University of Nebraska - Lincoln DigitalCommons@University of Nebraska - Lincoln

Dissertations, Theses, & Student Research, Department of History

History, Department of

2012

Toxic Tourism: Promoting the Berkeley Pit and Industrial Heritage in Butte, Montana

Bridget R. Barry University of Nebraska-Lincoln

Follow this and additional works at: http://digitalcommons.unl.edu/historydiss
Part of the Nature and Society Relations Commons, and the United States History Commons

Barry, Bridget R., "Toxic Tourism: Promoting the Berkeley Pit and Industrial Heritage in Butte, Montana" (2012). Dissertations, Theses, & Student Research, Department of History. 50. http://digitalcommons.unl.edu/historydiss/50

This Article is brought to you for free and open access by the History, Department of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Dissertations, Theses, & Student Research, Department of History by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

TOXIC TOURISM:

PROMOTING THE BERKELEY PIT AND

INDUSTRIAL HERITAGE IN BUTTE, MONTANA

by

Bridget R. Barry

A THESIS

Presented to the Faculty of

The Graduate College at the University of Nebraska

In Partial Fulfillment of Requirements

For the Degree of Master of Arts

Major: History

Under the Supervision of Professors Andrew R. Graybill and Margaret D. Jacobs

Lincoln, Nebraska

May, 2012

TOXIC TOURISM:

PROMOTING THE BERKELEY PIT AND INDUSTRIAL HERITAGE IN BUTTE, MONTANA

Bridget Rose Barry, M.A.

University of Nebraska, 2010

Advisers: Andrew R. Graybill and Margaret D. Jacobs

Butte, Montana's Berkeley Pit and its deadly water are a part of the country's largest Superfund site. In 1994 the United States Environmental Protection Agency (EPA) issued a Record of Decision designating Butte, along with the neighboring town and mining site of Anaconda (twenty-five miles northwest of Butte), and 120 miles of Montana's Clark Fork River as a single Superfund complex. The vast mining operations undertaken in the area, including five hundred underground mines and four open pit mines, have resulted in hazardous concentrations of metals in groundwater, surface water, and soils.

Butte's mines once extracted more tons of copper than any other in the world, and when the Berkeley Pit, the last major mining operation in the city, closed in 1982, Butte lost the cornerstone of its identity. From 1980 through 1983, Silver Bow County, home to Butte and Anaconda, lost 2,700 jobs, most of them in the mining industry. Because of the lack of its industrial growth, Butte turned to Montana's fastest-growing industry: tourism. Butte has begun to market its mining legacy, and historic preservation—once shunned to allow for expanded mining operations—has become a primary goal of city planning. Industrial heritage tourism (the development and promotion of tourist activities at man-made sites that originated during earlier industrial periods) is the foundation of the city's tourism agenda and is actively shaping Butte's post-industrial identity. Butte has rebranded the environmental destruction of its mining industry as a tourist attraction, and the Berkeley Pit is the city's most profitable and popular destination. In the process, Butte has had to reconcile the Superfund program's cleanup process with the preservation of historic sites and develop a tourist-friendly image. Since becoming a site of industrial heritage tourism, the cultural meanings and narratives attached to the Berkeley Pit have changed and evolved.

TABLE OF CONTENTS

Chapter 1. Introduction	1
Chapter 2. The Richest Hill on Earth	12
Chapter 3. A Mining City No Longer	29
Chapter 4. Marketing Heritage	41
Chapter 5. Poison and Preservation	52
Chapter 6. Focusing the Tourist Gaze	65
Chapter 7. Heritage Landscapes and Narratives	77
Chapter 8. Conclusion	88

LIST OF ILLUSTRATIONS

1. Aerial photo of Butte, Montana	4
2. Timberyard of a copper mine	18
3. Berkeley Pit in operation	30
4. Berkeley Pit today	64
5. Miner's home	72
6. Uptown, 1980	74
7. View from the Granite Mountain Memorial	.79

CHAPTER ONE INTRODUCTION

A billboard on Interstate 90 shows a photo of a large water-filled crater, with the proud proclamation, "1700 feet deep!" and an exhortation to visit Butte, Montana. A short drive from exit 126 takes the curious to the Berkeley Pit, a former open-pit copper mine on the northwest side of town. The site includes a small parking lot, whose spaces are often filled in warm weather, a gazebo for picnicking visitors, a historic trolley car, and a gift shop. At the ticket window, an unenthused employee puts down her cigarette to make change for the two dollar admission fee, and hands over a copy of *PitWatch*, a newspaper publication with stories and facts about the site. After a short walk down a covered tunnel, the visitor steps onto an observation platform with a view similar to that on the billboard: a gaping hole filled with rust-colored water, the crater's stair-stepping sides a barren brown. Even with the assistance of the coin-operated telescope on the viewing stand, the enormity of the scene is hard to grasp. The toxic water in the Berkeley Pit, a murky mix of minerals from arsenic to zinc, is over 1,000 feet deep, and the crater itself has a circumference of nearly four miles, with a depth that could swallow the Empire State Building. A rundown shack and power lines, remnants of Butte's mining industry, sit perched on the opposite side of the Pit, seemingly ready to slide into the poisonous depths.

The Berkeley Pit's lake formed after the Atlantic Richfield Company (ARCO, now a subsidiary of British Petroleum), the mining corporation that owns the polluted property, closed their mining operations at the Pit in 1982 and shut off the pumps that had kept dry the open pit, as well as neighboring underground mines. Water began to enter the Berkeley Pit from groundwater and storm water runoff, and ARCO and Montana Resources, another mining company operating in Butte, diverted wastewater from nearby mine operations, filling the Pit at a rate of six million gallons each day. Though the fill rate has slowed because Montana Resources has begun diverting wastewater to a tailings pond just north of the Pit, 2.6 million gallons of contaminated water still enter the crater daily.¹

The Berkeley Pit and its deadly water are a part of the country's largest Superfund site. A federal program established in 1980 to address hazardous waste sites, Superfund assesses contaminated areas and implements cleanup programs. In 1994 the United States Environmental Protection Agency (EPA) issued a Record of Decision designating Butte, along with the neighboring town and mining site of Anaconda (twenty-five miles northwest of Butte), and 120 miles of Montana's Clark Fork River as a single Superfund complex. The vast mining operations undertaken in the area, including 500 underground mines and four open pit mines, have resulted in hazardous concentrations of metals in groundwater, surface water, and soils. The EPA identified potential health threats, including lead poisoning and cancer risks, from direct contact with, or ingestion of, contaminated soils or water, or inhalation of contaminated air.² In her recently completed study of remediation efforts and health risks in Butte, Stacie Barry found that mortality rates in the city are higher than the state and national averages for nearly all disease groups. Despite the EPA's environmental remediation work in Butte's neighborhoods, only a few of these rates have decreased in the past decade.³

¹ *PitWatch*, 2010 Update, available online at http://www.pitwatch.org/2010.htm.

 ² Environmental Protection Agency (EPA), "Superfund Program: Silver Bow Creek/Butte Area," available online at http://www.epa.gov/region8/superfund/mt/sbcbutte/index.html; EPA, "Record of Decision," 1994.
 ³ Stacie Lynn Barry, "Coming to the Surface: The Environment, Health, and Culture in Butte, Montana, 1950-2010" (PhD diss., University of Montana, May 2012).

The crucial component of the EPA's mitigation plan for the Berkeley Pit is a water treatment plant, which opened in 2003. Financed and operated in perpetuity by ARCO and Montana Resources, the plant removes pollutants from water pumped out of nearby mines, which the companies then reuse in mining operations, minimizing the amount of water entering the Berkeley Pit. When the water in the Pit reaches the EPA-designated "critical level" (approximately 1,100 feet deep), the Horseshoe Bend water treatment plant will begin pumping and treating enough water from the Pit to keep the level below the critical point. If the Pit maintains its current fill rate, water will reach this level in 2022.⁴ With the ability to treat up to 5,000 gallons of the crater's contents per minute, the water treatment plant has nearly eliminated any threat of the Berkeley Pit's water entering Butte's water table or breaching the Pit walls, but forty billion gallons of acidic, corrosive, deadly water is impossible for the town to ignore.

* * *

Viewed from the two interstates that travel along the southern and eastern edges of the town, Butte looks like little more than a scattering of houses and buildings perched on a brown, rocky foothill, with newer housing developments and shopping centers stretching out in a valley to the south. "Gallows" frames, five- to eight-story-high headframes constructed over mineshafts, dominate Butte's skyline. As part of the city's beautification efforts, red rope lights illuminate the frames at night, providing visible reminders of Butte's once-vibrant mining culture. Montana Tech University to the west, and an ongoing mining operation to the east, bookend the city's historic center (known as "Uptown" because of its location on the hill), where vacant buildings and dilapidated

3

houses sit next to renovated storefronts. Businesses invoke the area's mining history with names such as Quarry Brewing Company and Copper City Signs and Awnings, while the east-west streets are named for metals: Aluminum, Copper, Mercury, Silver. Hidden under the streets are nearly 10,000 miles of mining tunnels, connecting more than thirty vertical shafts. ⁵ A map of the mine tunnels looks like an out-of-control Etch-A-Sketch drawing, with hundreds of lines crisscrossing and overlapping.

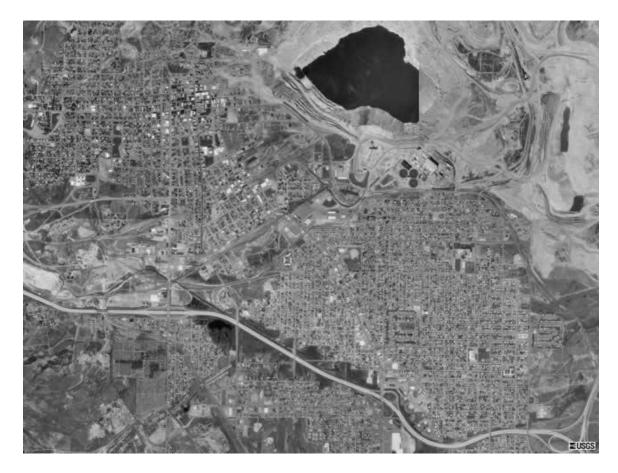


Figure 1. An aerial photo of Butte, looking north. The Berkeley Pit is seen at the top right, with Uptown to the left of the Pit. Interstate 90 is visible along the bottom of the photo. (United States Geological Survey)

⁵ Christopher H. Gammons, John J. Metesh, and Dean M. Snyder, "A Survey of Geochemistry of Flooded Mine Shaft Water in Butte, Montana," *Mine Water and the Environment* 25 (2006): 100.

Butte's mines once extracted more tons of copper than any other in the world, garnering the city the nickname, "the richest hill on Earth." With a population of over 100,000 at its peak during World War I, Butte was a city confident in its future. Today, however, the town's population has dwindled to less than 34,000, and the dozens of mines that crowded the hill are gone. A single mine still operates, employing only 350 in an industry that built, and for over a century defined, the town.⁶ When the Berkeley Pit, the last major mining operation in the city, closed in 1982, Butte lost the cornerstone of its identity. From 1980 through 1983, Silver Bow County, home to Butte and Anaconda, lost 2,700 jobs, most of them in the mining industry. For every job lost, the county's population decreased by three, eliminating tax revenues and customer bases for businesses, and creating lasting economic effects.⁷

Because of its lack of industrial growth, Butte turned to Montana's fastestgrowing industry: tourism. Butte has begun to market its mining legacy, and historic preservation—once shunned to allow for expanded mining operations—has become a primary goal of city planning. In addition to protecting buildings in Uptown, the city has preserved remnants of the mining industry. Industrial heritage tourism (the development and promotion of tourist activities at man-made sites that originated during earlier industrial periods) is the foundation of the city's tourism agenda and is actively shaping Butte's post-industrial identity.⁸ Butte has rebranded the environmental destruction of its mining industry as a tourist attraction, and the Berkeley Pit is the city's most profitable

⁶ Butte Local Development Corporation, "Local Employers," available online at http://www.bldc.net/industries-companies/major-employers/.

⁷ City and County of Butte-Silver Bow, "Preliminary Title IX Seed Grant Proposal," n.d., Butte-Silver Bow Chief Executive's Office records, box 23, file Economic Development EDA 1982, Butte-Silver Bow Public Archives, Butte, Montana (hereafter cited as BSBA).

⁸ For the definition of industrial heritage tourism, see J. Arwel Edwards and Joan Carles Llurdés, "Mines and Quarries: Industrial Heritage Tourism," *Annals of Tourism Research* 23 no. 2 (1996): 341-63.

and popular destination. In the process, Butte has had to reconcile the Superfund program's cleanup process with the preservation of historic sites and develop a touristfriendly image. Since becoming a site of industrial heritage tourism, the cultural meanings and narratives attached to the Berkeley Pit have changed and evolved.

* * *

Many Americans regard the western half of their nation as a place of vast grasslands, imposing mountains, or barren deserts. Despite this popular conception of a wilderness west, the region has played a significant role in the industrial history of the country. From its inauspicious beginnings as a small gold mining camp, Butte quickly developed into an industrial city. Mining companies exercised political and economic control, and, like other cities reliant on an extractive industry, the mining companies of Butte exploited the area's natural resources to achieve financial success.

Though the American West has a long history of industrialization, historians have only recently begun studying the intersections of industry, society, and the environment in the region. Scholars such as Bernard DeVoto produced environmental histories of the West in the first half of the twentieth century, but his work focused primarily on human interaction with nature in a rural or agricultural setting. Though DeVoto's "plundered province" thesis examined the city/hinterland connection between East and West, arguing that the capitalist society of the eastern United States exploited the natural resources of the West, he offered little discussion of the complicated costs and benefits of industry in the West.⁹ As Andrew Isenberg explains in his 2005 study of ecological changes created

⁹ Bernard DeVoto, "The West: A Plundered Province," *Harper's Monthly* Magazine, August 1934, 355-364.

by mining in California, the idea of an industrial west was at odds with agrarian ideals articulated by scholars such as Frederick Jackson Turner.¹⁰

The connections between city and country, and industry and nature, however, are far more complex than the analysis offered by early historians of the American West. Kathleen Brosnan, in her study *Uniting Mountain and Plain*, examines the connections "that shaped the contested transition to a modern urban industrial order."¹¹ Denver, Colorado, Brosnan shows, was an industrial city, but also forged economic and environmental connections with its hinterland. Rather than being exploited by Denver, the surrounding countryside, including mining regions, benefited from the relationship, though the hinterland also suffered the environmental and social consequences of resource exploitation. Similarly, through a discussion of industrial agriculture in California, David Igler's *Industrial Cowboys* illustrates the importance of a capitalist society in the ecological transformations of the West. Igler directly challenges DeVoto's description of the West as a plundered province. Rather, Igler argues, "we can understand industrialism as a historical process that enveloped an entire nation *and* contained important regional contingencies" (emphasis in original).¹²

Historians have also placed urban industrialization in the American West at the center of their work. As in Butte, mining was the foundation of many industrial cities in the American West. Mining towns shared similar economic, political, and social

¹⁰ Andrew Isenberg, *Mining California: An Ecological History* (New York: Hill and Wang, 2005), 9.

¹¹ Kathleen Brosnan, *Uniting Mountain and Plain: Cities, Law, and Environmental Change along the Front Range* (Albuquerque: University of New Mexico Press, 2002). For a discussion of city and hinterland relationships see William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W. W. Norton, 1991).

¹² David Igler, *Industrial Cowboys: Miller and Lux and the Transformation of the Far West, 1850-1920* (Berkeley: University of California Press, 2001), 182.

characteristics, from the ethnic backgrounds of miners to labor relations.¹³ Thomas Andrews examines the intersection of environmental, social, and labor history in his award-winning work, *Killing for Coal*, a study of Colorado's 1914 Ludlow Massacre and the history of the state's coal region. Andrew offers "a more holistic interpretation ... a window onto the ... richer and more intriguing set of relationships that connected different groups of people—particularly capitalists, consumers, and coal-mining families—with the natural world."¹⁴

Most studies of western industrial cities have failed to engage with changes that have occurred as industries have declined or disappeared altogether.¹⁵ The legacy of industrialization cannot be fully understood without examining the recent history of the American West. Like Butte, communities that have suffered from industry's environmental consequences, and cities that are forging a postindustrial identity, provide new opportunities of study for scholars hoping to achieve an inclusive perspective of the industrial West. One of the progressions in many western cities is an increasing reliance

¹³ For an examination of mining culture in Butte see Janet L. Finn, *Tracing the Veins: Of Copper, Culture, and Community from Butte to Chuquicamata* (Berkeley: University of California Press, 1998) and Mary Murphy, *Mining Cultures: Men, Women, and Leisure in Butte, 1914-41* (Urbana: University of Illinois Press, 1997). For a discussion of mining cultures and labor relations in other areas of the American West, see Linda Gordon, *The Great Arizona Orphan Abduction* (Cambridge, MA: Harvard University Press, 1999) and Philip J. Mellinger, *Race and Labor in Western Copper: The Fight for Equality, 1896-1918* (Tucson: University of Arizona Press, 1995).

¹⁴ Thomas Andrews, *Killing for Coal: America's Deadliest Labor War* (Cambridge, MA: Harvard University Press, 2008), 15. See also Scott Martelle, Blood *Passion: The Ludlow Massacre and Class War in the American West* (New Brunswick, NJ: Rutgers University Press, 2007).

¹⁵ Most studies of twentieth-century postindustrial cities focus on the development of the West during World War II. For a discussion of the boom and bust cycle of uranium mining see Michael Amundson's *Yellowcake Towns: Uranium Mining Communities in the American West* (Boulder: University Press of Colorado, 2002). For studies of the Hanford, WA nuclear site see John Findlay and Bruce Hevly's *Atomic Frontier Days: Hanford and the American West* (Seattle: University of Washington Press, 2011) and Michele Stenehjem Gerber, *On the Home Front: The Cold War Legacy of the Hanford Nuclear Site*, 3rd ed. (Lincoln: University of Nebraska Press, 2007). Mike Davis, in his multiples studies on western cities, examines the intersection of urbanization, industrialization, and the environment in the second half of the twentieth century, and focuses the changes that have occurred in these communities as industries have changed. See especially, *Ecology of Fear: Los Angeles and the Imagination of Disaster* (New York: Henry Holt, 1998) and *Dead Cities: And Other Tales* (New York: New Press, 2002).

on the tourism industry. Mike Davis's co-authored volume, *Under the Perfect Sun*, illustrates San Diego's social justice issues and challenges common stereotypes of the city's affluence and progressiveness.¹⁶ While San Diego's tourism industry is much larger and more economically significant than Butte's, the two cities still face similar struggles in their development of tourist spaces. Most studies of tourism in the American West, though, focus on the industry's early growth, expanding on Earl Pomeroy's influential study, *In Search of the Golden West*.¹⁷ Hal Rothman's work, however, has engaged with more current tourism development, arguing that catering to tourists is a "devil's bargain" for cities in the American West because "tourism promises much but delivers only a little."¹⁸

Butte promotes its industrial heritage as a tourist attraction, a recent development in the tourism industry. Scholars who have studied heritage tourism have primarily offered analyses of case studies in Europe.¹⁹ Emma Waterton and Steve Watson's edited volume, *Culture, Heritage and Representation* is the most comprehensive study of heritage tourism, though the focus remains in Europe, particularly the United Kingdom. Despite an increase in the number of industrial heritage tourism sites in the United States,

¹⁶ Mike Davis, Kelly Mayhew, and Jim Miller, *Under the Perfect Sun: The San Diego Tourists Never See* (New York: The New Press, 2003).

¹⁷ Earl Pomeroy, *In Search of the Golden West: The Tourist in Western American* 2nd ed. (Lincoln: University of Nebraska Press, 2010). See also Bonnie Christensen, *Red Lodge and the Mythic West: Coal Miners to Cowboys* (Lawrence: University Press of Kansas, 2002); David Louter, Windshield Wilderness: Cars, Roads, and Nature in Washington's National Parks (Seattle: University of Washington Press, 2006); Hal K. Rothman, ed., *Reopening the American West* (Tucson: University of Arizona Press, 1998); Mark David Spence, Dispossessing the Wilderness: Indian Removal and the Making of the National Parks (Oxford: Oxford University Press, 1999); Chris Wilson, *The Myth of Santa Fe: Creating a Modern Regional Tradition* (Albuquerque: University of New Mexico Press, 1997).

¹⁸ Hal K. Rothman, *Devil's Bargains: Tourism in the Twentieth-Century American West* (Lawrence: University Press of Kansas, 1998), 10. For additional essays on tourism in the twentieth-century American West, see David M. Wrobel and Patrick T. Long, eds., *Seeing and Being Seen: Tourism in the American West* (Lawrence: University Press of Kansas, 2001).

¹⁹ See Gert-Jan Hospers, "Industrial Heritage Tourism and Regional Restructuring in the European Union," *European Planning Studies* 10 no. 3 (2002): 397-404; Stephen Wanhill, "Mines—A Tourist Attraction: Coal Mining in Industrial South Wales," *Journal of Travel Research* 39 (2000): 60-69.

few studies have focused on America's industrial tourism.²⁰ Mining tourism, however, is becoming increasingly popular in both the tourism industry and tourism studies. J. Arwel Edwards and Joan Carles Llurdés i Coit established the field with their 1996 article examining the growing interest in mining tourism and providing case studies of mining and quarry sites from Spain and Wales.²¹ In addition, Michael Conlin and Lee Jolliffe recently edited a volume dedicated to mining heritage tourism. While their publication illustrates the growing interest in mining heritage, the contributors offer only brief case studies of former mining sites that have been turned into museums or historical attractions.²²

Tourism spaces in Butte also speak to theories of the tourist and sightseer, established by Dean MacCannell in his foundational work, *The Tourist*.²³ Scholars, including most notably, John Urry, have built on MacCannell's work, examining both the motivations of tourists and promoters of tourist attractions.²⁴ Tourist sites, particularly industrial heritage tourism attractions, also intersect with the field of landscape studies, established by geographer Carl Sauer, as well as more recently developed fields of

 ²⁰ For a case study of a U.S. site, see Michele Andreadakis Rudd and James A. Davis, "Industrial Heritage Tourism at the Bingham Canyon Copper Mine" *Journal of Travel Research* 36 no. 3 (Winter 1998): 84-88.
 ²¹ J. Arwel Edwards and Joan Carles Llurdés i Coit, "Mines and Quarries: Industrial Heritage Tourism,"

Annals of Tourism Research 23 no. 2 (1996): 341-363.

²² Michael V. Conlin and Lee Jolliffe, eds., *Mining Heritage and Tourism: A Global Synthesis* (New York: Routledge, 2011).

 ²³ Dean MacCannell, *The Tourist: A New Theory of the Leisure Class* (New York: Schocken Books, 1976).
 ²⁴ John Urry, *The Tourist Gaze*, 2nd ed. (London: Sage Publications, 2002). See also Alf H. Walle,

Cultural Tourism: A Strategic Focus (Boulder, CO: Westview Press, 1998) and Anita M. Waters, *Planning the Past: Heritage Tourism and Post-Colonial Politics at Port Royal* (Lanham, MD: Lexington Books, 2006).

landscape aesthetics and memory.²⁵ These varied aspects of industrial heritage tourism offer numerous possibilities of future study, and situate postindustrial cities like Butte at the intersection of environmental and labor history and tourism and landscape studies.

²⁵ Carl O. Sauer, "The Morphology of Landscape," University of California Publications in Geography 2 (1925): 19-54; Arnold R Alanen. and Robert Z. Melnick, Preserving Cultural Landscapes in America (Baltimore: Johns Hopkins University Press, 2000); Allen Carlson, Nature and Landscape: An Introduction to Environmental Aesthetics (New York: Columbia University Press, 2009); Paul Groth and Todd W. Bressl, eds., Understanding Ordinary Landscapes (New Haven: Yale University Press, 1997); D. W. Meinig, ed., The Interpretation of Ordinary Landscapes: Geographical Essays (New York: Oxford University Press, 1979); Edward Relph, Place and Placelessness (London: Pion, 1976); Pamela J. Stewart and Andrew Strathern, Landscape, Memory and History: Anthropological Perspectives (London: Pluto Press, 2003).

CHAPTER TWO THE RICHEST HILL ON EARTH

In 1943 the Work Projects Administration (WPA) published a collection of stories about Butte entitled *Copper Camp*. In the introduction to the volume, the contributors described Butte as "a lusty, sprawling mining town … The barren, gray mine dumps with faded cottages in clusters at their feet; the huge steel and wooden gallows frames of the mines; the smoke-belching stacks; the crooked, crazy dirt roads and crumbling sidewalks … the rickety, unpainted, bulging and leaning brick and frame buildings."²⁶ Though Butte's rapid industrialization formed an economic foundation for the town, the community suffered the environmental, social, and political consequences of an extractive industry. Like similar towns across the American West, life in Butte revolved around the success, or failure, of its mining operations.

Butte's ascension to mining dominance began in 1864 when goldseekers spread across the newly-created Montana Territory and discovered a rich vein of ore on Silver Bow Creek, near present-day Butte. While a few of the more intrepid men tried to mine the quartz deposits on Butte hill, they had neither the technology nor the expertise to successfully remove the ore. As with dozens of other sites across the American West, prospectors soon exhausted the gold deposits and moved on to other opportunities, leaving Butte with a population of only 241 in 1870. The Panic of 1873 nearly ended the struggling settlement altogether, but eastern financiers seeking cheap investments during the financial crisis bought land on the hill and revitalized Butte's mining industry.²⁷ An 1884 article in the local newspaper celebrated the mines' successes, claiming, "the camp

²⁶ Work Projects Administration, *Copper Camp: Stories of the World's Greatest Mining Town, Butte, Montana* (New York: Hastings House, 1943), 21-22.

²⁷ Michael P. Malone, *The Battle for Butte: Mining and Politics on the Northern Frontier* (Seattle: University of Washington Press, 1981), 7-8, 10.

of Butte has advanced to the first position among the mineral producing districts of the United States and of the world. There are no reasons why it should not. There are many reasons why it should.²²⁸

Marcus Daly, an industrious businessman and miner, was one of the reasons for the success of Butte's copper fortunes. Daly was born in County Cavan, Ireland on December 5, 1841, but left the Emerald Isle for New York at age fifteen. After five years in the city, he moved to California where he began his long and remarkable mining career. Daly worked the silver mines of California and Utah, earning frequent promotions and eventually becoming foreman of the Emma Mine in Utah. In 1876, the Walker Brother's mining company, Daly's employers, sent the Irishman to Butte to appraise the hill for a possible expansion of the Walker mining operation. Impressed with the site's potential, Daly and the Walkers jointly purchased a silver mine in Butte, and Daly moved to the town to manage the operation.²⁹ In 1880, Daly sold his share of the mine for a rumored \$100,000 and purchased the Anaconda Mine from a fellow Irishman for \$30,000. Daly converted the Anaconda Mine to copper in 1882 and began purchasing other mining properties. In 1889, with the backing of a San Francisco syndicate, Daly established the Anaconda Mining Company. To house the smelter and laborers needed for his burgeoning corporation, Daly built the town of Anaconda, nearly named Copperopolis until Daly discovered that the name had already been bestowed upon a small mining camp elsewhere in Montana.³⁰

²⁸ "The Mines of Butte," Weekly Inter Mountain (Butte, MT), July 3, 1884.

²⁹ David M. Emmons, *The Butte Irish: Class and Ethnicity in an American Mining Town, 1875-1925* (Urbana: University of Illinois Press, 1989), 19.

³⁰ Malone, 25.

The history of Butte is inseparable from that of the Anaconda Company. As the Company's operations on the hill grew, so too did the city. In 1899, Standard Oil purchased the Anaconda Mining Company, creating the Amalgamated Copper Company, a formidable corporation with power, wealth, and influence. Rich deposits of copper ore stretching more than twelve thousand feet across Butte's hill were the source of the Company's power. No other site in the world has ever matched the size and scale of these deposits.³¹ To recover the copper, the Anaconda Company's miners tunneled into ore veins, blasted out most of the copper-bearing rock, and then moved to another level of the mine, where they repeated the process.³² By 1915, twenty-six major mines, nearly all owned by Anaconda, crowded the hill, including the Orphan Girl, the Badger State, the Never Sweat, and the Original. Headframes and hoist houses accompanied each mine, along with change houses, blacksmith shops, ore bins, and machine shops. In addition, dozens of mills and smelters operated to process the mined ore. Railroad lines connected the mines to the city and to the Northern Pacific Railroad depot and smelters on the southern edge of Butte. Each mine employed hundreds of men, from geologists and bucket dumpers underground, to electricians and hoist engineers aboveground.³³

Because Amalgamated employed such a large percentage of the state's male workforce, Montana's political leadership had little choice but to bend to the Company's demands or risk economic chaos. In addition, the Company owned seven of Montana's ten major daily newspapers, insuring that they strictly controlled news coverage of the

³¹ Steve J. Czehura, "Butte: A World Class Ore Deposit," *Mining Engineering* September 2006: 14. ³² Bode J. Morin, "Reflection, Refraction, and Rejection: Copper Smelting Heritage and the Execution of Environmental Policy," (PhD diss., Michigan Technological University, 2009), 246.

³³ Mark Fiege, Fredric Quivik, and Brian Shovers, *Industrial Heritage of Butte and Anaconda: An Analysis of the Historical Significance of the Surviving Physical Features of the Anaconda Copper Mining Company* (Butte, MT: Renewable Technologies, 1985), 15.

corporation and its mining operations.³⁴ Dennis Swibold provides a detailed history of the detrimental effects of this journalistic domination in his book, *Copper Chorus*. Swibold explains that the Company's stranglehold on the state's media stifled any political opposition to the mining monopoly and kept the state's attention on Amalgamated.³⁵ The mining company demonstrated its power in October 1903 when it found itself on the losing side of litigation regarding property rights and the regulation of subsidiary stocks. Infuriated by the ruling and fearing the loss of its industrial monopoly, the Company retaliated by shutting down all of its Montana operations, putting nearly 15,000 men out of work. The Company then asked the governor to hold a special session of the state legislature to enact a law that would make it possible to have the ruling judge removed from the case. The governor refused, and the massive shutdown continued through the fall. When the governor relented and called for the special session in December, Amalgamated reopened the mines.

The Company's control extended to the environment, and city residents had to contend with dangerous levels of pollution. Air pollution, especially, was an ongoing and serious problem in Butte. In the early days of the mining industry, companies smelted ore though the process of "heap roasting." For weeks at a time, workers burned giant, block-long piles of timbers, alternated with copper ore, to melt the mineral and remove any non-copper compounds.³⁶ From 1885 to 1890, Butte mining companies roasted 25,000 tons of ore nearly continuously. The process sent oxides of sulfur, arsenic and fluorides spewing into the air; the pollutants then amassed on the land and washed into

³⁴ Finn, 74.

³⁵ Dennis L. Swibold, *Copper Chorus: Mining, Politics, and the Montana Press, 1889-1959* (Helena: Montana Historical Society, 2006).

³⁶ Morin, 41.

streams.³⁷ Butte residents protested the dense blanket of smoke that enveloped the city, but mine owners ignored the complaints. At Montana's constitutional convention of 1889, Butte smelter owner William Andrews Clark argued that the smoke was beneficial: "It has been believed by all the physicians of Butte that the smoke that sometimes prevails there is a disinfectant, and destroys the microbes that constitute the germs of disease." Clark even claimed "that women were 'very fond' of Butte 'because there is just enough arsenic there to give them a beautiful complexion." The mining magnate of course failed to identify these Butte residents who celebrated the toxic haze.³⁸

While Clark touted the so-called benefits of the smoke, Butte suffered. The city recorded 172 deaths from July through October, 1890, and 74 in November alone, half of which city officials attributed to respiratory illnesses that had been worsened by the smoke from heap roasting. On December 17, 1890 Butte passed an ordinance restricting the practice within three miles of the city limits. The mining companies ignored the law, arguing that the city had no authority to interfere with the mining industry.³⁹ Thick smoke continued to plague the city, becoming worse as copper production increased through the 1890s. A visitor to Butte who wrote home about the suffocating smog alleged that "'[a]t times the smoke became so thick the citizens literally groped their way around. Carriages had to be driven slowly for fear of knocking into pedestrians. …

 ³⁷ Douglas Neil Isokait, "Natural Resource Damage Restoration in the Upper Clark Fork River Basin, Montana: A Policy Perspective," (PhD diss., University of Maryland Baltimore County, 2010), 88.
 ³⁸ Gordon Morris Bakken, "An Inversion Lawyer in Western Legal History: Air Pollution in Butte, Montana," in *Law as Culture, Culture as Law: Essays in Honor of John Phillip Reid* eds. Hendrik Hartog and William E. Nelson, 264-291 (Madison, WI: Madison House Publishers, 2000).
 ³⁹ Isokait, 89.

⁴⁰ Donald MacMillan, *Smoke Wars: Anaconda Copper, Montana Air Pollution, and the Courts, 1890-1920* (Helena: Montana Historical Society Press, 2000), 43.

pollution nor the resulting health concerns ended the use of heap roasting; as the mining industry became more intensive and production increased, it simply became an ineffective smelting process. In response to increased production demands, the Amalgamated Copper Mining Company built the Washoe smelter near Anaconda, allowing Daly to expand the Company's smelter capabilities. Smelting began at Washoe on January 2, 1902, removing air pollution from Butte, but transferring it to the town of Anaconda and the surrounding Deer Lodge Valley instead.⁴¹

In addition to damaging the air quality in and around Butte, the Anaconda Company liberally exploited natural resources in the region to support the mining industry, felling vast tracts of timber to provide fuel for smelting and for use as supports in the mine workings. Sulfur dioxide emitted during the smelting process killed or injured nearly every tree within hundreds of miles of Butte; by 1890, residents counted only four living trees within the city limits.⁴² Mining operations also required large volumes of water, and so the Anaconda Company made full use of Silver Bow Creek, a small stream running along the base of Butte's hill. Metals from mining and smelting processes polluted the creek so badly that it became unrecognizable as the clear stream that began Butte's mining industry. Mining byproducts also contaminated Butte's municipal water supply. As early as 1897 the *Butte Weekly Miner* began warning residents to boil their water before drinking it. After examining a bottle of the city's water, the paper reported that "the amount of live matter … was enough to start a small sized aquariam [sic] and menagerie."⁴³ The mines discarded waste rock and tailings (the

⁴¹ Isokait, 91. For information on air pollution in Anaconda, see Bakken, "Montana, Anaconda, and the Price of Pollution" *The Historian* 69 (Spring 2007): 36-48.

⁴² Isokait, 89.

⁴³ "Butte Water," Weekly Miner (Butte, MT), March 18, 1897.

materials left after the smelting process) indiscriminately, contaminating both the hill and low-lying areas in the valley. Spring floods and heavy rains washed thousands of tons of mine waste down Silver Bow Creek and into the Clark Fork River, depositing the metal-rich tailings along the floodplain.⁴⁴



Figure 2. The timberyard of Butte's Mountain Con mine, 1942. (Library of Congress)

The lack of environmental regulations on either the federal or state level, as well as the mining industry's considerable power, gave Montana's citizens little recourse to fight Anaconda's exploitation and degradation of the region. Lawsuits challenging the environmental destruction of mining companies were rarely successful, and when they

⁴⁴ Christopher H. Gammons, John J. Metesh, and Terence E. Duaime, "An Overview of the Mining History and Geology of Butte, Montana," *Mine Water and the Environment* 25 (2006): 70; Fredric L. Quivik, "The Industrial Undergirding to the Vernacular Architecture of Butte and Anaconda," *Drumlummon Views* 3 (Spring 2009): 47.

were, the result was generally a nominal fine.⁴⁵ Those towns, including Butte, that depended economically on mining, were reluctant to directly challenge the business that sustained them, and thus the mining industry continued to grow. The Anaconda Company consolidated its control through influence in local and state government and the sizable profits made from Montana's copper deposits. Butte was, in effect, a company town, nearly every aspect of life directed by the Company.

Despite Anaconda's vast wealth and control over Butte, the city maintained the character of a frontier town and mining camp into the twentieth century. The WPA's collection described the town as, "dirty, rough, and wide-open."⁴⁶ Saloons with such vivid names as Bucket of Blood, Graveyard, and Pay Day remained open around the clock, and the town boasted a vibrant red-light district. An early history of Butte described the population as "made up of the floating element, gathered from all the nations of the earth."⁴⁷ Butte was a city of immigrants, most of them young, male, and itinerant. Before technology reduced the need for human labor, Butte's mines required a large force of skilled workers. Consequently, Butte attracted significant numbers of Irish and English miners, who immigrated directly from the British Isles, as well as from other mining camps in the United States, particularly the copper mining region of Michigan's Upper Peninsula.⁴⁸

In 1900, more than a quarter of Butte's population was Irish-born or the children of Irish-born immigrants, a higher percentage than any other city in the country.⁴⁹ David

⁴⁵ See Bakken, "Montana, Anaconda."

⁴⁶ Work Projects Administration, 14.

⁴⁷ Harry C. Freeman, *A Brief History of Butte, Montana: The World's Greatest Mining Camp* (Chicago: Henry O. Shepard Company, 1900), 21.

⁴⁸ Finn, 30.

⁴⁹ Emmons, 13.

Emmons' detailed study of the Irish in Butte explains that because the Irish arrived in such large numbers, and before there was an established society in Butte, the town became their domain. The Irish held positions of leadership in the town's political sphere, as well as supervisory positions at the mines, and founded social institutions throughout the town. "Butte, America" as the Irish called the city, was home to other sizeable immigrant communities as well, including Austrians, Germans, Italians, and Finns. Working-class immigrant neighborhoods retained ethnic identities and built community connections through social, religious, and political gatherings. For example, the Finns, whose neighborhoods dominated the East side of Butte, constructed Finlander's Hall in 1902, using the building to host dances, union meetings, weddings, and funerals. Most neighborhoods had a similar social center and community events attracted people of all nationalities.⁵⁰ Mary Murphy's analysis of Butte's social culture in the first half of the twentieth century illustrates the dominance of Anaconda over residents' lives, yet also shows that miners and their families participated in community activities that provided an important separation from the mining industry.

The copper mines provided a steady job and a reliable paycheck, with Butte's laborers receiving the highest mining wages in the country. However, the transient nature of the miners meant that many never became familiar with their work environment, which, combined with intensive mining practices on the hill—including closely-placed mines and deep shafts—created hazardous working conditions. Emmons argues that Butte's mines were perhaps the most dangerous in the world. By 1940, the

⁵⁰ Finn, 33.

dead in Butte's cemeteries outnumbered the living in the town.⁵¹ As many as 2,500 men died in mining accidents and thousands more perished from diseases or injuries related to their work in the mines.⁵² Silicosis, or miner's consumption, a debilitating and usually-fatal disease that developed from inhaling mine dust, was rampant in Butte. In 1921, a public health survey of Butte miners found that forty-two percent of the volunteers in the study suffered from miner's consumption.⁵³ To avoid compensating victims, the Anaconda Company refused to recognize silicosis as an occupational hazard until 1946, after receiving pressure from workers and government regulators, making it impossible to determine how many thousands had died from the disease.⁵⁴

Even with the many health and safety dangers in the mines, Butte had a reputation for being a relatively peaceful and profitable town. While miners participated in unionled strikes in the gold regions of Nevada, the coal camps of Colorado, and the copper mines of Arizona in the first decade of the twentieth century, Butte enjoyed decades of relative peacefulness.⁵⁵ The start of World War I, though, ushered in a turbulent era of labor conflict in Butte. Across the American West, industrial communities experienced what Andrews describes as the "struggle between Labor and Capital over who would bear the burdens and reap the awards of American industrialization."⁵⁶ Though Butte's unions were active and influential in the 1890s, factional disputes, corruption, and infiltration by company operatives weakened them by the early twentieth century.⁵⁷ Taking advantage of the lack of labor leadership in the city, the Industrial Workers of the

⁵¹ Emmons, 148-149.

⁵² William Langewiesche, "The Profits of Doom," *Atlantic Monthly*, April 2001, 56.

⁵³ Finn, 179.

⁵⁴ Murphy, 19.

⁵⁵ See Mellinger.

⁵⁶ Andrews, 4.

⁵⁷ Finn, 31.

World (IWW), a radical labor organization, and the Socialist Party both gained strength in Butte. Disagreements between conservative and radical union members incited further conflict, culminating in an explosion that destroyed the Miner's Union Hall on June 23, 1914. Montana's governor placed Butte under martial law, and Anaconda announced an open shop and refusal to recognize any unions.

By 1916, to meet the war effort's growing demand for copper, which was used for shell casings and in electrical wiring, all of Butte's mining operations were running at full capacity. In that year alone, the city's mines extracted over 325 million pounds of copper, worth more than \$96 million.⁵⁸ While this level of production meant full employment, it also led to increased demands on workers, including longer hours and more dangerous working conditions. With the miners already under pressure, the June 2, 1917 announcement of a national draft registration provoked a volatile reaction. The Irish, who retained a strong influence in the city, vehemently opposed a war with Germany because Germany supported a free Irish Republic.⁵⁹ On June 5, in response to the draft registration, as well as continued anger over the 1914 open shop decision, Butte's miners formed the Metal Mine Workers' Union. Three days later, the city suffered its deadliest mining accident and what is still the worst hardrock mining disaster in American history. Shortly before midnight, the flame of a carbide lamp ignited the oilsoaked insulation of an electric cable in the Granite Mountain Mine. The WPA's Copper *Camp* describes the accident: "Acting as a chimney, the draft in the up-cast shaft pulled the flames toward the surface, and in an instant the entire length of the cable was ablaze. As the dry shaft timber caught fire, it was but a moment before the entire three thousand

⁵⁸ Murphy, 23.

⁵⁹ Emmons, 363.

feet of shaft had been turned into an inferno.⁶⁰ Smoke and gas filled the adjoining Spectator Mine, suffocating dozens.⁶¹ The victims included two men who had been lowered into the shaft only a few seconds before it erupted in flames; a few charred bones and brass buttons were the only remains.⁶² The disaster killed at least 168 men, many of whom were never identified. Incited by the tragedy, the newly-formed union called for a strike to begin on June 11.⁶³ In addition to improved safety conditions, the miners struck over the "rustling card system," instituted by the Company in 1912. Anyone who wanted to "rustle" a job on the hill needed an identification card, meaning that all workers had to register with the Company. The system allowed Anaconda to keep a detailed work record of each employee, a convenient method for excluding men the Company considered "undesirable," usually those involved in radical political or labor organizations.⁶⁴

The strike continued through the summer, and though it is difficult to determine how many men walked off the job, Emmons speculates that it may have been as many as 5,000.⁶⁵ Frank Little, an outspoken critic of Anaconda and a board member of the IWW, arrived in Butte in July to support the strike and to encourage the Butte's Metal Mine Workers' Union to affiliate with the IWW. On August 1, a group of men, likely members of Anaconda's private security force, broke into Little's hotel room, beat him, dragged him through the streets, and hanged him from a railroad trestle.⁶⁶ On the day of

⁶⁰ Work Projects Administration, 166. See also Michael Punke, *Fire and Brimston: The North Butte Mining Disaster of 1917* (New York: Hyperion, 2006).

⁶¹ Murphy, 23.

⁶² Work Projects Administration, 167.

⁶³ Emmons, 364.

⁶⁴ Finn, 31.

⁶⁵ Emmons, 373.

⁶⁶ Finn, 32.

his funeral, thousands escorted his casket while thousands more lined the streets. Jeannette Rankin, Montana's pacifist congresswoman and advocate for the Butte miners, condemned Little's death and called for the nationalization of the copper mines. Her vocal opposition to Anaconda damaged her political career, and she was unable to gather federal support for the miners.⁶⁷

Montana's governor declared a state of emergency and again placed Butte under martial law. The city remained in a state of almost-constant turmoil and labor unrest for several years. In April 1920, Butte miners joined IWW activists in a picket line, blocking entrances to the mines. Anaconda security forces opened fire on the crowd, killing one and wounding sixteen others. The massacre marked the end of IWW influence in Butte, and the miners would not strike again until 1934.⁶⁸ The demand for copper dropped sharply at the end of the war, and the mines reduced their workforces. Nearly one-third of Butte's population, around 30,000 people, left the city between 1917 and 1921.⁶⁹ Mine production increased in the late 1920s, but the stock market crash of 1929 resulted in the dismissal of 8,000 miners; the town never fully recovered from the economic chaos.

* * *

Copper had transformed Butte into an industrial city, economically volatile and environmentally damaged. In his 1929 novel, *Red Harvest*, Dashiell Hammett modeled his fictional city of Poisonville on the industrial site Butte had become. Hammett worked for the Pinkerton Detective Agency as a strikebreaker in Butte during the summer of

⁶⁷ Norma Smith, *Jeannette Rankin: America's Conscience* (Helena: Montana State Historical Society Press, 2002), 130, 133.

⁶⁸ Finn, 33.

⁶⁹ Murphy, 23.

1920, and his novel's protagonist painted an unflattering portrait of the mining town: "The city wasn't pretty. ... [T]he smelters whose brick stacks stuck up tall against a gloomy mountain to the south had yellow-smoked everything into uniform dinginess. The result was an ugly city of forty thousand people set in an ugly notch between two ugly mountains that had been all dirtied up by mining. Spread over this was a grimy sky that looked as if it had come out of the smelters' stacks."⁷⁰ Despite the visible environmental damages wrought by the mining industry, Butte and the Anaconda Company were determined to continue mining the city's mineral wealth.

To revitalize business after the economic trouble of the 1930s, the Anaconda Company announced its "Greater Butte Project" in 1947. In a speech at the Finlen Hotel in Uptown, Con Kelley, chairman of the board, assured Butte that the Company would continue mining the hill for another fifty years.⁷¹ The plan was designed to recover lower-grade ores through the use of block-cave mining. This method made cuts beneath ore veins, which allowed the ore, along with the ceiling, to collapse from gravity. Miners then removed the ore, along with substantial amounts of extraneous materials, from the mine to separate and process it. This indiscriminate method of mining significantly reduced the need for skilled labor, and in turn, cut overall mining costs. Anaconda's ambitious plan called for a single headframe in Butte, with underground tunnels connecting multiple mines, as well as a twenty-year extension of underground mining. The Company also claimed that it could recover 3.5 billion pounds of copper through implementation of the project. Despite the great potential it predicted, Anaconda

⁷⁰ Dashiell Hammett, *Red Harvest* (1929; repr., New York: Vintage, 1989), 3-4.

⁷¹ Eugene C. Tidball, "What Ever Happened to the Anaconda Company?" *Montana: The Magazine of Western History* 47, no. 2 (Summer 1997): 61.

abandoned the "Greater Butte Project" only nine years later, after the new mining operations failed to recover a significant amount of copper ore.⁷²

Because of the depletion of the hill's high-grade copper ore and the failure of the "Greater Butte Project," Anaconda transitioned from underground to open-pit mining. To reap the financial rewards of America's post-World War II consumer boom, Anaconda needed to institute a more efficient method of mining. While open-pit mining, a process of removing the overburden and taking the ore from the exposed surface, rather than tunneling into the earth, had been practiced for decades, mass production technology had improved greatly during the inter-war years. By 1955, when the Berkeley Pit operation began, power shovels and trucks could remove tons of blasted ore in minutes.⁷³

The use of this technology quickly reconfigured Butte's spatial organization. In twenty years of operation, the Berkeley Pit grew to three square miles, swallowing two suburbs, Meaderville and McQueen, and thirty city blocks.⁷⁴ Entire neighborhoods that had grown around the old Berkeley mine, including Dublin Gulch and Finntown, disappeared. Anaconda offered residents of Meaderville, established by miners in the 1880s, \$1,500 for their houses, which they had built on land leased from the company. Neighboring McQueen residents owned the land on which they had built, forcing Anaconda to offer buyouts. Residents of both communities relocated to a neighborhood in the flats, the valley south of the city.⁷⁵ Anaconda demolished some buildings before

⁷² Morin, 245.

⁷³ Timothy LeCain, *Mass Destruction: The Men and Giant Mines that Wired American and Scarred the Planet* (New Brunswick: Rutgers University Press, 2009), 178.

⁷⁴ Casey Bukro, "Butte, Mont., Waits for Anaconda to Take Bite," *Chicago Tribune*, November 7, 1976.

⁷⁵ Brian Shovers, "Remaking the Wide-Open Town: Butte at the End of the Twentieth Century" *Montana: The Magazine of Western History* 48, no. 3 (Autumn 1998): 43.

expansion, but massive truck-loads of discarded tailings buried those that remained.⁷⁶ The pit also absorbed several underground mines, headframes, and smelter sites.

Block-cave and open-pit mining, both considered "bulk mining" processes because of the large amounts of material removed, increased the amount of waste generated by Butte's mines. To deal with the extra waste, Anaconda built new settling ponds to trap tailings and dissolved metals, preventing discarded materials from washing into Silver Bow Creek and other waterways.⁷⁷ Though bulk mining allowed Anaconda to cut labor costs, the company further improved its bottom line by no longer transporting ore to the town of Anaconda. Instead, in 1964, the Anaconda Company built a new concentrator (the facility that processes ore) near the edge of the Berkeley Pit. Workers fed ore into the concentrator, mixed it with water, and reduced the material to a slurry. After separating the valuable sulfide minerals from the waste rock, the Company disposed of the remaining tailings near the mining operations.⁷⁸

Because the ore in the Berkeley Pit was of a lower grade than the copper previously recovered on the hill, Anaconda needed to mine larger amounts of ore to maintain its profits, compounding the amount of waste tailings. Anaconda used part of the waste to build the Yankee Doodle tailings impoundments, north of the Berkeley Pit. Standing over two hundred meters tall, this dam contained the slurry tailings and also allowed for the reuse of water behind the dam. Northeast of the Berkeley Pit, Anaconda piled low-grade waste into heap-leach pads, where they mixed ore with leach solutions to dissolve the metals in the rock.⁷⁹ As the Pit grew deeper, the waste piles grew higher.

⁷⁶ LeCain, 203.

⁷⁷ Isokait, 247.

⁷⁸ Ibid., 188.

⁷⁹ Gammons, Metesh, Duaime, 71.

From its inauspicious beginnings as a gold mining camp, Butte became the world's top producer of copper ore. Despite steadily declining production after World War I, growing environmental damages, and economic instability, Butte remained an industrial mining town. Pinning its future on the success of the Anaconda Company, Butte hailed the opening of the Berkeley Pit as a revival of the city's mining industry. Instead, the Pit destroyed the northeast corner of the city. While excavation of the Pit progressed, the Anaconda Company made a series of business decisions that began its irreversible decline and nearly wiped out a large section of Butte.

CHAPTER THREE A MINING CITY NO LONGER

On the morning of May 17, 1956, executives at the Anaconda Company read with pleasure an article in the Wall Street Journal that reported the company's record first quarter earnings. At an annual shareholder's meeting the previous month, Anaconda had announced an expansion of their operations in Chile, along with increased earnings from the Berkeley Pit. By the end of the year, Anaconda expected the mine to produce 10,000 tons of ore daily.⁸⁰ The news in the spring of 1956 was a welcome change from the previous year, when strikes at Anaconda's Chilean mines had slowed production, and the mining company had made the costly mistake of investing in aluminum production. Instead of using profits made during World War II to pay down debt or expand its copper production, the Company lost heavily in its aluminum gamble. Anaconda was eager to regain its copper profits, but the good fortunes reported by the Wall Street Journal did not last. In 1956 Anaconda expanded its Chilean operations by fifty percent, despite unstable political conditions in the South American country. The decision proved a disastrous mistake when the 1970 election of Salvadore Allende to the Chilean presidency led to the expropriation of all American mines. Almost overnight, Anaconda's net worth dropped by thirty percent.⁸¹

In a desperate bid to salvage its business, the struggling Anaconda Company decided to expand the Berkeley Pit by moving westward into Butte's central business district. Having been inextricably tied to the Anaconda Company for a century, the city offered little resistance to the plan, willing to sacrifice a sizeable and historically-

⁸⁰ "Anaconda Reports Record Earnings in First Quarter," Wall Street Journal, May 17, 1956.

⁸¹ Thomas R. Navin, *Copper Mining and Management* (Tucson: University of Arizona Press, 1978), 220-221.

significant section of the town in order to sustain the mining industry. The increased mechanization and efficiency of open-pit mining required far fewer workers than traditional underground mines, and from 1960 to 1976, mining jobs declined from over 6,000 to 2,200. Between 1960 and 1970, nearly 8,000 individuals left Silver Bow County.⁸² Because of this exodus of former miners and the resulting economic turmoil, Butte residents believed that an expansion of the mining industry was the only way to insure the economic survival of the town.



Figure 3. The Berkeley Pit in operation, circa 1980. (Library of Congress)

⁸² Carrie Johnson, "The Undermining of Butte, Montana," *Washington Post*, November 22, 1976; Joseph E. Kasperick, "The Economic Impact of the Mining Industry in Silver Bow and Deer Lodge Counties," 1978, Butte-Silver Bow Chief Executive's Office records, box 23, file Economic Impact of Mining Industry, BSBA.

In order to make room for the Berkeley Pit expansion, Butte began discussing the possible relocation of its central business district. Though designated as a National Historic Landmark District in 1962, Uptown's significance as a business center had declined. Butte residents relocated from the hill to the flats during the creation of the Berkeley Pit, and some businesses in Uptown moved off the hill to follow their customers. The remaining Uptown stores struggled to remain in business after losing customers from mine lay-offs and competition from the growing shopping district along the interstate. By the early 1970s, a quarter of the business district's retail space sat vacant. The empty storefronts, residents argued, were reason enough to sacrifice the central business district to the Berkeley Pit.

A series of fires that destroyed more than twenty major buildings in Uptown in the early 1970s also strengthened the argument to move the central business district.⁸³ On February 15, 1972 Butte's *Montana Standard* reported that the department store J. C. Penney's had signed a long-term lease for its Uptown building, and was planning an expansion into three vacant shops in the same block. Twelve days later, the business went up in flames. The fire, which affected multiple blocks in Uptown, caused \$4.5 million in damage, destroying twelve other businesses in addition to the department store. In 1974 another block burned, destroying four businesses. The fire began in the late afternoon, and more than 8,500 residents gathered to watch the conflagration, some of them cheering as the buildings burned to the ground. The following day the *Montana Standard* printed photos of the destruction, describing the scene: "The smoky specter of days past, present and probably future, hangs over Butte … taking another piece of the

³¹

⁸³ Shovers, 43-44.

city's heart. And when the dead skin has been stripped away there will be another parking lot, or perhaps just another vacant piece of real estate."⁸⁴

Fires became a familiar sight in Uptown, and most residents suspected they were the result of arson. Rumors that Anaconda had paid employees to start the fires spread throughout the city. Residents believed that Anaconda wanted to eliminate the central business district, in the hopes that its destruction would end resistance to the planned Berkeley Pit expansion.⁸⁵ Adding to the rumors was the Butte police department's seemingly reluctant investigations of the fires. By 1976, Butte had fourteen unsolved arson cases, and the state fire marshal appointed a part-time deputy to coordinate the investigations.⁸⁶

Despite—or perhaps because of—the fires, some residents supported Anaconda's expansion. The Company lost much of its public support, however, when it closed Butte's Columbia Gardens. Mining magnate William A. Clark built the park in 1899, hoping it would become an entertainment center for the western United States. Though Clark used the Columbia Gardens to promote his business ventures and political ambitions, locals loved the park. Situated along the eastern ridge of the city, the gardens included an amusement park with a roller coaster, dance pavilion, baseball fields, an herbarium, and a fish hatchery. Flags along the rooflines of the buildings could be seen for miles, and Butte residents and out-of-town visitors crowded the park during the summer months.⁸⁷ Anaconda closed the gardens in 1973 to begin a new open pit mine just east of the Berkeley Pit, dismantling some of the structures but leaving others

⁸⁴ Mike Babcock, "Fire, Butte's Foe, Blackens Uptown," *Montana Standard*, October 15, 1974.

⁸⁵ Morin, 265-266.

 ⁸⁶ Jonathan Krim, "Arson Work in Butte Ignites Hot State-Local Debate," *Montana Standard*, July 1, 1976.
 ⁸⁷ Hipólito Rafael Chacón, "Creating a Mythic Past: Spanish-Style Architecture in Montana" *Montana: The Magazine of Western History* 51, no. 3 (Autumn 2001): 49.

standing, vacant and abandoned. In 1975, when Anaconda began excavation of the new mine, workers buried the still-standing roller coaster under dirt and debris. An Anaconda employee recalled emptying truckloads of excavated material onto the roller coaster: "Never again would children and their families build fond memories at Columbia Gardens, and I felt that I was partly to blame."⁸⁸ Work on the new mine ended after only two years when Anaconda failed to locate the lode they had promised the town, and Butte residents have not yet forgiven Anaconda for closing the park.⁸⁹

Beleaguered by business problems after the failure of the mine at the Columbia Gardens site, Anaconda grew indecisive about the Berkeley Pit expansion, and Butte's citizens became more vocal about the issue. A group calling themselves "Butte Forward," made up of leading citizens of the city, formulated a plan for building a new town center in the flats and destroying what remained of the old business district. Butte Forward argued that the future of Butte depended upon the future of mining: "The community has reached an impasse. The two most important elements of the economy, mining and CBD [Central Business District], are linked to the same piece of geography."⁹⁰ The group funded a study by the American City Corporation that evaluated five new locations for Butte's central business district. The study endorsed a site east of the airport, which is located south of the city, and Butte Forward promoted the site for the city's new city center.

Butte Forward worked closely with the Anaconda Company, and Anaconda provided financial backing for the group as a "civic responsibility." While it would

⁸⁸ Bill Long, *Pit Driver: Remembrances of a Berkeley Pit Haul-Truck Driver* (La Habra, CA: Aljon Graphics, 2007), 100.

 ⁸⁹ "Lost Neighborhoods, *Montana Standard*, August 21, 2004; author conversations with Butte residents.
 ⁹⁰ American City Corporation, "Central Business District Development Program Butte, Montana," 1976, vertical files, Montana Historical Society (hereafter cited as MHS).

likely take two or more decades for the expanding Berkeley Pit to reach the central business district, Anaconda maintained that it was doing Butte a favor by buying Uptown so far in advance of additional mining operations. Butte Forward's feasibility study included a letter written by L. C. Powell, president of the Montana division of the Anaconda Company, to Butte mayor Mike Micone. The letter sought to convince Micone of Anaconda's commitment to the city. After providing statistics regarding the amount of copper ore in the vicinity of the Berkeley Pit, Powell warned, "the present geological analysis of the Butte mining district indicates that the development and mining of known ore bodies will not extend beyond a 15 to 25 year period. Consequently the long range future of Butte depends upon the recovery of the mineralized deposit located under the Central Business District."⁹¹ Additionally, the Anaconda Company offered \$8.5 million in cash, along with its Uptown property, valued at \$2.5 million, to offset the costs of relocating the district.⁹²

The debate over the Berkeley Pit's expansion grew more heated as Butte prepared to celebrate the nation's bicentennial. On April 23, 1976 the Anaconda Company applied to the Montana Department of State Lands for an additional mining permit, which included an expansion of the existing tailings pond and leach and waste dumps, and the creation of a new leach dump in the McQueen neighborhood.⁹³ As plans for moving Uptown gained momentum, business owners on the hill formed a "Save the Central Business District" committee to challenge Butte Forward. The group collected

⁹¹ Ibid.

⁹² "Butte Relocation Effort Gets \$11 Million Boost," Montana Standard, July 3, 1976.

⁹³ Montana Department of State Lands, "Preliminary Environmental Review for a Proposed Expansion of Anaconda Company's Berkeley Mining Complex," September 20, 1976, MHS.

200 signatures from businesses and 6,000 from the city's remaining 23,000 citizens in support of Uptown's preservation.⁹⁴

In addition to the petition drive, Uptown business owners employed more creative methods to halt the advance of Anaconda. In the midst of the debate over a relocation site, a land developer from California offered to sell the city a fifty-acre site adjacent to Butte's stockyards and city dump. His asking price, \$15,000 an acre, was about six times the price for the proposed site near the airport. The stockyards location, dubbed Manureville by Butte residents, was unattractive financially and aesthetically. Uptown supporters, however, chose to endorse Manureville, hoping that if the least desired site became the frontrunner, the entire relocation plan might fail.⁹⁵ The business owners' ploy worked. On July 7, 1976, in an eight to five vote, Butte's city council approved moving the central business district to the stockyards location.⁹⁶ Citizens from all neighborhoods of Butte protested, and on July 22 the city council reversed its decision, voting nine to four to halt the relocation process during "a tumultuous meeting repeatedly interrupted by applause, whistles, and jeering from the nearly 60 spectators."⁹⁷

Despite the decision, the future of Uptown was still uncertain. The various factions of Butte residents remained upset over the decision, and the city received \$32,000 from the Department of Housing and Urban Development to study alternative sites for Butte's airport, in case the city would eventually use the site for a new central

⁹⁴ Richard Kaudy, "Council Rejects Relocation and Free Land," *Montana Standard* July 12, 1976; "Overall Economic Development Plan, Butte-Silver Bow, Montana," 1978, Butte-Silver Bow Chief Executive's Office records, box 23, file Overall Economic Development Plan 1979, BSBA.

⁹⁵ Nancy Cardwell, "How Two Women Outwitted Big Firm, At Least for a While," *Wall Street Journal*, December 8, 1976.

⁹⁶ Richard Kaudy, "Spolar Site Approved, 8-5," Montana Standard, July 8, 1976.

⁹⁷ Langwiesche, 59.

business district.⁹⁸ Uptown store owners promoted repairs, cleanup, and repainting in an effort to begin the restoration of the historic district, but enthusiasm and funding were in short supply.⁹⁹ In the fall of 1976, Butte learned that legendary stuntsman and hometown hero Evel Knievel would not build a long-anticipated museum in the city. He told upset residents that he would build elsewhere because Anaconda would "'destroy the town in 10 years."¹⁰⁰

The Anaconda Company, too, faced uncertainties. After decades of political and social control in Butte, Anaconda had not expected opposition to the relocation plan. A company spokesman expressed disbelief after the city council's decision: "We just assumed that most people wanted the move."¹⁰¹ Anaconda was facing other problems, as well. An unprofitable mine expansion at Twin Buttes, Arizona exacerbated the financial loss of the company's Chilean mining ventures, and Anaconda fired or gave early retirement to nearly half of the employees at its New York headquarters.¹⁰² The Atlantic Richfield Company (ARCO), an oil company eager to diversify its holdings, purchased the failing Anaconda Company in 1977. Inexperience in the mining industry, however, along with a sudden drop in copper prices, resulted in substantial losses for ARCO. On April 23, 1982, as Butte celebrated Earth Day, the company announced that it was closing the Berkeley Pit operation.

Following the closure of the mine, ARCO fired five thousand workers, causing an economic crisis in the city. The city's unemployment rate in 1982 was just over eleven

 ⁹⁸ Ed Christopherson, "In Path of Mine, All Butte, Mont., May Move," *New York Times*, August 15, 1970.
 ⁹⁹ Carrie Johnson, "The Undermining of Butte, Montana," *Washington Post*, November 22, 1976.

¹⁰⁰ "Knievel Refuses Uptown Site Because 'It'll Be Gone in 10 Years," *Montana Standard*, November 5, 1976.

¹⁰¹ Cardwell, "How Two Women," *Wall Street Journal*, December 8, 1976.

¹⁰² Navin, 224.

percent; by the summer of 1983 it had jumped to nearly eighteen percent.¹⁰³ ARCO laid off an additional seven hundred workers in the summer of 1983, prompting the Montana *Standard* to describe the former copper camp as "a mining city no longer."¹⁰⁴ The mining industry had been the economic backbone of Butte and Silver Bow County. In 1970, sixty-three percent of the total employment in Silver Bow County was directly or indirectly related to the mining industry, while half of all earnings were related to the Anaconda Company.¹⁰⁵ Without the hope of mining jobs, scores of people vacated the county. Butte felt the effects in lost tax revenues, reduced school enrollments, and an increased number of households receiving public assistance. In 1984 Silver Bow County had the highest rate of food stamp use per capita in Montana.¹⁰⁶ The decreased consumer base further injured the economy, with Butte losing 150 jobs on May 30, 1983 when Safeway closed its distribution center in the town and another hundred jobs on April 1, 1983 when the Stauffer Chemical Company reduced its production.¹⁰⁷ The United States Economic Development Administration classified Silver Bow County's economy as "Sudden and Severe Dislocated," a classification usually reserved for areas affected by a natural disaster.¹⁰⁸

Though Butte had tolerated the environmental pollution of the mining industry for over a century, the closure of the Berkeley Pit ended the community's passive acceptance. When ARCO closed the Berkeley Pit operation, they also shut off the pumps

¹⁰³ 11.5% and 17.9%; "The Economic Impact of the Mining Industry," BSBA.

¹⁰⁴ "Reflections '83," Montana Standard, January 2, 1984.

¹⁰⁵ "The Economic Impact of the Mining Industry in," BSBA.

¹⁰⁶ Montana Department of Social and Rehabilitation Services, *Statistical Report*, 1983/84, 13.

¹⁰⁷ "Preliminary Title IX SSED Grant Proposal," BSBA.

¹⁰⁸ Ibid.

that had kept the open pit dry. ¹⁰⁹ Groundwater began flooding the mine tunnels, and in November 1983, water reached the floor of the Berkeley Pit. Thereafter, water entered the Pit from flooded underground workings as well as diverted surface water from surrounding mining operations.¹¹⁰ Geologists classify much of the water entering the Pit as "acid mine drainage," created when metal sulfides in rock oxidize and generate acidity after exposure to air and water. In addition to this contaminated drainage, the walls of the Pit are rife with stored acidity and leachable metals. As the water in the Pit rises, it dissolves this material, which then mixes into the top layer of the lake.¹¹¹ In 1982, the Montana Department of State Lands filed an Environmental Impact Statement regarding the flooding of underground mine tunnels in Butte. The report stated that basement flooding could occur in homes and businesses, and, if water continued to fill the mines and the Berkeley Pit, it could contaminate Butte's groundwater aquifer.¹¹²

In addition to water pollution, air quality had been an ongoing problem in Butte. In Anaconda's 1976 expansion request, the Department of State Lands gave serious consideration to the issue of air pollution. In that year alone, the Berkeley Pit operation emitted over 6,000 tons of particulate matter. The department's assessment admitted that the brown haze over Butte was "somewhat reminiscent of the smog that occurs over Los Angeles." As a result of decreased air quality, Butte residents faced a high risk of respiratory diseases, and the department's report included a sobering description of the effects:

¹⁰⁹ William Wyckoff, "Postindustrial Butte," *Geographical Review* 85 (1995): 486.

 ¹¹⁰ Christopher H. Gammons and Terence E. Duaime, "Long Term Changes in the Limnology and Geochemistry of the Berkeley Pit Lake, Butte, Montana," *Mine Water and the Environment* 25 (2006):77.
 ¹¹¹ Ibid., 84.

¹¹² Rick Foote, "Uptown sinking," Montana Standard, April 14, 1982.

The death rate from respiratory diseases is 51% higher in Silver Bow County for all ages and sexes than for the state as a whole. Furthermore, asthma, emphysema, bronchitis, and circulatory diseases account for a 42% higher than normal death rate in Silver Bow County when compared to the death rate for all of Montana. An even more interesting statistic is the death rate caused from cancer of the respiratory system. In Silver Bow County such a death rate is 80% higher than the average for the state in all ages. Among females, the average is 148% above the state average. This trend among females is also evident in circulatory diseases and pneumonia.¹¹³

Though closure of the Berkeley Pit operation reduced air pollution, there remained piles of contaminated waste tailings that could be dispersed by wind and water. The Anaconda Company had removed over 700 million tons of waste rock from the Berkeley Pit before its closure, all of which had been discarded next to the mining operation. ¹¹⁴

Uncertainty about the future of the mining industry, worsening economic conditions, and a growing understanding of the massive environmental issues facing the city heightened the public's mistrust of the mining company. At ARCO's annual shareholders' meeting in May, 1982, a coalition of twenty-three church leaders from Butte expressed their concerns: "[T]oday, the people of Butte are left with the following realities: a mining industry, which has taken our lives, our heritage and our neighborhoods. ... An environment un-reclaimed, scarred and ugly, as well as the

¹¹³ Montana Department of State Lands, "Preliminary Environmental Review," MSHS.

¹¹⁴ Gammons, Metesh, and Duaime, 71.

uncertainty and fear of future water table levels and possible contamination."¹¹⁵ These postindustrial realities would plague the community as Butte began to negotiate the legacy of a mining past and a future in the tourism industry.

¹¹⁵ "Butte Ministers Take ARCO to Task," Montana Standard, May 6, 1982.

CHAPTER FOUR MARKETING HERITAGE

In November 1995 a flock of migrating snow geese landed in the waters of the Berkeley Pit. No one knows how many of the birds survived their fateful stop in the crater, but 342 did not. In the days and weeks following the grisly episode, carcasses drifted on the "lake" and washed up on its shores, the once-white feathers permanently stained by the rust-colored water. Hoping to avoid a public relations disaster, ARCO issued a statement asserting that the birds had died from ingesting a wheat fungus.¹¹⁶ The citizens of Butte, too familiar with the environmental hazard looming over their town, blamed the lake. Autopsies performed on the birds affirmed the community's conclusions; the Pit's acidic waters had killed each bird from the inside out, burning the oral cavity, trachea, esophagus, and digestive organs.¹¹⁷

Despite billing as a tourist attraction and such tongue-in-cheek humor as postcards (unsanctioned by the city) with an illustration of a man water skiing on the Berkeley Pit "lake," the now infamous geese episode is a vivid reminder that the polluted crater remains a site of environmental devastation. Despite the evident dangers of the site, Butte has succeeded in turning the Pit into a profitable tourist attraction. More than 40,000 visitors stop at the site each year, and in the summer of 2009, the chamber of commerce collected nearly \$40,000 in admission fees from the attraction.¹¹⁸ Despite initial skepticism from many residents, Butte persevered to recreate itself as a tourist city and the Berkeley Pit as an attraction. As MacCannell notes, "The designation of an object as a sight ... is most often accomplished without any esthetic assistance from the

¹¹⁶ Finn, 208.

¹¹⁷ Edwin Dobb, "Pennies from Hell," Harper's Magazine, October 1996, 39.

¹¹⁸ Nathaniel Miller, "The Pit," Virginia Quarterly Review (Fall 2010): 147.

object. Its elevation to sight status is the work of *society*" (emphasis in original).¹¹⁹ Butte's city government and chamber of commerce have instituted a number of tourism campaigns and plans, applying new labels both to residents and the city to rebrand Butte as a tourism space.

* * *

Economic diversification became a desperate goal for Butte as the mining industry declined. The city's depressed economic state, however, made it difficult to attract new businesses, so Butte turned to other ventures, including tourism. Rebranding the city from a mining town to a tourist attraction, however, was a difficult process. In June 1972 a Regional/Urban Design Assistance Team of the American Institute of Architects visited Butte to "provide a spark of excitement to the community and ... create an enthusiasm in the citizenry, an urge for action."¹²⁰ The team identified the Berkeley Pit and the interstate highway as the two largest determinants of Butte's future. The report described a litany of problems facing the town, including "haphazard" city development, loss of tax revenues, absentee landlords, subsidence (the settling of ground undermined by mining excavation) and mine waste. The architects struggled to articulate the city's attributes, focusing mainly on the physical environment, including one researcher's enthusiastic comment: "The climate and air is great."¹²¹ The study provided recommendations for redesigning Butte through the creation of new neighborhoods, recreation areas, shopping centers, and even the construction of a monorail. The report noted the significance of the Berkeley Pit as "an example of industrial architecture and a display of man-made forms,"

¹¹⁹ MacCannell, 119.

¹²⁰ Regional/Urban Design Assistance Team, "Summary Report on Butte, Montana," 1972, 3.

¹²¹ Ibid., 31.

but also suggested developing the Pit into a ski slope.¹²² Should the city have cared to act on the idea, the report thoughtfully included a drawing of a cable car transporting skiers across the expanse of the crater. Despite the team's enthusiasm for the future of Butte, the report cautioned, "Do not over-rely on tourism as a new revenue source. This is a fantasy."¹²³

Butte's tourism statistics seemed to warrant the architects' warning. Though the tourist industry was an important source of revenue for the state of Montana, Butte attracted few visitors. In 1963, a Montana State Highway Commission survey found that only two percent of the state's 2.6 million visitors stayed overnight in Butte, placing the city ninth out of the ten towns tracked in the report.¹²⁴ A study undertaken by researchers at Montana State University during the 1975 summer tourist season reported similar results, with only 1.7 percent of the surveyed out-of-state visitors stopping at the Berkeley Pit, and less than one percent visiting Butte's mining museum.¹²⁵ While the studies indicated that tourists stopped in Butte for a specific purpose, the totals were far below those of the top two attractions in the state, Yellowstone and Glacier National Parks, which attracted 38.2 and 28 percent of Montana's summer tourists, respectively.¹²⁶ A 1980 report on tourism potential in Deer Lodge County, which neighbors Butte, listed the top twenty Montana travel counties, as based on employment generated from tourism the previous year. The report ranked Butte's Silver Bow County seventh. The mayor's

¹²² Ibid., 40.

¹²³ Ibid., 32.

 ¹²⁴ Montana State Highway Commission, "Five Years of Tourist Studies in Montana," October 30, 1963.
 ¹²⁵ Roland R. Renne and Martin L. Paulson, "Montana Nonresident Motor Vehicle Travel Survey, Summer,

^{1975,&}quot; Staff Papers in Economics 76 no. 29 (1976): 11.

¹²⁶ Ibid., 12.

office saved the report, underlining the rating and writing next to it: "Silver Bow should be #1" (emphasis in original).¹²⁷

To help Butte capture a larger piece of "the 'tourist pie," Butte-Silver Bow Chief Executive Don Peoples formed an Ad Hoc Committee on Tourism and Economic Development in 1982.¹²⁸ With the mining industry declining and Butte's tourism opportunities unexploited, Janie Ryan, a committee member, told Peoples, "someone has got to 'take the bull by the horns' and at least begin to do something" (emphasis in original).¹²⁹ As part of their efforts, the committee submitted a "Five-Year Tourism Development Plan" to the Butte-Silver Bow Chamber of Commerce in March, 1983. The committee acknowledged that Butte had never set long-term goals or crafted plans regarding tourism, but that it was time to "stop 'flying by the seat of our pants."¹³⁰ The city's location at the junction of two interstates guaranteed ample traffic, but Butte had to devise a strategy to draw these potential tourists into the city.¹³¹ Butte clearly understood the challenges, and the committee's nine-page plan listed the steps the community should take in order to develop a tourism industry, including inventorying possible attractions, improving signage in the city and on the interstate, and rehabilitating the city's public image. The committee also discussed the need to make Butte a "primary destination," rather than simply a place tourists stopped on their way to somewhere else. Topping the list of possible attractions under the heading of "Historical Experience" was Butte's

¹²⁷ "Tourist Potential–Deer Lodge County," December 1980, Butte-Silver Bow Chief Executive's Office records, box 52, file Tourism (2 of 2), BSBA.

¹²⁸ Minutes of the Ad Hoc Committee on Tourism and Economic Development, December 4, 1982, Butte-Silver Bow Chief Executive's Office records, box 52, file Tourism (2 of 2), BSBA.

¹²⁹ Memorandum from Janie Ryan to Don Peoples, February 9, 1983, Butte-Silver Bow Chief Executive's Office records, box 52, file Tourism (2 of 2), BSBA.

¹³⁰ Ad Hoc Committee on Tourism and Economic Development, "5-Year Tourism Development Plan," Butte-Silver Bow Chief Executive's Office records, box 52, file Tourism 1984, BSBA.

¹³¹ For a discussion of capturing tourists through advertising, see Tuan, *Passing Strange and Wonderful* (Washington, DC: Island Press, 1993), 158.

World Museum of Mining, but the report mentioned neither the Berkeley Pit nor any other industrial sites.¹³²

Implementing the five-year plan was a slow and difficult process. In order for the tourism proposal to be successful, the city needed the cooperation and support of the Butte chamber of commerce. Only a month after the plan's presentation, however, Ryan expressed to Peoples her frustrations with the relationship: "Working with the Chamber is like working with the bureaucracy in Washington, DC. It is no wonder nothing gets done! I am very unhappy with the Chamber and their attitude and the haphazard manner in which they are approaching the tourism plan." Ryan also reported that the chamber felt the mayor's office was "meddling in their business," and she feared they might try to derail the city's tourism proposals. "[T]he Chamber," Ryan complained, "is attacking the tourism plan like a bunch of vultures around a carcas [sic]."¹³³

The chamber's lack of experience in tourism added to the difficulties. During the reign of the mining industry, the chamber of commerce had been concerned primarily with promoting Butte to prospective businesses and residents, not tourists. Like other cities in the American West, Butte had relied on booster rhetoric to build and maintain its population and economy.¹³⁴ A 1915 publication by the chamber stated that "the purpose of this little volume ... is to ... show that Butte is a growing, flourishing and permanent city; to place this community in the proper light before the world and to invite the homebuilder, the investor and new capital to join us."¹³⁵ The chamber of commerce produced

¹³² Ad Hoc Committee, "5-Year Plan."

¹³³ Janie Ryan to Don Peoples, April 28, 1983, Butte-Silver Bow Chief Executive's Office records, box 52, file Tourism, BSBA.

¹³⁴ For a discussion of boosterism in the American West, see David Wrobel, *Promised Lands: Promotion*, Memory, and the Creation of the American West (Lawrence: University Press of Kansas, 2002). ¹³⁵ John J. McIntosh, ed., "Butte: Metropolis of Montana," [1915], BSBA.

similar publications throughout Butte's industrial era, especially during and immediately following World War II, when the city's promotional materials focused on attracting workers to Butte, by glorifying the city's "dynamic market" and future economic growth.¹³⁶ During the height of the mining industry, the chamber's primary goal was advertising the benefits of living, working, and investing in Butte; changing their focus to tourism was not an easy task, especially when, in their view, it was a forced mandate from the mayor.

In addition to an inexperienced chamber, Butte had to overcome a lack of desire to promote itself. The tourism committee realized that marketing Butte effectively required the support of the city's populace. The city, though, was still reeling from the loss of the mining industry, and, like the chamber of commerce, tourism was unfamiliar ground for Butte residents. The World Museum of Mining was, and still is, one of Butte's key tourist attractions, so the tourism committee found it especially frustrating that locals seemed indifferent to it. The museum is located on the campus of Butte's Montana Tech University, at the site of the former Orphan Girl Mine. In order to reach the museum, a visitor must travel through the campus, and the committee reported that university events often blocked the road, making it impossible to reach the site. The committee also criticized chamber employees for not being more welcoming to tourists and more educated about local attractions. The committee reported the story of a visitor's center employee who, when asked by a tourist about Butte being a historical center, replied, "'no, Butte wasn't, but they should go on up to Helena.""¹³⁷ Adding to the lack of awareness was a spatial and social disconnection between the flats and

¹³⁶ Butte Chamber of Commerce, various promotional materials, BSBA.

¹³⁷ Minutes, Ad Hoc Committee, December 4, 1982, BSBA.

Uptown, a separation that persists today. Residents in the two areas of the town rarely cross the interstate to shop or do business on the other side, and have little interest in events or issues outside of their area.¹³⁸

Tourism promoters also faced the difficult challenge of rebranding Butte from an industrial city to a tourist attraction. In 1979, the same year *Reader's Digest* called Butte "the ugliest city in America," the Department of the Interior, Heritage Conservation and Recreation Service (subsumed by the National Park Service in 1981) conducted a twelveweek study of Butte in order to assess opportunities for the revitalization of its historic neighborhoods.¹³⁹ After interviews with the townspeople, the study concluded that "there exists in the minds of many Butte citizens a perception that the mine's influence is much greater than it actually is. This perception is historically rooted and is perpetuated by the physical presence of the mining industry, population decline, and unemployment."¹⁴⁰ The economic conditions cited in the study had only worsened in the intervening years, and overcoming the public's belief in the significance of the mining industry was a difficult task for the chamber of commerce and the city government. Despite lingering perceptions of the significance of the mining industry, after the closure of the Berkeley Pit the tourism industry became a larger employer of Butte residents than mining operations.

* * *

Following the five-year tourism plan, in October 1983, the Butte-Silver Bow government issued a "Public Relations Development Plan." The document, produced by the Butte

¹³⁸ George Everett, interview by author, August 23, 2011.

¹³⁹ James Nathan Miller, "Cowboys, Copper Kings and Coal: A Montana Montage," *Reader's Digest*, October 1979, 170.

¹⁴⁰ Department of the Interior, *Butte, Montana: A Project Report* (1981), 19.

Economic Futures Advisory Council, outlined strategies to attract new businesses to the city by improving Butte's public image. As tourism scholars have acknowledged, creating tourism space requires marketing both a place and an identity, and Butte was determined to update the public's perceptions of the city.¹⁴¹ The city adopted the slogan, "Butte: A Mile High, a Mile Deep & Everyone's on the Level," and while the motto was short-lived, it communicated "fairness," which, at least for Butte's advocates, was a key concept in promoting the city. The plan's authors desired to dispel Butte's image as a "dying community" and a place of violent unionism, and happily pointed out that Silver Bow County had not been included on a recently released list of the thirteen high crime rate counties in Montana. The council stated, "It is the intent of this plan to take every opportunity to refute any negative image and to replace it with a positive picture of a prosperous and growing community."¹⁴²

In the fall of 1983 the tourism committee held several meetings to strategize methods for rebranding Butte. Meeting minutes reveal efforts to dramatically alter the city's image. The first two goals on a list of thirty-six projects included "Stop 'Mining City' moniker" and "Change 'tough' town image."¹⁴³ There was also a discussion about encouraging Butte residents to be friendlier and more welcoming to tourists, including goals to improve the conduct of Butte residents, both while in, and also while outside of, the city. As part of the effort, the city had earlier requested \$960 to purchase 3,000

¹⁴¹ See Wrobel, *Seeing*, 102.

 ¹⁴² Butte Economic Futures Development Committee, "5-Year Public Relations Development Plan,"
 October 15, 1983, Butte-Silver Bow Chief Executive's Office records, box 52, file Tourism 1984, BSBA.
 ¹⁴³ "Brainstorming Session—Image, Internal," Butte-Silver Bow Chief Executive's Office records, box 52, file Tourism 1984, BSBA.

buttons emblazoned with the cheerful slogan, "Ask Me About Butte," for city residents to wear.¹⁴⁴

* * *

To become a popular tourist attraction, a site must be something out of the ordinary. To achieve this goal, Butte took steps to refocus the public's attention from the city's failed industry to its cultural mining heritage. Butte sought to separate tourism spaces from the economic and social realities of a city recovering from an economic disaster.¹⁴⁵ As part of their efforts, the tourism taskforce proposed ways to attract tourists to Butte. The list included typical promotions, such as event packages and an information center at the bus depot, as well as the more creative, including exploiting "natural air conditioning," promoting the region's hunting opportunities in Alaska, electing a Republican, and building an amusement park.¹⁴⁶ The committee was so enthusiastic about this last idea that they contacted the general manager of Santa Cruz Beach Boardwalk, "California's Finest Seashore Playland," about the feasibility of creating Montana's first amusement park. The committee, however, seems to have tabled the plan after receiving a response from Santa Cruz asking for Butte's population statistics.¹⁴⁷ The only projects included on the list related to Butte's mining heritage were a "Disneyland-type Mining Camp" and a suggestion to improve the Berkeley Pit observation platform, which the chamber of commerce had recently begun leasing from ARCO. Meeting participants voted for the

¹⁴⁴ "Proposal to: ARCO Loan Committee," June 3, 1983, Butte-Silver Bow Chief Executive's Office records, box 52, file Tourism, BSBA.

¹⁴⁵ See Stephen P. Hanna and Vincent J. Del Casino, Jr., "Introduction: Tourism Spaces, Mapped Representations, and the Practices of Identity," in Hanna and Del Casino, Jr., eds., *Mapping Tourism* (Minneapolis: University of Minnesota Press, 2003), xxii.

¹⁴⁶ Tourism Task Force, meeting notes, [1983], Butte-Silver Bow Chief Executive's Office records, box 52, file Tourism 1984, BSBA.

¹⁴⁷ Edward E. Hutton to Jim Kambich, n.d., Butte-Silver Bow Chief Executive's Office records, box 52, file Tourism 1984, BSBA.

projects to which they felt the committee should give priority. A tourist railroad through Maud S. Canyon, a hiking area in the Beaverhead-Deerlodge National Forest a few miles from Butte, received the most votes. The amusement park placed second. The only historical item on the top ten list was a museum dedicated to Evel Knievel.¹⁴⁸

Despite the lack of heritage-related attractions mentioned at the brainstorming meetings, and a desire to promote Butte as a changed town, the city was beginning to recognize the value of marketing its history. Notes written by a member of the tourism committee stated specifically, "industrial heritage, tourism and heritage tied with economic development."¹⁴⁹ In addition, only a few weeks after the closure of the Berkeley Pit, Peoples wrote to a lawyer at the United States Department of the Interior to inquire about the possibility of designating former mines in Butte as national historic sites. Peoples explained that there were several "relatively complete" mine sites in Butte that the city could refurbish "to portray this part of our heritage." He added that if the sites were left inactive "they will become an attractive nuisance in the neighborhoods."¹⁵⁰

In 1984, perhaps to challenge the city government's committee and regain control of tourism promotion in Butte, the Butte-Silver Bow Chamber of Commerce presented its own tourism plan. Titled the "Greater Butte Tourism/Development Project," the document, which was double the length of the five-year tourism plan or public relations plan, placed a much stronger focus on heritage tourism than the city's proposals. The chamber recognized that Butte retained numerous mining sites, which had potential for

¹⁴⁸ Hand-written list, n.d., Butte-Silver Bow Chief Executive's Office records, box 52, file Tourism 1984, BSBA.

¹⁴⁹ Hand-written notes, n.d., Butte-Silver Bow Chief Executive's Office records, box 52, file Tourism 1984, BSBA.

¹⁵⁰ Donald R. Peoples to William H. Coldiron, May 16, 1983, Butte-Silver Bow Chief Executive's Office records, box 52, file Tourism, BSBA.

development as tourist attractions. The chamber classified Butte's history as its top tourist asset and prioritized the development of "an urban industrial park system to interpret Butte's mining past" that included a "head frame and mine yard park and underground mine tour." In addition, the plan specifically mentioned the Berkeley Pit as a tourist attraction and suggested the expansion of visitor amenities at the site. The chamber believed that the Berkeley Pit, along with other viewing stands in the town, were "crucial" to successfully luring tourists off the interstate and into the city.¹⁵¹

Butte faced significant challenges in transforming its city to a tourist space, struggling to define its tourism potential and identity through an extensive series of plans and reports. Because promoters must create tourism spaces and market them for the tourist, Butte focused on rebranding the city's public image. The chamber of commerce and the city government sought to recreate Butte's mining history from a failed industry to a cultural heritage. Transforming the Berkeley Pit from a site of an extractive industry to a vacation destination has extended the economic life of the former mine, but has also complicated the historical narrative of the city.

¹⁵¹ Greater Butte Tourism Task Force, "Great Butte Tourism/Development Project," July 20, 1984, Butte-Silver Bow Chief Executive's Office records, box 52, file Tourism 1984.

CHAPTER FIVE POISON AND PRESERVATION

In the murky waters of the Berkeley Pit, scientists have recorded iron concentrations of 507 parts per million (ppm), while copper stands at 73 ppm. Deeper in the lake, the concentrations increase; iron is an impressive 883 ppm and copper is 137 ppm.¹⁵² The numbers mean little until compared to the EPA's recommended limit in drinking water: 15 ppm for iron and an even lower 1.3 ppm for copper.¹⁵³ Even without the knowledge of these hydrologic statistics, the lack of vegetation surrounding the Pit, the stories of dead birds, and the vast depths of reddish-brown water provide visual proof of environmental devastation. The Berkeley Pit may hold the dubious distinction of being the country's largest manmade contaminated body of water, but it is also an integral part of Butte's history. As historical archaeologist Donald Hardesty explains, the crater's toxic waste is an artifact; the Berkeley Pit acts as a historical document, albeit a large, polluted one, for Butte.¹⁵⁴ Collectively, mining sites, including mining waste like tailings, and piles of excavated earth from open-pit mining, compose Butte's historical narrative.

Butte's commitment to the preservation of its mining sites led to frequent conflicts with the EPA during the environmental remediation process. By the time the EPA's Superfund program became active in Butte in the mid-1980s, the city had already begun developing its tourism agenda. Butte's plans of the 1980s never mentioned environmental cleanup, however, perhaps because the city was unaware of the extent to

 ¹⁵² *PitWatch*, Spring 2006, available online at http://www.pitwatch.org/2006.htm#anchor50925.
 ¹⁵³ EPA, "Lead and Copper Rule," available online at

http://water.epa.gov/lawsregs/rulesregs/sdwa/lcr/index.cfm.

¹⁵⁴ Donald Hardesty, "Issues in Preserving Toxic Wastes as Heritage Sites," *The Public Historian* 23 (Spring 2001): 20.

which the EPA would become involved. Butte's fervent efforts to preserve mining sites during the implementation of the Superfund program illustrates the city's commitment to industrial heritage tourism, but also reveals the difficulties of reconciling environmental cleanup and historic preservation.

* * *

Americans' environmental awareness expanded during the 1970s as the country commemorated the first Earth Day, and the federal government enacted a flurry of legislative and administrative environmental policies, including the Clean Air Act, the Safe Drinking Water Act, and the Toxic Substances Control Act. Montana reflected the national trend. The state's second constitution, ratified in 1972, added the "right to a clean and healthful environment" as an inalienable right, and included an article on the responsibility of the state government to protect the state's environment and natural resources.¹⁵⁵ In addition, the 1971 *Montana Environmental Policy Act* increased funding for environmental initiatives.¹⁵⁶ This decade of legislation addressing threats to human health culminated in 1980, when President Jimmy Carter signed into law the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), better known as Superfund.¹⁵⁷ The Environmental Protection Agency implements the Superfund program, which addresses hazardous waste sites and implements cleanup.

The Environmental Protection Agency listed Silver Bow Creek on the National Priority List of Superfund sites in December, 1982, but it quickly became evident that the

¹⁵⁵ Montana Constitution, art. 2, sec. 3; art. 9, sec. 1.

¹⁵⁶ Montana Code Annotated, 75-1-102(1).

¹⁵⁷ Robert T. Nakamura and Thomas W. Church, *Taming Regulation: Superfund and the Challenge of Regulatory Reform* (Washington, DC: Brookings Institution Press, 2003), 57-58. See also John A. Hird, *Superfund: The Political Economy of Environmental Risk* (Baltimore: Johns Hopkins University Press, 1994), 18.

Superfund process in Montana would not proceed without complications. The EPA suffered from severe budget cuts and numerous administrative difficulties in the early years of President Ronald Reagan's first term, and in March 1982 the agency instituted a policy requiring states to contribute ten percent of the cost of the EPA's initial Superfund site studies.¹⁵⁸ In response, Montana Governor Ted Schwinden signed an appropriations bill for \$220,000, but the EPA budgeted just \$569,000 for fiscal year 1983 for cleanup work in Butte and along the Clark Fork River.¹⁵⁹ Though Montana's U.S. Representative Pat Williams, a dedicated advocate for his hometown of Butte, enlisted the help of the Senate to force the agency to allocate more funding, the increased amount of \$859,116 still fell far short of covering expenses.¹⁶⁰ The EPA listed only twenty-eight miles of Silver Bow Creek in the Superfund designation because insufficient funding prevented further studies of downstream environments or headwater sources of pollution.

By 1985, the EPA had accomplished little in Butte. The agency's efforts in Montana concentrated on Silver Bow Creek and the Clark Fork River, and the EPA had not yet begun studying mine flooding or soil contamination in Butte. In addition, the agency had yet to conduct remedial investigation studies, the first step in recommending a formal cleanup plan, in the city. While the EPA struggled to implement Superfund processes in Butte, the Butte historical society released "The Butte-Anaconda Historical Park System Master Plan" in 1985. Produced in cooperation with the neighboring town of Anaconda, who had also experienced the demise of its mining industry, the plan

¹⁵⁸ Joel A. Mintz, *Enforcement at the EPA: High Stakes and Hard Choices* (Austin: University of Texas Press, 1995), 43-44.

¹⁵⁹ Associated Press, "Butte, Anaconda waste dumps will get help from the state," *Montana Standard*, March 29, 1983.

¹⁶⁰ Associated Press, "Silver Bow Creek clean-up funding on waiting list," *Montana Standard*, September 17, 1983.

outlined "the creation of a park system which will preserve and interpret the physical remnants of mining and smelting in and around Butte and Anaconda." The towns intended the historic park to revitalize their struggling economies and become "a catalyst for development." ¹⁶¹

In addition to economic revitalization, "environmental reclamation" was also one of the stated goals of the project. The historical society's plan, however, provided few specifics for achieving the objective and focused on the safety of park visitors rather than the residents of Butte and Anaconda. While the plan advocated for cleanup it also called for "the character of historic sites" to be maintained "as much as possible."¹⁶² The proposal was the city's first formal commitment to the preservation of mining sites, including mine waste. The preservation objective would continue to influence, and in some cases hinder, remediation efforts throughout the Superfund process.

As Butte sought to diversify its economic base by promoting tourism, mining operations resumed in the city. The Montana State Department of Revenue approved a three-year tax rate approximately two-thirds less than that of other industrial properties for Montana Resources, Incorporated, and on July 16, 1986 the new mining company began operations at the Continental Pit, just east of the Berkeley Pit.¹⁶³ Also in 1986 the EPA began topping Butte's mine dumps with non-contaminated soils and conducting tests of residential soil samples. The agency found mercury levels that a reclamation official described as "a little bit scary" in a baseball field on the north side of the city. The levels were hundreds of times higher than soil samples from other areas of Butte, but

¹⁶¹ Butte Historical Society, "The Butte-Anaconda Historical Park System Master Plan," EPA Region VIII File 4010417.

¹⁶² Ibid.

¹⁶³ "Blast restores Butte mining," Montana Standard, July 17, 1986.

the EPA's only recommendation was to close the field until they could conduct further tests.¹⁶⁴ Soil analysis also showed elevated lead levels in many samples, though the agency believed they did not present immediate or high-risk health hazards.¹⁶⁵ After studying the relationship between contamination sites in Butte and the downstream environment, the EPA proposed and approved an expanded Superfund site designation in 1987. This site encompassed the entire city of Butte. However, in response to comments from city officials and citizens, the EPA specifically excluded ongoing mining operations from the site listing.

As the EPA's remediation work and environmental testing heightened the community's awareness of the Superfund process in Butte, frustrations with the agency's lack of progress also increased. CERCLA regulations required the EPA to propose multiple remediation options, which involved extensive studies. Further complicating the situation was a 1985 report by the office of technology that uncovered faulty technical reporting and incomplete records at the EPA. In response to these criticisms, and just as the remedial investigation stage was beginning in Butte, the EPA slowed the process of site assessments to insure higher quality work.¹⁶⁶ An editorial in the September 12, 1986 issue of the *Montana Standard* described the frustrations of Butte residents: "Time is running out. [The EPA] wants to waste more money with studies that will mean nothing. The EPA has a record of doing nothing, just generating studies."¹⁶⁷

Butte was not alone in its criticisms of the Superfund program. Residents living in or near Superfund sites across the country filed numerous reports accusing the EPA of

¹⁶⁴ "Mercury a threat at baseball field," Montana Standard, May 17, 1986.

¹⁶⁵ "Hill City field closure urged," Montana Standard, November 6, 1986.

¹⁶⁶ Harold C. Barnett, *Toxic Debts and the Superfund Dilemma* (Chapel Hill: University of North Carolina Press, 1994), 168.

¹⁶⁷ "A wetlands project is the best way," *Montana Standard*, September 12, 1986.

discriminating against economically- or socially-disadvantaged neighborhoods.¹⁶⁸ The 1986 Superfund Amendments and Reauthorization Act (SARA) addressed the existence of environmental racism and classism, providing funding for community outreach groups and mandating the EPA to complete environmental justice reviews.¹⁶⁹ However, environmental policy legislation such as CERCLA and SARA also created complex, technical, bureaucratic, and extended processes that exclude most people who do not have specific technical expertise, and, as with many industrial cities, Butte's workingclass neighborhoods are the most affected by contamination. Other industrial cities face similar environmental degradation, and Andrew Hurley offers the example of Gary, Indiana in his 1995 book. Hurley discusses the racial and class patterns of environmental pollution, as well as the reform efforts undertaken by local advocates.¹⁷⁰ Similarly, Matthew Klingle investigates how environmental transformations in Seattle have resulted in environmental injustices divided along social lines.¹⁷¹ Unlike the city of Gary, however, Butte did not organize against environmental discrimination. Most residents who complained about remediation accused the EPA of doing too much, rather than too little, in the city. Butte's economic goals, including maintaining mining operations and

¹⁶⁸ Ellison Folk, "Public Participation in the Superfund Cleanup Process" *Ecology Law Quarterly* 18 (1991): 173. See also National Resource Council, *Superfund and Mining Megasites: Lessons from the Couer d'Alene River Basin* (Washington, DC: National Academies Press, 2005).

¹⁶⁹ EPA, "SARA Overview," http://www.epa.gov/superfund/policy/sara.htm.

¹⁷⁰ Andrew Hurley, *Environmental Inequalities: Class, Race, and Industrial Pollution in Gary, Indiana, 1945-1980* (Chapel Hill: University of North Carolina Press, 1995).

¹⁷¹ Matthew Klingle, *Emerald City: An Environmental History of Seattle* (New Haven: Yale University Press, 2009).

preserving mining sites for a heritage tourism campaign, took precedence over environmental remediation.¹⁷²

* * *

As Butte entered the last decade of the twentieth century, civic leaders recognized the necessity of forging a diversified economy. Though the city had implemented only a few components of the 1985 Butte-Anaconda Historical Park System proposal, Butte was still determined to market the city's mining heritage. The Butte-Silver Bow Planning Board drafted a "Work Program for Superfund Remediation" in 1990 that addressed the related issues of historic preservation and economic revitalization. The proposal described Butte's Uptown area as "a unique asset that cannot be recreated ... a living example of an era of America, Montana and Butte's history," and discussed ways in which Butte could capitalize on this asset. As in the 1985 plan, environmental hazards and cleanup received little attention. The Board placed "Environment" as the seventh and final item in their outline of the work program.¹⁷³

As remediation continued in Butte, the EPA adopted a "waste in place" strategy. The agency left polluted areas, such as hills of mine tailings or contaminated soils, in place, rather than removing them. The strategy was due in part to Superfund regulations that required the EPA to employ the most cost-effective method for protecting environmental and human health, as well as the need to meet federal guidelines regarding

¹⁷² For a discussion of the role of environmental racism in the environmental justice movement see Robert D. Bullard, ed., Confronting Environmental Racism: Voices from the Grassroots (Boston: South End Press, 1993); Luke W. Cole and Sheila R. Foster, From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement (New York: New York University Press, 2000); National Resource Council, Superfund and Mining Megasites: Lessons from the Couer d'Alene River Basin (Washington, DC: National Academies Press, 2005); Patrick Novotny, Where We live, Work, and Play: The Environmental Justice Movement and the Struggle for a New Environmentalism (Westport, CT: Praeger, 2000).

¹⁷³ Lee C. Tuott to Planning Board Members, August 29, 1990, EPA Region VIII File 4010417.

the preservation of historic structures. In 1962, the federal government designated Uptown Butte a National Historic Landmark. The six-square-mile district, which contains several thousand buildings, including homes and businesses, overlaps the area designated as a Superfund site. In 1966, Congress passed the National Historic Preservation Act, which requires federal agencies to evaluate cultural resources before initiating any actions that might adversely affect them.¹⁷⁴ Thus, projects undertaken to clean up industrial contamination within the bounds of Butte's historic district must meet federal guidelines regarding the preservation of historic structures. The regulations do not permit simple solutions such as fencing off or covering over contaminated areas because these strategies do not retain the historical character of the mineyards. In addition, the Butte-Silver Bow government amended the city-county's zoning ordinance in 1985 to prohibit "the moving, demolition, or removal of contributing historic structures" within the National Historic Landmark district.¹⁷⁵

Butte's focus on heritage tourism and a fixation on maintaining the city's historical character also influenced preservation policies. In 1990, Sara Weinstock, an official at the Butte EPA office, expressed her frustrations with the city because of their desire to preserve contaminated mine waste. She stated that Butte's historic preservation groups refused to allow the EPA to remove potentially hazardous mine tailings because they believed their absence would make the city look "like Kansas."¹⁷⁶ In the summer of 1987, as part of cleanup efforts, the Office of Surface Mining of the Department of the Interior proposed capping the Steward Mine's main shaft. As part of the process, the

¹⁷⁴ Quivik, "Integrating the Preservation of Cultural Resources with Remediation of Hazardous Materials: An Assessment of Superfund's Record," The Public Historian 2 (Spring 2001): 48.

¹⁷⁵ Butte-Silver Bow Historic Preservation Office, Butte-Silver Bow Chief Executive's Office records, box 28, file Historic Preservation Office 1985, BSBA. ¹⁷⁶ "EPA plans cleanup," *Montana Standard*, April 12, 1990.

department recommended removing the mine's remaining ore bins (large containers used for storing ore prior to smelting) from the site. Butte's Advisory Council on Historic Preservation and the State Historic Preservation Office declared that the removal of the bins would have an adverse effect on the historical integrity of the Steward mineyard.¹⁷⁷ Despite the department's concerns regarding contamination and safety issues, the city wanted to avoid any reclamation work that might negatively impact the historical significance of mining sites or change the "visual and urban landscape" of the hill.¹⁷⁸ The disagreement culminated in a gathering of personnel from the historic preservation office and the office of surface mining at the disputed mineyard. The meeting had some "touchy moments," but resulted in Butte gaining greater influence in deciding how to address reclamation at historically sensitive areas.¹⁷⁹

In 1993, as part of the city's continued efforts to become a tourist destination, and to better define how they could incorporate preservation in remediation plans, the Butte Historical Preservation Office released their comprehensive Regional Historic Preservation Plan (RHPP). In yet another tourism plan for Butte, the office focused on luring tourists off the interstate and into historic Uptown, including detailed drawings of tourist "capture points" and traffic flow plans, as well as proposed methods of advertising. The plan branded multiple mining sites, concentrated on the northern side of Butte, as "historic resources." Though this area of the city contained the highest levels of environmental contamination, the RHPP did not include any mention of Superfund, the

¹⁷⁷ Memorandum from Janet Ore, Historic Preservation Officer, to Don Peoples and Rick Griffith, Reclamation Specialist, July 22, 1987, Butte-Silver Bow Chief Executive's Office records, box 28, file Historic Preservation Office 1987, BSBA.

¹⁷⁸ Robert Fink to Jerry R. Ennis, June 26, 1987, Butte-Silver Bow Chief Executive's Office records, box 28, file Historic Preservation Office 1987, BSBA. ¹⁷⁹ Ore to Peoples and Griffith, BSBA.

EPA, or remediation activities. The plan also classified Uptown's historic residential neighborhoods, the most economically disadvantaged in the city, as tourism resources. With the exception of a brief acknowledgment that increased traffic would have an "adverse effect" on these neighborhoods, the plan did not discuss the residents of Uptown Butte.¹⁸⁰

To encourage a public dialogue regarding the RHPP, Mark Reavis, an RHPP representative, discussed the plan at a public meeting on September 9, 1993. Butte residents asked questions ranging from landscaping projects to funding. A question about the RHPP's consideration of future mining possibilities illustrated the continued influence of the mining industry. In reply to the question, Reavis stated: "We will continue to work closely with mining interests, but there is no reason that active mining and historic preservation can't co-exist." Perhaps reflecting Butte's weariness with the federal government's intervention, Reavis was adamant that Butte desired only local control for the RHPP: "It won't become another Yellowstone Park where the Park Service comes in to take over running it." There was also a series of questions regarding the "waste in place" strategy and its possible effects on human health. Reavis, however, refused to debate the point, reminding the audience that mine waste did not present a danger to human health, and that the RHPP would improve the city. "Historic preservation can co-exist with Superfund," he told those gathered, "it does not stop the process. ... Our goal is to enhance what resources we have, not endanger human health."181

¹⁸⁰ Butte Historical Preservation Office, "Regional Historic Preservation Plan (hereafter cited as RHPP)," EPA Region VIII File 4010417.

¹⁸¹ Minutes of CTEC Meeting, September 9, 1993, EPA Region VIII File 4010417.

In addition to tourism efforts in Butte, the RHPP included ideas for the area named the Butte-Anaconda Heritage Corridor. The corridor encompasses the two towns, as well as the approximately thirty miles between them, and falls within the boundaries of the Superfund complex. One of the ideas implemented was the Old Works Golf Course, designed by Jack Nicklaus and constructed in the town of Anaconda in 1994. The course retains the original mining landscape by incorporating hills left from mine tailings and using black slag, a by-product of the copper smelting process, rather than sand, in the course's traps.¹⁸² The EPA and ARCO supported the project (though the EPA had reservations about the health consequences of the use of slag), and though the golf course preserves the mining industry's historical and visual landscapes, the project has critics. Some area residents believe that Old Works, and similar projects, interfere with environmental remediation responsibilities.¹⁸³ Mary Curran's essay on Butte's tourism tensions explains: "Environmentalists charged that ... the historical development plan was an ARCO ploy to limit its cleanup liability by offering tourism as an alternative development plan."¹⁸⁴ Others, however, thought the golf course failed to preserve enough. Fred Quivik, an architectural historian and former resident of Butte who was closely involved with the city's historic preservation efforts during the 1980s and 1990s, criticized the EPA for its lack of attention to historic remnants at the site. The fairway for the sixth hole passes through a series of smelter ruins, which the agency removed during the creation of the golf course. The EPA did not reroute the fairway or conduct a salvage

¹⁸² Dobb, "Pennies," 46.

¹⁸³ Quivik, "Integrating," 58.

¹⁸⁴ Mary Curran, "Dialogues of Difference: Contested Mappings of Tourism and Environmental Protection in Butte, Montana" in *Mapping Tourism* eds., Stephen P. Hanna and Vincent J. Del Casino, Jr. (Minneapolis: University of Minnesota Press, 2003), 150.

excavation of the site, destroying, in Quivik's opinion, "a significant industrial archaeological resource."¹⁸⁵

Balancing the need for environmental cleanup and historic preservation has been a difficult task in Butte. The city must retain its historical character and mining sites in order to attract tourists, but it must also be conscious of the health and safety dangers posed by sites left unremediated. The EPA has faced continued criticism about ineffective work in Butte, though the city has at times stymied their efforts. Fritz Daily, a Butte resident, former state representative, and vocal opponent of the Superfund program and its cleanup methods, summarized the EPA's efforts in Butte as, "[s]uck, muck, truck, throw lime at it, build a settling pond and get out of town." ¹⁸⁶ Residents have also objected to overzealous cleanup processes, as when Quivik accused Peoples of being "manipulated by … economic blackmail" and prioritizing environmental cleanup over protecting the community's cultural resources.¹⁸⁷

The consequences of Butte's conflict between environmental remediation and historic preservation continue to affect the city. Stacie Barry's study of health risks and remediation in Butte explains that there are connections between specific toxins and the city's elevated disease and mortality rates. For example, Butte's rate of mortality from digestive system disorders from 1997 to 2007 were higher than the state and national averages, and exposure to contaminants such as arsenic, mercury, and lead—all toxins that the EPA cited as present in Butte—damages the gastrointestinal system. Causes of death due to multiple sclerosis were nearly four times higher in Butte than the national

¹⁸⁵ Quivik, "Integrating," 59.

¹⁸⁶ Fred Quivik to Don Peoples, July 25, 1987, Butte-Silver Bow Chief Executive's Office records, box 28, file Historic Preservation Office 1987, BSBA.

¹⁸⁷ Fritz Daily to John [Wardell], n.d., Butte-Silver Bow Chief Executive's Office records [new material; temporary box 4] folder Berkeley Pit, BSBA.

average, while deaths due to Alzheimer's disease were more than double. Again, there is a correlation between exposure to toxins present in Butte and incidences of these diseases.¹⁸⁸ Barry concludes that remediation has been unsuccessful in protecting the health of Butte's citizens. She accuses the EPA of failing to conduct adequate risk assessments by ignoring contaminants such as aluminum and mercury and testing only small areas of the city. Barry, however, also blames Butte for ignoring risks in order to present an improved public image, particularly to tourists.¹⁸⁹



Figure 4. The Berkeley Pit today. (Photo by the author)

¹⁸⁸ Barry, 193-195. ¹⁸⁹ Ibid., 204-205.

CHAPTER SIX FOCUSING THE TOURIST GAZE

In the Butte visitor's center a three-hundred-pound statue of a large, shaggy dog commands attention. Auditor, the mysterious mongrel immortalized in bronze, lived at the Berkeley Pit for sixteen years. No one knows where he came from or how he survived at the toxic site. Miners at the adjacent Continental Pit adopted him, naming him Auditor because, like an auditor, he arrived when least expected. The dog kept his distance, appearing only occasionally to eat what food the Butte miners provided for him. Auditor became something of a mascot for Butte, a metaphor for the city; surviving against all odds. After the dog died in 2003, the community raised funds to commission a statue in his honor, sculpted by a miner employed at the Continental Pit.¹⁹⁰

While Auditor's story can be seen as inspirational, it is also comfortable, almost cozy. Conversations, articles, and essays about the Berkeley Pit frequently mention the tale, since it is far easier to share the story of a dog that survived the dead zone of the Pit than to discuss the environmental destruction of the mining industry. Though the Berkeley Pit's environmental devastation has made it an attraction, Butte has adapted the site for tourists. As Nezar AlSayyad explains in his introduction to *Consuming Tradition, Manufacturing Heritage*, in places that market heritage, the audience is no longer those that produce it, but those who consume it. Local boosters manipulate and even fabricate culture to serve the demands of tourism.¹⁹¹ In Butte, promoters have minimized the

 ¹⁹⁰ Matt Vincent, "Like Butte, A Lonely Dog Hangs On," *High Country News*, December 9, 2002; "Legend in His Own Time, Pit Dog Perishes," *Montana Standard*, November 20, 2003; "Statue Completed in Honor Of Berkeley Pit Dog," *Helena (MT) Independent Record*, April 28, 2005.
 ¹⁹¹ Nezar AlSayyad, "Global Norms and Urban Forms in the Age of Tourism: Manufacturing Heritage,

¹⁹¹ Nezar AlSayyad, "Global Norms and Urban Forms in the Age of Tourism: Manufacturing Heritage, Consuming Tradition" in *Consuming Tradition, Manufacturing Heritage* (New York: Routledge, 2001), 10.

city to attract tourists. While the beautification work has had the positive effect of rehabilitating dilapidated buildings in Uptown, it has also obscured lingering economic problems and cultural conflicts in the city.

Integral to developing successful tourist attractions is control of the "tourist gaze." Sociologist John Urry defined the theory of the tourist gaze in his 1990 work of the same title. Drawing on Michel Foucault's ideas of human agency and visual nature, particularly Foucault's views of surveillance, Urry linked "representations of cultural heritage landscapes with the first-hand experiences of place consumers."¹⁹² Similarly, MacCannell explains that site promoters must teach tourists what constitutes an attraction. Signs and symbols, which create a narrative for the sightseer to use in reading and interpreting a site, help to construct the tourist gaze. By controlling such semiotics Butte has succeeded in remaking a polluted crater into a tourist attraction, and ensured that the tourist gaze rarely looks deeper than the water's surface.

* * *

The tourist gaze is tied to the visual landscape, and while the physical image of the Berkeley Pit has not changed in the past few decades, the consumption of it has evolved. Don Mitchell's 1998 article examining new western history and landscapes reveals that Butte hoped the Berkeley Pit would "stand as a stark representation of the importance and the effects of industrial mining."¹⁹³ The viewing stand at the former mine has been open for decades, and there was originally nothing available at the platform beyond a view of the Pit. Marko Lucich, current Director of the Butte-Silver Bow Chamber of Commerce, described the original site as "a concentration camp," with a chain link fence topped by

¹⁹² As explained in Waterton and Watson, 40; see also Urry, *The Tourist Gaze*.

¹⁹³ Mitchell, "Writing the Western: New Western History's Encounter with Landscape," *Ecumene* 5 (1998): 8.

barbed wire, and an unlit, weedy, parking lot. "That's all [visitors] saw. … It was just nothing. It was horrible."¹⁹⁴ The site, while visually unappealing to tourists, emphasized the Berkeley Pit as the remains of a destructive, extractive industry. As the former mine attracted increasing numbers of sightseers, however, the city recognized the value in enhancing the location for the comfort of tourists. In 2007, a nonprofit group named Envision Butte added such improvements as restrooms, informational signs, a coinoperated telescope, and an automated recording describing the history of the Berkeley Pit.¹⁹⁵ There is also a gift shop, which sells the usual gamut of tourist kitsch, from Montana postcards to copper ornaments to Butte key chains. Despite its enthusiasm for the crater, however, the city has not yet produced any Berkeley Pit-themed souvenirs beyond postcards.

While the shocking extent of the Pit's pollution is often Butte's initial allure, the city has tried to minimize its image as a toxic town. At an April 2004 meeting of the Butte-Silver Bow Convention and Visitor's Bureau, the attendees discussed the necessity of "educating Montanans and potential visitors from out-of-state about the millions of dollars spent over the last two decades to mitigate environmental problems."¹⁹⁶ While the Berkeley Pit is a successful tourist attraction because of its visible toxicity, the city has made the environmental destruction comfortable for tourists.

As Rothman notes in *Devil's Bargain*, "[a]ll places have scripted space," and Butte has literally scripted the tourist experience at the Berkeley Pit.¹⁹⁷ A cheerful

¹⁹⁴ Marko Lucich, interview by author, August 22, 2011.

¹⁹⁵ "Berkeley Pit View," Montana Standard, August 12, 2007.

 ¹⁹⁶ Kelly Smith to Judy Jacobson, "CVB Marketing Plan '04-'05," April 30, 2004, Butte-Silver Bow Chief Executive's Office records [new material; temporary box 9] folder Chamber of Commerce: Misc, BSBA.
 ¹⁹⁷ Rothman, *Devil's Bargain*, 12. See also Rothman, "Shedding Skin and Shifting Shape: Tourism," in Wrobel and Long, *Seeing and Being Seen*, 103.

female voice, accompanied by banjo music to add to the buoyant mood, narrates the automated recording at the viewing stand. The recording, which lasts five and a half minutes, begins with a brief history of Butte, then discusses the origins of the Berkeley Pit. There is no mention of the turmoil caused by Anaconda's proposed expansion of the mine; rather, the recording explains simply that neighborhoods "were all swallowed up by mining expansion." After reciting the process of ore removal and listing statistics about the size and profitability of the Berkeley Pit operation, the narrative turns to the mine's environmental hazards. The recording's rationale for ending the use of the pumps—"That water would preserve the mine for future use, conserve costly electricity, and prevent the pit walls from caving in"-is almost entirely false.¹⁹⁸ Allowing the Berkeley and surrounding mines to flood would prevent them from operating again, a sobering reality that environmental officials and Butte residents understood. There is also no evidence that water strengthens the walls of the Berkeley Pit. In 1998, over one million cubic yards of silt, sand, and gravel from the crater's southeast wall slid into the lake, raising the water level by three feet, and creating waves of over twenty feet.¹⁹⁹ While the recording is correct that ARCO turned off the pumps to conserve electricity, the company took this step not for ideological reasons, but because of severe financial problems; less electricity used meant more money saved.

Other informational material available at the site echoes the positive spin the recorded narrative places on the evolution of the Berkeley Pit. Each visitor to the site receives a free copy of *PitWatch*, a newspaper publication that educates the public about environmental conditions at the Superfund site. The Berkeley Pit Public Education

¹⁹⁸ Berkeley Pit viewing stand recording.

¹⁹⁹ *PitWatch*, Spring 2005, available online at http://www.pitwatch.org/2005.htm

Committee, made up of local volunteers, including Butte residents and personnel involved in the Superfund program, writes and publishes the paper, which ARCO and Montana Resources finance as part of their Superfund responsibilities. While *PitWatch* does not diminish the polluted reality of the Pit, providing extensive details on everything from the sources of the water in the crater to the metal content of the lake, there is an air of optimism in the publication. Articles project a calm confidence in the EPA, the Horseshoe Bend water treatment plant, and mitigation efforts to prevent another large-scale bird death incident on the waters of the crater's lake.²⁰⁰ *PitWatch* also authored four informational posters located on the viewing stand, which repeat information from the site. The publication is the primary source of information about the Berkeley Pit, but it is impossible to know how many tourists open the paper and read the articles, or how many simply add it to their accumulation of vacation detritus, or throw it away while still at the Pit.

While *PitWatch* provides extensive information about current conditions at the Berkeley Pit, the paper says little about the ongoing mining operations next to the tourist attraction. Similarly, the observation deck's recorded narrative provides only brief references to the operation at the Continental Pit, though from the Berkeley Pit a visitor can watch oversized trucks emptying loads of dirt removed from the Continental's worksite. Hardesty describes the potential value of industrial toxic waste as "important repositories of historical information about the mode and tempo of global environmental change," but for the tourist, the current pollution of the Berkeley Pit is isolated from the

²⁰⁰ See various volumes of *PitWatch*, available online at http://www.pitwatch.org/newsarchive.html.

environmental history of Butte.²⁰¹ Similarly, David Lowenthal argues that interpreting a site with physical signposts dissociates the location from the surrounding landscape, "diminishing its continuity with its mileu."²⁰² Thus, while the audio recording at the Pit mentions the industry's destruction of Butte neighborhoods, there is no discussion of mining's long-term environmental consequences. Without making information about environmental dangers explicit, Butte has trained the tourist gaze to see little beyond the novelty of visiting a toxic pit.

The underlying optimism in the informational materials at the Berkeley Pit enforces the tidy physical appearance of the site. By establishing a sense of order in the rise and decline of the former mine, Butte has made the Berkeley Pit a more appealing tourist attraction. As Lowenthal notes, markers and signs at sites provide "the kind of order found in history books; they make the visible past feel more like the written record."²⁰³ Butte's promoters are cognizant of aesthetics and appearance, and in addition to making the Berkeley Pit suitable for tourists, Butte has taken steps to control the tourist gaze in the rest of the city. Though the Pit is the city's primary tourist destination, Butte hopes that visitors to the site will explore the city further, and has worked to make other areas of the city attractive to tourists.²⁰⁴

As Butte progressed through its extensive series of tourism plans during the 1980s and 1990s, the city devoted additional attention to the content, and associated tourism experience, of its industrial heritage sites. For example, the 1993 Regional Historic Preservation Plan addressed the questions of "what areas may be visited as part of an

²⁰² David Lowenthal, "Age and Artifact: Dilemmas of Appreciation," in ed. D. W. Meinig, *The Interpretation of Ordinary Landscapes: Geographical Essays* (New York: Oxford, 1979), 111.
 ²⁰³ Ibid. For a discussion of the aesthetics of cleanliness in cities, see Yi-Fu Tuan, *Passing Strange*.

²⁰¹ Hardesty, 21.

²⁰⁴ Lucich interview.

interpretive experience, what facilities must be preserved to allow such interaction at the various sites, what sites or facilities will be documented through pictures and text but not by physically preserved."²⁰⁵ Signposts and markers took the form of mapped walking tours and various signage in the town, promoting the Berkeley Pit, the town's historic district, and the World Museum of Mining.

As the city focuses the tourist gaze on certain attractions, it also directs visitors away from less affluent areas of the town. Historically, there was no spatial dividing line between the city and the mines. Neighborhoods grew around the mines, giving miners close access to their jobs. Butte, however, directs tourists to mansions on the west side of the city that were home to mine owners and managers and away from the homes of mineworkers on the east side of the city. Curran explains that the map of tourist locations in Butte "asserts a vibrant, colorful, prosperous, homogenous, and male place. The constitutive others-the social histories of struggle about class, gender, and ethnicitycan only be found in the broader map space."²⁰⁶ In addition, the neighborhoods closest to the Berkeley Pit are still home to Butte's working-class residents, as they were historically, and it is this area that environmental hazards affect the most. The EPAproduced map of Butte's soil contamination clearly illustrates the town's class delineations. The neighborhoods inhabited by the upper- and upper-middle classes have far less contamination than the working-class neighborhoods, which are adjacent to the mines. By directing tourists to affluent areas of the city, Butte has hidden both economic and environmental struggles from the tourist's eye.

²⁰⁵ 1993 RHPP, 11.

²⁰⁶ Curran, 143.

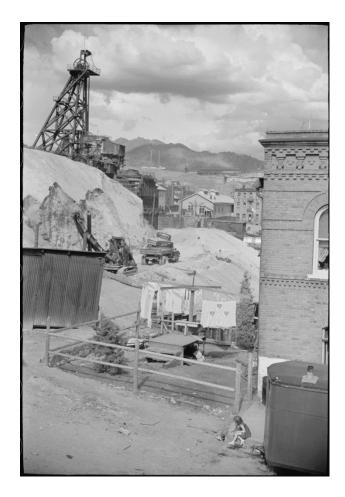


Figure 5. Miner's residence next to a working mine, photo by Arthur Rothstein, 1939. (Library of Congress)

In contrast to Butte, other locations have promoted their environmental issues in an effort to educate the public. For example, San Francisco has designed "toxic tours," which direct tourists to contaminated areas whose residents often face serious health risks. These tours cater to social justice advocates in the hopes of improving the visibility of environmental racism. While this type of disaster tourism might improve awareness of environmental or social issues, there is no clear evidence that it benefits the affected areas. Phaedra Pezzullo concludes in her study on toxic tours that rather than connecting tourists to a visited site, this tourism may alienate them. In addition, toxic tours cannot offer a complete understanding of the situation and the pain that those living in the polluted area face. Pezzullo states, "The best a host can do is describe what his or her pain feels like, and the best a tourist can do is try to imagine what that pain must be like with compassion."²⁰⁷

* * *

As part of their efforts to make the city more visually appealing, Butte has improved the physical appearance of its historic district. By the end of the industrial era, more than a quarter of the buildings in Butte's National Historic Landmark District sat vacant, while others required repairs and rehabilitation. Butte's Urban Revitalization Board and Community Decay Committee dedicated themselves to cleaning up the city. The committee primarily targeted rundown residences and yards with an unacceptable "accumulation of rubble, debris, junk or refuse," though they also wanted to rid the city of stray animals and "beautify" Uptown buildings.²⁰⁸ As part of their mission, the city created files on problematic residents, including the often-discussed Tom McIntee, who lived on the 1600 block of Lowell Street, and whose yard contained "1 GMC Truck, 1 Ford Truck, 1 Truck Cab, 1 Green Sedan, 1 Grey Sedan, 1 Motor, 1 Utility Trailer, 2 Axles, 1 Chassis, Various Parts and Tires" and a fence that failed to meet the city's density standards.²⁰⁹ Butte made some headway in requiring residents to remove such automotive collections, though inflicting fines on, or filing charges against, offenders was a slow and laborious process.

²⁰⁷ Phaedra C. Pezzullo, *Toxic Tourism: Rhetorics of Pollution, Travle, and Environmental Justice* (Tuscaloosa: University of Alabama Press, 2007), 184.

²⁰⁸ Community decay ordinance draft, Butte-Silver Bow Chief Executive's Office records, box 15, file Community Decay folder 1987, BSBA.

²⁰⁹ Property file lists, Butte-Silver Bow Chief Executive's Office records, box 15, file Community Decay folder 1988, BSBA.



Figure 6. Butte's Uptown, looking West on Broadway Street, circa 1980. (Library of Congress)

As Butte became more invested in the creation of tourism spaces, the city's rehabilitation efforts became more organized and more effective. In 1999, the city founded Mainstreet Uptown Butte, part of the National Trust for Historic Preservation's main street program, which is dedicated to revitalizing downtown and neighborhood business districts by using such local assets as historic and cultural resources. Mainstreet Uptown Butte, under the direction of George Everett since 2002, has worked to improve tourism in Butte while also preserving the city's heritage. Everett has coordinated the lighting of eight of the city's remaining headframes, and overseen beautifying efforts, including planting nearly seven hundred trees and painting more than thirty-five buildings in Uptown. The ultimate goal, he says, is "to make [Butte] look cleaner,

greener, and safer." Though passionate about improving the city, Everett is less enthusiastic about the Berkeley Pit. He believes the town has stronger tourist potential in Uptown than at the Pit, and feels that visitors to the former mine "get off the interstate, see the big hole, and leave," rather than visiting the rest of the town.²¹⁰

As with the EPA's environmental remediation efforts in Butte, the city's own rehabilitation projects have conflicted with the goals of historic preservation advocates. In 2003 the Butte-Silver Bow health department, as part of their community enrichment program, demolished multiple properties in Butte due to health and safety concerns. The Historic Preservation Office, however, criticized the department for razing buildings of possible historic significance. In August 2004, Dan Dennehy, health department director, wrote to Reavis, Butte's Historic Preservation Officer, asking for additional information regarding historic preservation guidelines. Dennehy told Reavis that the health department was concerned about the dangers posed by dilapidated buildings that had been "slated for mothballing," as Dennehy described the city's preservation process.²¹¹ Later email correspondence between Dennehy and Reavis illustrates the tensions between historic preservation and beautification, as well as the complications inherent in negotiating the federal guidelines of the National Historic Landmark program.

As Butte's campaign to improve its visual appearance illustrates, humans do not celebrate, or often remember, failures. According to human geographer Yi-Fu Tuan, "the story that we remember tends to be a long catalogue of triumphs. Failed ventures seldom provide the stuff of history: they exist in the mute sufferings of myriads of people who

²¹⁰ Everett interview.

²¹¹ Dan Dennehy to Mark Reavis, August 16, 2004. Butte Archives. Butte-Silver Bow Chief Executive's Office records [new material; temporary box 15] box 15, folder Historic Preservation Office, BSBA.

have tried to wrest a living out of nature and know it to be hard and capricious.²¹² The Berkeley Pit and the dilapidated buildings throughout the city are visual reminders of Anaconda's failed effort to maintain a successful mining venture in Butte. Failures, however, are neither "the stuff of history" nor the stuff of tourist attractions, and Butte has created a more optimistic narrative for the Berkeley Pit and trained the tourists' gaze to look away from the harsher realities of the city's mining heritage.

²¹² Tuan, *Man and Nature* (Washington, DC: Association of American Geographers, 1971), 46.

CHAPTER SEVEN HERITAGE LANDSCAPES AND NARRATIVES

On July 9, 2000, under a blue summer sky, 150 hula dancers assembled on an expanse of barren mine waste near the Berkeley Pit. Wearing blue sarongs and moving as one, the group swayed and sang to "Cool Water." Made famous by the Sons of the Pioneers, the song's lyrics are appropriate for the landscape of the Berkeley Pit: "All day I face the barren waste without the taste of water, cool water." Butte resident Kristi Hager organized the "art in action" event, held in the shadow of the Diamond Mine headframe, to bring attention to the toxic waters of the Pit.²¹³ Ten years later, the hula dancers assembled again, this time with two hundred participants, dancing again for the polluted waters.²¹⁴

Though Tuan argues that the memory of human events heightens the appreciation of landscapes, the gathering of dancers is one of the few social interactions involving the Pit since ARCO closed the mine in 1982.²¹⁵ Mines are places of both work and community, particularly in Butte, where mines formed the nucleus of the city, but these meanings have changed since the town recreated the Berkeley Pit as a tourist attraction. While Butte's current promotion of the Berkeley Pit may be considered a progression of resource exploitation for the city, "mining tourists" as Michael Pretes has described the process, a working mine and a Superfund site have very different meanings and allure for the viewing public.²¹⁶ Though Butte has crafted a specific narrative for the Berkeley Pit,

 ²¹³ George Everett, "Cool Water Hula by the Berkeley Pit," http://www.butteamerica.com/coolhula.htm.
 ²¹⁴ Cherie Newman, "Hula on the Hill," *High Country News*, August 2, 2010.

²¹⁵ Tuan, *Topophilia: A Study of Environmental Perception, Attitudes, and Values* (Englewood Cliffs, NJ: Prentice-Hall, 1974), 95.

²¹⁶ Michael Pretes, "Touring Mines and Mining Tourists," *Annals of Tourism Research* 29 no. 2 (2002): 439.

visitors bring their own interpretations to the site, and their reactions to this postindustrial location challenge traditional concepts of nature and beauty.

* * *

Industrial sites, such as mines, are primarily places of work, but closure of a site alters this meaning. While there are still visible reminders of human labor at postindustrial locations, they are no longer sites of active work. Human labor created Butte's mines, including the polluted crater, but there are few overt reminders for the tourist. The audio recording at the Pit's viewing stand refers to Butte's miners in only general terms, and there is little connection between human labor and the toxic waters. Unlike Butte's World Museum of Mining with its examples of mining equipment and original mineyard buildings, or the headframes scattered across Butte's hill, there are few remaining visual indications of human labor at the Berkeley Pit.

Similarly, the history of Butte's miners has been erased in the city's marketing ventures. Labor conflicts evoke strong symbolic meanings in American history and were a repeated, violent, and influential part of Butte's past, yet they are not visible to the tourist. The tourist plans of the 1980s were eager to erase any connection between Butte and unions, for fear that the union legacy would deter new businesses from relocating to the city. Frank Little, brutally murdered for his role in labor activism, is buried in Butte's cemetery, but the chamber of commerce does not include his grave in their list of tourism sites. In fact, Little's final resting place was not properly marked until 2008 when a local carpenters' union, not the city, undertook the task.²¹⁷ While a pamphlet created by the Butte Historical Society that offers a self-guided tour of Butte's remaining headframes

²¹⁷ John Grant Emeigh, "Frank Little Not Forgotten," Montana Standard, 15 July 2008.

provides some information about the lives of miners, the focus remains on the industrial landscape and artifacts.²¹⁸



Figure 7. The view from the Granite Mountain Memorial, looking east. (Photo by the author)

The most visible acknowledgment of human labor in Butte is the Granite Mountain memorial, honoring the 168 miners killed in the Speculator Mine disaster. Located on the hill above the Berkeley Pit, and funded primarily by a grant from the EPA, the memorial is an open-air plaza with information about the tragedy, including biographies of miners who died in the disaster. The memorial is the town's most visible acknowledgement of the dangerous, difficult work of a hardrock miner. The monument's location above the Pit and the ongoing mining operations provides visual connections to the legacy of the mining industry for those tourists who choose to interpret the surrounding landscape. While the Berkeley Pit's water is not visible from the memorial,

²¹⁸ Butte Historical Society, "A Self-Guided Tour of the Mines of Butte," May 2010.

the site offers a clear view of several of the town's remaining headframes, as well as the Continental Pit's operation and the vast expanse of land that the mining industry is consuming.

The human laborers of the mining industry determined Butte's cultural landscape, including not only the mines but also the spatial organization of the town. In David Emmons's opinion, Butte's tourism agenda threatens to "erase 'the people' of Butte and replace them with industrial mannequins."²¹⁹ The removal of the human element from the Berkeley Pit has a long history. The principle of open-pit mining is the use of technology, rather than human labor, and this absence of people was evident at the Berkeley Pit decades before it became a Superfund site. During the post-World War II consumption boom, the Anaconda Company, along with other industrial corporations, engaged in a public relations campaign championing the country's industrial growth. Anaconda ran an advertisement in the Saturday Review, a supplement to the New York *Evening Post*, in the summer of 1957, calling the Berkeley Pit "America the Bountiful" and encouraging Americans to visit this site of national economic prosperity. The Anaconda Company promoted the Pit as a tourist site through the 1960s, publishing an informational pamphlet for summer sightseers entitled *The Anaconda Company Trailsman.* The paper provided detailed information for the visiting "sidewalk superintendents" on mining techniques and procedures, focusing on speed and efficiency, and offering statistics on the size and number of equipment used in the Pit. The

²¹⁹ Mitchell, 9.

publications praised what historian Timothy LeCain has described as "technology of mass destruction," rather than human labor.²²⁰

Human agency is also absent from today's Berkeley Pit. Geographer Carl Sauer's essay, "The Morphology of Landscape" advocated for the reading of the landscape as text, explaining, "The cultural landscape is fashioned from a natural landscape by a culture group. Culture is the agent, the natural area is the medium, the cultural landscape is the result."²²¹ In reading the Berkeley Pit's landscape, however, the cultural element is missing. In Nathaniel Miller's recent essay on the Berkeley Pit, he points to a key sentence in the recorded narrative at the site, "that in 1983, 'the decision was made to turn off the pumps" (emphasis in original).²²² The use of the passive voice removes the human agency, along with responsibility, from the decision. The recording then goes on to state, "While painful, most folks realized that Butte's economic stability relied on mining. It was a simple fact. If the Pit did not produce, it would cost every miner's family their livelihood."²²³ The narrative removes any connection between the decision to expand the pit and those affected. The script reduces the years of turmoil endured by Butte and its residents to a single sentence that focuses only on the economic impact of the mine.

The city has obscured the human element for tourists, particularly the concept of human labor, but those who worked at the mine while it was in operation view the polluted Pit differently. As sociologist Rob Shields explains, "Sites are never simply

²²⁰ LeCain, 201; *The Anaconda Company Trailsman*, 2, no. 1 (May 1957) and other volumes, vertical files, MHS.

²²¹ Sauer, 41.

²²² Nathaniel Miller, 149.

²²³ Berkeley Pit viewing stand recording.

locations. Rather they are sites for someone and of something.²²⁴ Those who created the Berkeley Pit associate different meanings, primarily economic and social, with the site than tourists. Accepting that their former worksite is now a tourist attraction is difficult for former miners, and they resent paying to view the Pit.²²⁵ Lucich has agreed not to raise the admission fee to the Pit beyond two dollars, partly to quell reactions from disgruntled former workers. He also believes, though, that the objections of the miners are absurd because the site is no longer a mine, but a tourist attraction.²²⁶

In addition to places of work, mines are also social sites. As Edwards and Llurdés i Coit explain, mines were "not only workplaces but also foci for communication and the development of shared beliefs and cultures."²²⁷ Today's Berkeley Pit, however, is no longer a social site. Though thousands of tourists visit the site, they interact little, if at all, with each other. While the Berkeley Pit draws visitors from across the globe, who share a common experience as they view the waters, the moment is not sustained. The lack of social associations with the Berkeley Pit is, according to Denise Cole's concept of heritage tourism, a serious shortcoming. Cole maintains, "Industrial heritage tourism offers a means through which to preserve, understand and celebrate this complex social legacy, enabling local communities to connect with, and celebrate, their past."²²⁸ While the hula dancers serve as the only significant example of social celebration at the Pit, Butte succeeded in retaining social associations with other former mines in the community. The Original mineyard served as the site of the National Folk Festival from

²²⁴ Rob Shields, *Places on the Margin: Alternative Geographies of Modernity* (New York: Routledge, 1992), 6.

²²⁵ Everett interview; Nathaniel Miller, 143.

²²⁶ Lucich interview.

²²⁷ Edwards and Llurdés I Coit, 343.

²²⁸ Denise Cole, "Exploring the Sustainability of Mining Heritage Tourism," *Journal of Sustainable Tourism* 12 no. 6 (2004): 483.

2008 to 2010, and now the Montana Folk Festival. More than 150,000 people attend the annual summer event, which showcases hundreds of musicians from around the world. The city built the main stage under the Original's headframe, and plans to leave the stage in place permanently. In addition, the city converted the engine room at the Belmont mine into a senior citizens center, which opened in 2000.²²⁹ Despite studies showing that the Belmont mineshaft is caving, officials have promised it will not affect the center.²³⁰

* * *

While Butte has improved the visibility of the Pit through such marketing strategies as the interstate billboard and directional signs in the city, the visual landscape of the site is the key to its attraction. Glacier and Yellowstone National Parks anchor Montana's state tourism campaigns, which focus on nature and wilderness in the traditional sense of a place "out there," unspoiled by humans. The Berkeley Pit and other sites of industrial heritage tourism challenge these traditional concepts of nature and aesthetics. While a polluted former mine located in a city has little connection to popular ideas of wilderness, the meaning of nature is not universal. As environmental historian William Cronon explains, "Such disagreement is inevitable—one might even be tempted to say natural—given the universalizing tendencies that lie at the very core of this human construct called nature."²³¹

Complicating the concept of nature at the Berkeley Pit are the environmental benefits of this toxic site. Though scientists initially assumed that organisms could not

 ²²⁹ Edwin Dobb, "Viewpoint: Location, Occupation, Juxtaposition, Interpretation: Notes on an Erotics of the Mining City" *Buildings & Landscapes: Journal of the Vernacular Architecture* (Spring 2010): 8-9.
 Roberta Forsell Stauffer, "Belmont Hoist House Open for Seniors," *Montana Standard*, February 28, 2000.
 ²³⁰ Stauffer, "Subsidence Study: Belmont Headframe in Danger," *Montana Standard*, February 3, 2002.
 ²³¹ William Cronon, *Uncommon Ground: Rethinking the Human Place in Nature* (New York: W. W. Norton, 1996), 51.

survive the polluted properties of the lake, they have discovered extremophiles, microorganisms capable of living in extreme environments, in the Pit's waters. Donald and Andrea Stierle, research professors at the University of Montana, have become wellknown for their research of anticancer compounds. In 1991, they identified a fungus in a northwestern Montana forest that produces taxol, a powerful anticancer agent. The discovery led to eleven patents, with the resulting royalty payments providing the funding for their investigation of the Berkeley Pit. By 2008, they had identified 142 different organisms living in the lake, some of which produce promising anticancer agents.²³² One species of fungi exudes an acid that fights ovarian cancer cells, and the Stierles have isolated compounds that have been effective in test tubes against some types of lung cancer, leukemias, and nerve cell receptors that cause migraine headaches.²³³ The Pit's most visible environmental advantage is acting as a giant receptacle for contaminated water. In a bizarre paradox, the polluted mine water would flow into Silver Bow Creek and the Clark Fork River if not for the existence of the Berkeley Pit.

Tourists' reactions to the Berkeley Pit reflect the disparate meanings of nature, often invoking the dichotomy of "ugly" and "beautiful." While some view the site as polluted or scarred, others see it as a picturesque landscape. Some visitors who find the physical appearance of the Pit appealing view the former mine as a triumph of human industry. Pretes describes this reaction as "a feeling of control over nature" and cites it as a reason for the appeal of mining heritage tourism.²³⁴ Most tourists who describe the site as beautiful, however, do so for visual reasons. In Allen Carlson's study of landscape aesthetics he argues that humans view nature through methodologies that emphasize

²³² Michael Stroh, "True Chemistry" *Popular Science* February 2008, 34.
²³³ Catherine Arnst, "A Superfund Site Helps Fight Cancer," *BusinessWeek*, August 7, 2006, 79.

²³⁴ Pretes, 450.

specific attributes. Tourists, Carlson explains, prefer what he calls the Landscape Model, in which "the appreciative emphasis is on visual qualities that play an essential role in depicting a prospect: line, color, and overall design."²³⁵ The Berkeley Pit's viewing stand is, in essence, a scenic overlook, providing visitors with a panoramic view of a large, deep lake. The popularity of marked scenic viewpoints, particularly in the American West, where national parks and protected wilderness areas abound, have trained tourists to accept these marked sites as aesthetically exceptional. In his study of the human perception of environments and landscapes, Tuan notes that "awareness of environmental beauty ... seems to be largely independent of the character of the environment."²³⁶ Thus, even when visitors view the Berkeley Pit in the context of the surrounding barren landscape and the area's pollution, the visual attraction remains.

Many visitors, though, find the Berkeley Pit anything but beautiful. Butte has long been described as "ugly," from a remark in *Copper Camp* that "it is doubtful if Butte will ever be pointed to as a beauty spot," to the dubious honor of "ugliest city" awarded by *Reader's Digest*.²³⁷ Tuan argues that "ugly" is both a "both a moral and an aesthetic term," one associated not only with physical appearance but also confusion and turmoil.²³⁸ Sightseers may associate the exploitation of Butte's landscape and the uncertainties of the safety and future of the Berkeley Pit with a sense of disorder, thus viewing the site as visually unappealing. Kevin A. of Chicago recorded his reaction to the Berkeley Pit on Yelp, a website with reviews of businesses from restaurants to, as of last year, toxic mine sites. Kevin stopped at the Berkeley Pit after visiting Glacier

²³⁵ Carlson, 26-27.

²³⁶ Tuan, *Topophilia*, 95.

²³⁷ Work Projects Administration, 26; James Nathan Miller, 170.

²³⁸ Tuan, Passing Strange, 156.

National Park, and, in his review, noted the disparity between the two Montana attractions. Rating the Berkeley Pit only one star out of possible five, he described it as a "polluted, disgusting, depressing, barren, abused, raped landscape."²³⁹ While Butte's promoters wish to avoid negative descriptions from tourists like Kevin, MacCannell argues that feelings of "disgust" evoked by derelict or polluted sites are as important as reactions of admiration or respect, providing a "stability" to tourists' understanding of the viewed site.²⁴⁰

Tourists' reactions to the Berkeley Pit extend beyond ideas of beauty and visual attractiveness. For example, a reviewer on the website TripAdvisor called the Pit a "fantastic site" because of its educational value in teaching visitors how extractive industries can harm the earth.²⁴¹ In addition, because tourists are seeking something different from their ordinary lives, unusual or strange attractions like the Berkeley Pit are appealing. Tuan explains that "anything large or exceptional in some other way has the power to command attention."²⁴² A Yelp review by Jeni M. of Portland, Oregon rated the site as a five star attraction: "Where else, but America, can you pay a dollar and view a toxic pit? I don't know, but 'MERIKA! FUCK YEAH! Also, you get to walk down a tunnel that made me feel like I was on the Deathstar. AWESOME!"²⁴³

Tourists' varied reactions to the Berkeley Pit complicate the legacy of Butte's landscape. The ongoing process of heritage also adds to the complexity of the city's cultural narrative. While most scholars have traditionally defined heritage as fixed and

²³⁹ "The Berkeley Pit Visitor Center," Yelp, <u>http://www.yelp.com/biz/the-berkeley-pit-visitor-center-butte</u>. Review submitted on September 14, 2011.

²⁴⁰ MacCannell, 40.

 ²⁴¹ "Berkeley Pit," TripAdvisor, http://www.tripadvisor.com/Attraction_Review-g45106-d501160-Reviews-Berkeley_Pit-Butte_Montana.html. Review submitted December 16, 2011.
 ²⁴² Participation and Partic

²⁴² Tuan, *Passing Strange*, 156.

²⁴³ Yelp. Review submitted on June 11, 2011.

historic, current scholarship argues that heritage is much more fluid and present. As David Crouch explains, rather than simply objectifying places, sites, or people, communities constantly remake their heritage.²⁴⁴ Though Butte promotes its preservation efforts and markets its historic—rather than present—character to tourists, the city, and therefore its heritage, is still developing and evolving.

²⁴⁴ David Crouch, "The Perpetual Performance and Emergence of Heritage" in eds. Waterton and Watson, 57.

CHAPTER EIGHT CONCLUSION

In 2006, Comedy Central's *The Daily Show* featured the Berkeley Pit as an example of America's industrial pollution. The parodied news clip reported, "The city of Butte, Montana has taken lemons and turned them into something that, if you drank, could kill you." The segment used interviews with the Stierles (the researchers who discovered living organisms in the Pit's waters), a state representative, and a Butte citizen critical of the EPA's actions, to illustrate the absurdity of marketing the Berkeley Pit, "the cure-all and cause-all for cancer" as *The Daily Show* correspondent described it, as a tourist attraction. *The Daily Show* suggested that Butte could make the site more attractive by turning the Pit into "Toxi-Land," an amusement park that would be "Superfund for the whole family."²⁴⁵

Despite Butte's efforts to present a public image of a clean, healthy town, *The Daily Show* segment illustrates the mining industry's continuing environmental consequences. The Environmental Protection Agency conducted its third five-year review of Butte's Superfund site in 2011, cataloging completed remediation efforts and describing long-term goals for the area. The report listed remaining cleanup efforts, including additional testing of the Berkeley Pit's water, managing contaminated storm water runoff, and continued cleanup of residential properties, which the EPA estimates it will not complete until 2020. The agency also discovered additional work to complete at the Berkeley Pit. When water in the Pit reaches the EPA's designated critical level, the Horseshoe Bend water treatment plant will begin discharging water directly into Silver Bow Creek, rather than returning treated water to the crater, as it does now. The current

²⁴⁵ *The Daily Show*, June 22, 2006.

pH level of treated water, however, is fifty times more alkaline than what is acceptable for aquatic life. The review also discovered severe scale buildup on equipment at the plant, which has resulted in metal corrosion. Despite concerns about the treatment plant, the EPA happily observed that the Pit recorded only seven bird fatalities in 2009.²⁴⁶

The EPA's lists of ongoing remediation projects, Stacie Barry's recent study of elevated mortality rates connected to hazardous materials, and the visual landscape of the Berkeley Pit all stand in opposition to Montana's goal to cater to the "geotraveler." The state's proposed marketing plan for 2011 and 2012 is focused on geographic destinations, boasting to tourists in its promotional materials that Montana has "more spectacular unspoiled nature than anywhere else in the lower 48, vibrant and charming small towns that serve as gateways to our natural wonders, breathtaking experiences by day and relaxing hospitality at night."²⁴⁷ While Butte has attempted to transform the city into the kind of "vibrant and charming" location promoted in the state plan, the Berkeley Pit does not fit the image of "unspoiled nature." The recent cosmetic improvements at the former mine have improved the appearance of the location, and preservation initiatives in Uptown have dramatically altered the once dilapidated and derelict appearance of the historic district, but Butte must still contend with the legacy of its mining heritage.

While Butte has no immediate plans for creating "Toxi-Land," as *The Daily Show* suggested, the city has returned to the goals of the heritage park system set out in the 1993 Regional Historic Preservation Plan. In October 2011, the Butte-Silver Bow planning department requested proposals for a "step-by-step implementation plan" for the

²⁴⁶ EPA, "Five Year Review," available online at ftp://ftp.epa.gov/r8/sbcbutte/FiveYearReviewReport-June2011/Volume3_ButteMineFloodingOU/Vol3_ButteMineFloodingOU.pdf.

²⁴⁷ Montana Department of Commerce, Office of Tourism, "Tourism Marketing Plan July 2011-July2012," June 7, 2011.

RHPP. After two decades, the county returned to its initial vision of making the area a "regional heritage tourism destination."²⁴⁸ Butte-Silver Bow has selected a consulting group to develop a strategy to attract "visitors with a definite interest in ... a community's heritage and history."²⁴⁹ In addition to focusing on its history as a successful mining town, Butte hopes to incorporate environmental cleanup in the heritage park. The city faces the daunting challenge of balancing the dual legacies of its mining heritage, which Curran classifies as heroic and polluted.²⁵⁰ There is a temptation to lionize the past, yet the Berkeley Pit and abandoned mineyards are constant visual reminders of the destructive legacy of the mines. Butte cannot attract significant numbers of visitors, however, without presenting a positive image. Tourism scholars have acknowledged the tourist's desire for both physical cleanliness and, in the case of heritage tourism, a cheerful nostalgia.

Butte long identified itself as "the richest hill on earth," yet the community also experienced violent labor strikes, horrific mining disasters, and economic crashes. While the city has crafted a specific narrative for the Berkeley Pit and attempted to focus the tourist gaze on neighborhoods it feels tourists will find most acceptable, Butte cannot erase the physical or psychological legacy of the mining industry. Like other industrial sites, the Berkeley Pit provides a visual reminder of the complicated relationships between environment, economy and culture. These contested narratives will continue to influence Butte's tourism strategies and shape the community's heritage and identity.

²⁴⁸ Butte-Silver Bow Planning Board, "Request for Proposals: Butte-Anaconda Heritage Park Implementation," available online at http://www.buttecpr.org/rhpp-rfp.pdf.

²⁴⁹ Justin Post, "Butte's Heritage, History Could Draw Specific Tourists," *Montana Standard*, March 14, 2012.

²⁵⁰ Curran, 149.

BIBLIOGRAPHY

Archives

Butte-Silver Bow Archives (Butte, Montana) Montana Historical Society (Helena, Montana)

Published Sources

- Alanen, Arnold R. and Robert Z. Melnick. *Preserving Cultural Landscapes in America*. Baltimore: Johns Hopkins University Press, 2000.
- AlSayyad, Nezar, ed. Consuming Tradition, Manufacturing Heritage. New York: Routledge, 2001.
- Amundson, Michael A. Yellowcake Towns: Uranium Mining Communities in the American West. Boulder: University Press of Colorado, 2002.
- Andrews, Thomas G. *Killing for Coal: America's Deadliest Labor War*. Cambridge, MA: Harvard University Press, 2008.
- Arnst, Catherine. "A Superfund Site Helps Fight Cancer." BusinessWeek, July 7, 2006.
- Bakken, Gordon Morris. "An Inversion Lawyer in Western Legal History: Air Pollution in Butte, Montana." In Law as Culture, Culture as Law: Essays in Honor of John Phillip Reid edited by Hendrik Hartog and William E. Nelson, 264-291. Madison, WI: Madison House Publishers, 2000.
- ———. "Montana, Anaconda, and the Price of Pollution." *The Historian* 69 (Spring 2007): 36-48.
- Barnett, Harold C. *Toxic Debts and the Superfund Dilemma*. Chapel Hill: University of North Carolina Press, 1994.
- Barry, Stacie Lynn. "Coming to the Surface: The Environment, Health, and Culture in Butte, Montana, 1950-2010." PhD diss., University of Montana, May 2012.
- Brosnan, Kathleen A. Uniting Mountain and Plain: Cities, Law, and Environmental Change along the Front Range. Albuquerque: University of New Mexico Press, 2002.
- Carlson, Allen. *Nature and Landscape: An Introduction to Environmental Aesthetics*. New York: Columbia University Press, 2009.

- Chacón, Hipólito Rafael. "Creating a Mythic Past: Spanish-Style Architecture in Montana." *Montana: The Magazine of Western History* 51 no. 3 (Autumn 2001): 46-59.
- Christensen, Bonnie. *Red Lodge and the Mythic West: Coal Miners to Cowboys*. Lawrence: University Press of Kansas, 2002.
- Cole, Denise. "Exploring the Sustainability of Mining Heritage Tourism." *Journal of Sustainable Tourism* 12 no. 6 (2004): 480-494.
- Conlin Michael V. and Lee Jolliffe, eds. *Mining Heritage and Tourism: A Global Synthesis.* New York: Routledge, 2011.
- Cronon, William, ed. Uncommon Ground: Rethinking the Human Place. New York: W. W. Norton, 1996.
- Crouch, David, ed. Leisure/Tourism Geographies: Practices and Geographical Knowledge. London: Routledge, 1999.
- Curran, Mary. "Dialogues of Difference: Contested Mappings of Tourism and Environmental Protection in Butte, Montana." In *Mapping Tourism*, eds. Stephen P. Hanna and Vincent J. Del Casino Jr., 132-160. Minneapolis: University of Minnesota Press, 2003.
- Czehura, Steve J. "Butte: A World Class Ore Deposit." *Mining Engineering* September 2006: 14-19.
- The Daily Show with Jon Stewart. 22 June 2006.
- Davis, Mike. *Ecology of Fear: Los Angeles and the Imagination of Disaster*. New York: Henry Holt, 1998.
- Davis, Mike, Kelly Mayhew, and Jim Miller. Under the Perfect Sun: The San Diego Tourists Never See. New York: The New Press, 2003.
- DeVoto, Bernard. "The West: A Plundered Province." *Harper's Monthly Magazine*. August 1934.
- Diefendorf, Jeffry M. and Kurk Dorsey, ed. *City, Country, Empire: Landscapes in Environmental History*. Pittsburgh, PA: University of Pittsburgh Press, 2005.

Dobb, Edwin. "Pennies from Hell." Harper's Magazine, October 1996, 39-55.

———. "Viewpoint: Location, Occupation, Juxtaposition, Interpretation: Notes on an Erotics of the Mining City." *Buildings & Landscapes: Journal of the Vernacular Architecture* (Spring 2010): 1-12.

- Edwards, J. Arwel and Joan Carles Llurdés i Coit. "Mines and Quarries: Industrial Heritage Tourism," *Annals of Tourism Research* 23 no. 2 (1996): 341-63.
- Emmons, David M. The Butte Irish: Class and Ethnicity in an American Mining Town, 1875-1925. Urbana: University of Illinois Press, 1989.
- Fiege, Mark, Frederic Quivik, and Brian Shovers. Industrial Heritage of Butte and Anaconda: An Analysis of the Historical Significance of the Surviving Physical Features of the Anaconda Copper Mining Company. Butte, MT: Renewable Technologies, 1985.
- Findlay, John M. and Bruce Hevly. *Atomic Frontier Days: Hanford and the American West*. Seattle: University of Washington Press, 2011.
- Finn, Janet L. Tracing the Veins: Of Copper, Culture, and Community from Butte to Chuquicamata. Berkeley: University of California Press, 1998.
- Folk, Ellison. "Public Participation in the Superfund Cleanup Process." *Ecology Law Quarterly* 18 (1991): 173-221.
- Freeman, Harry C. A Brief History of Butte, Montana: The World's Greatest Mining Camp. Chicago: Henry O. Shepard Company, 1900.
- Gammons, Christopher H. and Terence E. Duaime. "Long Term Changes in the Limnology and Geochemistry of the Berkeley Pit Lake, Butte, Montana." *Mine Water and the Environment* 25 (2006):76-85.
- Gammons, Christopher H., John J. Metesh, and Terence E. Duaime. "An Overview of the Mining History and Geology of Butte, Montana." *Mine Water and the Environment* 25 (2006): 70-75.
- Gammons, Christopher H., John J. Metesh, and Dean M. Snyder. "A Survey of Geochemistry of Flooded Mine Shaft Water in Butte, Montana." *Mine Water and the Environment* 25 (2006): 100-107.
- Gunewardena, Nandini and Mark Schuller, eds. *Capitalizing on Catastrophe: Neoliberal Strategies in Disaster Reconstruction*. Lanham, MD: Altamira Press, 2008.
- Hammett, Dashiel. Red Harvest. 1929. Reprint, New York: Vintage, 1989.
- Hanna, Stephen P. and Vincent J. Del Casino, Jr., eds. *Mapping Tourism*. Minneapolis: University of Minnesota Press, 2003.
- Hardesty, Donald. "Issues in Preserving Toxic Wastes as Heritage Sites." *The Public Historian* 23 (Spring 2001): 19-28.

- Hird, John A. *Superfund: The Political Economy of Environmental Risk*. Baltimore: Johns Hopkins University Press, 1994.
- Hurley, Andrew. Environmental Inequalities: Class, Race, and Industrial Pollution in Gary, Indiana, 1945-1980. Chapel Hill: University of North Carolina Press, 1995.
- Igler, David. Industrial Cowboys: Miller and Lux and the Transformation of the Far West, 1850-1920. Berkeley: University of California Press, 2001.
- Isenberg, Andrew C. *Mining California: An Ecological History*. New York: Hill and Wang, 2005.
- Isokait, Douglas Neil. "Natural Resource Damage Restoration in the Upper Clark Fork River Basin, Montana: A Policy Perspective." PhD diss., University of Maryland, Baltimore County, 2010.
- Klingle, Matthew. *Emerald City: An Environmental History of Seattle*. New Haven: Yale University Press, 2009.
- Langewiesche, William. "The Profits of Doom." Atlantic Monthly, April 2001.
- LeCain, Timothy J. Mass Destruction: The Men and Giant Mines that Wired American and Scarred the Planet. New Brunswick: Rutgers University Press, 2009.
- Long, Bill. *Pit Driver: Remembrances of a Berkeley Pit Haul-Truck Driver*. La Habra, CA: Aljon Graphics, 2007.
- MacCannell, Dean. *The Tourist: A New Theory of the Leisure Class*. New York: Schocken Books, 1976.
- MacMillan, Donald . Smoke Wars: Anaconda Copper, Montana Air Pollution, and the Courts, 1890-1920. Helena: Montana Historical Society Press, 2000.
- Malone, Michael P. The Battle for Butte: Mining and Politics on the Northern Frontier, 1864-1906. Seattle: University of Washington Press, 1981.
- Meinig, D. W., ed. *The Interpretation of Ordinary Landscapes: Geographical Essays*. New York: Oxford University Press, 1979.
- Mellinger, Philip J. Race and Labor in Western Copper: The Fight for Equality, 1896-1918. Tucson: University of Arizona Press, 1995.
- Miller, James Nathan. "Cowboys, Copper Kings and Coal: A Montana Montage." *Reader's Digest*, October 1979, 170-178.

Miller, Nathaniel. "The Pit." Virginia Quarterly Review (Fall 2010): 140-153.

- Mintz, Joel A. *Enforcement at the EPA: High Stakes and Hard Choices*. Austin: University of Texas Press, 1995.
- Mitchell, Don. "Writing the Western: New Western History's Encounter with Landscape." *Ecumene* 5 (1998): 7-29.
- Montana Department of Commerce, Office of Tourism. "Tourism Marketing Plan July 2011-July2012." June 7, 2011.
- Montana Department of Social and Rehabilitation Services. *Statistical Report*. 1983-1995.
- Morin, Bode J. "Reflection, Refraction, and Rejection: Copper Smelting Heritage and the Execution of Environmental Policy." PhD diss., Michigan Technological University, 2009.
- Murphy, Mary. *Mining Cultures: Men, Women, and Leisure in Butte, 1914-41*. Urbana: University of Illinois Press, 1997.
- Nakamura, Robert T. and Thomas W. Church. *Taming Regulation: Superfund and the Challenge of Regulatory Reform*. Washington, DC: Brookings Institution Press, 2003.
- Navin, Thomas R. *Copper Mining and Management*. Tucson: University of Arizona Press, 1978.
- Pezzullo, Phaedra C. *Toxic Tourism: Rhetorics of Pollution, Travle, and Environmental Justice*. Tuscaloosa: University of Alabama Press, 2007.
- Pomeroy, Earl. In Search of the Golden West: The Tourist in Western American. 2nd ed. Lincoln: University of Nebraska Press, 2010.
- Pretes, Michael. "Touring Mines and Mining Tourists." *Annals of Tourism Research* 29 no. 2 (2002): 439-456.
- Punke, Michael. *Fire and Brimstone: The North Butte Mining Disaster of 1917.* New York: Hyperion, 2006.
- Quivik, Fredric L. "The Industrial Undergirding to the Vernacular Architecture of Butte and Anaconda." *Drumlummon Views* 3 (Spring 2009): 27-72.

Regional/Urban Design Assistance Team. "Summary Report on Butte, Montana." 1972.

Relph, Edward. Place and Placelessness. London: Pion, 1976.

Rothman, Hal K. *Devil's Bargains: Tourism in the Twentieth-Century American West.* Lawrence: University Press of Kansas, 1998.

——, ed. Reopening the American West. Tucson: University of Arizona Press, 1998.

- Sauer, Carl O. "The Morphology of Landscape." University of California Publications in Geography 2 (1925): 19-54.
- Shields, Rob. *Places on the Margin: Alternative Geographies of Modernity*. New York: Routledge, 1992.
- Shovers, Brian. "Remaking the Wide-Open Town: Butte at the End of the Twentieth Century." *Montana: The Magazine of Western History* 48, no. 3 (Autumn 1998): 40-53.
- Smith, Norma. *Jeannette Rankin: America's Conscience*. Helena: Montana State Historical Society Press, 2002.
- Stewart, Pamela J. and Andrew Srathern, eds. Landscape, Memory and History: Anthropological Perspectives. London: Pluto Press, 2003.
- Stroh, Michael. "True Chemistry." Popular Science, February 2008, 34-35.
- Swibold, Dennis L. Copper Chorus: Mining, Politics, and the Montana Press, 1889-1959. Helena: Montana Historical Society, 2006.
- Tidball, Eugene C. "What Ever Happened to the Anaconda Company?" *Montana: The Magazine of Western History* 47, no. 2 (Summer 1997): 60-68.
- Tuan, Yi-Fu. *Man and Nature*. Washington, DC: Association of American Geographers, 1971.

———. *Passing Strange and Wonderful: Aesthetics, Nature, and Culture*. Washington, DC: Island Press, 1993.

———. *Topophilia: A Study of Environmental Perception, Attitudes, and Values.* Englewood Cliffs, NJ: Prentice-Hall, 1974.

U.S. Bureau of the Census. *Population and Housing*, 2000: Summary Population and Housing Characteristics: Silver Bow County, Montana. Washington, DC: U.S. Government Printing Office, 2001.

U.S. Department of the Interior. Butte, Montana: A Project Report. 1981.

- U.S. Environmental Protection Agency. "Five Year Review." ftp://ftp.epa.gov/r8/sbcbutte/FiveYearReviewReport-June2011/Volume3_ButteMineFloodingOU/Vol3_ButteMineFloodingOU.pdf.
- ------. "SARA Overview," http://www.epa.gov/superfund/policy/sara.htm.
 - ——. "Superfund Program: Silver Bow Creek/Butte Area." http://www.epa.gov/region8/ superfund/mt/sbcbutte/index.html.
- ———. Various records from EPA Records Center. Helena, Montana. Region VIII File 4010417. http://www.mtech.edu/clsps/ptc/sciencesocietysuperfund/ archival_materials.html.
- Urry, John. The Tourist Gaze. 2nd ed. London: Sage Publications, 2002.
- Waterton, Emma and Steve Watson, eds. *Culture, Heritage and Representation: Perspectives on Visuality and the Past.* Farnham, England: Ashgate, 2010.
- Work Projects Administration. Copper Camp: Stories of the World's Greatest Mining Town, Butte, Montana. New York: Hastings House, 1943.
- Wrobel, David M. and Patrick T. Long, eds. *Seeing and Being Seen: Tourism in the American West.* Lawrence: University Press of Kansas, 2001.

Wyckoff, William. "Postindustrial Butte." Geographical Review 85 (1995): 478-496.