



THE STRUGGLE
TO REVIVE
AN AMERICAN TOWN

Gillian Lucas

Lead ville

The Struggle to
Revive an
American Town

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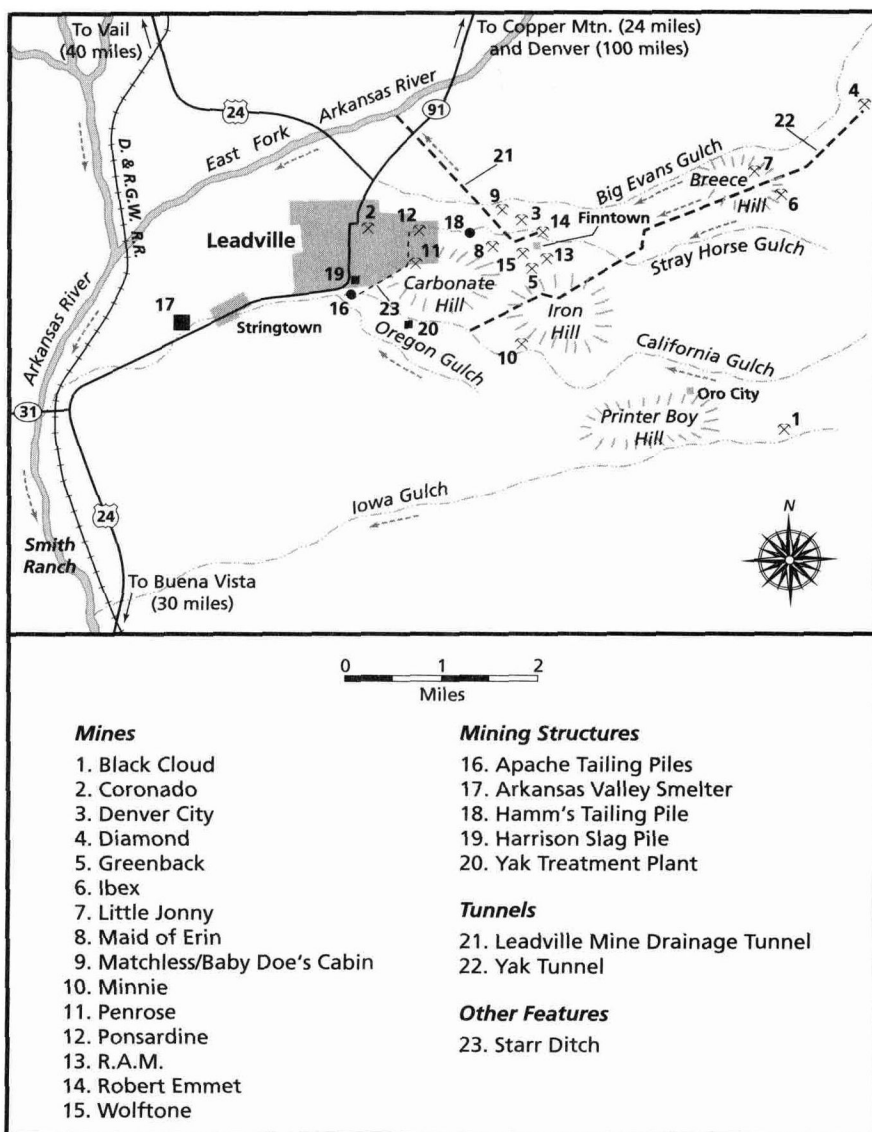
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For my parents, Robert and Carol





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Prologue

Leadville, Colorado, sits on the Continental Divide above a beautiful high valley in the Rocky Mountains, at 10,200 feet the highest incorporated town in North America. Just over the passes to the north lie the ski resorts of Copper Mountain, Vail, and Breckenridge; to the west over Independence Pass, drivable only in the summer, is Aspen. Picturesque Leadville averages two hundred inches of snow a year, and snow flurries have even graced the Fourth of July parade. The temperature can dip to thirty degrees below zero, but rarely reaches eighty in the summer. At that altitude, it's hard to keep coffee warm, baking is a challenge, and a flight of stairs leaves most visitors gasping for breath.

In 1998, living in Denver, I had never heard of Leadville until I learned that the residents were battling the Environmental Protection Agency (EPA) to preserve their mine waste dumps. At the time, I knew little about historic mining, and I couldn't imagine the desire to save a "waste dump" or who would be interested in doing so. I moved away before I could find out, but my curiosity simmered, and several years later I had an opportunity to spend a few days in the town.

Leadville is a friendly place, and that August I was soon exploring the hills in old pickup trucks and learning about much more than the



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waste rock piles that have dotted Leadville's hillside for more than a century. The story, I learned, reached far beyond historic preservation or even environmental protection to a town struggling for nearly twenty years to retain a way of life—a mining identity—in the face of economic hardship and governmental intervention. But something had happened in the three years since I had first heard about Leadville's bitter fight. Resentment against the federal government was still there, but I sensed a new spirit of cooperation between the EPA and the townspeople that I hadn't anticipated.

Just before leaving town, I was standing beside the Arkansas River talking with a rancher when dark clouds suddenly blew over the mountains. As a few flakes began to fall, I watched the Arkansas winding its way down the valley. It had been explained to me that, despite the breathtaking scene, for miles the river and meadows were poisonous to fish, wildlife, and livestock that relied upon them. I realized I was more intrigued and perplexed by the complex problems facing restoration of abandoned mining sites than I had been before I arrived. As I turned away from the river, churning now by wind from the advancing storm, I was anxious to get off the mountain, but I knew I would be back. I wanted to know if this new cooperative spirit I had witnessed in town could possibly lead to the river's revival.

A year later I moved to Leadville to get to know the town better and to try to understand its past, including its fascinating journey over the past twenty years, and its prospects for the future. Subsequently, I spent hundreds of hours talking with the people who appear in this book and many more who do not; I became a regular at city, county, and federal government meetings; and I spent hours in the library scouring through more than twenty years of local newspapers.

In Leadville, I found many of the complex challenges facing the nation as we attempt to restore the environment after more than a hundred years of extracting minerals from the earth, and other disruptive practices. The scope of the waste left behind in Leadville and elsewhere is astonishing. This subject is larger than Leadville, and larger even than the dozens of other western mining towns grappling

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with similar issues. But Leadville is illustrative of the challenges we, as a nation, must face in deciding what to clean up, who pays for it, and how much risk to our health we are willing to accept.

The story that follows is about a mountainside covered with mining ruins, a blue-collar town, and a powerful federal agency, but it begins and ends with the river.

1

Living Downstream

Doc Smith didn't get the message until late afternoon, after he had finished his chores and made his way across the snowy pasture toward home, his heifers watching his progress from behind a gnarled wood fence. It had been a good day for working outside; only thirty-five degrees but sunny, and the air at two miles above sea level warmed to a degree that surprised visiting flatlanders. Doc crossed the wide dirt driveway and climbed the wooden steps to his house one at a time, leading with his right leg, his left leg followed stiffly behind. At the top, he stomped the snow from his boots and entered the cluttered hominess of the combined dining room and kitchen, the center of activity at the Smith Ranch.

The message Doc found waiting for him was from Dr. Dennis Linemeyer, the young man who had replaced him at the veterinary clinic. Doc was only fifty-two years old, but times were tough and the town could no longer support two vets. Besides, Doc had a ranch to tend. He picked up the phone and sat down at the dining table beside the antique woodstove that warmed the room.

Dr. Linemeyer told Doc he had received a call earlier in the day. The man wouldn't leave his name, but he had a warning: "Tell Doc Smith his river is going to run red." That was all the anonymous caller



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would say, but it was enough. Doc knew what that meant because something similar had been happening to the river for years, though usually on a Friday night before a long holiday weekend and this was Wednesday. Doc had never been alerted before, and he wondered what that could mean. He went back outside and trudged three hundred yards down the driveway to have a look.

The Arkansas River, one of the longest in the United States, begins modestly on the side of a craggy mountain high up in Colorado's Rocky Mountains just ten miles north of Doc's ranch. It quickly makes its way to the valley floor and snakes southward, losing altitude but gaining momentum as it travels 120 miles through the wide Arkansas River Valley before turning southeast across the Kansas Plains to Arkansas and entering the Mississippi River. When Doc stepped onto his old railroad tie bridge that afternoon and peered over the side, he could see the river's rocky bottom through the clean, icy-cold water.

Doc straightened up and looked east toward town and the hills rising behind it and wondered what was coming. Then he turned west and headed back home—a compound consisting of his log-and-wood-panel house; a vacant 1870s farmhouse; several large barns, deep brown from a century of harsh winters; and a number of sagging old structures long since abandoned. Colorado's two highest peaks, Mount Massive and Mount Elbert, towered over his rustic homestead and the snowy surroundings.

Throughout the evening, Doc worried about the anonymous warning and continued to check the river, but found nothing unusual. After the ten o'clock news, he grabbed a flashlight and his coat and tramped through the snow to the river's edge for one last look before bed. Shining the light into the water, Doc couldn't see that the river was already changing, and in a strange way, he was disappointed. He had expected something to happen and began to think the caller had been wrong.

Doc went back to his house, climbed the stairs to the bedroom, and packed a few clothes for a meeting in Gunnison the next day before getting into bed. Lying in the darkened room next to his wife,

he remembered all of the other times he had worried about the river and wondered what he would find in the morning.

Earlier that day, five miles east of Doc's ranch, rusty-hued sludge had poured out of an old tunnel cut into the hillside, a "Danger! Do Not Enter" sign affixed to one of the decaying wooden beams holding up the tunnel's entrance. The sludge entered California Gulch, one of many crevices dug into the mountains by glaciers that drain snow and rain into the valleys below. But this sunny winter afternoon, the gulch carried a vast toxic hemorrhage that cut a swath through fresh snow as it plunged down the hillside past dormant aspens and pine trees. It edged by the hard-knocks town of Leadville, picking up toxic strength as it flowed past the enormous mound of mining spoils that loomed at the end of Leadville's main street. The sludge continued flowing west, over silvery green sage; past Stringtown, a collection of trailer homes and run-down wooden structures; and through the shadows of undulating gritty black hills before entering Doc's beautiful valley. There it poured into the Arkansas River.

For days previously, the sludge had been backing up into the Irene mine shaft. The Yak Tunnel that normally drained groundwater from the Irene, among numerous other mines, must have been blocked by the rotting timbers and rock walls that periodically toppled over and prevented the contaminated water from draining into California Gulch. The manager of ASARCO Inc., the mining company responsible for the tunnel, decided it was time to go in and have a look around.

Nine ASARCO employees had ducked past the "Danger!" sign and entered the tunnel. With the light affixed to their hard hats leading the way, the men walked along the sludge-covered floor of the tunnel, their passage clearing a channel. Along the way, they encountered several areas of fallen timber and rock that dammed the flow of water and "slime," as the manager would later note in a handwritten report. In some areas, the stagnant water reached chest height. Working in the dim light with little fresh air, the men removed much of the timber and rock obstructions so that "a considerable flow was running" by the time they left the tunnel.

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“None of the newer people enjoyed this trip very much,” the manager wrote in his report. “We all got very wet, very orange and very cold. I, nor did any one who made the trip before, quite expect the gravity of the problems we saw.” The old timbers were in terrible shape, and the group agreed that more blockages within the year were inevitable.

It would be hours before the consequences of ASARCO’s trip into the tunnel would be known, but they were devastating. The toxic torrent let loose consisted mainly of “yellow boy,” a miners’ term for the iron hydroxide that gave the river its rusty color, plus an assortment of other heavy metals, all dangerous in high quantities: zinc, copper, cadmium, manganese, lead, and arsenic. In recent years, the Yak had been draining 210 tons of these metals into the Arkansas River each year. California Gulch had long since been stained a permanent rusty orange.

Mining’s toxic by-product came from the hills, but for over one hundred years it had been flushed downstream, unchecked and unregulated and out of sight to those working in the mines. And it had had a disastrous effect on the valley below. For three miles south of the confluence of California Gulch and the Arkansas River, through the Smith Ranch, the Arkansas River had long been considered a dead zone. No wildlife, most notably fish, could survive the metallic-tainted water. For another sixty miles beyond the dead zone, few trout survived more than a couple of years.

Ranchers had been using the Arkansas River to irrigate their land and water their livestock for generations. The accumulation of metals from 130 years of mining the hills had taken its toll; acres of barren ground pocked the meadows, and the grass that did grow there was so mineral-rich that the foals and calves that grazed on it were poisoned to death.

The Smith family had taken the brunt of the contamination, living in the midst of the dead zone since 1879, when Doc’s grandfather, Henry, first homesteaded 160 acres of verdant meadows below two vast mountain peaks and the sparkling Arkansas River meandering right through the middle of it. Back then, timothy grass grew “as high

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as a horse's back," and Henry and his new neighbor, Huey Young, built an irrigation ditch, still known as the Smith-Young Ditch, to spread the clean, cold river water over the meadows. Doc's grandfather was in business, making hay for the area's milk cows and the mules that lived underground in the mines. But over the last twenty years of the eighteen hundreds, more and more waste from the mining operations was dumped into the Arkansas River, which soon became "rolling mud," as Henry described it. Timothy grass turned to stubble, and Henry's once-successful hay business floundered. Even then, Doc's grandfather knew the source of his problems. To prove it, he gathered up soil from his meadow and sent it over the mountains to the Agricultural College of Colorado in Fort Collins. The reply—the Environmental Protection Agency (EPA) would excitedly refer to it as "The Letter" seventy-five years later—dated July 30, 1906—confirmed Henry Smith's fears.

Dear Sir:

The sample of soil and letter pertaining thereto were duly received. The letter has been misplaced so I cannot answer your questions except as I remember them. You apparently know exactly the cause of your trouble i.e. mine water and mill tailings. The sample sent is so rich in the latter that we would think that you must have gathered the sample from the bottom of a ditch or stream. There is a large amount of soluble iron and zinc salts present either of which are injurious in such quantities.

Yrs, W. P. Headle

Mining, bringing fame and fortune to those just a few miles away, was killing Henry's meadows and his livelihood. All he could do was build another irrigation ditch, the Smith Ditch, to carry water from a creek farther west in the mountains. It was a long haul, but the water was cleaner, diluting the effects of the Arkansas River, and grass grew again, though not as it had thirty years earlier. Henry's son, Jim—Doc's father—decided livestock would be more profitable, and the ranch began raising cattle. But by 1940, as Leadville's mines increased

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production of lead and zinc in anticipation of World War II, the calves and foals began to come up lame and many died. And the cows were too skinny, unable to bulk up like cattle at the southern end of the valley. Jim Smith couldn't give his problems a name, but he knew they stemmed from the same place his father's had—mining waste draining out of the hills, and he would tell his son that many times over the years.

His son, Bernard—to become “Doc”—had grown up on the ranch watching the livestock suffer and he decided to become a veterinarian. He returned from school in the mid-1950s to be Lake County's only vet, starting his practice in the basement of a new house, built just a few yards from the 1870s farmhouse he and his father had grown up in. Doc was small in stature with a fine-boned handsomeness and well-groomed like his father and grandfather. In another era he would have been considered a “gentleman farmer,” as his grandfather had once been. Doc had what his wife would later describe as the Irish Catholic belief that the longer and harder one suffers the more points earned with God, something her German Protestant background didn't share. Doc earned a lot of points his first year back on the ranch.

The winter of 1957 had been cold—more snow and ice than normal, and the ground was frozen into slick concrete. By spring, the ranch was behind schedule; nearly May and the yearlings had not yet been dehorned or vaccinated. One day, Doc and a ranch hand were rushing to round up some unruly calves. “I was the guy who was always in too big of a hurry,” Doc would recall. He turned his horse quickly on the frozen ground and all four legs went airborne. As the horse crashed on its side, Doc heard his left leg snap like a willow stick. It didn't seem too bad at first. The hardened mountain men made a splint and eventually got Doc to the Leadville hospital, ten miles away, a few hours later. But Doc had fractured his lower leg in four places and crushed the blood vessels. Rushed to Denver—four hours over Loveland Pass in those days—the doctors amputated his leg just below the knee. Only in his mid-twenties at the time, Doc would never fully recover, fighting feelings of inadequacy and gritting through the pain of working the ranch on an amputated leg the rest of

his life, though he rarely let on and most people in town never knew despite his stiff gait.

Over the years, Doc earned a reputation for his patience, teaching young ranch hands to “cut nuts,” the western tradition that gives restaurants the prized Rocky Mountain oysters, and for his acrimonious sense of humor, softened by an impish smile and a sense of tease in his gravelly smoker’s voice. He brought to the ranch a redhead named Carol he had met on a blind date in college. Her lovely smile belied an even wickeder sense of humor than Doc’s. Though she’d grown up on the outskirts of Denver, still a cow town then, Carol loved the ranch, and Doc admired her toughness. Their good-natured humor helped them raise eleven children. Carol survived the neonatal onslaught by becoming a laid-back mother and housekeeper. If future surgeon George ended up wearing dirty, mismatched socks to school because he hadn’t bothered to pick up his clothes, that was fine with Carol. And she rarely wore her glasses in the house so she wouldn’t see the dust bunnies gaining mass in the corners.

But the contaminated ranch left them so poor the children were sometimes allowed just half an egg at breakfast. A high-altitude meadow should produce about two tons of hay per acre. “The best I ever got, when my wife wasn’t pregnant and was working her buns off out there, was up to 0.88 tons per acre. You can’t make a gosh darn living.”

Their troubles intensified in 1971 when ASARCO opened another lead, zinc, and silver mining operation up on the hill, sending yet more waste through the Yak Tunnel and into the Arkansas River. Doc complained about the contamination in public meetings, which didn’t make him popular with the mining companies, especially ASARCO. “I’m not sure when I began to have intimate relations with the bosses at ASARCO, but we swore at each other. I didn’t take them kindly, and they thought I was a pain in the ass.” Doc may have been a pain in the ass, but that was about it. With no clear regulations in place to stop the mining companies from dumping waste, Doc had no leverage.

But by 1970 a nationwide environmental movement was under-way, with the first Earth Day held in April of that year. Companies in