

# INTRODUCTION

October 5, 1974: Idaho governor Cecil Andrus had an announcement to make. The first-term Democrat, a conservationist who had campaigned on a pledge to block an open-pit molybdenum mine in central Idaho's White Cloud Mountains, informed Idahoans that the Bunker Hill Company had reached an agreement with the state to drop its plans to sponsor a lead-zinc trade group's study of the Kellogg area's lead health scare. The company would instead support a study of the situation by the Idaho Department of Health and Welfare.<sup>1</sup> The governor also noted that Bunker Hill had agreed to provide "appropriate medical treatment to those affected" by the lead outbreak and that Bunker Hill would take steps to reduce its lead and particulate emissions.<sup>2</sup> The announcement came a month after the revelation that Kellogg-area children, in the wake of the subsequently infamous "bag-house fire" at Bunker Hill's lead smelter, had been found to have among the highest blood lead levels ever recorded. Eighty percent of 370 tested children living within 2.5 miles of the smelter tested at levels considered to be cause for medical concern and 41 of these had clinical lead poisoning.<sup>3</sup> Despite the seriousness and magnitude of the situation, Andrus's statement must have come as something of a surprise to politically astute Idahoans. The governor's announcement was evidence of occurrences rarely if ever witnessed in Idaho politics: publicly challenging Bunker Hill, the north Idaho mining and smelting giant that was the state's second-largest employer, and winning the confrontation.

In the weeks since news of the lead epidemic had broken, Bunker Hill had been unusually reticent, issuing only a press release expressing concern over the situation and asserting that retesting would show the State of Idaho Centers for Disease Control (CDC) blood lead results to be in error. Quietly, however, the company had been active, recruiting the International Lead-Zinc Research Organization (ILZRO), an industry-financed scientific research organization, to perform a study of the lead health situation in Kellogg. Based upon the organization's track record, Bunker Hill would have had good reason to believe that an ILZRO study

likely would minimize the health implications of the lead outbreak and cast doubt upon the company's culpability in the affair.<sup>4</sup> Dr. James Bax, head of the Idaho Department of Health and Welfare, caught wind of the proposed study, however, and publicly blasted it, asserting that the public was unlikely to believe the results "of a study funded by lead and zinc industries."<sup>5</sup> A week later, Governor Andrus made his announcement.<sup>6</sup> The north Idaho giant had blinked.<sup>7</sup> While it did not grab many front-page headlines, the event marked a significant shift. Idaho, like a number of states in the 1970s, was becoming less deferential to large industry and more protective of the environment and human health.

The "environmental turn" of the 1960s and 1970s in the United States undoubtedly marked a watershed in the nation's history. The enactment of a host of major national environmental laws and the creation of federal agencies to protect the environment and worker health—prominent examples include the Clean Air Act, the Federal Water Pollution Control Act Amendments of 1972 (popularly known as the Clean Water Act), the Environmental Protection Agency (EPA), and the Occupational Safety and Health Administration (OSHA)—challenged the right of industry to pollute and to expose employees to unsafe working conditions. In Idaho, as in much of the United States, prodevelopment attitudes and values had until that time largely trumped all other concerns. In the Inland Empire—the region that is centered on Spokane, Washington, and includes much of northern Idaho and eastern Washington—the productivity of the mines, mills, lead smelter, and zinc refinery of the Coeur d'Alenes (the locale that is the focus of this work, a roughly thirty-by-ten-mile area that runs from the town of Mullan, a few miles west of Lookout Pass on the Idaho-Montana border, to the Cataldo Mission about twenty-five miles east of the City of Coeur d'Alene) were sources of pride and the subject of numerous feature stories celebrating the region's progress. If the gray, barren South Fork of the Coeur d'Alene River that flowed from the mining district or the foul, acrid smoke that issued from the Bunker Hill smelter were mentioned, it was as the necessary price for progress, a classic tradeoff for the benefits of modernization that included stable employment at decent wages for many locals. While Kellogg residents likely would have acknowledged the basic realities of their community's natural environment—the bad-smelling, acidic air; the brown lawns and barren hillsides; the "dead river" that supported no aquatic life—until the "environmental turn" it appears that most would have accepted the tradeoff of environment for economy.

Around 1970, however, attitudes about pollution and the environment began to shift, both nationally and in the Coeur d'Alene mining district. At air quality hearings in Kellogg in 1971, although many still spouted the traditional "price for

progress” argument, others insisted that Bunker Hill needed to do a better job of controlling its air emissions, with some claiming that the town’s bad air was the reason it had lost population over the past decade. The Kellogg High School student president, Clint Waltham, speaking on behalf of the school’s six hundred students, referred to the town’s air quality as a “dangerous situation” and urged “that economy give way to ecology and that pollution should be stopped.”<sup>8</sup> The student body president was suggesting a new and radically different approach. Waltham’s views, which would have been deemed odd or eccentric in the Coeur d’Alenes only a few years earlier, by the early 1970s represented the mainstream values of the Kellogg High student body, and as such, had to be taken seriously by the community.<sup>9</sup> As it turned out, Waltham’s statement was a harbinger. For the rest of the 1970s, the Coeur d’Alenes’ mining and smelting concerns, long accustomed to primacy in the region, found themselves increasingly on the defensive as they battled some environmental regulations and spent large sums to comply with others.

The transition experienced in the Coeur d’Alenes conforms closely to sociologist Ulrich Beck’s theorization of two discrete stages of modernity: “classical industrial society” and “advanced modernity.” Under the former, “the ‘logic’ of wealth production dominates the ‘logic’ of risk production,” while “in the risk society [i.e., advanced modernity] the logic is reversed.”<sup>10</sup> Whereas in classical industrial society “everyone is engaged in the struggle for *his* job (income, family, little house, automobile, hobbies, vacation wishes, etc. If those are lost, then you are in a tight spot in any case—pollution or no),” in advanced modernity, “modernization *within* the paths of industrial society is being replaced by a modernization *of the principles* of industrial society . . . the gain in power from techno-economic ‘progress’ is being overshadowed by the production of risks.”<sup>11</sup> The concerns with, calculation of, and efforts to minimize risk are hallmarks of the advanced modernity that has been achieved in the United States and Western Europe over the past few decades. In the Coeur d’Alenes, partially due to shifts in local attitudes and to new federal legislation and the consequent heightened scrutiny of federal and state regulators, the 1970s marked the watershed decade during which pollution and environmental risks came to outweigh traditional concerns for local prosperity and technological development.<sup>12</sup>

During this period, both in the Coeur d’Alenes and nationally, the truly massive levels of personal risk and environmental harm that traditionally had been off-loaded by corporations onto workers, the community, and the environment came to be seen by the public as an excessive price to pay for their industrial standard of living. Simply put, people and their elected representatives began to demand a re-allocation of those risks and harms so that the quality of life in places like Kellogg

would be improved. This historic shift, one manifestation of which was the “environmental turn” of the 1970s, led not only to the passage of landmark environmental legislation but ultimately also to the outsourcing of much of the heavy, often dirty, industry of advanced economies such as the United States, to the lower-cost, less-regulated economies of the developing world (e.g., China), where the logic of classic industrial society still prevailed. Thus, the 1981–1982 Bunker Hill shutdown should not be viewed as an example of environment versus economy any more than the public and government responses to Kellogg’s 1973–1974 lead health epidemic should be. Both incidents were part and parcel of the dynamics of industrial modernity—in this case, the shift in the United States from a classic industrial to an advanced modern society. Regardless of political persuasion, since at least the 1970s US citizens by and large have been unwilling to accept unsafe air or drinking water as the “price of progress” (as the uproar in 2016 over lead-tainted water in Flint, Michigan, evidences).

The themes of risk and tradeoffs, so central to the modern predicament, are crucial to this book. Issues of place, power, values, economics, and the environment lie at its core. This is essentially the history of a place—principally the City of Kellogg and the Coeur d’Alenes region of northern Idaho.<sup>13</sup> A pressing interest in questions of environmental change in the Coeur d’Alenes, involving both human and nonhuman nature, and in the complex causes of that change, is a key driver of this work.<sup>14</sup> Understanding the profound changes in the land that have occurred in this place over the past 130 years, of course, necessitates some study of the social and cultural forces that have been at work. As Matthew Klinge has written in his environmental history of Seattle, “place making is neither disinterested nor benign . . . place is never incidental.”<sup>15</sup> The landscape of the Coeur d’Alenes—the product of over 130 years of mining, sixty-five years of smelting, and a thirty-plus years of environmental remediation as a federal Superfund site—is certainly neither benign nor accidental. In this place a history of economic decisions made by mining companies, a history of technological decisions regarding which processes and machinery to use in smelting, milling and mining ores, and a history of, in the words of Anne Whiston Spirn, “which groups had the power to impose certain ideas and values before weighing the consequences,”<sup>16</sup> are inscribed upon the landscape, and on the bodies of many who lived and worked there.

Issues of political power and the environment have been deeply intertwined in the Coeur d’Alenes. In the early 1930s a group of Coeur d’Alene City residents challenged the power of upstream mining companies to continue to pollute the lower Coeur d’Alene River and Lake Coeur d’Alene. Though influential enough to prompt the Idaho legislature to sponsor a study of the conditions of the Coeur

d'Alene River watershed that resulted in the installation of some modestly effective pollution-control technology, the group ultimately lacked the power to achieve their goal. By the late 1960s, however, due to a significantly enhanced federal Clean Water Act, all of the upstream mining companies had installed the type of tailings impoundment system the Coeur d'Alene residents had advocated, and the river had begun its long journey toward recovery. Another example concerns Bunker Hill lead smelter workers. From the time of the smelter's completion in 1917, working there constituted an uncomfortable, demanding, and, due to the toxic nature of lead, potentially unhealthy job. Smelter workers, particularly after they gained true union representation in 1942, demanded safer and healthier working conditions. Until the 1970s, however, when a new federal law and a federal agency, OSHA, tilted the balance of power in their favor, the workers garnered only minimal improvements. But with federal law and OSHA backing their demands, smelter workers gained significant improvements in safety and health conditions at the plant. Shifts in cultural norms and power relations over time have profoundly shaped the physical environment of the Coeur d'Alenes.

A history of place, and an environmental history, this book seeks not only to trace significant aspects of the ecology of human and nonhuman nature in the Coeur d'Alenes, but also to explain how and why the environment of this place came to be as it is. That explanation involves untangling a number of different histories: mining and milling economics and technologies; the attitudes, ideas, and tactics of those running the district's major mining operations; labor-management relations, the thinking and strategies of the district's labor unions; and the ideologies and policy inclinations of local, state, and federal officials over time, to name a few.

A particular substance, lead, is central to this work. The heavy, ductile, versatile, highly toxic mineral plays a key role in every chapter, and one chapter is devoted entirely to "the useful metal." Having served as both an economic pillar and the toxin most responsible for devastating the Coeur d'Alenes' environment, lead's significance to the place is hard to exaggerate. This raises the question of the agency of nonhuman, and even nonsensate, actors. By traditional definition, such actors cannot be said to possess agency because they lack intentionality, and thus cannot willfully affect situations. Nonhuman actors such as lead can play important roles in history, however. Once aerosolized by a smelter and dispersed across a landscape, for instance, lead ends up in house dust and yard dirt that small children readily ingest in the normal course of play. Inside the child's body, lead goes on a path of cellular destruction that can lead to severe health problems, and even death in rare cases.

Human bodies, and their susceptibility to environmental insult, is another focus of this work. During the modernist turn in Western medicine that lasted from the late nineteenth century until the 1950s and 1960s, bodies were seen as largely impervious to their environments. Concerned primarily with the pathogens acting inside bodies, the medical profession became uninterested in the ability of environments to affect health. Post–World War II worries about radioactive fallout, pesticides, and smog, however, prompted the medical community to reconsider the environmental sources of disease.<sup>17</sup> The bodies of residents of the Coeur d’Alenes, and those of Bunker Hill smelter and zinc refinery workers, are central subjects of my work. Children’s bodies, owing to their heightened susceptibility to lead poisoning, receive particular attention. Indeed, it was the bodies of children who lived close to the Bunker Hill smelter, as viewed through the lens of blood lead readings, that in September of 1974 alerted the world to the fact that the Kellogg area had both a severe environmental lead problem and a severe lead health issue on its hands. Until that time, environmental regulators and the Bunker Hill Company had been focused almost exclusively on the community’s sulfur dioxide problem. Kellogg’s 1973–1974 lead health epidemic offers a textbook example of the inextricable linkage between human bodies and local environments.

The concept of risk, and the even larger notion of tradeoffs—both inherent to the modern predicament—are fundamental to this work.<sup>18</sup> The systems of capitalism and industrialization that undergird modernity predicate heightened levels of social and individual risk—from pesticide-laden food to nuclear radiation—and environmental damage. Such downsides, however, are not the result of modernization’s failures but of its successes.<sup>19</sup> Heightened risks and environmental harms are by-products of the very successes of industrial capitalism at increasing material abundance and technological sophistication that have been celebrated in such catchphrases as “the American way of life.” These tradeoffs are ubiquitous. Health risks to workers in “the dangerous trades” and to nearby residents from polluting industries have been among the harsher consequences of the modern predicament.

As Joseph Stalin was fond of saying, you can’t make an omelet without breaking eggs.<sup>20</sup> In discussing what he calls “the tragedy of development,” philosopher Marshall Berman describes the inherent duality of the modern project, the impossibility of realizing the new, modern world “with clean hands.”<sup>21</sup> While lauding “the luminous . . . possibilities that pervade modern life,” and seconding Karl Marx’s view that in the dynamics of capitalist development lie “a new image of the good life . . . a process of continual, restless, open-ended, unbounded growth,” Berman also acknowledges that modernism’s “insatiable development has left spectacular

devastation in its wake.”<sup>22</sup> One need only wander the devastated landscape of the Bunker Hill Company’s old works, at the Bunker Hill Superfund site, to experience the truth of Berman’s observation.

This book also deals with issues of community, focusing particularly on the small mining and smelting city of Kellogg. Because it was so beholden to its long-time chief employer and benefactor, the Bunker Hill Company (Kellogg residents long referred to the company as “Uncle Bunker”), an exploration of community in Kellogg necessarily involves an investigation of the relationship between the town and the company. With the abrupt closure of Bunker’s operations in the early 1980s, however, Kellogg was forced to find a new economic rationale and identity. The community’s fraught transition from a quintessentially “old West” extractive industry town to a “new West” recreation community is the focus of this work’s final chapter.

Chapter 1, “Uncle Bunker’s Town,” sets the stage, exploring the place, the community, and the corporation where much of the action in this book takes place. The chapter traces the economic and social structure of Kellogg and the Coeur d’Alenes during the long period (1885–1982) when mining and smelting constituted the area’s *raison d’être*. Bunker Hill’s paternalistic relationship with Kellogg is examined and contextualized and the extent to which Kellogg can be seen as a “company town” is analyzed. Chapter 2, “The Useful Metal,” addresses humankind’s long and problematic history with lead, tracing the metal’s deep imbrication in modern industrial civilization and the social costs the toxic substance has exacted. The next three chapters trace the use of various aspects of the environment as “sinks” for the mining district and Bunker Hill’s unwanted wastes—their pollution. As was the rule for industry in the nineteenth and much of the twentieth century, the “ultimate sinks”—rivers, lakes, seas, airsheds—were employed first for the elimination of wastes, before the pollution began working its way back up through the food chain into human bodies. Chapters 3 through 5 describe a history that closely follows this pattern. Chapter 3, “Lead Creek,” details the ecological effects of the intense mining and milling activity that has taken place along the upper South Fork of the Coeur d’Alene River and its tributaries since the early 1880s on the entire Coeur d’Alene watershed, including the Coeur d’Alene River and Lake Coeur d’Alene. The chapter describes the effects of different types of milling technology on the riverine environment, and highlights the periodic bursts of contention from downstream farmers and Coeur d’Alene City residents over the ecological problems caused by mine tailings flushed their way from the mining district. The chapter concludes with a discussion and assessment of the efforts made since 1968 to restore the ecological health of the watershed.

Chapter 4, “Foul Humours,” describes the construction of the Bunker Hill lead smelter and zinc refinery in the first decades of the twentieth century and the company’s perennial concerns with complaints over its sulfur-dioxide-caused “smoke damage” to trees and other vegetation. Bunker’s efforts to neutralize such threats through deals with the US Forest Service (USFS) and the purchase of smoke easements from area landowners are also traced. The chapter concludes with a discussion of the company’s novel revegetation efforts in the 1970s and its struggles to meet the heightened burdens of federal and state sulfur dioxide regulations—Bunker’s search to make the local airshed “legible” and its ultimate decision to build the “tall stacks” as an expensive technological fix. Chapter 5, “Raining Down Poison,” focuses primarily upon issues of lead health in Smelterville and Kellogg, the population centers closest to the smelter. Opening with a description of what must rank as the most dramatic episode in the environmental history of the Coeur d’Alenes, the 1973–1974 lead health epidemic, the chapter goes on to examine Bunker Hill’s role in the situation. The issue of how human, and particularly children’s, health has been affected by significant emissions of aerosolized lead, how this threat has been understood, and how it has been dealt with, are central to this chapter. It concludes with a discussion of the work done in the Superfund era (1983–present) to deal with the threat to children’s health posed by the environmental lead that remained in the Kellogg area following the closure of the smelter.

Chapter 6, “On Lead’s Front Lines,” addresses the lead health issues that faced workers in Bunker’s lead and zinc plants both during and, in many cases, long after their employment. In the early days of the smelter, company managers understood that lead poisoning was a danger for their workers. The chapter details the company’s early approach to the issue and tracks its varied, but largely ineffectual, attempts to ameliorate workers’ lead problems. It traces the trajectory of union complaint over the lead health situation at the smelter, and outlines the increase in worker protections at the lead and zinc plants following the creation of the Occupational Safety and Health Administration in 1971. The chapter concludes with a discussion of recent medical studies that have indicated health damage to Bunker Hill smelter workers, and shortened life spans, from their heavily “leaded” work environment.

Chapter 7, “A Brave New World,” examines Kellogg’s history as a postindustrial community in the wake of Bunker Hill’s closure in 1982. It describes the community’s struggle to shift from a mining and smelting town dominated by a single corporate entity to a self-reliant, Bavarian-themed ski village. Examining not only the difficulties and identity conflicts inherent in this transition, the chapter also addresses the very different economic realities that have confronted Kellogg in its

new guise. It additionally traces the community's highly contentious relationship with the Environmental Protection Agency, the federal agency that since Bunker's demise has emerged as a major power and economic driver in the Coeur d'Alenes.

All this said, the question of why anyone should care about the history of a small, polluted mining and smelting region in northern Idaho—of why it matters—seems a valid one. The answer is that there is a good deal to be learned from a well-executed study of such a place. In many ways, the story of the Coeur d'Alenes is a microcosm of the modern history of the United States, and a multitude of its communities. From the time of the discovery of gold on Pritchard Creek in 1883, the forces of modern industrial society have operated with a particular freneticism and destructive capacity in this place. Home to one of the most productive mining districts in world history and to the Bunker Hill Company, for decades one of the nation's largest integrated mining and smelting operations, for 130 years the Coeur d'Alenes region has produced lead, zinc, and silver that have played an important role in powering national and global development, yielding over twenty-six billion dollars' worth of minerals.<sup>23</sup> As with many industrial activities, however, production has come at a significant cost. Dead swans, leaded children, a sterile river, toxic backyard dirt and house dust, denuded hillsides—these and more have been part of the place's hard reckoning. Lead from the Coeur d'Alenes was used in television sets, automobiles, gasoline, paint, computers, X-ray shields, auto batteries, and other products purchased by consumers in a global market. Although the disseminations of lead around the world via consumer goods, especially paint and gasoline, had major negative health consequences, it also helped to bring affordable products to global consumers and contributed to the vaunted American standard of living. People enjoying their cars and televisions a few decades ago in Dubuque and Dusseldorf, however, should have understood (but most likely did not) that they did not pay the full freight of their goods. This is because the pollution costs associated with mining, milling, and smelting the lead in those products was, to borrow a term from economists, externalized. Simply put, the social costs of leaded soils and people, dead horses, and poisoned rivers in the Coeur d'Alenes was passed on to the environment and human bodies to absorb.

In its 130 years the Kellogg area has been through a veritable trifecta of American modernity: intensive industrial development and environmental despoliation, large-scale environmental cleanup, and redevelopment as a recreational community. Once a strong union town filled with homeownership hard hats and busy merchants, Kellogg's shrunken population now struggles to sell lattes and condos to out-of-state visitors. The metals-laden smelter smoke is gone and the South Fork no longer runs the color of a lead milkshake. Gone too are most of the high-

paying mining and all of the decent-paying smelting jobs awaiting newly minted high school graduates.<sup>24</sup> In its historic boom-and-bust trajectory, Kellogg's story echoes that of many communities, both in the American West, where the boom-and-bust of natural resource industries has been a commonplace, and across the globe. It is hoped that this work will both help to illuminate those shared historical patterns and assist in what social commentator and historian Mike Davis calls "excavating the future."