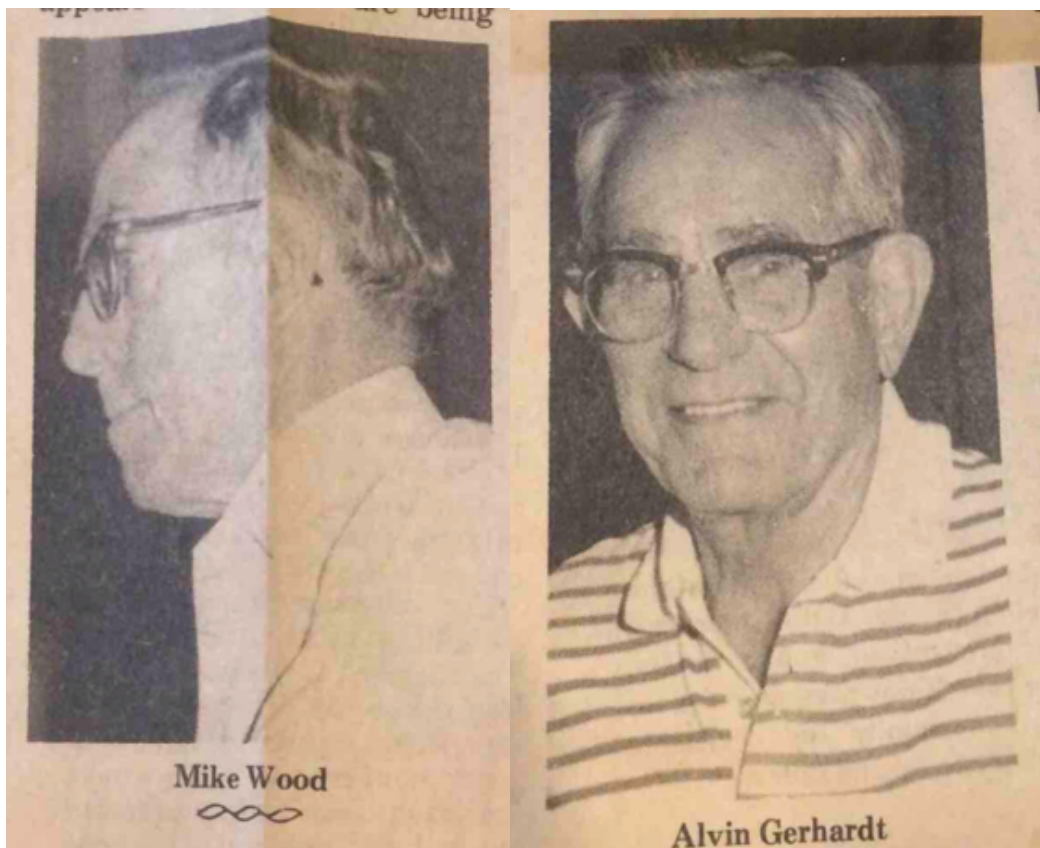


Figure 6.5. Mike Wood and Alvin Gerhardt portraits. Source: *Arizona Silver Belt*, July 22, 1982, File Folder 21, Box 8, Wood-Gerhardt Asbestos Study Collection, PP-MS 256, Arizona Historical Society-Papago Park, Phoenix, Arizona.

³⁹ Gerhardt interview with Mike Wood.

⁴⁰ Gerhardt interview with Mike Wood.

⁴¹ United States Environmental Protection Agency, “Superfund Record of Decision: Mountain View/Globe Site, AZ” (Washington, D.C.: U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, June 1983).

Both Wood and Gerhardt had long histories in Globe. Originally hailing from Vermont, Wood had moved to Arizona with his wife in 1943, hoping the dry climate would improve his bronchiectasis. After a two-year stint in Phoenix, the couple moved to Globe, where Wood worked for Pacific Mutual Insurance until he retired. He died in 1993.⁴² Al Gerhardt, on the other hand, was a westerner. Born in New Mexico in 1906, Gerhardt earned a degree in mining engineering and climbed the industry ladder from miner to engineer to superintendent. He landed in Globe in 1952 and worked for Jaquays Asbestos Corporation for twenty-one years. He died in 2004.⁴³ Both had earned college degrees and acquired professional experience related to the asbestos industry.

By the time Governor Babbitt declared the emergency in 1979, though, Wood and Gerhardt were recently-retired, but apparently looking for somewhere to put their energy. Neither of the two men lived in Mountain View Mobile Home Park, nor did any of their relatives—at least, no one with the Wood or Gerhardt surnames.⁴⁴ But the former insurance agent and former mining industry executive resented the government’s effort to move people out of the mobile home park. Both of them claimed that they had never known anyone to get sick from asbestos. Both of them insisted over and over in letter after letter, in public meeting after public meeting, and in newspaper article after newspaper article that asbestos was not bad for human health.

If the asbestos industry in Globe had been closed since 1968, why did they care so much?

⁴² “Hubert ‘Mike’ F. Wood Funeral Program” (January 5, 1994), Wood-Gerhardt Asbestos Study Collection, PP-MS 256, Arizona Historical Society- Papago Park, Phoenix, Arizona.

⁴³ “Alvin W. Gerhardt Resume” (1987), Wood-Gerhardt Asbestos Study Collection, PP-MS 256, Arizona Historical Society- Papago Park, Phoenix, Arizona.

⁴⁴ “Residents and Owners of Property in Mountain View Estates” (1980s), Wood-Gerhardt Asbestos Study Collection, PP-MS 256, Arizona Historical Society- Papago Park, Phoenix, Arizona.

For many mining town residents, mining is a large part of their identity and how they relate to their community. They work hard and long, their bodies breaking down quickly. A sense of masculine pride comes with working hard, and miners know this pride well. Even non-mining members of towns like Butte, Leadville, and Globe develop a sense of pride in their town's mining industry. People's relationships to the asbestos operations in Globe were no different.⁴⁵

Before it became Mountain View Mobile Home Park, the site that sparked Wood and Gerhardt's interviews and their subsequent battle with the press and the government had been the location of the Metate Asbestos Mill (Figure 6.7). Arizona's asbestos was particularly desirable for its long fibers, and many people thought it was a miracle mineral. Before being sent from a mine to a manufacturer, asbestos is milled. During the milling process, the rock that contains asbestos is crushed, releasing fine fibers into the air. Once airborne, the tiny asbestos fibers can be inhaled. Any leftover rocks were dumped in a pile outside of the mill.

On the eastern outskirts of Globe, the Metate Asbestos Corporation and Jaquays Asbestos Corporation's mills boomed and busted, much like the Old Dominion Mine had on the west side of town in the early 1900s. The corporations employed miners and mill workers during the 1950s and 60s, but the mill closed in 1974 due to its inability to meet air quality standards for the Gila-Pinal Counties Air Quality Control District.⁴⁶ The nation's burgeoning interest in and legislation for environmental controls on industry had resulted in

⁴⁵ Robertson, *Hard as the Rock Itself*, 39; Andrews, *Killing for Coal*, 97. David Robertson and Thomas Andrews describe specific individuals in mining towns that have intense pride in their labor, but they also describe this more broadly through the works. Additional information about miner pride can be found throughout much of the literature on mining history.

⁴⁶ "L.C. Kopsich to Eugene Rabogliatti" (Letter, April 19, 1973), Governor Bruce Babbitt Papers 1978-1988, Polly Rosenbaum State Archives & History Building, Phoenix, Arizona.

federal laws, such as the Clean Air and Water acts and the creation of the Environmental Protection Agency in 1970. The federal laws were just the beginning and led local governments, like Globe's county government (Gila County), to pass their own air quality control measures. The closure of Metate was a painful experience for those who believed in the power of asbestos to serve the country as a fireproof material and who had been benefitting so much from its mining and manufacturing, like Metate's owner, Jack Neal.



Figure 6.6. Metate Asbestos mill in center with Mountain View Mobile Home Park behind it. Looking west toward Globe. Source: *Tucson Citizen*, June 17, 1983, File Folder 22, Box 8, Wood-Gerhardt Asbestos Study Collection, PP-MS 256, Arizona Historical Society-Papago Park, Phoenix, Arizona.

After the mill's closure, Jack Neal quickly found a new way to profit from his property: he convinced the city to rezone the area, filled it in with asbestos tailings, covered it with dirt, and sold it off as lots for mobile homes. A year prior, Pinal-Gila Counties Air Quality Control District (AQCD) Director L.C. Kopsich wrote to Globe mayor Eugene Rabogliatti saying that he had heard of Neal's idea to turn Metate's mill site into mobile home lots despite the fact that the site bordered the still-operating Jaquays mill. "I am not sure," Kopsich warned, "that you are aware of the possible health hazards involved in allowing residences to be built in close proximity to an operating asbestos mill." He then detailed the EPA's declaration of asbestos as a hazardous air pollutant. Both Jaquays and Metate had been working with Pinal-Gila AQCD, he said, but even with their compliance, there were fine particles escaping into the atmosphere. The AQCD had allowed the mills to continue operating because of their "remoteness" from residential areas. But with Neal's subdivision, homes would be easily within sight of the still-operating Jaquays mill.⁴⁷

In 1974, Neal's lots became home to over one hundred people.⁴⁸ It was a fatal move.

In October 1979, state and local health officials inspecting the Mountain View wastewater disposal system identified elevated levels of asbestos. On November 28, ADHS informed Globe officials and residents of the Mountain View Mobile Home community that asbestos tailings had been found near four abandoned asbestos mills and one that was still operating. The next day, ADHS sent residents a letter advising them of the "health risk." On December 3, the EPA received notice of the problem, and the Department of Health

⁴⁷ "Gateway to White Mountains," *Arizona Republic*, January 1, 1974; L.C. Kopsich to Eugene Rabogliatti, April 19, 1973, Governor Bruce Babbitt Papers 1978-1988, Polly Rosenbaum State Archives & History Building, Phoenix, Arizona.

⁴⁸ "Gateway to White Mountains"; Roy Ing et al., "Community Asbestos Exposure in Globe, Arizona," *Journal of Pediatrics* 99, no. 3 (1981): 409.

Services' air, soil, and water sampling on December 4 revealed elevated asbestos levels.⁴⁹ By January 1980, the Assistant Surgeon General of the United States recommended immediate evacuation of the entire community. On January 17, 1980, Arizona Governor Bruce Babbitt declared the situation an emergency.⁵⁰ The federal government offered the residents emergency housing beginning on January 23. The Metate mill met its demise on February 6 while the mobile homes and waterways in the subdivision underwent a deep clean of exteriors and interiors. By April 16, six inches of soil had been spread over the subdivision and street cleaners did a final sweep a month later.⁵¹ Jack Neal resumed selling lots.

Six inches of soil is not much, especially in the face of Globe's rain and wind. By fall 1981, the soil's erosion was apparent. Some residents had moved back into the subdivision. There was bound to be another confrontation. In 1983, the Environmental Protection Agency conducted a remedial investigation and feasibility study to understand the extent of the erosion and continued presence of asbestos. The study concluded that the best of three options was to relocate residents and then proceed with "site capping, closure, and maintenance." It was the cheapest option and the only option that recommended permanent (rather than temporary) relocation of residents.⁵²

From an official health standpoint, the decision to remove residents permanently makes a great deal of sense. Asbestos becomes dangerous when it is airborne. The county air quality control director L.C. Kopsich had warned of it in his 1973 letter to Globe's mayor.⁵³

⁴⁹ R. Bruce Scott, "Statement: Asbestos in Globe" (undated), Governor Bruce Babbitt Papers 1978-1988, Polly Rosenbaum State Archives & History Building, Phoenix, Arizona.

⁵⁰ Marilyn Taylor, "Governor Declares Globe Emergency," *Arizona Republic*, January 17, 1980.

⁵¹ Michael P. Austin, "Memorandum for Mr. Charles A. Ott, Jr." (July 9, 1980), Governor Bruce Babbitt Papers 1978-1988, Polly Rosenbaum State Archives & History Building, Phoenix, Arizona.

⁵² United States Environmental Protection Agency, "Superfund Record of Decision: Mountain View/Globe Site, AZ."

⁵³ L.C. Kopsich to Eugene Rabogliatti.

In the early 1980s, health officials at the Centers for Disease Control's Chronic Exposure Division reported that there was "a positive correlation between exposure to chrysotile asbestos and disease, including asbestosis, lung cancer, and mesothelioma." If Globe's mills continued operating, asbestos fibers would continue to be airborne. Moreover, the mills disposed of unwanted, asbestos-laden material in piles outside the mill. Winds blew dust from these piles into the neighboring subdivision. A health study also revealed that children had been observed playing in the piles. To avoid the asbestos being airborne, the EPA proposed burying and monitoring the site in perpetuity.⁵⁴

As the law requires, the EPA presented its solution to the community and invited public comment. More than 125 people attended the May 1983 meeting. Wood and Gerhardt offered the most vocal objections, but thirty other members of the public submitted letters or made statements. Of those, according to EPA records, fourteen supported permanent relocation of Mountain View Mobile Home Estates residents and eight believed that chrysotile asbestos was not hazardous and that remedial action or further study were unnecessary. None of those listed as opponents lived at the mobile home community. Of the fourteen who supported cleanup and relocation, nine lived or owned property at Mountain View, and four were health and government officials. If the numbers in this record are any indication, residents of the mobile home community *wanted* clean up.⁵⁵

And yet, there was pushback. Why the conflict? The EPA chalked it up to economics. The "Record of Decision" characterizes the opposition as people who simply believed that Globe's asbestos was unique (and therefore valuable) and not hazardous to

⁵⁴ United States Environmental Protection Agency, "Superfund Record of Decision: Mountain View/Globe Site, AZ"; Ing et al., "Community Asbestos Exposure in Globe, Arizona," 410.

⁵⁵ "U.S. Environmental Protection Agency, "Superfund Record of Decision: Mountain View/Globe Site, AZ." The seven other letters were uncategorized Residents and Owners of Property in Mountain View Estates."

health, but worried about “the negative impact of the government action on the economy of Gila County.”⁵⁶ The economy? How so? If the asbestos mill was already closed, how would cleaning up and relocating a mobile home community negatively impact the economy? The answer was—at least in part—bigger than Globe.

Conclusion

In fact, the answer lies in how mining towns related to the larger mining industry of the 1970s and each town’s attempt to deal with the industry’s negative environmental and human health effects. Since the 1960s, residents in Butte, Globe, and Leadville had been pursuing urban renewal efforts that emphasized a measure of modernization as well as attention to those assets each place possessed. In each town, tourism guided recommendations for redevelopment. When environmental legislation passed the federal government in 1970, it changed the way that planners approached their decisions about city design. This was particularly crucial in mining towns, where past and present mining activity contributed to a slew of issues that did not easily pass muster under the new laws.

The effect of these new laws played out differently in Butte, Globe, and Leadville, but still highlighted crucial similarities in why things were different from other places. In Butte, the plan to save the CBD certainly reflected the interest in preserving some of the town’s historical resources. But the lack of effort to save McQueen and Meaderville revealed that Anaconda was still largely in control of how the town appeared. Leadville faced the challenge of not only considering what to do with the historical resources in town, but also what to do about a historical resource like a drainage tunnel that could be useful in the future

⁵⁶ United States Environmental Protection Agency, “Superfund Record of Decision: Mountain View/Globe Site, AZ.”

but was threatening the health and safety of the community. Finally, the interactions between Globe residents and the state and federal government revealed that the presence of mining's past was a matter of image as well as health. In all of these instances, residents found that the past they hoped would attract tourists was also a past that could repel them.

By the end of the 1970s, the federal government began to realize that these struggling communities had no way to pay for clean up on their own. The creation of the EPA's Superfund program in 1980 allowed the federal government to clean up areas it deemed hazardous to the public. It addressed health threats like those at Globe's Mountain View Mobile Home community, but it also created a new threat: a stigmatizing label. Who would want to visit a town that had been branded as hazardous, even if the EPA cleaned it up?

By the time that sites in Butte, Leadville, and Globe received Superfund status in 1983, it was clear that "image" was no longer just about the materiality of historical landscapes, but also about what that materiality meant for the lived experiences of visitors and residents alike. One way or another, the Superfund designation meant that mining towns were going to have to confront their "blighting influence," both in their visual landscapes and in their bodies. How would they save their towns then?

CHAPTER VII
INDUSTRIAL HERITAGE

1983-2015

“No one wore black and there were no sad faces, for no one knew they were attending a funeral,” former miner Stephen M. Voynick editorialized on September 13, 1983. Voynick was mourning the announcement of a new revitalization program in Leadville, Colorado. He believed the program would transform “one of the West’s last authentic frontier mining towns” into a tourist town.¹ Voynick’s eulogy appeared in the *Rocky Mountain News* about seven months after Leadville’s “authentic” mining past had made itself known in the form of acidic mine water surging into the Arkansas River. On February 24, a marigold plume of mine water coursed twenty miles down the Arkansas River from Leadville’s Yak Tunnel. Nearby residents reported the surge to the State Health Department, but it was not something new. And although the water cleared up, the potential for similar surges was not about to go away. In fact, just one week later, the water again flowed marigold after yet another surge.²

This marigold water was part of mining’s legacy, but not the part that appealed to tourists. By the 1980s, many mining towns of the U.S. West were worn and tired, but still struggling to survive. In towns like Leadville, Butte, and Globe, the latest planning efforts emphasized tourism, leading to a general interest in cleaning up each town’s streets and buildings. Voynick believed this meant replacing bleached timbers with plastic and asphalt

¹ Stephen M. Voynick, “Leadville’s Heart and Soul Undermined,” *Rocky Mountain News*, September 13, 1983.

² “Pollution Problems Plague the Arkansas,” *Rocky Mountain News*, March 20, 1983.

and “the honest grins of miners” with the “contrived smiles of shopkeepers.” He blamed “an outside white-collar consultant” and an “Atlanta development group” for conducting revitalization efforts that “polished, packaged, and presented to tourists another ‘frontier city.’” But, he argued, “Leadville needed no polishing and packaging. It was the real frontier all along, the last surviving remnant. Its problem was that it was too authentic.”³ As earlier chapters have shown, these revitalization and modernization efforts were much older and widespread across the intermountain West. By 1983, however, a fresh kind of revitalization effort came to the towns, and from that moment, Leadville, Butte, and Globe contended with their mining pasts as they never had before, because now the toxic legacy of their pasts were not just a matter of local concern, but a matter of federal concern as well.

The historic preservation and environmental efforts in mining towns during the 1980s through the 2000s found that historic preservation and environmental standards set at the federal level during the 1960s and 1970s had restricted activists in both movements. Historic preservation policies, for example, required a historic resource to meet at least one of four criteria, including association with a significant historical event, person, architectural design, or potential for yielding prehistoric information. These policies have often favored the resources associated with members of the white upper and middle classes. Environmental policies required cleaning up hazardous environments, but this often meant destroying historical resources, like homes and businesses and even toxic waste, which provided insight into the lived experiences of people who once occupied those contaminated landscapes. Moreover, local communities have divided over their understandings of and desires for their surroundings, further complicating their relationship with federal agencies

³ Voynick, “Leadville’s Heart and Soul Undermined.”

like the National Park Service and the Environmental Protection Agency. I argue that the lack of flexibility in the standards set by the NPS and EPA prompted community members and outside activists to reevaluate how they justified their actions regarding historical resources and “natural” landscapes.

This chapter augments lively conversations about environmental history, historic and natural resources, and community identity in the U.S. West. Like Chapter Six, this chapter builds on David Robertson’s *Hard as the Rock Itself*, Gillian Klucas’s *Leadville: The Struggle to Revive an American Town*, and Bradley D. Snow’s *Living with Lead*, which chronicled how mining communities have grappled with the environmental hazards mining had created. Using this same scope, my chapter links to historic preservation literature about hazardous cultural resources, including Donald Hardesty’s “Issues in Preserving Toxic Wastes as Heritage Sites” (2001) and Fredric Quivik’s “The Historical Significance of Tailings and Slag” (2007) to broach a question that lies at the intersection of the environmental and historic preservation movements: what to do when some residents argued that waste sites had not caused health problems and were essential to connecting inhabitants to the community’s history, while scientific evidence suggested waste sites were potential health hazards? Drawing on planning documents, court hearings, photographs, newspaper articles, correspondence, and other archival resources, this chapter reveals the ways in which cleaning up toxic landscapes without documenting their historical impact endangered both the honesty of narratives about the past and the awareness of the present.⁴

⁴ Thomas G Andrews, *Killing for Coal: America’s Deadliest Labor War* (Cambridge: Harvard University Press, 2008); Brian James Leech, *The City That Ate Itself: Butte, Montana and Its Expanding Berkeley Pit* (Reno: University of Nevada Press, 2018); Jessica Van Horssen, *A Town Called Asbestos: Environmental Contamination, Health, and Resilience in a Resource Community* (Vancouver: University of British Columbia Press, 2016); David Robertson, *Hard as the Rock Itself: Place and Identity in the American Mining Town* (Boulder: University Press of Colorado, 2006); Gillian Klucas, *Leadville: The Struggle To Revive An American Town* (Washington, D.C.: Island Press, 2004); Bradley D. Snow, *Living with Lead: An Environmental History of Idaho’s Coeur D’Alenes, 1885-2011* (Pittsburgh, Pennsylvania: University of Pittsburgh Press, 2017); Donald L. Hardesty, “Issues in Preserving Toxic Wastes as Heritage Sites,” *The Public Historian* 23, no. 2 (2001): 19–28; Fredric L. Quivik, “The Historical

In order to understand the ramifications of historic preservation and environmental efforts that had been standardized at the federal level since the 1960s, my chapter analyzes how each town responded to the Environmental Protection Agency designating an area in their town as a Superfund site. To some residents—particularly town leaders—the designation was a death knell. They had been relying on tourism as the answer to the decline in mining, but if the federal government labeled their town as a toxic site, who would want to visit? In the aftermath of designation, some residents expressed denial, anger, confusion, and depression. But town leaders who had desperately clung to the Wild West mining image explored ways to move on. At first, some of them, like those in Globe, denied the idea that their reliance on mining and milling had permanently ended. In Leadville, residents battled with the EPA over whether or not to remove mine waste piles and merlot ponds of mine water while struggling to understand their identity and purpose. In Butte, residents embraced “industrial heritage” and sought ways to preserve not just buildings, but also machinery and landscapes. In all cases, residents’ individual, community, and national identities came into play and ultimately shaped the extent to and manners in which they controlled their surroundings. This chapter will explore each of the reactions more closely.

Denial in Globe

The burial of Globe’s last direct tie to an active mining operation came swiftly and firmly. In 1983, the news that the Environmental Protection Agency would bury two asbestos mills and their associated tailings piles devastated and scared many Globe residents. The mill owners lashed out at the EPA and contested any claims that chrysotile, the

Significance of Tailings and Slag: Industrial Waste as Cultural Resource,” *LA. The Journal of the Society for Industrial Archeology* 33, no. 2 (2007): 35–52.

particular form of asbestos milled in Globe, would lead to cancer. A few local residents joined the battle, including Mike Wood, a retired insurance salesman, and Alvin Gerhardt, a retired mining superintendent for Jaquays Asbestos Corporation. They did not want Globe to lose an industry that had been so profitable and to gain a federal label as a “hazardous site.” The mining industry that had once attracted investors was, in the 1980s, the industry that deterred investors.

The asbestos mills were not the only burials, however. Metate and Jaquays employed miners and mill workers during the 1950s and 60s, but Metate closed in 1974 due to its inability to meet air quality standards.⁵ By 1983, the federal government’s Environmental Protection Agency had stepped in, declared the area a Superfund site, and was conducting studies on how best to handle the situation. The agency considered three options and, in June 1983, filed their “Record of Decision.” According to the latter, the most cost-effective avenue was to demolish the mills and mobile homes, lay down a thick filter paper, top it with twenty-one inches of soil and three inches of crushed rock, then surround the area with a chain-link fence.⁶ By 1985, it was “a cemetery, a graveyard for 48 mobile homes, crushed flat and buried whole beneath the torn dark earth.”⁷ What had been a young, “comfortable, attractive community” was now a vacant lot (Figure 7.1).

Although the burial of the hazardous site was complete and the EPA took Mountain View off of its National Priorities List, the grief was still fresh in the late 1980s and through

⁵ F.L. Hoffman, *Mortality from Respiratory Disease in Dusty Trades Inorganic Dusts*, Bulletin No. 231, Industrial Accidents and Hygiene Series 17 (Washington, D.C.: Government Printing Office, 1918); E. R. A. Merewether, “The Occurrence of Pulmonary Fibrosis and other Pulmonary Affections in Asbestos Workers,” *Journal of Industrial Hygiene* 12 (1930): 198–57; K. M. Lynch and W. A. Smith, “Pulmonary Asbestosis III: Carcinoma of Lung in Asbesto-Silicosis,” *American Journal of Cancer* 24 (1935): 56–64; Marilyn Taylor, “Asbestos Is Detected in Globe Soil,” *Arizona Republic*, November 28, 1979.

⁶ United States Environmental Protection Agency, “Superfund Record of Decision: Mountain View/Globe Site, AZ”; Wayne King, “Homes, Trees, and Toys Buried Amid Asbestos,” *New York Times*, November 11, 1985.

⁷ King, “Homes, Trees, and Toys Buried Amid Asbestos.”

the 1990s. For residents like Mike Wood and Alvin Gerhardt, this grief manifested as anger and denial. Their grieving began in 1979, when the state governor used the presence of asbestos to call a state of emergency. Wood and Gerhardt had been in Globe their whole lives and believed it was a mining town; without the asbestos industry, their town would lose direct ties to the mining industry.⁸ Gerhardt had even worked in asbestos mines for decades. If asbestos was cause for a state emergency, how come no one they knew had died from asbestos-related causes? And if there was no direct link, why spend so much money cleaning it up?



Figure 7.1. Left: Metate Asbestos mill in center with Mountain View Mobile Home Park behind it. Right: The long, white-roofed building in the center is Chem Metals, Inc., with the site of the former Mountain View Mobile Home Park behind it. Looking west toward Globe. Sources: *Tucson Citizen*, June 17, 1983, and Google Maps.

⁸ Although the death of the asbestos mills in Globe would be Globe no longer had active mining interests represented in their city limits, they were within only a few miles of the massive open-pit copper mines in Miami.

Although Wood and Gerhardt were some of the most vocal and active opponents of the EPA, other Arizona residents supported their point of view. Robert Park of Arizona Workmen's Compensation Insurance Fund wrote that the only asbestos-related insurance claims he knew of came from insulation installers, not asbestos miners.⁹ Globe physician Thomas B. Jarvis testified in a 1984 letter that he had conducted virtually all autopsies in Gila County between 1967 and 1977. He and two colleagues also studied upwards of seventy asbestos workers around 1971. His conclusion? "There is no evidence of any victim of asbestos in Gila County whether that be carcinoma of the lung, mesotheliomas, other carcinomas, or pulmonary fibrosis due to asbestosis."¹⁰

As the outcry continued, the arguments revealed that the differences of opinion resulted from how people valued different types of knowledge regarding environmental features. While opponents continued arguing that there had been no known cases of asbestos-related disease in the community—no knowledge of illness in individual bodily environments—and that the EPA action would harm business, the EPA presented its own logic. "The EPA is aware," Assistant Administrator Lee Thomas explained in 1984, "of the Globe business community's concern that the economy and reputation of the area not suffer as a result of association with Mountain View Estates." Thomas also responded to the community's request that the federal government produce evidence of actual cases of asbestos-related diseases in Globe: "We have been advised by medical experts of the CDC that, statistically, it would be unlikely that exposure and effect relationships could be demonstrated in a populated area as small as Globe. However, the relative statistical

⁹ Robert K. Park to D.W. Jaquays, December 29, 1982, Folder 4, Box 1, Wood-Gerhardt Asbestos Study Collection, PP-MS 256, Arizona Historical Society- Papago Park, Phoenix, Arizona.

¹⁰ Thomas B. Jarvis to Whom It May Concern, April 10, 1984, Folder 4, Box 1, Wood-Gerhardt Asbestos Study Collection.

significance of the population does not change the evidence that chrysotile asbestos is a human carcinogen which poses an unacceptable threat to the residents of the Mountain View subdivision.” Essentially, Thomas and the EPA believed that just because no one in Globe had died of asbestos-related causes, that did not mean no one would. They undoubtedly relied on scientific studies that showed that some asbestos-related diseases had a latency period ranging from sixteen to forty-one years. Although none of the asbestos workers who had worked in the Globe region for that period of time had died in Globe from asbestos-related causes, Thomas and the EPA were adamant that they did not want to risk lives. Globe’s Chamber of Commerce President Robert Zache responded at least once, arguing that people who had been “heartily exposed have had NO ill effects from this exposure.” He lamented Globe’s loss of a “small industry” and its gain of a reputation as “the most ‘hazardous’ city in the state.”¹¹ Perhaps Zache might have been more convinced had Thomas pushed the idea that effects of asbestos exposure take years to manifest. Instead, Zache’s body and his experience in the local environment told him the EPA was wrong.

But even the burial of Mountain View did not stop the critics. The EPA had completed the destruction by December 1985, but Mike Wood and Alvin Gerhardt were still assembling an impressive array of evidence and support for their point of view. It might have been too late to save the mobile home community and prevent the EPA from spending over \$4 million on cleanup, but Wood and Gerhardt hoped they could redeem the reputations of both Globe and the asbestos industry. Their compilation of research brought

¹¹ Lee Thomas to Robert J. Zache, November 2, 1984, Globe Asbestos News file, Gila County Historical Museum, Globe, Arizona; Elliott Kagan and Robert J. Jacobson, “Lymphoid and Plasma Cell Malignancies: Asbestos-Related Disorders of Long Latency,” *American Journal of Clinical Pathology* 80 (July 1, 1983): 14–20, <https://doi.org/10.1093/ajcp/80.1.14>; J. M. Dement et al., “Exposures and Mortality among Chrysotile Asbestos Workers. Part II: Mortality,” *American Journal of Industrial Medicine* 4 (1983): 421–33; Robert J. Zache to Lee Thomas, June 27, 1985, Globe Asbestos News file.

them to two conclusions: 1) there were several forms of asbestos, and Globe’s chrysotile was the form that scientists had not shown conclusively as being linked to cancer or diseases and 2) because chrysotile was not necessarily a cause of disease, the EPA had wasted taxpayer money and ruined the town’s economy.

As discussed in Chapter Six, the initial efforts of Wood and Gerhardt involved writing to scientists and government officials. One of their most exhilarating discoveries came in the form of Dr. Malcolm C. Ross, a research mineralogist for the U.S. Geological Survey. Ross had gained some degree of fame in Washington, D.C., in 1984 as he challenged claims of the dangers of asbestos in presentations to the White House, Congress, and federal agencies. There was a national scare in the 1980s about the links between asbestos and lung cancer or other diseases. Ross viewed asbestos as a “spectrum” of types, some of which were extremely harmful to humans. For one type, however, there was little evidence to support claims of its deadliness: chrysotile (see Figure 7.2). Enthused at the prospect of having an ally *within the government*, Wood and Gerhardt flooded Ross with letters. Ross, who had earned a Ph.D. in Geology from Harvard in 1962, responded at least occasionally to Wood and Gerhardt and even sent them materials now and then.¹²

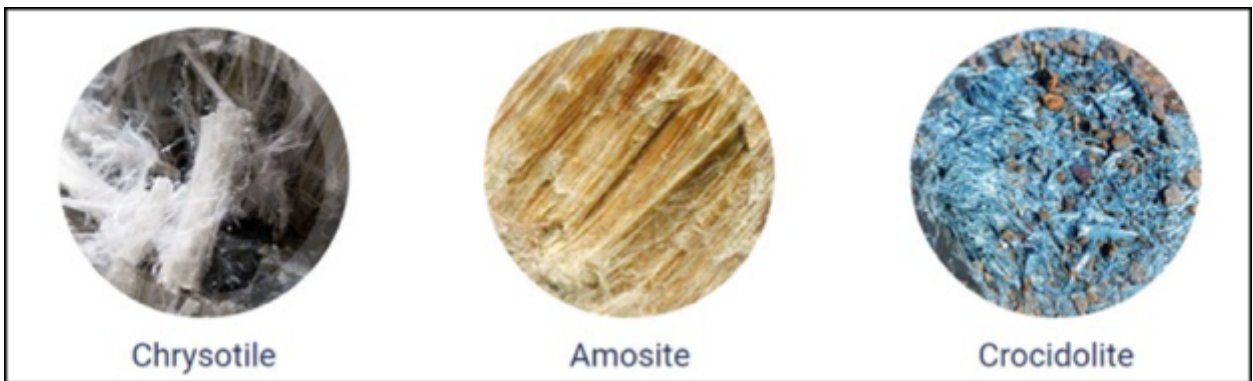


Figure 7.2. Common types of asbestos. Manufacturers favor chrysotile for its long fibers. Image source: <http://www.merryhillenvirotec.com/types-of-asbestos/>

¹² “Curriculum Vitae for Malcolm Ross” (n.d.), Folder 41, Box 4, Wood-Gerhardt Asbestos Study Collection.

Of course, Wood and Gerhardt did not consider the fact that Ross's opinions were unpopular within the government. The Centers for Disease Control doubted Ross's data, attacking him for "statistical manipulations that [we]re highly inappropriate." The CDC also noted that Ross failed to consider how long victims were exposed to asbestos, an important factor in latent diseases such as cancer. The EPA and the National Institute for Occupational Safety and Health agreed with the CDC. Some officials questioned Ross's qualifications for weighing in on health issues. His expertise was in geology, after all. Representative George Miller hoped the government "would not allow the opinions of an individual with no background in public health to influence policy in this area."¹³ According to such opinions, geological expertise had no place in public health policy.

The arguments extended beyond Globe. By 1986, the EPA had already banned some asbestos materials and was in the process of banning asbestos mining, milling, and manufacturing.¹⁴ Asbestos had been useful in many products, such as cement pipes. According to Dr. Steven H. Lamm, President of Consultants in Epidemiology and Occupational Health, developing countries used asbestos cement pipes to funnel drinking water to local villages. To this end, Lamm wrote to the EPA, "I doubt that the asbestos exposure from drinking water carried by asbestos cement pipe will lead to the development of cancer for anyone."¹⁵ He was more concerned with the United States ultimately denying villagers in third world countries access to drinking water than with the use of asbestos in making pipes for this purpose. For him, the uncertain risk of asbestos exposure through

¹³ Bill Keller, "A Quite Contrary View on Asbestos," *New York Times*, August 22, 1984.

¹⁴ U.S. Environmental Protection Agency, "U.S. Federal Bans on Asbestos," Overviews and Factsheets, United States Environmental Protection Agency, March 12, 2013, <https://www.epa.gov/asbestos/us-federal-bans-asbestos>.

¹⁵ Steven H. Lamm to Lee Thomas, September 4, 1986, Folder 23, Box 4, Wood-Gerhardt Asbestos Study Collection.

drinking water was less than the certain risk of denying people access to any water at all. The EPA denied the allegations. Assistant Administrator for Pesticides and Toxic Substances John A. Moore told Dr. Lamm, “The Agency’s proposal is not based upon the risks associated with ingestion of asbestos, for example, in drinking water...[it] is based upon concern for the significant human exposure to asbestos through inhalation during its manufacturing, processing, use and disposal.”¹⁶ Lamm had apparently forgotten that asbestos pipe does not just come out of the ground, but requires processing, and processing requires workers. Although workers might wear face masks and wash off after working with asbestos, Moore’s comment suggests that the risk to these workers was simply unwarranted.

While the EPA continued the battle against asbestos by imposing the 1989 Asbestos Ban and Phase-Out Rule (ABPR), some scientists looked deeper into the effects of asbestos removal. A *Science* article in 1990 pointed out that there were hazards for workers not just in production, but also in the removal of asbestos. After describing the scientific differences between forms of asbestos and the relationship (or lack thereof) to disease, the authors concluded that “the asbestos panic in the U.S. must be curtailed, especially because unwarranted and poorly controlled asbestos abatement results in unnecessary risks to young removal workers who may develop asbestos-related cancers in later decades.”¹⁷ By 1991, the EPA’s all-out ban on asbestos had been overturned in a court case and only prevented the new use of asbestos in products and banned specific asbestos products, including flooring felt and certain types of paper.¹⁸ The challenge was thus not just the continued production of

¹⁶ John A. Moore to Steven H. Lamm, October 1, 1986, Folder 23, Box 4, Wood-Gerhardt Asbestos Study Collection.

¹⁷ B.T. Mossman et al., “Asbestos: Scientific Developments and Implications for Public Policy,” *Science* 247 (1990): 299.

¹⁸ Environmental Protection Agency, “Asbestos Ban and Phase-Out Federal Register Notices,” <https://www.epa.gov/asbestos/asbestos-ban-and-phase-out-federal-register-notices>.

asbestos, but also the problem of the removal process. Was it better to leave asbestos-containing products as they were? Or gamble on a worker's health by sending the worker to remove asbestos and therefore risk exposure? The EPA decided on at least banning manufacture.

Besides the onslaught of letters from Wood, Gerhardt, and others, the EPA was well aware of community opinions about asbestos. On March 6, 1986, the EPA held a hearing about asbestos where Wood and Gerhardt had an opportunity to air their grievances face-to-face with EPA officials. Wood laid out the typical arguments about the lack of evidence for health concern as well as the worry about the Superfund stigma's effect on the local economy. But he also made the case for the critical role of asbestos in national security and the threat that Russia would control the asbestos market if the U.S. gave it up. He finished with presenting the evidence of a petition containing upwards of 4,300 signatures, which declared,

The people of Globe and Gila County have suffered great and economic loss from the fear, generated by innuendo with no actual proof that human cancer or mesothelioma can be due to Arizona chrysotile asbestos... Therefore, we, the undersigned, request that if there are known cases of these diseases in Gila County during the 68 years of mining and milling of asbestos, they be presented. Otherwise, we request a public statement be made to remove the health stigma by stating there are no known cases and assuring the public that Globe and Gila County are not hazardous places in which to live.¹⁹

The community had spoken, and the concern was both about health and about the stigma that Superfund status imposed on the town.

In fact, throughout much of the asbestos debate in Globe, wherever there were health arguments, economic arguments were not far away. In Superfund cases, part of the EPA's job is to determine entities that caused the contamination (referred to as "potentially

¹⁹ "Petition," 1984, Folder 5, Box 1, Wood-Gerhardt Asbestos Study Collection.

responsible parties,” or PRPs) and then demand payment for the cleanup cost. The economics of the EPA’s Superfund process fueled Wood and Gerhardt’s anger. Not only was the EPA telling the town that it was unhealthy, but it was also stealing any chance for it to continue benefitting from an industry. In a 1984 letter to Arizona Senator Barry Goldwater, Wood and Gerhardt described how the EPA was pressuring Jaquays to destroy a 26,000 ton tailings pile, and “the market value of this pile is about \$2,000,000.00.” “If this destruction is completed,” they continued, “it will permanently close down the mining, milling and the whole chrysotile asbestos industry in Gila County. The closing of the mill would result in another \$2,000,000.00 loss, the present day cost to replace it.”²⁰ D.W. Jaquays, the Jaquays Asbestos owner himself, also wrote to Goldwater about the concern that the EPA was spending \$2 million to purchase the mobile homes and move people out while spending additional funds to complete the burial process.²¹

Beyond the money that the company could earn from tailings and the outcry over the cost of cleanup, there was also an argument that the stigmatization of asbestos and any suggestion that it should be banned would hurt the United States on an international level. Wood had certainly made the argument that asbestos was an essential material for products used in defending national security. Ross added that producing products using chrysotile would allow the U.S. “to compete successfully in the international market.”²² Such a comment echoed the Cold War fears about national security and technological development that had jumpstarted the asbestos industry during the 1950s.

²⁰ Mike Wood and Alvin Gerhardt to Barry Goldwater, November 22, 1984, Folder 18, Box 1, Wood-Gerhardt Asbestos Study Collection.

²¹ D.W. Jaquays to Barry Goldwater, May 3, 1985, Folder 18, Box 1, Wood-Gerhardt Asbestos Study Collection.

²² Malcolm Ross, “Suspect Minerals and the Survival of the U.S. Mining Industry: A Commentary” (paper presented at the U.S. Geological Survey and U.S. Bureau of Mines Meeting on Mineral Commodities, Reston, Virginia, January 21, 1987).

Although the controversy continued at a more national level, the activism in Globe eventually fizzled out, particularly after the deaths of Wood and Gerhardt in 1993 and 2004. The EPA and the Arizona Department of Environmental Quality still monitor Mountain View. Chrysotile asbestos, as of 2019, is not on the EPA's list of hazardous substances. Without any evidence of Mountain View's history beyond the chain link fence and small sign, there is no apparent stigma plaguing the town.²³

Legacy in Leadville

The burial that was so swift and firm in Globe was perhaps what residents of Leadville, Colorado, would have preferred from the Environmental Protection Agency. Instead, the cleanup that began in 1983 is ongoing. In the asbestos controversy in Globe, arguments about stigma suggested Superfund status would be a detriment to tourism. Globe had been attempting to build its tourist economy by promoting its town as a remnant of the Old West, as did other mining towns, like Leadville. In Leadville, however, the hazardous waste *was* a remnant of the Old West and something with which many locals not only identified but which they also believed gave their town some of that Old West ambiance. Residents viewed themselves as products of a hard laboring past. Their attachment to that past and turning it into a tourist attraction caused many of them to view the EPA's cleanup as a threat. If the EPA cleaned up parts of the landscape that provided residents with a sense of the past, then they would lose that heritage and thus a sense of identity. Their fear rested on the concern that the EPA would remove highly visible features, such as tailings piles and slag heaps. As in Globe, Leadville residents were concerned about the tourist dollar. But

²³ "Hubert 'Mike' F. Wood Funeral Program," January 5, 1994, Folder 7, Box 1, Wood-Gerhardt Asbestos Study Collection; "Alvin W. Gerhardt Resume" (1987), Folder 7, Box 1, Wood-Gerhardt Asbestos Study Collection; "Electronic Code of Federal Regulations," *Legal Information Institute*, <https://www.law.cornell.edu/cfr/text/40/302.4>.

Leadville residents also had to confront the reality that their old mines—while providing evidence of the past—might harm people’s health.

In Leadville, 1983 was a tumultuous year, even for a boom-bust veteran. In January, AMAX, the last major mining company in the area, announced that its 1982 layoffs would continue into 1983. In February, a gush of acidic mine water tainted the Arkansas River. In March, town leaders announced the launch of “Operation Bootstrap,” an effort to beautify the town and attract tourists. In August, Ken Chlouber launched the first of what eventually became an annual ultramarathon based out of Leadville. In September, the EPA officially listed the entire town as a Superfund site. Just as the town’s leaders were investing hundreds of thousands of dollars into the downtown, the environment was pushing back.

Surges of acidic mine water, for one, were turning clear waterways a semi-opaque mustard yellow. Although similar surges had occurred in years past, the one in February 1983 garnered the EPA’s attention. In the mines east of Leadville, miners had built several drainage tunnels in order to draw water away from active mining tunnels. Most mining companies had abandoned Leadville mines by the 1970s, leaving the tunnels as well as wooden and metal support structures unmaintained. Over time, these structures can collapse, and groundwater can build up behind the debris. Sometimes, pressure builds so high that water breaks through the blockage. The surging generally subsides within a few minutes and is of less concern than the contents of the water. Water that runs through old mines might become acidic when it contacts rocks containing sulfur-bearing minerals, thus creating sulfuric acid. As this acidic water runs over other rocks containing heavy metals, it may leach the metals out and carry them downstream. The process occurs in unmined locations, but mining magnifies it by exposing more of the metals. In some mines, the water pools behind fallen debris, so if the fallen debris weakens or someone disturbs it, a surge of

the heavy metals-laden acidic water can occur. For Leadville, there had been concern about the Leadville Mine Drainage Tunnel releasing an estimated eight million gallons of mine water since at least 1976. The 1983 surge raised concerns about another tunnel, the Yak Tunnel in California Gulch, which was where American Smelting and Refining Company (ASARCO), an Arizona-based mining company, had been mining zinc, lead, gold, and silver.²⁴

The surge of water in 1983 stemmed from a historically and ecologically significant location known as California Gulch (Figure 7.3). Initial mining activities in the 1860s began near the bottom of the gulch, then spread north and east into the hills. Mining's boom in the 1870s spurred the development of the city of Leadville, which extended north and west from where the gulch exited the hills. Mine shafts, houses, and yards commingled on the eastern edge of town, making the city's mining identity quite visible. Even though most major mines closed by the mid-twentieth century, ties to the mining industry remained, because many of the city's miners worked at the nearby Climax molybdenum mine and at other small mines in the area. ASARCO had operated a mill along California Gulch since 1971 and continued to buy mining claims for zinc, lead, silver, and gold.²⁵ The ore processing for these metals discharged water containing these and other metals, which ASARCO funneled into the Yak Tunnel. The Yak had been in place since at least 1900 and directed mine water into the

²⁴ Environmental Protection Agency, "Abandoned Mine Drainage Factsheet," Overviews and Factsheets, US EPA, September 15, 2015, <https://www.epa.gov/nps/abandoned-mine-drainage>; Ata Akcil and Soner Koldas, "Acid Mine Drainage (AMD): Causes, Treatment and Case Studies," *Journal of Cleaner Production* 14, (January 2006): 1139; Gillian Klucas, *Leadville: The Struggle to Revive An American Town* (Washington, D.C.: Island Press, 2004), 32–33; United States Senate, *Leadville Mine Drainage Tunnel Act of 1976: Hearing before the Subcommittee on Energy Research and Water Resources of the Committee on Interior and Insular Affairs*, United States Senate, Ninety-Fourth Congress, Second Session on S. 3394 (Washington, D.C.: U.S. Government Printing Office, 1976); "Pollution Problems Plague the Arkansas," *Rocky Mountain News*, March 20, 1983.

²⁵ "ASARCO's Permit No Guarantee Dumping Of Pollutants Will Cease," *Rocky Mountain News*, March 20, 1983.

Arkansas River, which flows eventually into the Mississippi River. Any environmental changes at these headwaters could—and did—affect ecosystems downriver.

18—Rocky Mountain News Sat., March 20, 1983, Denver, Colo.

RIVER RUNNING ORANGE

Pollution problems plague the Arkansas

Dangerous chemicals from mines turn river to 'orange juice'

LEADVILLE — On Feb. 24, a 20-mile stretch of the Arkansas River below Leadville turned orange.

The river, a major source of water for 400,000 southern Colorado residents, remained orange for several days. One man described it as "orange juice" orange. Another called it "rust or blood" orange.

But the cause of the coloration, which periodically has tainted the Arkansas for many years, is much more worrisome than orange juice or rust.

It is due to dangerous metals and chemicals that drain out of abandoned mines,

Related stories, pages 19, 20

and from an active mine and mill owned by ASARCO Inc., a Fortune 500 company with a history of pollution problems.

THE POISONOUS surge of three weeks ago was the most serious in memory. And it demonstrates Colorado's inability to stop a major source of hazardous pollution.

In tests of California Gulch and the Arkansas River on Feb. 25 and 26, the Colorado Health Department found higher than normal concentrations of heavy metals — manganese, zinc, iron, copper, and cadmium. Lead and arsenic also were found, but acceptable amounts.

Heavy doses of cadmium are associated with kidney disease, birth defects and cancer. The river's orange tinge was caused by iron and manganese oxide.

A health department investigation found the surge was caused by ASARCO workers who flushed the hazardous liquids from the ledge-covered floor of the 3.4-mile-long Yak Tunnel. There was no prior warning, though ASARCO is supposed to notify health officials before initiating any change in the flow.

The Yak tunnel collects runoff from the mines and dumps it into California Gulch. Pastes in the runoff have turned the stream an opaque ochre. The gulch emp-

TOXIC SPILL
(Path from Yak Tunnel)

amount of material that would be stirred up," he said.

ASARCO's chief mining engineer told the health department that chest-high pools of water had accumulated behind debris dams.

WHEN THE debris was cleared, the toxic sludge in the pools poured into the gulch, said Robert Shukie of the health department's water quality control division.

The segment of the Arkansas below the tunnel always has high levels of metals. But Shukie said the concentration of cadmium at the confluence after the surge was four times the allowable standard.

Tom Martin, district wildlife manager for the Colorado Division of Wildlife, said the pollution has killed a three-mile section of river. It supports no wildlife. Downstream, he predicted a continued long term effect in smothered eggs and elimination of part of the food chain from the discharge.

Three downstream cities — Colorado Springs, Canon City and Florence — turned off their intake pipes for five days because of the Feb. 24 pollution surge.

"We asked them to shut down because we take a conservative attitude," said Gary Soldano, district engineer for the state health department in Pueblo. "We would rather be safe than sorry. We are not sure what would happen when they get into the reservoir."

Soldano said the health department was notified of the pollution by riverside residents who were alarmed by the color. ASARCO failed to alert state officials even after the "purge," although the company's permit requires it to notify state officials if they initiate a change in the flow.

"I had every person who lives in Granite, Colo., call me. That's how I found out," said Soldano. Granite is 18 miles from the Yak Tunnel.

BY THE TIME the pollution reached the cities' intake, the chemicals had been di-

Figure 7.3. Map showing Leadville, Colorado, and the path of a surge of acidic mine water from Yak Tunnel, down California Gulch, and into the Arkansas River. Source: March 20, 1983, *Rocky Mountain News*, Denver, Colorado.

With California Gulch on the National Priorities List, the EPA began a series of steps to determine the extent of contamination and the best actions to clean up the site. But EPA cleanup did not begin until February 1985, after several years of legal battles to identify who was responsible for picking up the costs. While EPA studies of the issue were still

underway, another surge occurred in October 1985. Time was of the essence, but the EPA struggled to learn quickly the local hydrogeological quirks.²⁶

The time crunch pressured the EPA, but legal snafus and the Colorado state government's intervention stalled the cleanup and antagonized local residents. The State of Colorado, it turns out, also had the responsibility to monitor the state's waterways and the authority to sue companies.²⁷ Unlike the EPA's ability to sue for cleanup, state governments had a statute of limitations for filing a claim based on natural resource damage: December 10, 1983. Only a few states made the deadline, including Colorado, which had selected California Gulch as one of seven claims.²⁸ The action ultimately led the state's attorney general to file a lawsuit against the City of Leadville, including 2,435 individual residents. In fall 1986, the state sent each individual resident a brown envelope containing legal papers describing the suit. Residents were horrified and confused.²⁹ First the EPA and now this? In a county court hearing, the state's assistant attorney general Kent Hanson explained that the notice was not to get residents to *pay* for the cleanup but to ask residents to give the State access to their property in order to conduct soil studies and determine the extent of contamination. Although the state dropped the lawsuit in October 1986, it had lost residents' cooperation. The "Brown Envelope" fiasco signaled that the State was interested not just in cleaning up the water over at the Yak Tunnel, but also in cleaning up Leadville's soil. The relationship between the federal government's Superfund and the state government's

²⁶ U.S. Environmental Protection Agency, "Phase I Remedial Investigation Report" (U.S. Environmental Protection Agency, May 1987); Joseph B. Verrengia, "Toxic Wastes in Arkansas River Endanger Major Trout Hatchery," *Rocky Mountain News*, October 24, 1985.

²⁷ Superfund legislation empowered both state and federal governments to sue in federal court for damages to natural resources.

²⁸ Klucas, *Leadville*, 63.

²⁹ Klucas, *Leadville*, 70–75.

Natural Resource Damage claim led residents to confuse the federal and state actions such that they did not regard either entity as trustworthy.³⁰

Leadville's soil concerned the EPA because several smelters once operated along the southern edge of town, including Arkansas Valley and American Mining smelters next to Stringtown. In the smelters, large furnaces heated the ore that encased precious metals. The metals melted, thereby separating from other unwanted materials. Smelter workers poured the molten metals into molds and dumped wheelbarrows of the other molten materials outdoors, creating massive piles of onyx-colored slag. The smelting process produces dark clouds of smoke containing particulates of arsenic, lead, and bismuth, all elements that can be dangerous to humans and animals. Leadville's valley socked the smoke in, and the arsenic, lead, and bismuth particulates settled over houses, yards, and streets. Those living closest to the Arkansas Valley smelter on the south side of town, like the Mexican families described in Chapter Three, bore the brunt of the smoke and dust (Figure 7.4). Because the particulates were small and widespread, they settled into the soil such that their presence remained well after the smelters closed in the 1960s. Scientists and government officials had debated the links between health problems and smelter smoke since at least the early twentieth century. By the 1980s, rising nationwide concerns about lead poisoning as well as the EPA's recent introduction to Leadville's environmental problems prompted officials to test Leadville's soils.³¹

³⁰ Klucas, *Leadville*, 75.

³¹ Robert M. Hazen and Margaret Hindle Hazen, *Keepers of the Flame: The Role of Fire in American Culture, 1775-1925* (Princeton: Princeton University Press, 1992), 84; Duane A. Smith, *Mining America: The Industry and Environment, 1800-1980* (Niwot: University Press of Colorado, 1994), 11; U.S. Bureau of Mines, *Minerals Yearbook 1961*, vol. 1 (Washington, D.C.: Government Printing Office, 1962), 772; Capaldo, "Smoke and Mirrors: Smelter Pollution and the Construction of Arizona Identity in the Late Twentieth Century," 239.

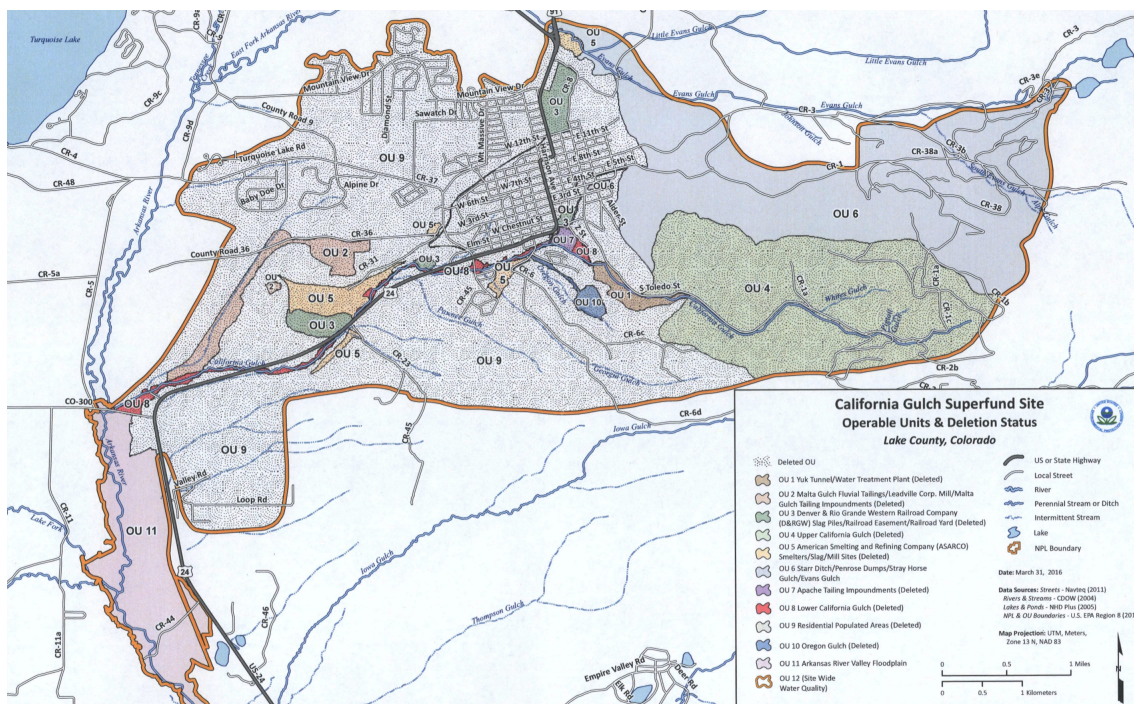


Figure 7.4. Map of the California Gulch Superfund Site, Leadville, Colorado. Map shows twelve operable units, including OU 12, which outlines the entire site in orange. Source: <https://semspub.epa.gov/work/08/1771143.pdf>

With financial support from the EPA, the Colorado State Health Department examined Leadville’s soils in 1987 and published the results in 1990. The study had four objectives: identifying the levels of lead in residents’ blood and urine, comparing them to national averages and similar mining environments, relating the levels of heavy metals in the residential environment and human bodies to environmental concentrations, and determining if environmental, behavioral, and socioeconomic factors affected exposure, particularly in children. Out of 239 children between six months and almost two years old, 150 participated in the survey. The study reported that forty-one percent of Leadville’s children age six or less had lead levels exceeding CDC standards and that there was evidence that children who played outdoors in Leadville had elevated levels of lead. The study recommended lowering “the exposure to lead in soils and dusts” as well as covering lead-

laced areas with grass, minimizing the opportunities for children to consume anything that could contain lead, and leaving mine tools and clothing at the mine.³² For residents living on the south and eastern sides of town, this might mean keeping their children from playing in their own yards.

The recommendations seemed like common sense, but there were critics. ASARCO, for one, balked at the data. The company was so incensed that it obtained a court order to prevent the EPA from discussing figures from the 1987 study and funded a follow-up study in 1994. According to the follow-up study, “8% of the children had blood lead levels of more than 10 micrograms per deciliter” (the CDC threshold) but “in some parts of town, where families live in homes constructed on mine waste, the study found as many as 20% of children suffered from lead poisoning.” Although less than the EPA’s forty-one percent figure, twenty percent was still high when talking about preventable illnesses. But unlike the EPA study, the ASARCO study recognized that location mattered and that residents closest to mine tailings bore the brunt of the poisoning.³³

To gather this data, the ASARCO study relied on asking residents a series of questions about their day-to-day lives. “Do you have a well on your property or use groundwater?” “Do you or others in your family fish?” Several questions emphasized children’s activities: “Do your children play in any stream, creeks or ditches near your home? Do your children play in any tailings piles, slag piles or mine waste?” The consultants received around 1,800 questionnaires, some seventy percent of the city’s population. Most

³² University of Colorado at Denver Center for Environmental Epidemiology and Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Service, “Leadville Metals Exposure Study” (Colorado Department of Health, Division of Disease Control and Environmental Epidemiology, April 1990), 40.

³³ University of Colorado “Leadville Exposures Study”; Katie Kerwin, “Residents, EPA Feud over Pollution Cleanup,” *Rocky Mountain News*, August 7, 1994; Woodward-Clyde Consultants, *Demographics Data Report California Gulch Site, Leadville, Colorado* (Denver, Colorado, 1994; Kerwin, “Residents EPA Feud.”

reported that their children did not play in streams, creeks, or ditches; only thirty-six respondents said “yes”; and two refused to answer.³⁴

And yet, residents distrusted the results of the EPA’s and ASARCO’s studies. Many of these locals based their opinions on the fact that they had never personally seen evidence of lead-related illnesses. “Here in Leadville, we really don’t believe the lead affects our kids,” explained Kathy Brendza, a mother and director of The Center, a school for as many as 700 children. “I guess what I and many townspeople recognize,” said then-mayor and third-generation miner Jim Martin, “is that...you don’t see any two-headed kids or idiots.” Local environmental officials noted that many residents did not believe the risk because there were no “dead bodies,” no one who had died from causes that could be traced directly to elevated levels of cadmium, zinc, or lead in the soil. Another former miner, Stephen Voynick, noted, “I’ve talked to old-timers who say they have played in those ponds and they’re 75 years old. [They think] as long as you don’t eat the stuff, or drink water coming out of the Yak, nothing is going to happen to you.” Even local health officials questioned how worried locals should be. Charleen Smith of the Lake County Health Department commented, “I’m not going to sit here and tell you that lead isn’t dangerous, but let’s use some common sense here...A good case of measles can make you deaf or blind or retarded, and I’m certainly more concerned about that than I am about the lead in the dirt around here.” For Smith and others like her, the generalized scientific data about the dangers of lead was important, but so too was “common sense.” And in her view, “common sense” meant recognizing the danger and taking appropriate precautions, but not going overboard, as she believed the EPA’s plan to clean up soils would be.³⁵

³⁴ University of Colorado, “Leadville Metals Exposure Study.”

The EPA realized that residents felt this way, but pushed back. “It’s particularly hard to change people’s minds with something like lead,” said Bob Duprey, EPA regional director of hazardous waste, “because we don’t expect people to be acutely ill. We’re more concerned with chronic effects...those aren’t things that are going to be obvious.” Other EPA officials agreed. “Lead poisoning is insidious,” one said. “You can’t see it. So you can’t say to a family your kid’s IQ might be 10 points higher without exposure to lead.” EPA regional toxicologist Christopher Weis had noted that the locals’ pushback had been particularly strong after the EPA had changed its focus “from a water-shed problem to a human health problem.” It was not that the EPA said only that mining had poisoned the environment, but also that it had poisoned the bodies of residents. The data and the EPA’s subsequent action to clean up people’s yards was thus a personal attack based on general knowledge. The EPA could provide a litany of sources for its knowledge of lead’s harmful effects, but lacked the data to link it to Leadville residents specifically and therefore remained unconvincing to some residents.³⁶

Residents also distrusted the EPA because agency officials did not listen to them. Many residents were educated, well-informed people, including professional engineers, geologists, and hydrologists. Peter Moller, a professor of environmental technology, believed the EPA had consistently ignored local expertise and should adopt a more site-specific approach. Local construction company owner and mining engineer consultant Al Phillips described how, at the first public meeting, EPA and state officials “just patted us on the

³⁵ Kerwin, “Residents EPA Feud”; Peggy Lowe, “Colorado Mining Town Residents Aren’t Rushing to Get the Lead Out,” *Los Angeles Times*, November 17, 1991; Jerry Hollyfield, *California Gulch: A Superfund Case Study* (Knoxville: Waste Management Research and Education Institute, University of Tennessee, 1991), 15, 17, 35; Mary George, “Residents Resist Proposed Soil Cleanup,” *Denver Post*, September 30, 1991.

³⁶ George, “Residents Resist”; Thaddeus Herrick, “Leaden Economy Poisons View of EPA,” *Rocky Mountain News*, February 14, 1992.

head like a bunch of little kids and told us not to worry: Big Brother is going to take care of you.” His sense of feeling belittled and unacknowledged is clear. Joe Swyers felt that the EPA was “not looking for input. They were giving us a chance to talk to a wall.” Indeed, since about 1988, a major point of controversy was the EPA’s plan to plug the Yak Tunnel. Locals argued that doing so might cause the water to migrate and contaminate the city’s water supply. By 1991, after three years of study, the EPA concluded that the locals had been correct. The agency decided to pursue another solution. It was yet another example of the EPA studying something for several years that locals felt they already knew how to address with local knowledge.³⁷

The level of pushback against different EPA actions reveals the core reasons for the complicated and lengthy debate over community health. When the EPA instigated the cleanup efforts for the Yak Tunnel with the purpose of cleaning up the orange water, residents were unhappy with the stigma of Superfund. Nonetheless, pushback was minimal, especially compared to the asbestos fight in Globe. With the later issues about lead in the soil and how to handle the Yak Tunnel’s ongoing discharge of mine water, however, Leadvillites resisted. For residents, the earlier efforts to clean the water made sense. The contamination was highly visible. As EPA’s Jim Hanley explained, “The water treatment plant the people can understand... You can see acid migrating. You can see orange water, and you know it’s not supposed to be like that.” Even State Senator Ken Chlouber, a vocal opponent of the EPA and creator of Leadville’s famed ultramarathon, admitted, “When the EPA came in to clean up one teensy little creek, that was OK. Anybody could see heavy metals were dumping into the river.” The lead content of soil was not so visible, nor were its

³⁷ Hollyfield, *California Gulch*, 16-19, 43.

effects on health, so residents questioned the EPA. In the Yak Tunnel issue, pushback stemmed from locals' confidence in their own knowledge and the belief that the EPA was simply "ramming its solutions down our throat." At the intersection of experience and science in Leadville's soil and water debate, as in Globe's asbestos controversy, some residents prioritized personal and local knowledge over data presented to them from state and federal authorities.³⁸

The government's attention to lead in the soil eventually prompted the 1994 "Kids First" program to clean up lead in Leadville's soils. ASARCO funded the program, because Superfund litigation charged the company with residential cleanup. "Kids First" gave residents a choice. In earlier efforts to study and address the soil problems, EPA officials had run into what they believed was a "western" attitude about private property: "It's my property, leave it alone, I can do with it what I want." ASARCO's "Kids First" program allowed Leadvillites to exercise their private property rights by offering them the option of having their property and their blood tested. It received approval from the EPA, and by 2002, 550 children had received blood tests. The results revealed that children living in historically marginalized areas of town had higher blood lead levels than those living near the historically wealthier and Euro-American central and upper west neighborhoods. But also by 2002, yards at 120 homes had been removed or capped. Blood lead levels in general were decreasing. This more voluntary effort seemed to have some success.³⁹

Even so, Leadville's environmental problems and concerns have persisted. In 2007, an old tunnel on the north side of town, the Bureau of Reclamation's Leadville Mine

³⁸ Winston Caine, "Opposition to Cleanup Surprises EPA," *Rocky Mountain News*, August 5, 1991; Kerwin, "Residents EPA Feud."

³⁹ Caine, "Opposition to Cleanup"; Klucas, *Leadville*, 264-265.

Drainage Tunnel (LMDT), raised concerns. Reclamation monitored the tunnel and had installed a water treatment plant at the tunnel's mouth. But in 2007, Brad Littlepage, the plant's manager and county commissioner, warned his supervisors about the LMDT's deterioration. They did not listen. Then the EPA got involved. EPA regional manager Robert E. Robert took Littlepage's local knowledge seriously and wrote Reclamation a warning of a "potentially catastrophic release of water." In 2008, residents at a mobile home community that surrounded the tunnel's mouth worried that backed up mine water might burst and wash away their homes. The story broke national news. In order to meet the EPA's water quality standards, Reclamation conducted a risk assessment. The agency concluded that residents were safe, but as an extra precaution, it installed additional water monitoring instruments and updated their Emergency Action Plan. The EPA accepted local knowledge in this case, but it was knowledge from someone who was both a local resident and a government employee. The 2008 drainage tunnel scare was a moment when a combination of local knowledge and the influence of one government agency over another led to action that ensured public safety.⁴⁰

Much of the controversy in Leadville has weighed visible and invisible evidence while adopting data- and logic-driven arguments. Many residents view changes to Leadville's landscapes since the 1990s as at least an attempt, if not complete success, at finding mutually satisfying solutions. Pools of merlot-colored mine water are still visible amongst the sulfur-yellow mine tailings piles, and anyone venturing along the south end of the "Route of the Silver Kings" can easily see the Yak Tunnel treatment plant and surge pool. The EPA has

⁴⁰ Dan Frosch, "Mine Water Poses Danger of a Toxic Gusher," *The New York Times*, February 28, 2008, <http://www.nytimes.com/2008/02/28/us/28leadville.html>; U.S. Department of the Interior, Bureau of Reclamation, *Leadville Mine Drainage Tunnel Risk Assessment* (Denver: Technical Service Center, 2008), https://www.usbr.gov/gp/eca/leadville/combined_risk_assessment.pdf.

capped some mine tailings piles and pushed the rocks into tiers like a wedding cake, particularly ones visible from the middle of town. Although they appear slightly different in form, they are still recognizable as tailings piles. And since at least 1995, the river runs clear, including significant numbers of trout.⁴¹ Perhaps there is hope, even for a tainted earth.

One major result of all of these environmental matters in Leadville was frustration for everyone, including residents, EPA officials, and mining company executives. Everyone felt the process was too slow. Everyone wanted the EPA to complete its work. Everyone wanted the EPA to employ individuals who were better qualified in working on mining sites. Leadvillites often complained that their town was a guinea pig for the EPA's experiments, and the number of trial and error studies certainly suggest this was the case. Things had moved quickly in Globe, where there was no argument that the site also had historical significance. In Leadville, however, the mine waste—the lead-laced soil, heavy metal laden water, piles of waste rock and tailings—was historical, and the contamination was old and ongoing. It revealed information about how historical mining processes functioned and what effect they had on their surroundings. Even so, it was a human health risk. What the EPA did in Leadville, in fact, inspired its approach in other communities.

Reconciliation in Butte

Butte residents might relate to residents of Leadville more than to those in Globe, at least in terms of the Environmental Protection Agency. As in Leadville, the EPA's actions began and, as of 2020, have yet to end. Development of Butte's Superfund status first targeted Silver Bow Creek but expanded in 1987 to include the city itself. Several operable

⁴¹ Mark Obmascik, "Mine Cleanups Start to Pay Off But Positive Results Have a Price," *Denver Post*, November 15, 1995.

units (OUs) emerged in the Butte/Silver Bow Superfund site, including three that occupied areas within Butte city limits. The West Side Soils, Priority Soils, and Mine Flooding operable units subjected Butte residents to Superfund action from many directions. The West Side and Priority Soils OUs targeted the streets of old Butte. As a result, the EPA's OUs occupied the same areas with which historic preservationists grappled.

Butte's historic preservation movement, particularly strong in the 1980s, aimed to keep mining landscapes as visual reminders of their past. Butte was much more populous than either Globe or Leadville, and many of the residents maintained an active interest in preserving their city's mining past. By the 1980s, they had their own historic preservation officer. This officer as well as employees and volunteers conducted extensive surveys and inventories of Butte's historic resources. These ranged from the Montana Historical and Archeological Inventory sheets completed by members of the Butte Historical Society throughout the 1980s to reports completed for the Butte Silver Bow Historic Preservation Office. At least as early as 1984, Butte's historic preservation movement recognized the historical significance of mining artifacts as well as health concerns.

Mine reclamation, a major movement in the 1980s, fell under different government jurisdiction than most historic preservation efforts. As such, two different arms of the government determined what would happen to the landscape, and—to complicate things further—the division happened at the state as well as the federal levels. In the federal government, for example, reclamation was the responsibility of the Department of the Interior's Assistant Secretary of Water and Science, whereas historic preservation efforts like the National Historic Landmark program were under Interior's Assistant Secretary of Fish, Wildlife, and Parks. At the state level in Montana, this meant reclamation was under the jurisdiction of the Abandoned Mine Bureau, a division of the Montana State Lands

Department. Before the 1980s, abandoned mines almost always fell under the jurisdiction of reclamationists, not preservationists. In the 1980s in Butte, however, there is clear evidence that reclamationists communicated with preservationists.

Within this context, Ben Mundie of Montana's Abandoned Mine Bureau had reached out to Janet Ore of Butte's Historic Preservation Office in 1984 to inquire about any historic preservation concerns regarding the agency's reclamation plans at five of Butte's mines. "I realize," Ore wrote in response to Mundie's inquiry, "that health and safety factors are paramount in this project and that they must take precedence over preservation concerns. However, I do have some concerns about work which would be merely cosmetic."⁴² Indeed, "The Hill," as the north side of Butte has been called, impressed visitors with not only its scale, but also the starkness of its surface. The Hill sloped down into town and, much like Leadville's east side, Butte's north side blurred the boundaries between mining and urban landscapes. But unlike Leadville, Butte's blurred area contained several large metal headframes (Figure 7.5).⁴³ At some sites, major buildings associated with the mine operations, such as hoist houses or carpenter and blacksmith shops, still existed. Ore expressed three general concerns about the reclamation plans: First, she worried that reclamation would lead to destruction or removal of historic buildings. She also wondered if smooth grading of mine dumps "down to the original contour" would "eradicate all signs that a mine once operated at a particular spot." Finally, she stated that if reclamation meant re-seeding the ground with grass, people should still be able to "identify the site as a mining feature." Much of her concern centered on the question of visual effect. She argued that

⁴² Janet Ore to Ben Mundie, November 19, 1984, Butte Silver Bow Historic Preservation Office records, Butte-Silver Bow Public Archives, Butte, Montana.

⁴³ Headframes are the structures that sit over a mine shaft and provide anchors for raising and lowering elevators and buckets.

once safety measures had been met, visual concerns required attention, because the visual presence of headframes and waste rock dumps was part of what gave Butte its historical character.



Figure 7.5. The Original Mine, Butte, Montana. The 1980 photograph for the Historic American Engineering Record depicts a mining headframe in the center of town, surrounded by waste rock piles and crumbling mine structures. Source: Library of Congress.

The concerns Ore raised only scratched the surface of some questions about preserving mining-related features. Ore passed her letter and a copy of the bureau’s plan to historian and Butte resident Paul Anderson at GCM Services, Inc.⁴⁴ “I believe,” Anderson quipped, “all of us agree the shafts are a serious potential danger and should be permanently

⁴⁴ GCM Services, Inc., “About Us,” 2015, <http://gcm-services-inc.blogspot.com/p/about-us.html>. GCM formed in 1982 to provide “archaeological and historical assessments, baseline inventories, mitigations, data recovery, and research and analysis of archaeological materials.”

sealed.” But the issue of tailings dumps was more controversial. Anderson saw no reason to preserve them. He believed that they were toxic and, as such, should be removed. Historic preservationist Fred Quivik, however, believed the dumps could be made safe and thus be preserved. After earning his Master of Sciences degree from Columbia University in 1977, Quivik found his way to Montana and established a historic preservation firm. Despite numerous conversations with Quivik, Anderson refused to believe that tailings held any historic value. To him, “the dumps do not represent any significant part of the original site but only the debris of what was once a site.”⁴⁵ But he also had a personal reaction toward the dumps: “they are ugly eyesores which are a visual pollution.”⁴⁶ The suggestion that visual elements could be “pollution” as well as geological and hydrological elements emphasized the importance of mine tailings in Butte.

Whether the Abandoned Mine Bureau required Ben Mundie to seek Janet Ore’s comments or whether the Butte Historic Preservation Office required Ore to seek Paul Anderson’s input about reclamation is unclear. But they did so, and that speaks volumes to the idea that the state government was taking steps to ensure it was working with historic preservation officials. In fact, the bureau contracted GCM Services to conduct several cultural resource inventories of abandoned mine sites in Butte during the 1980s. The inventories were detailed—the 1986 inventory totaled almost 300 pages—and cited vast arrays of historical records.⁴⁷ The bureau thus had an incredible amount of information

⁴⁵ Paul Anderson to Janet Ore, December 13, 1984, Butte Silver Bow Historic Preservation Office records, Butte-Silver Bow Public Archives, Butte, Montana.

⁴⁶ Anderson to Ore, December 13, 1984.

⁴⁷ Paul Anderson, “Cultural Resource Inventory and Evaluation of Selected Mine Sites in the Butte Mining District, Butte, Montana” (Butte, Montana, February 1985), Butte Silver Bow Historic Preservation Office records, Butte-Silver Bow Public Archives, Butte, Montana; GCM Services, Inc., “Cultural Resource Inventory and Assessment of Selected Abandoned Coal Mine Sites Throughout Montana and Selected Hardrock Mine Sites in Butte” (Butte, Montana, October 1986), Butte Silver Bow Historic Preservation Office records, Butte-Silver Bow Public Archives, Butte, Montana; Dale Martin and Paul Anderson, “Cultural Resource Inventory and Evaluation of Selected Mine Sites in the Butte Mining District, Butte,

about Butte's cultural resources at its fingertips. It continued working closely with local preservation officials and professionals throughout the 1980s to preserve cultural resources carefully.

Butte residents and the EPA could count some successes by the late 1980s, but outsiders might not be so sure. In 1988, *High Country News*, a pro-environmental stewardship publication about the U.S. West, published an article calling Butte "a center of infection." The article's author and a resident of eastern Montana, Don Moniak, said that growing a tourist economy raised "the question of whether the devastation that radiated outward from Butte and Anaconda when copper was king isn't being continued today through recreation and suburbanization." His article railed against outdoor recreationists, fishermen, and suburbanites. Although Moniak mentioned Butte's relationship to the EPA's Superfund efforts, he characterized Butte as aloof and resistant to Superfund designation. He argued that Butte boosters were ignoring the flooding of the Berkeley Pit, noxious weed infestations, and air quality problems. But the main "infection" he saw was Butte's continued negative effect on the surrounding environment.⁴⁸

Within two months, Butte residents wrote to *High Country News* to protest Moniak's article. Jay and Janet Cornish, for instance, explained their deep devotion to the care of Butte's environment. Both of them graduated from the University of Montana's Environmental Studies Program and identified themselves as "committed environmentalists." They rejected Moniak's characterization of the headframes that "littered" Butte and argued that the headframes remained standing as a result of local effort

Montana" (Butte, Montana, January 1987), Butte Silver Bow Historic Preservation Office records, Butte-Silver Bow Public Archives, Butte, Montana.

⁴⁸ Don Moniak, "Butte Remains a Center of Infection," *High Country News*, October 10, 1988.

to keep them. They recognized that the waste dumps “represent a blight on the environment,” but argued that Anaconda/ARCO, the mining company that owned major mining operations in Butte in the 1980s, “has made a good effort to clean up a lot of the mess” and that the city-county government was also cleaning up abandoned sites. Furthermore, residents in the northside neighborhoods frequently spent weekends cleaning up trash and cutting knapweed, leading to a dramatic change from the early to late 1980s. From their point of view, Butte might not have solved all of its environmental problems, but it was certainly making strides.⁴⁹

Other efforts in Butte further demonstrate the results of cooperation between historic preservation and environmental entities. One of the most significant efforts was the 1993 Regional Historic Preservation Plan. The plan joined employees from the Advisory Council on Historic Preservation, the Montana Department of Health and Environmental Sciences, the Montana State Historic Preservation Office, the Environmental Protection Agency, ARCO, and the local governments of Anaconda-Deer Lodge, Walkerville, and Butte-Silver Bow. It was a historic preservation plan, but it addressed goals beyond historic preservation. It claimed to reflect “the desire of the people of Anaconda and Butte to incorporate historic preservation and Superfund issues into overall community and economic development activities.”⁵⁰

These cooperative efforts between state and local historic preservation and environmental entities worked well regarding some resources, but the federal level was another story. In 1994, the Berkeley Pit became one of the Silver Bow Creek/Butte Area’s

⁴⁹ Jay and Janet Cornish to Betsy Marston, December 21, 1988, Correspondence, Micone/Peoples/Fisher Collection, January-June 1987, Butte-Silver Bow Public Archives, Butte, Montana.

⁵⁰ *Regional Historic Preservation Plan*, 1993.

operable units. Unlike Globe and Leadville, where residents were living within the boundaries of most of the OUs, the Berkeley Pit OU was an unoccupied area of Butte. As discussed in previous chapters, it had once harbored two of Butte's most lively ethnic neighborhoods, but the open pit mine ate up the neighborhoods in the 1950s. The mine closed in 1982. The closing also meant that water pumps ceased and the pit flooded (Figure 7.6). The water in the pit contained heavy metals and was acidic enough to kill geese that drank it. As such, the EPA included it in its Butte/Silver Bow Superfund site in 1994.



Figure 7.6. The Berkeley Pit, Butte, Montana. This is the Berkeley Pit as it appeared in 1995. The oldest part of town is just beyond the left side of the photograph. Source: www.pitwatch.org

The Berkeley Pit posed a unique challenge to the EPA and to historic preservationists. Considering the arguments in favor of preserving mine tailings and waste rock dumps, one might wonder if there might be a preservationist out there arguing in favor of preserving the Berkeley Pit as a historic site. So far, no one has *had* to do so in order to

prevent its destruction; the Pit is not going anywhere soon. Although the EPA declared the Pit a Superfund site in September 1994, it made little headway with the toxic lake. The “Record of Decision” outlined a plan to slow the Pit flooding, maintain water levels in the bedrock system, monitor, and treat surface and groundwater.⁵¹ Prior to 1994, the Pit’s water levels had risen over 200 feet over the course of six years. The rate of rise slowed over the years, but this was due in large part to the Pit being wider at the top.⁵² The EPA *did* successfully install and run a water treatment plant on the east side of the Pit, beginning in 2002.⁵³

Some of this small success is due to a closer relationship between the EPA and local residents. In fact, EPA remedial project manager Sara Sparks was both an EPA employee and a longtime local resident. Sparks was born in Butte and went to school at Montana Tech in Butte, where she earned her degree in Occupational Safety and Health. She worked for the EPA for about thirty-one years at the time of her retirement in 2018, meaning her work spanned many of the activities surrounding the EPA’s actions from the late 1980s through the 2000s. She has also served on the Butte-Silver Bow Archives Board of Directors, so her interests were history-based as well as environmentally-based.⁵⁴ As EPA project manager, Sparks’ responsibilities included presenting at public meetings, preparing technical information sheets, and protecting the interests of the local community.⁵⁵ She frequently

⁵¹ United States Environmental Protection Agency, “Superfund Record of Decision: Berkeley Pit” (Washington, D.C.: U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, September 1994).

⁵² Berkeley Pit Public Education Committee, “Berkeley Pit Water Levels & Monitoring,” Pitwatch, accessed March 11, 2019, <http://www.pitwatch.org/portfolio/berkeley-pit-water-levels-monitoring/>.

⁵³ Berkeley Pit Public Education Committee, “Water Treatment Plant Working as Expected,” Pitwatch, July 5, 2009, <http://www.pitwatch.org/water-treatment-plant-working-as-expected/>.

⁵⁴ “Board of Directors,” Butte-Silver Bow Public Archives, November 21, 2017, <https://buttearchives.org/about/board-of-directors/>.

appeared in the local news as someone who acted quickly when issues arose and someone who provided the public with information about the EPA's actions. She was also part of the Butte-Silver Bow Planning Department's Berkeley Pit Public Education Committee, which was a volunteer group focused on conveying information about the Berkeley Pit to the public. She once stated that in looking at the Pit, "I see beauty. I see ore bodies and veins and it absolutely intrigues me."⁵⁶ In Leadville, many issues arose from a lack of communication and from a high turnover rate in EPA employees. In Butte, Sara Sparks mitigated those challenges. As a longtime resident, she could speak to the locals with an attachment to the town's mining history like their own. And one can hardly call her thirty-one years working for the EPA a high turnover rate. Even though Butte continued—still continues—to grapple with the Berkeley Pit and Montana Resource's current mining at the Continental Pit, the EPA's work with the local community has represented some effort to address problems that arose in other mining town Superfund projects.

Conclusion

Burials have many results. Some create closure and a sense of finality. Others might extend the grieving process. In Globe, the EPA was thorough in following through on their plans. Interestingly enough, their efforts have supported Globe residents in their denial of the problem and revealed the limits of the federal historic preservation process. The site is now an empty field, hardly recognized as the former site of anything, save for the chain link fence around its perimeter and the sign (unreadable from the highway) stating that it is a

⁵⁵ U.S. Environmental Protection Agency, "Roles and Responsibilities of Remedial Project Managers (RPMs)" (2017), https://www.epa.gov/sites/production/files/documents/rpm_roles_responsibilities_notes.pdf.

⁵⁶ Jim Robbins, "A Different Kind of Hot Spot," *Los Angeles Times*, May 1, 2005.

Superfund site and listing contact information. Since it is outside the Globe city limits on the eastern edge of town, and the fence is about twenty feet from the side of Highway 70, the majority of people passing by are in cars traveling about 60 mph. Which of them is going to have time to read that sign? Which of them is even going to wonder why there is a fence around a field? How would tourists know about the history of that site? The town's tourist literature and sites will not tell them. At the Chamber of Commerce, the Gila County Historical Museum, Besh-Ba-Gowah Archeological Park, or the Old Dominion Mine site, there is no ready information about Mountain View. The stigma that Wood and Gerhardt had so passionately fought seems to have disappeared.

In Leadville and Butte, the grieving process has been long, difficult, and painful, but with glimmers of hope. Residents have been adamant that the EPA hear their voices, and there have been moments that demonstrate the EPA is listening. Residents' distrust in the EPA's science and data as well as their strong belief in experiential evidence have led many residents to question the EPA's Superfund actions, particularly when these threatened to destroy historical artifacts. As the EPA built closer relationships with community members, creative solutions emerged.

Although there has been progress, history is a deeply tangled nest. With EPA and NPS standards intent on categorizing, quantifying, and condensing information about the towns in which they work, many of the nuances in history disappear. The efforts to "clean" places and stories that are dirty and messy almost by their very definition have resulted in legal and social snafus that leave everyone involved frustrated. Only as the environmental and historic preservation efforts have begun to incorporate nuance and to pursue site- and community-specific solutions to health and safety, have they begun to truly preserve these

towns and their pasts so that we do not forget mining's effect on its workers and its environment. Burials, after all, do not require us to forget.

CHAPTER VIII

CONCLUSION: DETOXIFYING HISTORY

At the 2019 annual meeting for the National Council on Public History, attendees could pick up a button declaring, “History is Messy!” Such a sentiment proliferates current history-related disciplines, which seek to “complicate” or “problematize” previously told stories about the past. This dissertation’s examination of three mining towns in the U.S. West supports this notion of “messy history” and illustrates how knowledge of a messy past allows environmental and historic preservation projects to more fully and effectively address the problems of the present. One current problem for mining towns is their failing economies. Their solution has been to try to attract greater tourist traffic. In order to do so, they must appeal to tourists’ interests. Although limited in many senses, popular culture has engaged more with diverse histories than it did in the early half of the twentieth century, and many tourists respond well to historical sites that offer them new information about the past. By incorporating the untold, “messier” aspects of the past into the narratives of tourist literature, mining towns can offer tourists novel information. The other problem mining towns face is ensuring environmental and bodily health. Knowing where the worst contamination of past mining efforts occurred, in which forms, and for how long allows environmental projects to identify crucial parts of the ecosystem to clean up. The past is confusing and difficult, but, as the stories about knowing the past of environmental contaminants in the preceding chapters show, that messiness is essential. And yet, some of that messiness can be physically and psychologically toxic. What then?

The histories of historic preservation and environmental projects in Butte, Globe, and Leadville show that preservation of the toxic past is necessary, but that preserving it does not have to mean celebrating it. During the creation of these towns, celebrating the actions that “sanitized” or “brought order” to a wild West was the norm. We see that in the earliest narratives of these towns, when they celebrated the cutting of trees in the interest of developing mining or railroads, but vilified the Native populations who stripped the trees for medicinal bark. After constructing their towns to reflect notions of order and cleanliness during the late-nineteenth and early-twentieth centuries, those with expendable funds and leisure time pursued maintenance projects that preserved the narratives of their towns as icons of taming and commodifying the Wild West. The continuation of mining, however, perpetuated a relationship to the environment that destroyed facets of the natural and built environments that might have served as historical artifacts or natural attractions. The seeds of the debate over modernization and preservation took root in those early years as some residents and visitors praised features of the mining landscape, like smoke, while others derided it. As the debate continued into the early and mid-twentieth century, modernization through paving streets, updating sewer systems, and renovating individual structures benefited only the central business districts and not the neighborhoods where residents lacked access to modern plumbing. In the 1960s, the federal government created federal funding for historic preservation and environmental projects through new legislation that generated standards for identifying preservation and environmental projects deemed worthy of federal attention. Early on, elite residents often filled out nomination forms for historic properties, for instance, and they prioritized historic resources associated with the most elite citizens of the past. Similarly, environmental law sought to “assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings,” and mining has

proven quite dangerous to the health and safety of town residents. When the 1983 Superfund law drew attention to the negative environmental effects of mining, residents divided over accepting and rejecting federal assistance with cleanup. Some residents hoped to preserve their town's mining economy while others welcomed cleanup. Superfund debates raised the question of how to preserve sites that might be important to residents' heritage when it represents a threat to public health.

In fact, the toxic quality of some historic resources in mining towns has complicated the process of reconciling the desire to preserve cultural landscapes in mining towns while also meeting state and federal standards for environmental health. Moreover, because the toxicity occurs in both physical and psychological forms, it further complicates historic preservation and environmental projects. The physical threats manifest as toxic levels of heavy metals or minerals. The psychological threat can manifest if the resource is preserved or untreated, leaving residents feeling unsafe, or if the resource is cleaned up, while residents fear that cleanup will destroy their tourist economies. To those who might argue that there is no debate here and that the sites should be cleaned up, because human health is the ultimate priority, it is still worth asking if there is a way to preserve these sites without completely destroying them. In other words, is there a way to preserve mining sites that maintains historical integrity without perpetuating toxicity?

Preserving the site while removing the toxicity, such as capping a tailings pile to prevent water running through it from becoming acidic, is one approach. Although removing toxicity eliminates the site's characterizing feature, there are times and places where historical accuracy must be sacrificed in order to ensure the health and safety of future generations. Words and memories cannot replace the material experience of visiting or being a victim of a toxic past, but they can evoke it. Knowing, for example, the way a woman

living in Butte’s Meaderville neighborhood speaks of losing her home to the Berkeley Pit expansion or how another woman in Globe’s Mountain View community feared for the health of her children, visitors can better understand the human effects of the toxic past. With strong interpretation and enough empathy, visitors and residents alike are more than capable of understanding this past. The histories of historic preservation and environmental projects in Butte, Globe, and Leadville, reveal how debates over treating toxic sites have shown visitors and residents that each town represents the unique challenges of living in a mining community. These histories also show the ways that life in a mining town echo and speak to the environmental justice issues in other urban areas of the United States.



Figure 8.1 Interpretive sign and closeup of interpretive sign at the Berkeley Pit viewing stand, including the comment that ““many residents didn’t mind [the Pit’s expansion] because it meant good jobs would stay in the community.” Butte, Montana, August 10, 2016. Source: author’s collection.

The written narratives about Butte and the narrative inscribed on the landscape, for one, document some of the most tumultuous aspects of Butte's history. Unlike Disneyfied mining towns, Butte has maintained some of the grittier features of its mining landscape and fraught socioeconomic history. This grittier history is partially the result of careful choice, but also a result of the fact that some messy elements, like the Berkeley Pit, would take massive effort to erase. Cleaning up the toxic water is a continuous process, but it will take years, and the Pit itself is a scar on the landscape. Since at least the 1980s have been deeply aware of the significance that mining landscape features have for the local residents. These preservationists, like Janet Ore, have fostered conversations with scientists and engineers to address environmental health concerns while maintaining historical fabric, most prominently seen in the interpretation of the Berkeley Pit. The Pit exists as a historical artifact, an environmental problem, and a tourist attraction. Visitors can pay three dollars to observe the acidic lake from a small viewing platform at the Pit's southwestern lip. Pressing a button at the front of the platform begins an audio recording that narrates the history of the Pit and explains that Montana Resources, the current owner and operator of the Berkeley Pit and the nearby Continental Pit Mine, is continuously developing water treatment options. The Pit represents the destruction of neighborhoods, the shift in mining technology, the problems of abandoned mine sites, the types of maintenance required to fix those problems, and how tourists engage with this toxic past. Even so, the audio recording and interpretive signage focus on the technological qualities of pit mining, what Montana Resources is doing to mitigate the water's rising level and acidity, and the discovery of microorganisms living in the toxic water. There is mention that the Pit's expansion uprooted several communities, but adds that "many residents didn't mind because it meant good jobs would stay in the

community” (Figure 8.1). As such, the Pit epitomizes the intersection between historic preservation and environmental projects.

Beyond the Pit, Butte residents have also preserved resources related to historically marginalized communities, including Butte’s East Side and the redlight district. The redlight district in particular is illuminating, since it was long “hidden” from view despite its uptown location and continuous operation into the 1980s. Among the towns covered in this dissertation, Butte is the one with the most extensive attention toward preserving the redlight district. Many of the buildings, particularly the cribs that the lowest class of sex workers (including women of color) would have rented, no longer exist, but there is effort to preserve the block’s history. One example is the Dumas Brothel. The Dumas has not been frozen in time, nor have museum professionals curated the artifacts, but it has opened occasionally to visitors. It is a raw historic site. When I visited in 2018, there was little rhyme or reason to the scattered artifacts. Fringed lampshades, peeling layers of linoleum, cheap modern polyester costumes hanging on the walls, and glass cases filled with paraphernalia populated the rooms. Some rooms were locked, some were neat except for the deteriorating flooring and wallpaper, others were in complete disarray. Artifacts ranged from the late-nineteenth century to the 1980s (Figure 8.2). A few interpretive signs decorated the walls of the madam’s room on the second floor. Since its closure, the building has been under private ownership with very little funding available for developing it fully as a museum, although that has been the stated goal of various owners since about 1991.¹

¹ Karl Rohr, “Redlight Antique Mall Opens,” *Montana Standard*, April 21, 1991; Kristen Inbody, “How One Man Is Fighting to Save Montana’s Last Brothel,” *Great Falls Tribune*, June 11, 2018; Anne Pentilla, “New Dumas Brothel Owners Say They Plan to Keep Historic Integrity Intact,” *Montana Standard*, December 10, 2018.



Figure 8.2. Main level of Dumas Brothel, looking from interior room to central hallway, September 2017. One of the most organized rooms. Artifacts range from antique furniture to cheap framed art prints and a box of Tide detergent from much more recent period. Source: author's collection.



Figure 8.3. Metal silhouettes holding a sign telling the history of Pleasant Alley, which is in the background, photographed September 2017. Directly behind the head of the figure on the left is the rear of the Dumas Brothel. Source: author's collection.

Other efforts to preserve Butte's redlight district include outdoor artistic installations. At the northeast corner of the intersection of East Galena Street and South Wyoming, a sign with orange letters marks the area as the former site of the "COPPER BLOCK 1892," one of the major operations of the district. A series of black, two-dimensional metal silhouettes of human figures appear to walk down the alley. The two figures nearest the Copper Block sign hold a smaller sign with text explaining the history of sex workers in Pleasant Alley (Figure 8.3). According to sites like the Berkeley Pit and the redlight district, Butte not only cannot erase its gritty past, but also chooses to preserve and capitalize on it.

Globe, too, has grappled with preserving the environments of its marginalized residents, and the burial of Mountain View provides unique insight into the effects of swift and thorough environmental cleanup. In Globe's past, the historical records marginalized Chinese and Mexican residents during local emergency situations, either by maligning them as the cause of the disasters or excluding their names from the lists of properties destroyed. Prominent residents of color, like Sam Kee, did not receive the same attention in accounts of the 1890s floods and fire as white residents did, even white residents with questionable morals, like Jennie Scott. Globe faced major environmental disaster again in 1979, when the state and federal governments declared a state of emergency for residents at Mountain View due to the presence of loose asbestos fibers. The Environmental Protection Agency buried the site and assumed monitoring (Figure 8.4). In this emergency, mitigation rather than the disaster itself destroyed what might have been considered a cultural landscape. Moreover, because the Superfund project occurred within the past forty years, it does not ring of the same "Old West" history that most preservation projects in mining towns of the U.S. West include. Without knowing the story of Mountain View, one cannot understand the degree to

which local attitudes about scientific knowledge and federal involvement created animosity among residents as well as between residents and government officials. Moreover, the destruction of the mobile home community means that future preservationists will have no material resources to serve as tangible reminders of such a divisive moment in Globe’s history. Mobile home communities in general have received little attention from preservationists, but several scholars are beginning a conversation about how some of them might be preserved.² Were residents to preserve the story of asbestos and Mountain View as part of their town’s tourist literature and cultural landscape, they would have something unique to offer the histories of mining towns and environmental cleanup.



Figure 8.4. Former site of Mountain View Mobile Homes, photographed August 2019. At center are street signs, including one just below the highest peak of the surrounding landscape. Below that one and just to the right, the corner of the sign labeling Mountain View (indicated by the white arrow) as a delisted Environmental Protection Agency’s National Priorities List is barely visible. Source: author’s collection.

² Carson Bear, “Are Mobile Homes a Forgotten Historic Resource?,” *National Trust for Historic Preservation Website* (website), April 10, 2018, <https://savingplaces.org/stories/are-mobile-homes-a-forgotten-historic-resource#.Xqm1Mi-z3OR>; Parker Clifton Lawrence, “Home Sweet Mobile Home Park: Developing a Historic Context for a Modern Resource” (Ph.D. diss., Athens, University of Georgia, 2014); Janet Ore, “Mobile Home Syndrome: Engineered Woods and the Making of a New Domestic Ecology in the Post–World War II Era,” *Technology and Culture* 52 (2011): 260-286.

Leadville, too, reveals how mining towns struggling to develop tourist economies have wrestled with preserving their toxic pasts. In September 2017, I volunteered for a project at the Matchless Mine outside of Leadville, Colorado. HistoriCorps, a non-profit preservation organization, and the National Mining Hall of Fame, a mining museum in Leadville, funded the project to stabilize the mine's wooden headframe. During the restoration project, workers determined which portions of the headframe required replacement, removed some of those portions, then cut, carved, and installed new timbers. Knowing how rare historic materials can be in mining towns, I winced at the sound of handpicks digging into the original wood, fearful about the degree to which destroying the historical fabric would affect the historical accuracy of the headframe as a whole. After the project's completion, the contrast of the new wood against the old simultaneously frustrated and soothed my fears (Figure 8.5). The new wood ruined the overall visual of an old, decaying headframe, but it presented the change honestly, at least until the wind, rain, snow, and sun weathers the new wood, too. Most importantly, the fix made the site safe for visitors. The same cannot be said for those locations associated with Leadville's poorest and most marginalized residents, such as the Arkansas Smelter and Stringtown. Without including Stringtown or marginalized residents in other areas, Leadville's most promoted historic sites create a narrative in which the stories of men like Horace Tabor and women like Augusta and Baby Doe overshadow the stories of the Larsh and Mascarenas families or mobile home residents, which tell of more common experiences. Moreover, the absence of such stories places mining in the past, despite its continued legacy of contaminated soil and water.



Figure 8.5. Matchless Mine Headframe after September 2017 restoration. Source: National Mining Hall of Fame and Museum.

Taken together, these three towns reveal the nuances of mining town residents' attitudes toward historic preservation and environmental projects. Ignoring the preservation of areas like redlight districts, working-class housing, and ethnic neighborhoods has rendered mining town cultural landscapes incomplete and therefore inaccurate as representations of the past. Furthermore, ignoring the history of such areas has allowed the problems to continue into the present. Adding the histories of previously marginalized populations and developing ways to preserve toxic sites while ensuring health, on the other hand, has allowed the cultural landscapes to more accurately evoke the past.

In recent years, several public health issues dominated U.S. and world news, including the Flint water catastrophe and the COVID-19 pandemic. Unlike these emergencies, the crises in mining towns is a slower and, in some ways, quieter crisis. Low-level toxicity—be it in the environment or the historical narrative—requires attention, too, because it will build up over time and eventually become an emergency. But when we pay attention to it by cleaning it up, we must be cognizant of how much cleanup is necessary. Future environmentalists and historians, then, have a great task before them. By looking toward the failures and successes of historic preservation and environmental projects in mining towns, they might uncover methods for serving the public good while preserving the good, the bad, and the ugly. Indeed, the future depends on preserving our historical memory of these toxic pasts, because silences and cleaned up spaces can be toxic, too.

REFERENCES CITED

Newspapers and Periodicals

Anaconda Standard
Arizona Republic
Arizona Sentinel
Arizona Silver Belt
Arizona Weekly Citizen
Butte Daily Miner
Butte Semi-Weekly Miner
Carbonate Chronicle
The Chautauquan: A Weekly Newsmagazine
Collier's
Colorado Chieftain
Colorado Weekly Chieftain
Daily Arizona Silver Belt
Denver Post
The Dupuyer Acantha
Great Falls Tribune
Herald Democrat
High Country News
Island City Times
Leadville Daily Chronicle
Los Angeles Times
Montana Post
Montana Standard
New North-West
New York Times
Rocky Mountain News
Rocky Mountain News Weekly
St. Joseph Gazette
San Francisco Examiner
Saturday Evening Post
Survey Graphic
Tucson Citizen
Weekly Arizona Miner
Weekly Commonwealth and Republican
Western Mountaineer

Archival and Digital Collections

Arizona Historical Society- Papago Park, Phoenix, Arizona

Wood-Gerhardt Asbestos Study Collection (PP-MS 256)

Arizona State University, Tempe, Arizona

Carl T. Hayden Papers, Greater Arizona Collection (MSS-1)

Stephen C. Shadegg Papers, Greater Arizona Collection (FM MSS 53)

Butte-Silver Bow Public Archives, Butte, Montana

Butte Chamber of Commerce Collection (PC127)

Butte Health Officer Records, City of Butte Health Officer Collection (GR.HL.BC)

GCM Services, Inc. *Cultural Resource Inventory and Assessment of Selected Abandoned Coal Mine Sites Throughout Montana and Selected Hardrock Mine Sites in Butte*. Butte, Montana, October 1986.

Historic Preservation Office Papers, Butte-Silver Bow Historic Preservation Office Collection (GR.HP.BSB)

Martin, Dale, and Paul Anderson. *Cultural Resource Inventory and Evaluation of Selected Mine Sites in the Butte Mining District, Butte, Montana*. Butte, Montana, January 1987.

Micone/Peoples/Fisher Papers, Butte-Silver Bow Chief Executive's Office Collection (GR.CE.BSB.002)

Regional Historic Preservation Plan, Anaconda-Butte Heritage Corridor. 1993.

Vertical Files

Works Progress Administration Collection (GR.WPA.US)

Lake County Public Library, Leadville, Colorado

Gage Davis and Associates. *Leadville, Colorado: A Study in Urban Conservation*. 1979. Lake County Public Library, Leadville.

Leadville-Lake County Regional Planning Commission and Sam L. Huddleston. *Leadville and Lake County, Colorado: The Master Plan*. Colorado, 1963.

Woodward-Clyde Consultants. *Demographics Data Report California Gulch Site, Leadville, Colorado*. Denver, Colorado, 1994.

Gila County Historical Museum, Globe, Arizona

Vertical Files

Marsba Weisiger Personal Collection

Weisiger and Associates. *Central Business District Cultural Resources Survey, Globe, Arizona*. 1986.

Stephen H. Hart Library, Denver, Colorado

Leadville Water Company Collection, 1878-1971

Western History and Genealogy Department, Denver Public Library, Denver, Colorado

Caroline Bancroft Family Papers, Western History Collection (WH1089)

Digital

Butte City Directories, 1884-1960, U.S. City Directories, www.ancestry.com.

Globe City Directories, 1916-1928, U.S. City Directories, www.ancestry.com.

Library of Congress Digital Sanborn Map Collection.
<https://www.loc.gov/collections/sanborn-maps/>

Leadville City Directories, 1880-1913, U.S. City Directories, www.ancestry.com.

ProQuest Digital Sanborn Maps. <http://sanborn.umi.com/>

Sanborn Fire Insurance Maps, Arizona. Gila County Museum, Globe, Arizona.

Sanborn Fire Insurance Maps, Colorado. Denver Public Library, Denver, Colorado.

Sanborn Fire Insurance Maps, Colorado. University of Colorado, Boulder, Colorado.

Sanborn Fire Insurance Maps, Montana. Butte-Silver Bow Public Archives, Butte, Montana.

U.S. Department of Commerce, Bureau of the Census, Manuscript Census, 1860-1940, www.ancestry.com.

Scholarly Articles

- Andrews, Thomas G. "Made by Toile? Tourism, Labor, and the Construction of the Colorado Landscape, 1858-1917." *The Journal of American History* 92 (2005): 837–63.
- Baumler, Ellen. "Devil's Perch: Prostitution from Suite to Cellar in Butte, Montana." *Montana: The Magazine of Western History* 48, no. 3 (Autumn 1998): 4–21.
- Bear, Carson. "Are Mobile Homes a Forgotten Historic Resource?" *National Trust for Historic Preservation Website* (blog), April 10, 2018. <https://savingplaces.org/stories/are-mobile-homes-a-forgotten-historic-resource#.Xqm1Mi-z3OR>.
- Brown, Lawrence P., and Edward D. Dickerman. "Water Holds Back the Production of 2,000,000 Tons of Vital Metals." *Mining Year Book* (1943): 64–66.
- Connolly, C.P. "The Labor Fuss in Butte." *Everybody's Magazine* 31 (December 1914): 205–8.
- Doyel, David E. "Salado Cultural Development in the Tonto Basin and Globe-Miami Areas, Central Arizona." *Kiva* 42, no. 1 (1976): 5–16.
- Drake, C. F. "Effect of Acid Mine Drainage Water on River Water Supply [with Discussion]." *Journal American Water Works Association* 23 (1931): 1474–94.
- Fitts, Robert. "The Rhetoric of Reform: The Five Points Missions and the Cult of Domesticity." *Historical Archaeology* 35 (2001): 115–32.
- Grandjean, Philippe, Hiroshi Satoh, Katsuyuki Murata, and Komyo Eto. "Adverse Effects of Methylmercury: Environmental Health Research Implications." *Environmental Health Perspectives* 118 (August 2010): 1137–45.
- Greer, James. "The Home Owners' Loan Corporation and the Development of the Residential Security Maps." *Journal of Urban History* 39 (March 1, 2013): 275–96.
- Hardesty, Donald L. "Issues in Preserving Toxic Wastes as Heritage Sites." *The Public Historian* 23 (2001): 19–28.
- Lynch, K. M., and W. A. Smith. "Pulmonary Asbestosis III: Carcinoma of Lung in Asbestos-Silicosis." *The American Journal of Cancer* 24 (May 1, 1935): 56–64.
- McWilliams, Carey. "Myths of the West." *North American Review* 232 (November 1931): 424–32.
- Merewether, E. R. A. "The Occurrence of Pulmonary Fibrosis and other Pulmonary Affections in Asbestos Workers." *Journal of Industrial Hygiene* 12 (1930): 198–57.
- Mossman, B.T., J. Bignon, M. Corn, A. Seaton, and J.B.L. Gee. "Asbestos: Scientific Developments and Implications for Public Policy." *Science* 247 (1990): 294–301.

- Newton, Angelia. "Globe, the World's Coming Copper Capital." *Arizona: The New State Magazine* 1, no. 2 (April 1910): 12–13.
- Ore, Janet. "Mobile Home Syndrome: Engineered Woods and the Making of a New Domestic Ecology in the Post–World War II Era." *Technology and Culture* 52 (2011): 260–86.
- Quivik, Fredric L. "The Historical Significance of Tailings and Slag: Industrial Waste as Cultural Resource." *LA. The Journal of the Society for Industrial Archeology* 33, no. 2 (2007): 35–52.
- Sanders, Helen Fitzgerald. "Redeeming the Ugliest Town on Earth." *Craftsman* 12 (June 1907): 315–27.
- Shanley, Robert A. "Franklin D. Roosevelt and Water Pollution Control Policy." *Presidential Studies Quarterly* 18 (1988): 319–30.
- Shehan, Constance L., and Amanda Moras. "Deconstructing Laundry: Gendered Technologies and the Reluctant Redesign of Household Labor." *Michigan Family Review* 11 (2006): 39–54.
- Turner, Frederick Jackson. "The Significance of the Frontier in American History." 1897. Empire Online.
http://www.empire.amdigital.co.uk.libproxy.uoregon.edu/Documents/Details/The_Significance_of_the_Frontier_in_American_History_.
- Von Bamford, Lawrence. "Streets from Silver: Leadville's History through Its Built Environment." *Colorado Heritage* 4 (1987): 2–12.
- Wang, Joan. "Gender, Race and Civilization: The Competition between American Power Laundries and Chinese Steam Laundries, 1870s - 1920s." *American Studies International* 40 (2002): 52–73.
- Wilder, J.D. "Building City Streets 10,000 Feet Above Sea Level." *American City* 42 (January 1930): 123–26.

Books and Book Chapters

- Abbott, Carl. *How Cities Won the West: Four Centuries of Urban Change in Western North America*. Albuquerque: University of New Mexico Press, 2008.
- Andrews, Thomas G. *Killing for Coal: America's Deadliest Labor War*. Cambridge: Harvard University Press, 2008.

- Athearn, Robert G. *The Mythic West in Twentieth-Century America*. Lawrence: University Press of Kansas, 1986.
- Bancroft, Caroline. *Tabor's Matchless Mine and Lusty Leadville*. Boulder, Colo.: Johnson Books, 1960.
- Barth, Gunther. *Instant Cities: Urbanization and the Rise of San Francisco and Denver*. New York: Oxford University Press, 1975.
- Basso, Matthew, Laura McCall, and Dee Garceau-Hagen. *Across the Great Divide: Cultures of Manhood in the American West*. New York: Routledge, 2001.
- Beck, Louis Joseph. *New York's Chinatown: An Historical Presentation of Its People and Places*. New York: Bohemia Publishing Company, 1898.
<http://archive.org/details/cu31924023507217>.
- Bederman, Gail. *Manliness and Civilization: A Cultural History of Gender and Race in the United States, 1880-1917*. Chicago: University of Chicago Press, 1996.
- Benton-Cohen, Katherine. *Borderline Americans: Racial Division and Labor War in the Arizona Borderlands*. Cambridge, Mass.: Harvard University Press, 2009.
- Blair, Edward. *Leadville: Colorado's Magic City*. Boulder, Colo.: Fred Pruett Books, 1995.
- Blair, Madeleine. *Madeleine: An Autobiography*. New York: Harper & Brothers Publishers, 1918.
<http://digital.library.upenn.edu/women/madeleine/madeleine/madeleine.html>.
- Blum, Elizabeth D. *Love Canal Revisited: Race, Class, and Gender in Environmental Activism*. Lawrence: University Press of Kansas, 2008.
- Booker, Matthew Morse. *Down by the Bay: San Francisco's History between the Tides*. Berkeley: University of California Press, 2013.
- Brown, Ronald C. *Hard-Rock Miners: The InterMountain West, 1860-1920*. College Station: Texas A&M University Press, 1979.
- Burke, John. *The Legend of Baby Doe: The Life and Times of the Silver Queen of the West*. Lincoln: University of Nebraska Press, 1989.
- Butler, Anne M. *Daughters of Joy, Sisters of Misery: Prostitutes in the American West, 1865-90*. Urbana: University of Illinois Press, 1987.
- Butte Newswriters Association. *A Newspaper Reference Work: Men of Affairs and Representative Institutions of the State of Montana*.
<http://mtmemory.org/cdm/ref/collection/p15018coll38/id/197>.

- Calvert, Jerry W. *The Gibraltar: Socialism and Labor in Butte, Montana, 1895-1920*. Helena: Montana Historical Society, 1988.
- Camarillo, Albert. "The Mexican Pueblo of Santa Barbara." In *Chicanos in a Changing Society: From Mexican Pueblos to American Barrios in Santa Barbara and Southern California, 1848-1930*. Cambridge, Mass.: Harvard University Press, 1996.
- Chiang, Connie Y. *Shaping the Shoreline: Fisheries and Tourism on the Monterey Coast*. Seattle: University of Washington Press, 2008.
- Clark, Jr., Clifford Edward. *The American Family Home, 1800-1960*. Chapel Hill: The University of North Carolina Press, 1986.
- Cronon, William. "A Place for Stories: Nature, History, and Narrative." *Journal of American History* 78 (1992): 1347-76.
- . "Kennecott Journey: The Paths Out of Town." In *Under an Open Sky: Rethinking America's Western Past*, edited by William Cronon, George Miles, and Jay Gitlin. New York: W.W. Norton, 1993.
- . *Nature's Metropolis: Chicago and the Great West*. New York: W. W. Norton, 1992.
- Cronon, William, George Miles, and Jay Gitlin, eds. *Under an Open Sky: Rethinking America's Western Past*. New York: W. W. Norton, 1992.
- Curtis, Kent. *Gambling on Ore: The Nature of Metal Mining in the United States, 1860-1910*. Boulder: University Press of Colorado, 2013.
- Dall, Caroline Wells Healey. *My First Holiday*. Boston: Roberts Brothers, 1881.
- Davenport, Warren G. *Butte and Montana beneath the X-Ray, Being a Collection of Editorials from the Files of the Butte X-Ray during the Years 1907-08*. Butte: The X-Ray Publishing Company, 1908. <http://archive.org/details/buttemontanabene00dave>.
- Deutsch, Sarah. *No Separate Refuge: Culture, Class, and Gender on an Anglo-Hispanic Frontier in the American Southwest, 1880-1940*. New York: Oxford University Press, 1988.
- Emmons, David M. *The Butte Irish: Class and Ethnicity in an American Mining Town, 1875-1925*. Urbana: University of Illinois Press, 1990.
- Fiege, Mark. *Irrigated Eden: The Making of an Agricultural Landscape in the American West*. Seattle: University of Washington Press, 1999.
- Findlay, John M. *Magic Lands: Western Cityscapes and American Culture After 1940*. Berkeley: University of California Press, 1993.

- Finney, Carolyn. *Black Faces, White Spaces: Reimagining the Relationship of African Americans to the Great Outdoors*. Chapel Hill: University of North Carolina Press, 2014.
- Flaherty, Stacy A. "Boycott in Butte: Organized Labor and the Chinese Community, 1896-1897." In *Chinese on the American Frontier*, edited by Arif Dirlik. Lanham, Md.: Rowman & Littlefield, 2001.
- Foy, Jessica H., and Thomas J. Schlereth, eds. *American Home Life, 1880-1930: A Social History of Spaces and Services*. Knoxville: University of Tennessee Press, 1994.
- Francaviglia, Richard V. *Hard Places: Reading The Landscape Of America's Historic Mining Districts*. Iowa City: University of Iowa Press, 1997.
- Freeman, Harry Cass. *A Brief History of Butte, Montana*. Chicago: Henry O. Shepard, 1900.
- Gandy, Lewis Cass. *The Tabors: A Footnote of Western History*. New York: Press of the Pioneers, Inc., 1934.
- Green, William H., ed. *The Negro Motorist Green-Book*. New York: Victor H. Green, 1940.
<http://digitalcollections.nypl.org/items/dcb66a80-83d3-0132-5b00-58d385a7b928>.
- Gulliford, Andrew, ed. *Preserving Western History*. Albuquerque: University of New Mexico Press, 2005.
- Hayden, Ferdinand Vandever. *The Great West*. Bloomington, Ill.: Charles R. Brodix, 1880.
- Hazen, Robert M., and Margaret Hindle Hazen. *Keepers of the Flame: The Role of Fire in American Culture, 1775-1925*. Princeton: Princeton University Press, 1992.
- Hoagland, Alison K. *Mine Towns Buildings for Workers in Michigan's Copper Country*. Minneapolis: University of Minnesota Press, 2010.
- Hollyfield, Jerry. *California Gulch: A Superfund Case Study*. Knoxville: Waste Management Research and Education Institute, University of Tennessee, 1991.
- Jacoby, Karl. *Shadows at Dawn: An Apache Massacre and the Violence of History*. New York: Penguin Books, 2009.
- Jameson, Elizabeth. *All That Glitters: Class, Conflict, and Community in Cripple Creek*. Urbana: University of Illinois Press, 1998.
- Jeffrey, Julie. *Frontier Women: "Civilizing" the West? 1840-1880*. New York: Hill and Wang, 1998.
- Jeffrey, Julie Roy. *Frontier Women: The Trans-Mississippi West, 1840-1880*. New York: Farrar Straus & Giroux, 1979.

- Johnson, Susan Lee. *Roaring Camp: The Social World of the California Gold Rush*. New York: W. W. Norton, 2000.
- Jones, Sondra G. *Being and Becoming Ute*. Salt Lake City: University of Utah Press, 2019.
- Klucas, Gillian. *Leadville: The Struggle To Revive An American Town*. Washington, D.C.: Island Press, 2004.
- Kneeland, George J. *Commercialized Prostitution in New York City*. New York: The Century Company, 1917.
- Larsh, Ed B., and Robert Nichols. *Leadville U.S.A.* Boulder, Colo.: Johnson Books, 1993.
- LeCain, Timothy J. *Mass Destruction: The Men and Giant Mines That Wired America and Scarred the Planet*. New Brunswick: Rutgers University Press, 2009.
- Leech, Brian James. *The City That Ate Itself: Butte, Montana and Its Expanding Berkeley Pit*. Reno: University of Nevada Press, 2018.
- Limerick, Patricia Nelson. *The Legacy of Conquest: The Unbroken Past of the American West*. New York: W. W. Norton, 1987.
- Longstreth, Richard, ed. *Cultural Landscapes: Balancing Nature and Heritage in Preservation Practice*. Minneapolis: University of Minnesota Press, 2008.
- MacKell, Jan. *Brothels, Bordellos, and Bad Girls: Prostitution in Colorado, 1860-1930*. Albuquerque: University of New Mexico Press, 2007.
- Malone, Michael P. *The Battle for Butte: Mining and Politics on the Northern Frontier, 1864—1906*. Seattle: University of Washington Press, 2006.
- Mariko Miyagishima, Kara. "From Brothels to Buddhism: A Walking Tour of Denver's Red-Light District." In *Preserving Western History*, edited by Andrew Gulliford. Albuquerque: University of New Mexico Press, 2005.
- McAlester, Virginia, and A. Lee McAlester. *A Field Guide to American Houses*. New York: Knopf, 1984.
- Melosi, Martin. *The Sanitary City: Urban Infrastructure in America from Colonial Times to the Present*. Baltimore: Johns Hopkins University Press, 1999.
- Mercier, Laurie. *Anaconda: Labor, Community, and Culture in Montana's Smelter City*. Urbana: University of Illinois Press, 2001.
- Morse, Kathryn. *The Nature of Gold: An Environmental History of the Klondike Gold Rush*. Seattle: University of Washington Press, 2010.

- Murdoch, David Hamilton. *The American West: The Invention of a Myth*. Cardiff, Wales: Welsh Academic Press, 2001.
- Murphy, Mary. *Mining Cultures: Men, Women, and Leisure in Butte, 1914-41*. Urbana: University of Illinois Press, 1997.
- Nash, Linda. *Inescapable Ecologies: A History of Environment, Disease, and Knowledge*. Berkeley: University of California Press, 2007.
- Paul, Rodman Wilson. *Mining Frontiers of the Far West, 1848-1880*. Albuquerque: University of New Mexico Press, 1980.
- Peiss, Kathy. *Cheap Amusements: Working Women and Leisure in Turn-of-the-Century New York*. Philadelphia: Temple University Press, 1986.
- Perales, Monica. *Smelertown: Making and Remembering a Southwest Border Community*. Chapel Hill: The University of North Carolina Press, 2010.
- Petrik, Paula. *No Step Backward*. Helena: Montana Historical Society, 1987.
- Philpott, William. *The Lessons of Leadville, or, Why the Western Federation of Miners Turned Left*. Denver: Colorado Historical Society, 1995.
- . *Vacationland: Tourism and Environment in the Colorado High Country*. Seattle: University of Washington Press, 2013.
- Pomeroy, Earl. *In Search of the Golden West: The Tourist in Western America*. Lincoln: Bison Books, 2010.
- Reps, John William. *The Forgotten Frontier: Urban Planning in the American West before 1890*. Columbia: University of Missouri Press, 1981.
- Riley, Sam G., and Gary W. Selnow, eds. *Regional Interest Magazines of the United States*. New York: Greenwood Press, 1991.
- Robertson, David. *Hard as the Rock Itself: Place and Identity in the American Mining Town*. Boulder: University Press of Colorado, 2006.
- Roth, Leland M. *American Architecture: A History*. Boulder, Colo.: Westview Press, 2001.
- Sagstetter, Beth, and Bill Sagstetter. *The Mining Camps Speak: A New Way to Explore the Ghost Towns of the American West*. Denver: BenchMark Publishing, 1998.
- Shah, Nayan. *Contagious Divides: Epidemics and Race in San Francisco's Chinatown*. Berkeley: University of California Press, 2001.

- Simmons, Alexy. *Redlight Ladies: Settlement Patterns and Material Culture on the Mining Frontier. Anthropology Northwest Series 4* (Corvallis: Oregon State University, 1989).
- Smith, Duane A. *Horace Tabor: His Life and the Legend*. Boulder: Colorado Associated University Press, 1973.
- . *Mining America: The Industry and Environment, 1800-1980*. Niwot: University Press of Colorado, 1994.
- . *Rocky Mountain Mining Camps: The Urban Frontier*. Niwot: University Press of Colorado, 1962.
- Snow, Bradley D. *Living with Lead: An Environmental History of Idaho's Coeur D'Alenes, 1885-2011*. Pittsburgh, Pennsylvania: University of Pittsburgh Press, 2017.
- Spears, Ellen Griffith. *Baptized in PCBs: Race, Pollution, and Justice in an All-American Town*. Chapel Hill: University of North Carolina Press, 2014.
- State Historical Society of Colorado. *Healy House and Dexter Cabin: State Historic Monument, Leadville, Colorado*. Denver: Colorado State Museum, 1962.
- Sze, Julie. *Noxious New York: The Racial Politics of Urban Health and Environmental Justice*. Cambridge: MIT Press, 2007.
- Taylor, Quintard. *In Search of the Racial Frontier: African Americans in the American West, 1528-1990*. New York: W.W. Norton, 1998.
- Temple, Judy Nolte. *Baby Doe Tabor: The Madwoman in the Cabin*. Norman: University of Oklahoma Press, 2007.
- Torres-Rouff, David Samuel. *Before L.A.: Race, Space, and Municipal Power in Los Angeles, 1781-1894*. New Haven, Conn.: Yale University Press, 2013.
- Trouillot, Michel-Rolph. *Silencing the Past: Power and the Production of History*. Boston: Beacon Press, 2015.
- Van Horssen, Jessica. *A Town Called Asbestos: Environmental Contamination, Health, and Resilience in a Resource Community*. Vancouver: University of British Columbia Press, 2016.
- Von Bamford, Lawrence, and Kenneth R. Tremblay, Jr. *Leadville Architecture: Legacy of Silver, 1860-1899*. Estes Park, Colo.: Architecture Research Press, 1996.
- West, Elliott. *The Contested Plains: Indians, Goldseekers, and The Rush to Colorado*. Lawrence: University Press of Kansas, 1998.
- Wilson, Chris. *The Myth of Santa Fe: Creating a Modern Regional Tradition*. Albuquerque: University of New Mexico Press, 1997.

Workers of the Writers' Program of the Works Progress Administration in the State of Montana. *Copper Camp: The Lusty Story of Butte, Montana*. Helena, Montana: Riverbend Publishing, 2001.

Writers' Program of the Work Projects Administration in the State of Arizona. *Arizona, the Grand Canyon State: A State Guide*. New York: Hastings House, 1940.

Zimring, Carl A. *Clean and White: A History of Environmental Racism in the United States*. New York: New York University Press, 2016.

Websites

PitWatch. <https://pitwatch.org>

"Caroline Bancroft." Denver Public Library. <https://history.denverlibrary.org/colorado-biographies/caroline-bancroft-1900-1985>

"Caroline Bancroft." <https://coloradoencyclopedia.org/article/caroline-bancroft>

GCM, Inc. <http://gcmervicesinc.blogspot.com/p/about-us.html>

"Designation of Hazardous Substances." Legal Information Institute. Cornell Law School. <https://www.law.cornell.edu/cfr/text/40/302.4>

Presentations

Hayes, Benjamin, Elizabeth Goetsch, and Angela Smith. "Madams, Prostitutes, Alcohol, and Gambling, Oh My: Interpreting Vice by Challenging Dominant Narratives." Panel Presentation at the Annual Meeting, National Council on Public History, Las Vegas, Nevada, 2018.

Ross, Malcolm. "Suspect Minerals and the Survival of the U.S. Mining Industry: A Commentary." Presented at the U.S. Geological Survey and U.S. Bureau of Mines Meeting on Mineral Commodities, Reston, Virginia, January 21, 1987.

Theses and Dissertations

Heath, Kingston Wm. "Striving for Permanence on the Western Frontier: Vernacular Architecture as Cultural Informant in Southwestern Montana." Ph.D. diss., Brown University, 1985.

Lawrence, Parker Clifton. "Home Sweet Mobile Home Park: Developing a Historic Context for a Modern Resource." Ph.D. diss., University of Georgia, 2014.

Murphy, Mary. "Women on the Line: Prostitution in Butte, Montana 1878-1917." Master's Thesis, University of North Carolina, 1983.

Government Documents

Gardner, Eugene Delos, and C. H. Johnson. *Placer Mining in the Western United States*. Washington, D.C.: U.S. Bureau of Mines, 1934.

Hoffman, F.L. "Mortality from Respiratory Disease in Dusty Trades Inorganic Dusts." Bulletin No. 231. *Industrial Accidents and Hygiene Series 17*. Washington, D.C.: Government Printing Office, 1918.

"Production of Nonferrous Chrysotile Asbestos." In *Congressional Record*, Vol. 102, pt. 4. S 3499, Eighty-Fourth Congress, Second Session, 1956.

Twitty, Eric. "Historic Context Interstate-70 Mountain Corridor." Lafayette, Colo.: Mountain States Historical, June 2014.

U.S. Department of the Interior. Environmental Protection Agency. "Asbestos Ban and Phase-Out Federal Register Notices." <https://www.epa.gov/asbestos/asbestos-ban-and-phase-out-federal-register-notice>.

———. *Superfund Record of Decision: Berkeley Pit*. Washington, D.C., September 1994.

———. *Superfund Record of Decision: Mountain View/Globe Site, AZ*. Washington, D.C., June 1983.

U.S. Senate. *Leadville Mine Drainage Tunnel Act of 1976: Hearing before the Subcommittee on Energy Research and Water Resources of the Committee on Interior and Insular Affairs*, United States Senate, Ninety-Fourth Congress, Second Session on S. 3394. Washington, D.C.: U.S. Government Printing Office, 1976.

U.S. Department of the Interior. Bureau of Reclamation. *Leadville Mine Drainage Tunnel Risk Assessment*. Denver: Technical Service Center, 2008.
https://www.usbr.gov/gp/eca/leadville/combined_risk_assessment.pdf.

U.S. Environmental Protection Agency. "California Gulch Contaminant List." California Gulch Superfund Site.
<https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.contams&id=0801478>.

———. "Roles and Responsibilities of Remedial Project Managers (RPMs)." 2017.
https://www.epa.gov/sites/production/files/documents/rpm_roles_responsibilities_notes.pdf.

———. “U.S. Federal Bans on Asbestos.” Overviews and Factsheets. United States Environmental Protection Agency, March 12, 2013.
<https://www.epa.gov/asbestos/us-federal-bans-asbestos>.

U.S. Environmental Protection Agency and Syracuse Research Corporation. *California Gulch Superfund Site Risk Addendum: Evaluation of Risks from Mercury in Irrigated Meadows and Fluvial Deposits Along the Upper Arkansas River*. Denver, April 9, 2007.

University of Colorado at Denver Center for Environmental Epidemiology, and Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Service. *Leadville Metals Exposure Study*. Colorado Department of Health, Division of Disease Control and Environmental Epidemiology, April 1990.

White, Joseph Hill. *Houses for Mining Towns*. Washington, D.C.: United States Bureau of Mines, 1914.

Films

Johns-Manville. *Asbestos: A Matter of Time*. U.S. Bureau of Mines, 1959.