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Boom, the ghosts, and the importance of memory| A history of the Flint Creek watershed

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THE BOOM, THE GHOSTS, AND THE IMPORTANCE OF MEMORY:
A HISTORY OF THE FLINT CREEK WATERSHED

by

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B.A. Bowdoin College, 1990

presented in partial fulfillment of the requirements
for the degree of
Master of Arts
The University of Montana
1999

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8-12-99
Date
This is a history of people and place set in a watershed in southwestern Montana. It chronicles land use in the Flint Creek basin. It also examines how this land use history created a culture and sense of place for residents. The Flint Creek watershed shares elements of its history with much of the Rocky Mountain West. The historical record dates back several thousand years to Native Americans using the flint in the valley for spear tips. Since this time, the natural abundance of the basin has drawn visitors and settlers. Beaver trappers, loggers, ranchers, and miners all took advantage of basin resources. For the last 150 years this resource extraction has intensified. The 1860s discovery of silver ore in the Philipsburg area inspired a boom in population and prosperity. This boom was short-lived, but helped establish the towns of the watershed and the residents' perception that Flint Creek is a place of abundance. After the mining bust, agriculture played a stabilizing role, holding a core of population in the basin and maintaining a relationship with the land based on abundance.

Recently traditional resource extraction jobs have lost their dominant place in the Flint Creek economy. As in much of the rural West, this decline is linked to falling demand for natural resource products, waning abundance, and the rise of service jobs. Some places like Aspen have managed to sell their scenery and booped. Many others have faded quietly into ghost towns. Like most of the West, Flint Creek is destined for neither stardom nor oblivion. It continues to eke out an existence on the margins of the New West, with vestiges of the old ranching economy combining with glimmers of tourism and service jobs.

Understanding the way that Flint Creekers relate to their place is revealed in the culture and history they have created. Combining these stories with a more formal environmental history reveals boom, bust, and endurance in the basin. It reveals how crucial natural resources, particularly ore, grass, and water, have been to the settlement of the basin. Finally it reveals the way that some rural westerners relate to the landscape. The lessons from these insights can be applied to similar places in the West and help bridge the gap between generations of western migrants.
Acknowledgments

This project would have been impossible without the help of dozens of people who steered me, in my benighted state, to a measure of understanding of the rich complexity of the Flint Creek watershed. The Upper Clark Fork Watershed Steering Committee provided research funding, crucial contacts, and a lot of individual members' time to the paper. The Stephanie Ambrose-Tubbs Fellowship allowed me to concentrate on my studies. Pat McDonald, Eugene Manley, and Walter Johnson gave me their time and insight into a lifetime of living in the basin. The Granite County Museum allowed me to use invaluable documents in their collection and were gracious and hospitable. Thanks also to the Montana Historical Society and the K. Ross Toole Archives for assistance in research. My committee gave me the support, criticism, and encouragement to sustain a year and a half of work: thanks to Drs. Dan Flores, Janet Finn, and David Emmons. Thanks to all of the people in western Montana who kindly pointed me in the right direction and offered more help than I could have imagined. The mistakes are my own and don't reflect the quality of information and assistance I received. Finally thanks to my wife Shannon who suffered through reading dozens of drafts and who was my staunchest supporter and most able critic. Without her help this would still be scraps of research notes tucked into books on my desk.
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Introduction

The head gates still slide open in the spring and summer, and the cattle still trail up to the high country in search of good grass. The foundations of the mills crumble and vegetation creeps back onto the tailings piles. Out toward Interstate 90 a few sub-division signs have sprouted in the hay fields. In the background, the snowcapped Pintlers and Flint Creek Range fill my windshield. The creek of the same name runs down the center of this valley, stitching the place together. The place looks like Montana is supposed to - ranches and mountains. The weathered faces, callused hands, and pick-up trucks do nothing to dispel the myth that I have stumbled into the sort of rural Shangri-La that fires the imaginations of restless suburbanites across the country. Next to weathered lodgepole stock pens there are actually people fly-fishing. What I see as I roll south toward those lovely mountains is the history of the Rocky Mountain West writ small.

The Flint Creek watershed packs a historical punch that is subtly disguised by its bucolic landscape. There were no dramatic Indian battles here, no federal troops quelling strikes, no fiery orators born here, and no glamorous celebrities tooling down to Philipsburg in their Hum-vees. It is the breadth of history tucked into this one small basin that captures the imagination. Native Americans used the valley for at least 5,000 years, trappers and explorers poked through it in search of riches in the 1820's, silver mines boomed in the rocky hillsides, agriculture bloomed along the creek bottoms, fourth generation ranchers are still cutting hay and real estate agents are starting to nibble at the edges in search of marketable scenery.

While this valley is unique, it shares elements of its story with much of the Rocky Mountain West. All across the region there are places that
boomed with the discovery of silver or were stabilized by life-giving irrigation waters. Many of those places dried up and blew away when the critical resources that sustained settlement gave out or fell from market favor. The beaver trappers were ruined by overhunting and international fashion, while Virginia City was abandoned when the ore played out. The American West is littered with ghost towns that relied on some long vanished bonanza to sustain them.

Other places have survived and flourished in recent times on a heady mixture of recreation and scenery. Aspen and Telluride are mining towns that busted, then boomed with the ability to market their mountain location and skiing. Movie stars inhabit the mansions above Main Street and most of the workers live somewhere else. However, most of the Rocky Mountain West is neither vanishing nor turning into Hollywood with an altitude. Flint Creek fits this bill, a sparsely inhabited but beautiful place with a populace that has stabilized and an economy that wavers. It has an agricultural heart, a mining hang-over, and is destined for neither oblivion nor stardom.

The Flint Creek basin stands as a sort of Rocky Mountain every-place. It hovers precariously at the balance point of Old and New West, drifting between the silver bonanza that was, and a real estate and scenery rush that may never come. Since it shares common threads of history with so many other places in the region, Flint Creek and its history serve as a useful case study. Looking at the natural world of the basin reveals what the area shares with similar places. Examining land use and settlement patterns yields insight into what drew people to the watershed and how they used what they found. Finally, listening to residents describe the landscape and history provides a link between place, identity, and culture. Using this
understanding of the natural world, land use, and culture in Flint Creek shows where the basin has been and the lessons it can share with similar places across the West.\footnote{This environmental history approach is borrowed from Donald Worster, among others. Worster outlines this theoretical angle articularly in his essay "Doing Environmental History." This essay appears as the Appendix in The Ends of the Earth: Perspectives on Modern Environmental History (Cambridge: Cambridge University Press 1989). The crucial passage appears on page 293. "There are three levels on which the new history proceeds, three clusters of issues it addresses, though not necessarily on all the same project, three sets of questions it seeks to answer, each drawing on a range of outside disciplines and employing special methods of analysis. The first deals with understanding nature itself, as organized and functioning in past times... The second level in this history brings in the socioeconomic realm as it interacts with the environment. . . . The, forming the third level for the historian is that more intangible an uniquely human type of encounter- the purely mental or intellectual, in which perceptions, ethics, laws, myths, and other structures of meaning become part of an individual or group's dialogue with nature... Though for purposes of clarification, we may try to distinguish between these three levels of environmental study, in fact they constitute a single dynamic inquiry in which nature, social and economic organization, thought, and desire are treated as one whole. And this whole changes as nature changes, as people change, forming a dialectic that runs through all of the past down to the present." See also Worster's Dust Bowl: The Southern Plains in the 1930's (New York: Oxford University Press, 1979); Richard White's Land Use, Environment, and Social Change: The Shaping of Island County, Washington, (Seattle: University of Washington Press, 1980); and William DeBuys, Enchantment and Exploitation: The Life and Hard Times of a New Mexico Mountain Range, Albuquerque: University of New Mexico Press, 1985.}

**Western Historical Context**

The Flint Creek basin is a place of resource abundance. From the flint outcroppings that were the first resource mined more than 5,000 years ago, this abundance has drawn humans to the valley. Hudson's Bay trappers slogged the streams of the watershed in the 1820s looking for beaver. The grass lured a few summer time ranchers to the fertile grazing in the 1850s. Extraction of those resources has accelerated over the last 150 years with the permanent settlement of the basin. Silver buried in the ground inspired the rush of settlement and the first intensive use of natural resources. While mining has faded from prominence in the economy of the area, other resources have sustained the settlements that mining created. In particular, the availability of grass and water formed a stable foundation for agriculture.
The constant supply of natural resources has determined Flint Creek's settlement patterns, influenced its economy, and created a distinctive culture.

Flint Creek shares more than a century of natural resource based economics with much of the Rocky Mountain West. The history of booming mining cities like Butte, Leadville, and Helena reflects the importance of resource wealth to the Rocky Mountain economy. The underground wealth lured people from all over the world seeking their fortunes. Much of the mineral bonanza was concentrated in cold, remote, inhospitable places. It is nearly impossible to grow food in Butte or Leadville yet the settlers came, chasing the promise of economic gain. The railroads followed the resource wealth and provided a link to markets for the ore, timber, and agricultural produce that was available.

The grazing land that was swept away from various Native American peoples allowed space for both homesteaders and bigger livestock operations. While most of the arid land west of the 100th meridian was unsuited for independent yeomanry on the 160 acres allotted to homesteaders, grazing cattle and sheep on large tracts was profitable. Much of the Rocky Mountain West was filled with livestock that are still growing fat on the grass, though a good portion of the original abundance has been chewed to the roots. The trees growing on the mountainsides of the region also proved a rich source of wealth. They furnished railroad ties, stulls and cribbing for the mines, lumber for houses, and cordwood for the mills. The sawmills of places like Missoula and Bonner turned the forests into board feet and lined the pockets of corporations and jacks alike.²

² There is an extensive body of literature addressing the hazards of living west of the 100th meridian where annual rainfall drops below 15 inches a year. Walter Prescott Webb's seminal environmental history The Great Plains, examines some of the challenges that settlers from the eastern United States faced. Wallace Stegner's biography of John Wesley Powell Beyond the
This combination of timber, mining, and grazing formed the backbone of economies throughout much of the rural West. The plentiful resources kept westerners working and the rest of the country supplied with the goods it needed. The profits and jobs drew people westward to settle in towns near the available resources. These settlements flourished or withered depending on the richness and demand for those resources. Since it was generally too cold or too dry in the Rockies for a reasonable subsistence living on a homestead, many opted for the alternative: a job in the woods, the mines or on an irrigated ranch. If the well went dry or silver prices collapsed or the best trees were cut, then populations often moved on. With such a direct tie to natural resources, it was hard for many settlements in the west to survive without such abundance.

This connection to natural resources had an enormous impact on Western culture. The cowboy, the lumberjack, and the miner achieved mythic status as empire builders and the landscape was re-shaped by resource extraction. Local identities were linked to the mines, mills, and ranches that supported much of the local economy. The sign on the highway, near the mouth of Flint Creek, announcing the town of Drummond, Montana declares "World Famous Bullshippers." Connections with resource extraction

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are clearly seen in the names of high school sports teams. In western Montana there are the Lolo and Libby Loggers and the Philipsburg Prospectors. There is even a Butte American Legion baseball team called the Muckers. So far there are no bids for a team named the Real Estate Agents or the Retirees. Town names like Phosphate, Roundup, and Big Timber also reflect this resource view of the landscape. Working underground or chasing sheep across the bench lands gave many Westerners an intimate knowledge of the landscape. It also based that knowledge on resource extraction. With work and prosperity tied to natural resource abundance, it is little wonder that a perception of plenty dominated western psyches.

Shane. Come Back; Changes After World War II

The rural Western United States is in the throes of wrenching changes as the end of the century approaches. Throughout the West, the mining, timber, and agriculture that provided the economic foundation for communities have declined because resources have played out and increasing mechanization has eliminated jobs. In many rural areas of the West, residents have coped with this decline in resource and job availability by leaving in droves. Conversely, the urban West has boomed since World War II. Its population has grown exponentially and its economy has grown at the same rate. While the majority of Westerners have moved to oases of urban civilization, much of the rural West has witnessed a steady decline in population and waning economic fortunes. This decline is linked in part to a dropping demand for natural resources in the region. Prices for precious

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metals are down, much of the best timber has been cut, and beef prices are lower than they were 20 years ago. In addition, new environmental laws make the exploitation of resources more difficult and more expensive.

Accompanying the rural bust in resource extraction jobs is the service and technology boom in the urban west. Seattle, the San Francisco Bay Area, Salt Lake City, and Denver swell with the profits of Microsoft and Hewlett-Packard. These profits, and the desire of retirees to escape urban life, bring the latest migrants to the rural west. Some western Montana counties have grown between 25 and 40 percent since 1990. Other Western places, notably ski towns, have fashioned a new boom from tourism and recreation dollars.

The rural Western culture of resource extraction often clashes with the new culture of scenery and privacy. If they shared a cup of coffee together, old timers and scenery seekers would probably discover a common love of place. Nonetheless, there is a great deal of suspicion on both sides as the next wave of migrants and second home owners harvests the splendor of the rural west. This battle can be seen in the bumper sticker warfare of various constituencies of the changing West. "Cows not Condos" and "Forget the Whales-Save the Cowboy" bump against "The Blackfoot River is more Precious than Gold."

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The scenery boom creates a different land use pattern in the West. Many of the new sub-divisions resemble the suburbs that their residents just left. Lawns take over former pasture land and access to mountains, canyons, and rivers becomes a lifestyle amenity. People don't make their livings with their hands, except from a computer keyboard. This intangible economy of services, tourism, government jobs, and technology contrasts sharply with the production of earlier land use. Haystacks, timber, and ore dumps are easy to understand. The connection to the land and its wealth leads directly to arm muscles and food on the table. The latest wave of migrants earn their livings from investment portfolios, Social Security, commuting by computer, folding motel sheets, or loading chairs at the local ski lift. Good views are at a premium and many of the more traditional land uses are viewed as quaint at best and illegitimately destructive at worst.

This gap between generations of Western migrants threatens to estrange people from the land and its history. It is precisely here that Flint Creek fills a crucial role. Examining its land use history provides insight into similar natural resource areas in the West. A look at the economy of the basin reveals the deep connection between these natural resources, prosperity and settlement. Finally the relationship between culture and place shows the connection that many residents have with the landscape. Learning where Flint Creek has been tells us where much of the Rocky Mountain West has been. Absorbing the lessons from Flint Creek may help span the gap that splits New West from Old West, neighbors from neighbors, and Westerners from the land.

Flint Creek shares a land use history of resource extraction with much of the rural Rocky Mountain West. The dominant land uses for the last 150 years have been mining and ranching. Mining boomed spectacularly and
created the majority of settlements in the watershed. It was the prevailing source of work and wealth for a brief, but historically memorable, period. The evidence of its impact lingers in the ghost towns, tailings piles, substantial brick downtown in Philipsburg, and the memories of basin residents. The historical peaks of both population and prosperity were in the halcyon days of silver and manganese. When the ore played out, the rich grass of the valley held a core of the population. People remained here to raise hay and run cattle. Agriculture influenced the distinctive landscape of the basin today; the irrigated valley bottoms and open meadows. While ranching has provided a steady foundation for the economy, agriculture has never matched the wealth produced by the mines. As ranches have consolidated, the population supported by agriculture has also shrunk. This mirrors the waning fortunes of resource-based industries in the rural West as a whole.

Mining and ranching have created a distinct culture in Flint Creek. Many residents relate to the landscape as a place of abundance that is the source of their identity and economic well-being. Their memories often center on this working relationship with place. Even the contents of the Granite County Museum reflect local perception that the area is a mining place. With the steady waning of resource extraction industries in Flint Creek, older residents confront the question facing many Rocky Mountain residents: What remains when the resource boom is gone?

To reach an understanding of the Flint Creek watershed, and its usefulness as a case study, a number of questions must be answered. How has the land been used historically? How has this land use affected settlement and population in the basin? How has land use been tied to economic prosperity? Finally how do land use patterns affect local culture and the way that people relate to place? If the West is going to be more than a spectacular suburban
backdrop, it is critical to understand the way that its residents have traditionally related to the land. If those people are to be more than caricatures of America's past, it is important to give them voices and hear their stories of place. Only by acknowledging the current residents and including their history will the West be anything more than a vast scenic Disneyland with dust and real bears.
The Flint Creek watershed lies in southwestern Montana, a golden windswept valley surrounded by mountain ranges on three sides. The stream tumbles down from those mountains to water the fields of the valley and crease the floor of basin. From the valley floor it flows out to the Clark Fork River and eventually spills into the Pacific. The valley is approximately 35 miles long, with rich bottomlands supporting significant agriculture, primarily cattle ranches.\(^1\) The stream itself drops from the heights of the Flint Creek Range near 10,000 feet to its merger with the Main Stem of the Clark Fork near Drummond at just below 4,000 feet. The watershed consists of two broad valleys connected by a narrow canyon. Flint Creek drains a little over 490 square miles and carries approximately 125,000 acre feet of water to the Clark Fork annually.\(^2\)

In the south, the basin is bounded by the Anaconda Range, to the east by the Flint Creek Range, to the west by the John Long Mountains, and it empties almost due north from its headwaters into the Clark Fork River. The stream flows out of Georgetown Lake and continues past the towns of Philipsburg, Maxville, Stone Station, and Hall. Georgetown Lake is fed by the North Fork of Flint Creek which begins between Red Lion Mountain and Cable Mountain east of Georgetown Lake. The creek’s flow below the lake is strengthened by a series of tributaries.

\(^2\) Ibid., p.16; Terry Voeller and Kirk Waren, *Flint Creek Return Flow Study* (Helena, Montana: Montana Department of Natural Resources and Conservation, 1997): 5.
The side creeks are especially significant because the floor of the valley receives minimal amounts of rainfall. The annual precipitation is only 14.5 inches a year in Philipsburg, yet the mountains above receive more than 40 inches a year. Runoff from these mountains and the water stored in three reservoirs provides irrigation for approximately 17,000 acres of agricultural land in the lower valley and 8,200 acres of agricultural land in the upper valley. The lands in the basin include national forest, federally designated wilderness, two counties, seven mining districts, a dammed lake, several reservoirs, and five towns.

The question arises why use a watershed as the boundary for a history? There are certainly more commonly recognized borders like counties and towns that could be applied to historical inquiry. The answer lies in the role that water plays in the economy and imagination of the residents of the watershed. In the United States west of the 100th meridian, rainfall drops off dramatically. Water is the lifeblood of the region, and in Flint Creek it was important to wildlife and mining, and critical to agriculture and settlement. Current residents credit it with sustaining the population of the watershed. In some circles discussions of water take on nearly religious overtones and its continued availability is a matter of fierce concern. Water holds together the

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residents of the basin, binding them through shared necessity more strongly
than any political affiliation or boundary.

At this point borrowing from two theoretical frameworks lends
coherence to the pursuit of a watershed history. The first is an idea advanced
by Dan Flores in an essay on bioregional history. He provides basic ground
rules for focusing an historical study on a more specifically defined place and
makes a strong case for "natural geographic settings . . . [as] appropriate
settings for insightful environmental history." In particular, he states "the
narrative line of bioregional history should be the story of different but
sequential cultures occupying the same space, and creating their own
succession of places."  
Second, to help choose a specific site for this study I
used John Wesley Powell's idea that the West's defining characteristic is
aridity, and consequently orienting political boundaries around watershed
boundaries makes good sense.  Powell suggested to Montana's Constitution
makers that they arrange politics around hydrographic basins rather than
around arbitrary political lines drawn on the map.  

To understand the watershed, it is crucial to understand the natural
world there. Armed with this ecological baseline, it is possible to investigate
how humans relate to and use the basin. The flora and fauna of the
watershed are varied. Several distinct ecosystems cover the terrain from the
alpine zone above treeline in the Flint Range to the riparian areas along the
valley bottom. Forest Service ecologist John Joy has studied much of the
vegetation in the basin. He characterized the highest elevations as "alpine

6 Dan Flores, "Place: An Argument for Bioregional History," Environmental History Review 18
(Winter 1994): 6,12.
7 Wallace Stegner, Beyond the Hundredth Meridian: John Wesley Powell and the Second
8 Ibid., 315.
glaciated uplands" and described this ecological landscape unit as "occupying the tops of the Flint Creek Range and the Anaconda Range."^ The vegetation is "a solid forest of green with unvegetated rocky mountain tops. . ." 10 The headwaters of Flint Creek are in the sub-alpine forest that rings the basin, spanning from approximately 6000 feet at the lower end and creeping above 8600 feet. There are some grassy openings, krummholz, and areas of alpine tundra above treeline. This landscape unit is dominated by lodgepole pine. Mixed in with lodgepoles are Douglas fir, subalpine fir, Engelmann spruce, subalpine larch, and whitebark pine. The streams in this landscape unit contain willows, aspen, and red-osier dogwood.11 The upper elevations give way to more diverse forests as we move toward the valley floor.

Joy calls this area the "Mid-Elevation Slopes" that could be described as "forests with interspersed grasslands."12 This "ecological landscape unit nearly encircles the Flint Creek Mountain Range and extends to the Lower Willow Creek and Harvey Creek." 13 The location of this vegetation type varies according to aspect and covers the elevation from roughly 5000 feet to 6500 feet. The vegetation is dominated by ponderosa pine and Douglas fir. Lodgepole pine and sub alpine fir edge in at higher elevations and fescue grasslands occupy many south and west facing slopes. This landscape unit shares many of the same riparian species as the alpine glaciated uplands. The ecosystem has received significant human use over the last century since it became more accessible to the mining and ranching settlements.

10ibid., 16.
11ibid., 18
12ibid., 11
13ibid., 12
The rest of the basin is composed of valley grasslands, ecological landscape units Joy calls "Clark Fork Basin" and "Philipsburg Basin." These units are similar ecologically and are composed primarily of bottomlands, riparian areas, and grasslands. Rough and Idaho fescues originally dominated these grassland areas. Agriculture and grazing affected these grasses by replacing them with more commercially lucrative species and altering plant composition. There is also some evidence of invasion by the exotic spotted knapweed. Despite this change in composition grasses remain abundant.

Tree line stretches down to the 5000 foot elevation in some places and strips of willows still line the creeks, although much of the grassland is used for grazing now. The majority of current settlement is along the creeks and bottomlands as they provide a steady water supply and the best areas for livestock.

The last 110 years have seen a significant change in the vegetation in most of the Flint Creek watershed. With the arrival of permanent settlers in the 1860's, the pressure on native landscapes increased significantly. The areas with the easiest access have been most affected while the rocky alpine

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14 Ibid., 10-11.
15 Ibid., 10.
The primary agents of human induced change have been fire suppression, livestock grazing, logging, wood-cutting, and mining. Human use of the land is addressed later in the paper, but it is important to understand that Flint Creek's flora continues to change as human demands on resources change.

Wildlife also makes up an important part of the Flint Creek picture. Unfortunately there is no comprehensive study of wildlife in the watershed. Records and information from the Montana State Department of Fish, Wildlife, and Parks covers the area in a more general way. Wildlife is abundant, particularly in the forests along the upper edge of the valley bottoms. The watershed is home to elk, moose, whitetail and mule deer, mountain lion, black bear, mountain goats, lynx, pine marten, wolverine, beaver, mink and muskrat. Numerous smaller non-game species are also present. Birds include bald and golden eagle, goshawk, and osprey.  

According to John Firebaugh, a Fish, Wildlife, and Parks biologist, market hunting had diminished wildlife populations by the turn of the century. The last hundred years have provided more protection for game species and wildlife has gradually recovered. Elk and mule deer harvests from 1959 to the present show a steady increase in both the number of animals taken and the percentage of hunter success. Aerial elk counts for the years since 1983 also show a steady increase in wildlife in the basin. A herd of 80 Yellowstone elk were transplanted to supplement native elk in the valley in 1939. A year later, the Forest Service reported a total of 390 elk in the

19 Montana State Department of Fish, Wildlife, and Parks, "Region Two Deer and Elk Survey and Inventory Tables", (Missoula, Montana: Fish, Wildlife, and Parks, 1996): Table -Hunting Districts 210-212, 214.
valley. This compares with approximately 760 elk in the same area in 1998.\textsuperscript{20}

Aside from elk and deer populations, it is difficult to determine the overall health of wildlife populations in the watershed. They are apparently healthy and vital enough to provide for active trapping of fur-bearers in the basin. The current hotly debated endangered species in western Montana, grizzly bears and wolves are absent from the watershed. There are no records of wolves dating back to 1893 and grizzlies also were missing from the historic record. With a few exceptions, all of the species present before European settlement are still present. Some like coyotes are probably more abundant as a result of human disturbance. Others have probably declined due to habitat loss, hunting pressure, and trapping.\textsuperscript{21}

The fish in the watershed are apparently healthy but very few native fish remain. The dominant species are brown and rainbow trout. Many of these have been stocked by the Department of Fish, Wildlife, and Parks.\textsuperscript{22} Many of the creeks of the Flint Creek watershed contain brook trout, cutthroat trout, and their upper reaches harbor bull trout and genetically pure westslope cutthroat trout. In particular, bull trout were noted in Flint Creek,

\textsuperscript{20} Ibid., "Aerial elk trend counts Hunting district 210, 212", Table.
\textsuperscript{22}USDA Forest Service, Boulder Creek Fred Burr Landscape Ecology Unit: National Forest Management Act Integrated Resource Analysis, January 1996, p. 50-52
Boulder Creek, the North Fork of Flint Creek, and Harvey Creek. Some of the creeks provide spawning grounds for fish from the Clark Fork, while others protect small populations of native fish. A population of Kokanee salmon was planted in Georgetown Lake and uses Stuart Mill Creek for spawning. A Forest Service study of the Fred Burr and Boulder Creek Landscape Ecology Unit in 1995 found westslope cutthroat trout and bull trout in the drainages on the west side of the Flint Range. The study noted that cutthroats "were mostly confined to stream segments that do not contain introduced rainbow and Yellowstone cutthroat trout, with which they hybridize readily." The study notes that Copper Creek and Dora Thorn Lakes were stocked by Fish Wildlife and Parks. The major challenges to fish survival listed in the study included habitat alteration, de-watering of streams, competition between introduced species and native fish, mining related water quality impacts, and overharvest. The fish populations are reasonably stable despite angling pressure and a variety of water quality problems.

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25 Id, p. 50.


27 According to Fish, Wildlife, and Parks statistics for 1982 to 1986, the basin averaged 6193 angler days per year. Montana Department of Natural Resources and Conservation, "Final Environmental Impact Statement for Water Reservation Applications in the Upper Clark Fork Basin" (Helena, Montana: Department of Natural Resources, 1991), 18; Flint Creek is "not a blue ribbon trout stream" according to Area Fisheries Manager Don Peters of Montana Fish, Wildlife, and Parks in Missoula. The Department intends to undertake restoration work in the drainage and Peters mentioned that both bull trout and westslope cutthroat trout "are in pretty rough shape and that Flint Creek is "no stranger to problems." from a telephone conversation with author, April 26, 1999, notes in possession of author. There is currently no comprehensive view of the fish populations in Flint Creek but some of the scattered above resources provide a fair picture. See also "Final Environmental Impact Statement for Water Reservation..."
The watershed sits on the boundary of two climatic zones: Pacific Northwest and Rocky Mountain. The climate is primarily continental with most of the rain falling in May and June, though the mountains receive most of their precipitation as snow during the long winters. The growing season is short, lasting from sixty to eighty days at the best places in the valley, and is considerably shorter at the higher elevations. Philipsburg averages only fifty-five frost free days a year while Drummond enjoys a longer growing season. Winter temperatures drop as cold as forty below zero and summer temperatures soar into the nineties. The average annual temperature of Philipsburg is 41.2° F and Drummond is just slightly warmer at approximately 43° F.

The geological history of the basin reaches back about 1.5 billion years to the Pre-Cambrian. Much of the lower valley is dominated by Belt sedimentary rocks that formed from the deposition of sandy and muddy sediments for almost 600 million years. Beginning about 570 million years ago much of southwest Montana was below sea level and flooded. The resulting sediments formed the limestone that runs through the Anaconda and Flint Creek mountains forming the southern and eastern borders of the basin. This era lasted until approximately 240 million years ago. Shifting plates raised the region slightly above sea level and inland seas contributed several thousand more feet of sedimentary deposits.

Applications in the Upper Clark Fork Basin" (Helena, Montana: Department of Natural Resources, 1991), 15-18.
28 Joy, "Vegetative Resource," 1-2; Rowe, Natural Resources, 47-48; State Engineer's, Water Resources Survey, 11; Flint, "Environment and Culture History," 31-36.
29 Voeller and Waren, Flint Creek Return Flow Study, 5; Water Resources Survey, 10-11.
About 200 million years ago, at the beginning of the Mesozoic period, the North American plate began moving westward and collided with the Pacific Ocean plate. The resulting collision subducted the Pacific plate and caused compression of the overriding North American plate. The diving Pacific plate generated heat and friction that melted the basement granitic rocks and caused increasing quantities of magma to rise toward the surface. From 90 to 70 million years ago large quantities of granite rose beneath present day Montana and Idaho and solidified into the Idaho batholith. Pieces of this granite batholith broke off and moved eastward forming the Sapphire Block. This block pushed about 50 miles east and folded the sedimentary rock it encountered into the Anaconda, Flint Creek, and Garnet mountains. The Philipsburg thrust created cracks and faults that allowed granitic magma to intrude.\textsuperscript{31} The result was the Philipsburg Batholith that contains significant quartz veins carrying the rich silver and gold deposits that prompted so much mining in the basin.\textsuperscript{32}

The following Tertiary period was relatively uneventful in geologic terms. It was marked by extreme aridity and accompanying erosion that filled the Philipsburg and Flint Creek valley with significant sediment. The Miocene brought a warm tropical climate and the following Pliocene another period of drought. The gravel deposited by the erosion of the Pliocene later formed excellent aquifers that underlie much of the Flint Creek valley. Recent geologic times have brought wetter climates and the streams of these times have carved deeper valleys in the deposits from earlier times. Glaciers scoured the Flint Creek range and formed Georgetown Lake. The current shape of the valley is mostly attributable to the Philipsburg thrust, the

\textsuperscript{31} Alt and Hyndman, 11-19, 128-131, 188-189; Emmons and Calkins 32-33. 
\textsuperscript{32} Emmons and Calkins: 163.
mountain-making that accompanied it, and the resulting erosion from run-off over the last 50 million years.\textsuperscript{33}

At this point, a sensory picture of Flint Creek begins to emerge from the haze of statistical information. The watershed is a cold, dry, rocky place. The valley floor is fairly level grassland, kept green by the life-giving irrigation waters that flow down from the snowy surrounding peaks. Forests fill the hillsides but the treeline comes low on the rocky peaks, so bare summits reach above the stands of firs and pines. Aesthetically it is appealing, with archetypal grazing lands framed by mountains on three sides. It looks like the Montana of imagination, with cattle ambling over the valley bottoms, pickup trucks raising plumes of dust on the side roads, and haystacks standing as reserves against the long winter months.

\textsuperscript{33} Alt and Hyndman, 19-28,138,188-189; Emmons and Calkins, 32-33; Walter Johnson interview with author, January 19, 1999, Philipsburg, Montana, Tape 1, Side A.
Chapter 2:
Dawn, Boom, and Echoes: Resource Use and Settlement

Early Human History

The wind sighs through the roofless Miner's Union Hall and the snow is almost gone as I kick through the mud of Granite's main street. On the hill above me the old head frame for the Granite Mountain Mine's hoist has crumpled as the timbers sag earthward, pulled down by gravity and the passing years. The snowmelt runs downhill in rivulets and across the valley I can see Flint Creek wending its sinuous way toward the Clark Fork and the sea. From the heights of the upper watershed, the creek waters alfalfa, carries trout, washes tailings from the old Rumsey mill, and runs past buried flint points almost 5,000 years old. Since ancient peoples first used the flint outcrops to fashion those spear and arrow tips this basin has yielded an abundance of riches to a succession of visitors and settlers. This abundance drew people from outside the valley for thousands of years and created the settlement and land use patterns of the watershed.

This chapter examines the relationship between natural abundance, land use, and settlement in the Flint Creek watershed. A culture and economy based upon resource abundance has grown in the basin over the last 140 years. This relationship is particularly linked to intensive resource use by mining. While mining in the basin has faded into economic marginality in the last thirty years, it remains the dominant force in shaping the relationship between residents and landscape. Investigating mining in the watershed reveals the historical use of resource abundance and yields insight into the lingering power that mining holds on the imaginations of residents.

Before the clamor of the ore processing mills filled the valley, it was visited by a variety of Native Americans. There is significant archeological
evidence that the Flint Creek basin was used by native peoples and some evidence of their sporadic permanent settlement of the area. The valley was probably used seasonally for hunting. It also probably served as a stopping place for native peoples on their to and from the rich buffalo hunting grounds to the east. Reports vary, but some date human use of the valley as far back as 11,500 years. The more recent users are most clearly documented. "The ethnographic record indicates that Salish, Nez Perce, and Shoshone groups probably frequented the Flint Creek area."¹ Patricia Flint, in her archaeological study of Flint Creek, finds evidence of "long term semi-permanent campsite activities."² Later she concludes,

In comparing projectile point style of the projectile points found at these sites with other points of the same style found in dated contexts, it appears that Flint Creek Valley has been continuously occupied since about 3000 BC.³

The creek was apparently named for the rock that Indians used for tool-making, making them the first miners of the valley. "A large chert outcrop, located west of Maxville . . ., served as a source of stone for tool manufacture over several thousand years."⁴ The fur trappers interacted extensively with various native groups and Peter Skene Ogden refers to natives (probably Salish) in the Flint Creek valley. John Work, another Hudson's Bay fur trapper, refers to Blackfoot Indians in the Flint Creek area when he explored the headwaters of the Clark Fork River in 1831.⁵

² Flint, "Culture and Environment," 128-130.
³ Ibid., 163.
⁴ Perriman, et al., Historic Contexts, 5.
Later European visitors and settlers in the valley noted the presence of a number of native groups. When Granville Stuart and his brother James helped John Jacobs trail some of Johnny Grant's cattle into the valley in 1858 they were concerned about the nearby presence of Indians. "Here we built a corral, strong enough to bid defiance to the Blackfoot Indians, into which we put our horses each night." The Stuarts also refer to "eight lodges of Flathead Indians" camped nearby. Captain John Mullan surveyed this area of the Clark Fork River in 1860 and 1861. He referred to Mountain Nez Perces and Flatheads in the vicinity of Flint Creek. He also referred to Snakes and Bannocks in the Deer Lodge valley. With the arrival of European settlers, native usage slackened. Nevertheless, Amy Brown Spencer, a resident of Philipsburg in the 1880's and 1890's, refers to Nez Perce people in town during that time period and treaty rights to the area are still retained by the Confederated Salish and Kootenai Tribes.

Overlapping with the Native Americans during the mid-nineteenth century were a number of fur trappers, explorers, and prospectors. There is evidence of Hudson's Bay Company fur trappers in the Flint Creek Valley as early as the 1820's. Alexander Ross skirted the mouth of the valley in 1824 on a Company trapping expedition to the headwaters of the Clark Fork. The next

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7 Ibid., 134.
year Peter Skene Ogden, a Hudson’s Bay trapper, spent several weeks traversing the length of Flint Creek with a band of European and Indian trappers. The group trapped for beaver, suffered horse theft at the hands of the Blackfeet, and ultimately headed north to the Clark Fork and upstream towards Deer Lodge. The valley continued to see traffic from trappers through the 1830’s; John Work mentions Flint Creek in his journals of 1832. The usage tapered off as the market for beaver collapsed and the valley remained relatively quiet until Montana’s mining boom began in the 1860’s.10

Despite the relative calm in the basin, there was still a steady stream of documented visitors to the area and dozens of others who passed through on their way up and down the Clark Fork. Father Pierre de Smet must have passed the lower valley in 1841 on his way west but he failed to note Flint Creek in his letters. A little more than a decade later Francois Finlay discovered gold in the gravel bars just east of Flint Creek. Gold Creek contained sufficient gold to inspire placer mining beginning in 1852. Since the workings were close to the travel route on the Clark Fork the placering attracted a number of travelers. James and Granville Stuart and Reece Anderson arrived in the spring of 1858 to try their luck. They found some promising gold prospects and returned in the fall of 1860 for a more extended mining attempt. They had some success and the area attracted a small settlement of miners who stayed until the 1862 rush to Alder Gulch.11

11 Pierre DeSmet, Letters and Sketches with a Narrative of a Year’s Residence among the Indians Tribes of the Rocky Mountains, (Philadelphia: M. Fithian, 1843) : 110-143; Hiram Martin Chittenden and Alfred Talbot Richardson ed., Life, Letters, and Travels of Father Pierre De Smet 1801-1873: edited from original unpublished manuscript journals and letter books and from his printed works with Historical, Geographical, Ethnological and other Notes, also
Johnny Grant arrived in the Deer Lodge valley in 1858 and returned to settle and run a horse and cattle ranch in 1859. The ranch lay along the route to the mining fields in Idaho and the primary east-west travel corridor. Granville and James Stuart ran some of Grant's cattle with John Jacobs in Flint Creek that same year. They ventured up the basin "to a point three miles above where the town of Philipsburg now is."\(^{12}\) The Stuarts had a few horses stolen by the Blackfeet but avoided any more serious confrontation. The presence of the Blackfeet apparently discouraged the Stuarts who ran cattle intermittently in the valley for several more years. Granville mentions looking for lost cattle in the Flint Creek valley in 1862 with no success.\(^{13}\)

The Stuarts also used the valley for hunting and they supplied meat to Fort Bridger from the wildlife they shot in the basin. Granville Stuart noted in his journal, "Game of all kinds, found in this part of the Rocky Mountains, was abundant in the Flint Creek Valley and we were in no danger of starving . . . ."\(^{14}\) When Captain John Mullan retraced the steps of Isaac Stevens' survey to map out a new road from Fort Benton to Walla Walla he passed by Flint Creek. He was forced to cross Flint Creek by canoe since it was flooded in May of 1863. The party explored up the basin in a reconnaissance. The survey hinted at the basin's long term fate by noting "the upper portion of the valley of Flint Creek may be found suited to agriculture."\(^{15}\)

**The Mining Heyday**

\(^{12}\) Stuarts, volume I, p. 133.
\(^{13}\) Ibid., Volume I, p. 228. Flint Creek is one of a nearly a dozen such valleys along the Clark Fork River in western Montana. These valleys are typically level and fertile along the bottoms close to water. Their sides vary but generally are bordered by rolling bench lands leading to steep, forested mountains. They held significant large wildlife, especially ungulates, and now offer excellent grazing land for livestock.
\(^{14}\) Ibid., Volume I, p. 136.
\(^{15}\) Mullan, Report, p.42.
While people were attracted to Flint Creek by abundant wildlife, timber, and grazing the riches buried in the ground had the most profound effect on settlement and land use. The mining boom touched off the most intensive period of resource extraction and population growth in the watershed's history. The explosion of riches and community growth reinforced the connection between resource abundance and prosperity. Mining created the dominant land use pattern and the perception that resource extraction is the appropriate relationship with the land. While other land uses like cattle ranching enjoy lengthy tenures in the basin, mining casts a long historical shadow. The ghost towns, the jobs, and the idea of natural abundance linger in the memories of Flint Creekers.

The California gold rush of 1849 sent prospectors clambering across the West in search of the next big strike. Gold was first discovered in the Deer Lodge area in 1852, but Montana's first real bonanza happened in Alder Creek. The gold placers there started a three year boom from 1863 to 1866 and produced an estimated $10 million a year during this time. The wealth of this find spurred further prospecting in Montana, and men with visions of instant riches searched the hills of the territory.¹⁶

Flint Creek didn't receive much attention until a wandering prospector named Hector Horton stumbled across silver ore in the vicinity of present day Philipsburg in 1865. He was impressed enough by what he found to stake a claim but he completed no other development of the ground. In 1866, Charles Frost brought sample ore to an assay office in Helena. The

¹⁶ J.A. MacKnight, Mines of Montana, (Helena, Montana: National Mining Congress, 1892) : 5-7; Emmons and Calkins, Geology of the Philipsburg Quadrangle, 191.
sample proved rich, word of his discovery spread, and by springtime a small rush of prospectors began combing the hills of the Flint Creek Range.\textsuperscript{17}

During the same time, vigorous placer mining activity began around Henderson Gulch in the lower valley. In 1865, Joe Henderson found gold in the gravels on the west side of the lower valley and began a rush to the area. There are reports of close to 1000 people placering by 1868. The Henderson Gulch placers produced $300,000 in the first four years they were worked. The town of Emmetsburg sprang up but lacked the permanence of towns associated with underground mining. There was a post office for a few years at Emmetsburg but when the gravel bars played out the miners moved on. By 1872 the \textit{New Northwest}, Deer Lodge's newspaper, noted that the town was "dead" with approximately 35 whites and 150 Chinese left in the area. The ephemeral nature of placering meant that the camp disappeared when the gold was gone.\textsuperscript{18}

Despite this activity, the upper valley remained undeveloped. This was due primarily to the capital intensive nature of silver mining. Unlike gold, which typically lies suspended in gravels and is relatively easy to extract, silver forms in veins wedded to the surrounding bedrock. The veins generally run underground and require extensive tunneling. Separating the silver from the native rock entails crushing and milling. The tunneling and milling are expensive and necessitate large capital investments before any


profits are ever realized. The underground bonanza in the Flint Creek basin lay relatively undisturbed until the capital arrived to start the silver boom.\textsuperscript{19}

James and Granville Stuart returned to the valley in 1866. They liked the prospects of the rock they saw and set about raising money for exploration. They enlisted the aid of Samuel Hauser who already had an interest in the St. Louis and Montana Mining Company, a venture operating a mill in Argenta. With connections to capital in St. Louis, Hauser was able to raise money and begin building a stamp mill for ore-processing on the hill just north of present day Philipsburg. The company also purchased a number of claims from prospectors and found respectable quantities of silver in the ore from these claims. With the arrival of capital to finance extensive workings, the first profits began to flow from the wealth buried in the rock of the Flint Creek Range.\textsuperscript{20}

The St. Louis and Montana Mining Company built a wagon road from the Mullan Road to the area around present day Philipsburg beginning in 1867. The company hired eminent mining engineer Philip Deidesheimer to oversee the construction of the road and a mill for processing ore.\textsuperscript{21} The mill cost $75,000 and was completed and placed in operation by October 1867. The investment drew miners and prospectors from throughout the region. The sudden wealth and availability of work created a population boom in the once deserted valley. The town of Philipsburg was laid out in June of 1867.

\textsuperscript{19} Emmons and Calkins, \textit{Geology of the Philipsburg Quadrangle}, 173, 194-200, 203, 206, 209.
\textsuperscript{21} Philip Deidesheimer was renowned for his invention of the square set timbering that made the Comstock lode in Nevada possible. Hiring such a first rate engineer signaled the seriousness of the mining potential and the company's intentions.
and by August houses were going up at the rate of one a day. The population rose to 1500 by December and by February of 1868 a genuine town had been built. It included six stores, two lager breweries, a Masonic temple, and seven saloons.

The Stuart's mill ran for a year before being shut down for lack of profitable ore. The mine struggled near the brink of financial collapse for several years and in 1869 there were only two employees still working. The summer of 1869 was a low point in population for Philipsburg. While the newspaper account is probably exaggerated, it was described as a "deserted village" and home to only three residents. Finally, financing was raised in St. Louis, the company was reorganized as the Hope Mining Company, and work resumed. A rich vein of ore was struck by 1872 and Philipsburg's population climbed again. Reports indicate as many as 150 men were employed at the mill by mid-1872.

During this same period, exploration was continuing in the hills around the Flint Creek drainage. Gold placers were found near Georgetown, Cable Creek, and Henderson Gulch, and other silver veins were located along Boulder Creek and near the Hope mine. Some of the mines were quite productive. The silver near Philipsburg was rich enough to warrant two other stamp mills: the Tower and the Algonquin. The hamlets of Tower and Hasmark grew around the mines and the mills that processed their ore. By the early 1880's these mills would stand idle, but miners remained because rich ore strikes nearby provided abundant work. Unlike the basin's more

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24 Ibid., 242-243; Granville Stuart, Volume II, p. 33; Emmons and Calkins, Geology of the Philipsburg Quadrangle, 213-214; New Northwest, 27 August 1875, 3; Sorte, "The Hope Mining Company of Philipsburg," 8-17;
ephemeral towns centered around specific mines, Philipsburg managed to maintain a level of relative stability throughout this period. There was enough income and enough prospecting promise to keep the town afloat as a supply point for the miners scattered across the basin. Although still tied directly to the prosperity of the mines, Philipsburg serviced a broad enough area to maintain a permanent population to the present day.25

The Hope claim initiated permanent settlement in the region, the Trout and Algonquin mines sustained the populace, and scattered placers kept prospectors hopeful. However, the mines were never more than marginally productive. The real boom period lay just around the historical corner for the basin. The claim that triggered the boom was made in 1875, but lay dormant until Charles McClure, superintendent of the Hope Mill, obtained an interest in the property. McClure sought money for development in St. Louis and began to explore the area around Granite Mountain, high on a rocky mountainside northeast of Philipsburg. The investors incorporated as the Granite Mountain Mining Company and began work in 1881. The work was overseen by Frank Perkins and progressed slowly. 26

There is a much circulated story about actually striking the ore vein that made this area one of the richest silver mining districts in the country. The basic outline of the story can be established in the historical record but the dramatic details are probably the product of A. L. Stone's journalistic flair.

25Emmons and Calkins, Geology of the Philipsburg Quadrangle, 191, 203-213, 231, 246, 252; Anderson and Decco, Hardrock Mine in the Philipsburg Mining District, 8-10; Montana Department of Environmental Quality, Abandoned Mines Bureau, "Combination Mining District 59 (Granite County) Technical Version," Department of Environmental Quality Files, Helena, Montana : 1-2.
26Cushman, "Cordova Comstock Lode," 19; Emmons and Calkins, Geology of the Philipsburg Quadrangle, 199-203; MacKnight, Mines of Montana, 81.
The money for exploration had apparently run out and the foreman was sent orders to cease operations. The details of various accounts differ here, but either a snowstorm blocked delivery of the message or the foreman put off giving his crew the news until they had already descended for their shift. Stone, a newspaper man and frequent visitor to Granite during this time, describes the events of that fateful day.

Through the day there had been no change in the conditions underground. The last shot was tamped home, the fuse was lighted, and the miners prepared to leave the work which they had pushed so persistently... The last shot was fired. It threw bonanza ore upon the muckers' planks.

This dramatized event started what would become almost $20 million in silver production by the Granite Mountain Mining Company.

The discovery started the most intensive population and land use change in the basin's history. Granite grew most dramatically but Philipsburg enjoyed a boom in population, rising from 59 in 1870 to an estimated 2,500 by 1890. Black Pine grew from nothing to 250 people and New Chicago climbed to 288 during this period. The settlements of Kirkville and Tower grew up around the edges of Philipsburg and Granite. Ranches sprang up in the valley to feed the miners and the mules used in the mines. The villages of Flint (now Maxville) and Stone Station arose to service the freight trade between the mines and the Clark Fork River. Populations grew throughout the basin during this decade as the rich ores drew people to work in the mines and

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29 Emmons and Calkins, Geology of the Philipsburg Quadrangle, 202-203.
Workers posing outside the Bi-Metallic Mine, ca. 1895.
Photo no. 69-26, K. Ross Toole Archives, The University of Montana - Missoula.
provide services to the miners.\textsuperscript{30}

The majority of the population settled near the Granite Mountain mines. The Granite Mountain Mining Company built two mills with a total of eighty stamps near the site of the mine and a sizable town grew around them. In addition, a second mine was located on the same vein a short distance downslope from the Granite. The Bi-Metallic started in 1882, and though it never was as profitable as the Granite, it produced enough ore to warrant the construction of a 100-stamp mill at the bottom of the hill in Philipsburg. In March 1889, the Granite Mountain Mining Company built an additional mill about two miles south and downslope from the site of the mine on the banks of Fred Burr Creek. The site was named for the president of the Granite Mountain Mining Company, Lewis Rumsey. The Rumsey mill had 100 stamps and the town grew to approximately 500 people. These four mills and the mines they served provided the majority of the work and economic support for the booming population. During the decade leading up to 1893, the mine produced almost $20 million in revenues and $11 million in dividends for stockholders, while the Bi-Metallic produced $6 million in revenues and $2 million in dividends for the same period.\textsuperscript{31}

Such wealth and resource abundance created an instant town perched at 7,000 feet on the hard granite mountainside high above Philipsburg. The site was inhospitable and demonstrated how important mineral abundance was to determining settlement and land use patterns. Without the wealth buried in the ground it seems unlikely that such a large community would


\textsuperscript{31} Emmons and Calkins, 194, 201-203.
have chosen to settle in such a harsh spot. This abundance has continued to form the basis of the relationship between people and the landscape in the Flint Creek basin.

Since the site was steep, the town was settled along the contours of the hill and streets were narrow. Houses were often built on stilts so they would be level with the uphill street and the superintendent's office was connected level with the street by a gangplank reaching the building's second floor. A resident describes the houses as "clinging to the precipitous sides of the mountain, seemingly held there by some adhesive." The road was incredibly steep and rose 2,000 feet in just six miles, making supply difficult and closing access during the spring mud season.

By 1889, the town population had exploded. The transient nature of mining makes precise population estimates difficult, but statistics for this era put the population for Granite somewhere between 3,000 and 7,000. By 1887 Granite boasted eighteen saloons, a Miner's Union Hall, and four churches. There was a significant Chinatown and there are newspaper accounts of police raids on opium dens. The town's infrastructure had all the appearance of permanent settlement; inhabitants built a school and an elaborate fire hydrant system. No cemetery was ever started because the ground was too

34 Mining towns had wildly fluctuating populations that often moved seasonally and tended to desert if prospects seemed better elsewhere. Because of this obtaining accurate data for population is difficult. The United States Census seems to have been on the low side of all the estimates I have encountered. When giving population estimates I have used Census data and data from Polk's Gazetteer unless significant information indicates to the contrary. Compendium of the Eleventh Census- 1890, Part I Population (Washington, D.C.: Government Printing Office, 1892) : 29; Polk's Minnesota, North and South Dakota, and Montana Gazetteer and Business Directory 1890-91 Volume VII (St. Paul: R.L. Polk and Company, 1890) : 1637, 1713
Granite, Mt., ca. 1890.
Photo no. 89-283, K. Ross Toole Archives, The University of Montana - Missoula.
rocky for digging, so any resident who died was carried by wagon down to the cemetery in Philipsburg. 35

The mining boom in Flint Creek was not an inevitable result of rich mineral deposits. Rather it was a fortuitous collision of discovery, technology, national politics, and market demand. The ore deposits were found in the right place at the right time. Silver mining received an enormous boost when pro-silver politicians in Congress passed the Bland-Allison Act in 1878. This law re-authorized the coinage of silver and the government began buying silver for the treasury. The boom in demand coincided nicely with increasing transportation access to Montana. Railroads were creeping westward toward Flint Creek and the Northern Pacific Railroad completed its transcontinental track in 1883. The big strike on Granite Mountain occurred shortly before Northern Pacific Railroad's arrival in Drummond, at the north end of the Flint Creek valley, offered easy access to the outside world.

The basin was originally connected to the market by steamboat at Fort Benton and by the Mullan road to Walla Walla. Both methods were painstakingly slow. It took some of the initial ores from the Hope Mine almost a year to be processed and smelted in Wales. Only high grade ores were worth shipping so far and the scale of mining was necessarily limited by the availability of such ore. The arrival of the railroad made shipping ore-processing machinery faster and cheaper, as well as making ore shipments cheaper. Cheaper shipping costs freed miners in the watershed to exploit a much broader spectrum of ores. In particular, the railroad meant much cheaper prices for the salt necessary in the milling of the silver ores. The

price for a ton of salt at the head of the Flint Creek valley dropped from $120 a ton to $25 a ton. This drop in production costs also allowed lower grade ores to be exploited and milled profitably. Within four years, the railroad had been extended to Philipsburg along the floor of the valley. The Philipsburg and Drummond Railroad carried passengers and freight and connected directly with the mills of the mining companies. The arrival of the railroad meant changing culture accompanied booming economic growth. Amy Brown Spencer remembers the railroad "brought changes to the town-road shows, circuses, and drummers in their snappy suits, bowlers, and mustaches very much waxed." Despite the isolation of the Flint Creek basin, the silver buried underground brought the railroad and intensive resource extraction.

Silver prices lagged again in the late 1880's as the result of heavy silver production and a saturated market. Congress buttressed the price by passing the Sherman Silver Act of 1890 that required a minimum government purchase of 4.5 million ounces of silver per month. This act boosted demand again and kept the silver boom rolling in Flint Creek. The intensive mining kept people working and the land in heavy use.

The resource bonanza drew thousands of people to settle in this isolated and relatively inhospitable basin in southwestern Montana. Many settled high on the flanks of Granite Mountain, in a town where water was delivered by the barrel from a lake four miles away and all the food was grown and hauled from more hospitable agricultural sites. It was so difficult to transport goods to Granite that teamsters charged by the pound for

36 Sorte, Hope Mining Company, 8-10; Emmons and Calkins, Geology of the Philipsburg Quadrangle, 191-192.
37 Amy Brown Spencer, "The Old Green House," 44.
A resident of Philipsburg described the winters by writing "everything that could freeze, froze every night and was thawed out in the morning." Granite's Presbyterian minister refers to men wearing four to six shirts to stay warm and Thomas Weir, superintendent of the Granite Mountain Mine, wore an ankle length mink coat all winter. Miners routinely died from pneumonia, largely because of the brutal transition from the sweaty mines to the freezing outdoor temperatures in insufficient clothing. "Many of the men, however, would dash toward the bunkhouse or cabins soaked and before they reached home - it might be an eighth of a mile - their clothes were frozen stiff."

Despite the obvious difficulties of settling in such a place, the buried wealth ensured a steady income. The natural resources and their attendant wealth made enduring rugged conditions a profitable choice for people. While Granite was an extreme example, the majority of settlement was linked directly to resource abundance. The presence of gold and silver ore drew miners, merchants, woodcutters, farmers, and ranchers. They used the basin's ore, timber, grass, and water to create towns, communities, and a way of life for themselves. The intensive use of the land and water for mining established an enduring conception of both economy and the natural world based on resource extraction.

**The Silver Mining Bust**

Political events far beyond the boundaries of the watershed had a profound impact on the Flint Creek basin in the early 1890's. The importance of mining to the economy and settlement in Flint Creek was underscored by

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41 Ibid., 66.
the financial panic that gripped the United States at this time. The direct connection between settlement and available resources meant a radical shift when resource extraction no longer provided a living for the hundreds of people in the basin. People coped with the collapse of the mining industry by leaving in droves.

The financial panic of 1893 had profound effects on resource usage in the watershed. The United States Treasury's stock of gold plummeted as countries abroad stopped accepting silver as monetary payment. In the ensuing panic, the gold reserves of several New York banks were used to shore up the sagging Treasury. President Grover Cleveland felt the culprit was government purchase of silver and in the summer of 1893 called a special session of Congress to repeal the Sherman Silver Act and de-monetize silver. In addition, India, one of the leading consumers of silver in the world, demonetized silver in June 1893. The result of these two actions was a collapse of the silver market. It dramatically affected land use and settlement patterns in Flint Creek.42

Many of the mines shut down immediately. Some remained open and some managed to re-open. Their continued production was at a significantly reduced level of operation. Despite local efforts to lobby the national government, the silver mining boom was gone for good. The ground still contained some rich ore deposits and local people were still willing to mine, but global market demand and national politics decreed that such work wasn't financially feasible.43

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43 "The Money Panic," The Philipsburg Mail, 6 July 1893, 4; "From a Correspondent: How He Views the Free Coinage and Its Probable Results," The Philipsburg Mail, 20 July 1893; 5. The newspaper clearly places this date as the beginning of mine shutdowns in Granite and
On July 1st, 1893, the foreman of the Granite Mountain Mine tied down the whistle, signaling the mine's closure. As many as three thousand people are said to have walked off Granite Mountain in twenty-four hours. Most stumbled down to Philipsburg to recover their savings from the bank there. A.L. Stone, an eyewitness, wrote

It was the one of the interesting experiences of my life that I was present during the exodus of the miners from Granite mountain, it was a memorable event. There were not vehicles enough to transport those who wished to ride down the mountain and many of them walked; trunks were piled high upon great hayracks and shipped down to the railway station; there were tears in a good many people's eyes, for Granite's people loved their town.

Later Stone wrote, "Almost within the span of a single day these camps were transformed from hives of industry to deserted villages." The mines were re-opened for a few months to pay off expenses and the mill processed ore until October, but the collapse of the silver market meant the collapse of the mining towns.

Although Stone's account is surely exaggerated, there is no denying that the population of Granite plummeted from a high near 4,000 in 1892 to 1200 by November and a bare 500 by 1894. The payroll for the Granite Mountain Mine reflects the slide. In June of 1892 there are 907 entries for workers and their wages totaled $71,143.53. The following July there were only 472 employees listed and the payroll amounted to $31,015.79. By October the numbers had dwindled to 40 workers who were paid a mere $2,973.87.

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44 This number is widely quoted in reputable historic sources but is probably inflated.
45 Stone, Following Old Trails, 271.
46 Ibid., 271.
The payroll didn't list more than 30 workers through April of 1898 when available records disappear.47

Other basin settlements also suffered from the loss of silver revenue. The milling towns of Rumsey and Kirkville virtually disappeared and Combination "threw 130 men out of work" in July 1893.48 Philipsburg, as the county seat and commercial center, was more stable. Even so its population plunged down to 700 in 1894.49 A few of the towns in the valley, like Princeton, relied on gold as well as silver and weathered the crisis intact. The mining bust hurt the ranchers scattered throughout the valley but they also managed to hold on. Nevertheless, the desertion of the Flint Creek basin demonstrated how closely the people and their settlements were tied to the availability of natural resources, in this case silver.

In spite of the collapse of the world wide silver market, a number of communities and mines struggled on. The Granite and Bi-Metallic mines were resurrected in 1898 and turned out almost a million dollars a year in silver until 1905. The population returned to Granite and hovered near one thousand until the mines were closed again in 1905. After the second closure Granite dwindled again, dropping to 53 in 1910 when the post office was

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47 Granite Mountain Mining Company Payroll for 1893, in Granite County Museum, June 1892-April 1898. It is interesting to note the persistence of the myth that Granite was abandoned in a single day. There is no question that the collapse of the silver market had a significant effect on the population of the basin but Stone's account seems dramatized. While payroll and newspaper accounts of the day clearly indicate that the departure was more gradual, numerous subsequent stories reflect Stone's exaggerated account. These accounts range from articles in Montana Magazine to the oral histories of various basin residents. The persistence of this evaporation myth may indicate more about the way people view the transience of mining and its attendant wealth than any particular historical truths.

48 Department of Environmental Quality, Bureau of Abandoned Mines, "Combination Mining District 59 (Granite County) Historic Context Technical Version," Department of Environmental Quality files, Helena, Montana, 2.

discontinued, and the town was eventually abandoned altogether. Granite is only the most blatant example of the tie between settlement patterns, population fluctuation, and resource availability and extraction in the basin. With the exception of Philipsburg, some cabins around Princeton and Southern Cross, and the valley ranching communities, the mining camps throughout the basin stand empty.  

Black Pine, Combination, Hasmark, Granite, Tower, Rumsey, and Kirkville are all victims of a national bust in precious metals mining that has carried through to the present. Between 1900 and 1910 the population in the county dropped 32% and the 1990 population of Philipsburg was only 925. As the mines played out or the market dried up, it was difficult to make a living in the cold, dry landscapes of the watershed. With the dwindling silver production, many miners left for good. The towns of Granite and Rumsey boasted only 53 inhabitants between them in 1910. The remaining population was concentrated around Philipsburg and along the valley bottom where the best agricultural land was.  

Echoes of the Mining Boom

The silver mining bust ended the most lucrative period of Flint Creek mining but the mineral wealth provided livelihoods for a succession of miners to the present. The Brooklyn, Royal, and Princeton gold mines operated with varying degrees of success through the 1940's. The Princeton produced nearly $1 million in ore by 1907 but output tapered in the following

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years. The settlement of Princeton shifted to seasonal recreational use in the 1940's, the buildings converted to summer cabins for owners living in the valley or in nearby Butte and Anaconda. Across the valley, the mines near Combination produced sporadically also. About 39,000 tons of ore were milled from 1904-1957. The Black Pine Mining Company re-opened the mine in 1974 and shipped ore to the Anaconda smelter at least until 1992. On nearby Henderson Creek a gold dredge ran from 1943-1946. The dredge produced gold and tungsten ore and the combined value of the ore was close to $750,000. The Southern Cross also continued to produce gold for a number of owners through the 1940's. Originally developed in the 1870's by Salton Cameron, the mine ended up in the possession of the Anaconda Copper Mining Company by 1913. While the mine produced well through 1920, it soon reverted to being worked by lessees. The last reported work in the mine was 1942.52

The basin experienced another boom tied to the world market and international political events during World War I. Manganese was discovered in the Flint Creek Range at the turn of the century. In 1916, manganese shipments from overseas were curtailed by the war and the Flint Creek supply gained importance. Since manganese is a crucial ingredient in steel, the ore was much in demand. Production peaked in 1918 and generated more than $3 million that year.53

Unloading Manganese ore at Philipsburg, 1917-18.
Photo no. 69-89, K. Ross Toole Archives, The University of Montana - Missoula.
Three companies dominated the production of manganese in the basin. The Moorlight Mining Company, the Trout Mining Company, and the Philipsburg Mining Company provided ore for nearly fifty years. The companies worked through a variety of configurations before consolidating as the Trout and the Taylor-Knapp Mining Company. The market dipped markedly after the war, though the use of manganese in dry cell batteries kept production open. U.S. government subsidies and production quotas provided a market for the region's manganese through the late 1950's. Demand rose sharply during the Second World War and the Korean War due primarily to government purchases for stockpiling. The government continued to provide a market until 1958 and the mines provided sporadic employment until the closure of the Taylor-Knapp in 1971. Manganese production generated more than $11 million in all.\(^\text{54}\)

The tungsten, remnants of silver and gold, and manganese helped hold the population that began disappearing with the collapse of the silver mining in the 1890's. The population of Philipsburg actually peaked in the years following the first manganese boom. It climbed to 1724 in 1920 and has declined steadily ever since. No new towns sprang up in the wake of the manganese boom because most of the production and milling happened so close to Philipsburg. Nevertheless, the continued mineral abundance provided jobs and income to a number of basin residents and maintained a

mining presence until the 1990's. Ongoing mining reinforced the land use pattern based on extraction of abundant resources up to the present.55

Environmental Impacts of Mining on the Landscape

The mineral abundance in the basin had a profound effect on land use. In addition to population growth and the towns that were built to accommodate newcomers to the basin in the 1880's and 1890's, mining affected the natural landscape itself. While the landscape of Flint Creek escaped the sort of industrial damage that burdens nearby Butte, the land still reflects its mining past. The intensive usage of available resources to facilitate the wealth of the mining boom played an important role in shaping the terrain of Flint Creek. The tailings, the tunnels, and the second growth timber all mirror the fundamental idea that Flint Creek was a place to extract the natural abundance. This heavy usage provided jobs and supported communities for generations of basin residents but also left its mark on the natural world.

While people always used Flint Creek's resources, the real change in land use accompanied the arrival of mining, its attendant population boom, and its industrial methods for resource extraction. The most obvious impact is on the earth itself. Silver and gold mining in the valley was carried out in two ways. Much of the gold lay near the surface and was mined by washing gravels through screens. The placering operations moved large quantities of soil and gravels and changed the stream courses of many of Flint Creek's tributaries. The effects of hydraulic mining can still be seen in the mounds of

debris near Maxville. A gold dredge that operated on Henderson Creek moved massive quantities of gravel during the three years it operated. The ore processed ranged from 600,000 to 750,000 tons.56

Most of the silver and some of the gold lay buried in veins deep beneath the land's surface. The only method of extracting the ore involved digging shafts and tunnels to follow these veins. It also required intensive milling and processing. The Granite Mountain Mine's main shaft was 1,550 feet deep and the Bi-Metallic's shaft was 1,800 feet deep. 57 "The drifts and crosscuts have a total length of more than 20 miles."58 In 1898 the Granite and Bi-Metallic combined to have a tunnel dug that was 8,850 feet long. This tunnel drained the water from the lower levels of both mines and eliminated the need to pump all the water up to the surface. 59

In the two most productive years of the mine 170,231 tons of ore were raised. The Granite Mountain Mine also had a mill and concentrator capable of processing 300 tons in twenty-four hours. Unfortunately, there is no accurate record of the total quantity of ore extracted in the whole basin. Despite this, a sense of how much earth was moved and processed can be gained by knowing that tailings from the Bi-Metallic Concentrator cover 435,000 square feet; an area the size of 14 1/2 football fields. While the Bi-Metallic tailings are the largest, similar tailings piles and ponds can be found near the mills of Granite, Rumsey, Black Pine, Combination, Red Lion, and Hope. There are references to the hills being riddled with tunnels and adits

58Emmons and Calkins, Geology of the Philipsburg Quadrangle, 203.
59Ibid., 202-203; Wolle, Montana Paydirt, 252.
Granite, Mt., early 1900's.
Photo no. 69-88, K. Ross Toole Archives, The University of Montana - Missoula.
(mine tunnel entrances) and waste rock piles are scattered throughout the basin. 60

The ore pulled from the earth and its subsequent milling had two other obvious effects on the natural environment of the Flint Creek watershed. The first is the impact on timber and other vegetation throughout the basin. The lack of vegetation on the tailings piles themselves is still visible today. These plantless patches surround old mill sites, the ground a vivid yellow-green. A Forest Service report discusses these changes in bland, politically careful, and understated terms. The metals contained in the tailings curtail plant growth and the report refers to "stunted vegetation" as an indicator of the extent of tailings. It indicates vegetative disturbance from "smelter fumes, settling ponds, tailings piles and toxic residues" and states that "most of these activities cause long term site changes and some may be seen as irreparable." 61

This same report highlights a more widespread impact on the flora of Flint Creek and states that "mining created physical disturbance by actually removing the vegetation in the vicinity of the mines but also resulted in forest cutting to provide shelter, wood for the mines, and for heat and cooking." 62 There is no complete record for the acreage cut, nor is there any accurate measure for how much wood was used by individual citizens for

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62 Ibid., 28. Since I am not a biologist I rely on the work of trained scientists for assessing the physical impact of mining. The description in the reports seems inadequate for describing the changes mining wrought upon the land.
cooking, heating, and construction. The most thorough records are from the mining era and consist of both lumber and cord wood usage by the Granite Mountain Mining Company.

The vast milling processes in the basin were fueled by cord wood until 1901 when the dam at Georgetown Lake was built to furnish electric power to the mills. For many years thereafter, wood was still used for cooking and heating. Wood was needed to run the 650 pound stamps that crushed the ore for milling. It was also used to heat the roasting furnaces and dry-kilns of the ore-processing plants and to run the hoists that raised ore from the mines. Only one year of records has survived, but it provides an excellent indicator of how much wood might have been consumed by all of the mining operations. The record is for September 1888 to September 1889 and covers cord wood used in the hoist and three mills of the Granite Mountain Mine. The annual usage is 23,714 cords, enough firewood to cover approximately 25 football fields four feet deep. Sanborn maps from 1889 for the Granite A and B and the Rumsey mill depict significant wood piles. These piles, roughly measured using the scale of the map, reveal over 50,000 square feet of stored cordwood to fire the boilers. Some of the piles are noted to be 14 feet tall. If the other piles are only eight feet tall (standard cord height) the storage yards still contain roughly 3200 cords at the time of mapping.

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64 I used the "Wood Book" from the Granite Mountain Mining Company and added the daily totals of wood received at each of four sites to arrive at the total consumption figures I use in the text.

65 Sanborn Company Fire Insurance Map: Deer Lodge County, Granite and Rumsey, "Granite Mill A and B and Rumsey Mill", January 1889. It is hard to gauge the permanence of such piles but they were worth noting for insurance purposes. Numerous photographs over the years also reveal enormous cord wood piles surrounding the mills.
Four years prior to the Sanborn maps there is no record for cord wood, but supply ledgers do note lumber purchased by the company. Lumber was crucial to building the hoisting works and mills, and also for supporting the thousands of feet of tunnels underground. Between 1885 and 1886, the company bought 517,619 board feet of milled lumber. Some timbers as large as 12 inches by 24 inches still remain in the ruins of Granite.66

It is not hard to imagine the effect that such intensive cutting had on the forests of the basin. Walter Johnson says of the Philipsburg area, "All this was clear-cut, here and Granite."67 He goes on to say that the area around Granite was completely bare. Both the Granite and Bi-Metallic Mining Companies eventually had to build mills at the foot of Granite Mountain because they had outstripped the timber and water supply. This is corroborated by Forest Service environmental impact statements. On states that "extensive clearcutting of timber stands for fuelwood to support the smelter at Granite was done in the later part of the nineteenth century in the area at the head of South Boulder Creek, Stewart Gulch, and Brown's Gulch."68 Pictures reveal barren hillsides and an area just east of Philipsburg was nicknamed Stumptown. Amy Brown Spencer, a resident of Philipsburg in the 1880's writes that "the supply of firewood was unlimited among the

66 "Wood Book 1888-1889", Granite-Bi-Metallic Consolidated Mining Company Records, Montana Historical Society Archives, Helena, Montana; Emmons and Calkins, Geology of the Philipsburg Quadrangle, 193,203; "Supplies Issued/ Lumber Received", Granite-Bi-Metallic Consolidated Mining Company Records, Montana Historical Society Library, Helena, Montana; Rossillon, Granite Resource Inventory, 28.


stumps. Several sources mention as many as 200 woodcutters and 2000 mules employed by the mining companies in the silver mining heyday.

This period was probably the peak of wood and timber usage in the basin, though firewood cutting and commercial logging continue to the present. During the century following the mining boom, these other uses have certainly exerted a steady impact on the timber in the basin. Mining also used timber in fits and starts throughout the twentieth century, but nothing on the scale of the sustained cutting of the 1880's and 1890's. Stud mills in the valley shipped timber to the mines in Butte. The primary output was stulls and the mills "kept a lot of people working for a long time."

The final significant environmental impact of mining in Flint Creek is the impact on water. This is seen in two ways. The first is the impact on surface water quality and the second is diversion of water for drinking water, industrial uses, and power generation. Overall, the quality of Flint Creek's waters has suffered relatively little over its whole length from mining. Even so, some of the streams closest to the mines show significant impacts even a century later. Fred Burr Creek below the site of the former Rumsey mill shows data "indicating a severely stressed environment unsuitable for many of the less tolerant diatom taxa." A 1979 study found elevated mercury levels at selected sites and a number of sampling sites with metals concentrations high enough to affect aquatic life. The poor water quality found at a few sites "resulted from the creek waters contacting tailings dumps.

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69 Amy Brown Spencer, "The Old Green House," 17.
70 Pat MacDonald, interview, Tape 3, Side B; Walter Johnson, interview, notes in possession of author.
72 Eugene Manley, Tape 3, Side B.
73 Gary Ingman and Loren Bahl, An Assessment of Mining Impacts on Quality of Surface Waters in the Flint Creek Range, Montana, (Helena, Montana: Water Quality Bureau, Montana Department of Health and Environmental Sciences, 1979) : 35.
Though there was little scientific data available the tailings may have affected fish populations. One resident says, "I know right now the fish in Flint Creek down here, I don't think should be eaten because mercury stays in these tailings." While the main stream has escaped ill-effects, some small volume creeks have been adversely effected by mining.

The second way that mining affected water resources was through diversion. In 1901, Flint Creek was dammed to generate hydro-electric power for the Granite-Bi-Metallic Mining Company. The former hay meadows were covered by a lake that eventually spread to 2874 acres and set off an acrimonious debate between former water users and the mining company. Though there is no comprehensive report on the impact of the dam, the flow of Flint Creek was significantly altered, the water now is routinely pumped over the Continental Divide for industrial and household use in the Anaconda area, and some productive agricultural lands were buried beneath water. Elaborate flumes were also constructed to deliver logs and water to some of the mining towns. Granite had "an intricate collection of flumes, pipes, and storage facilities" and brought its water nearly four miles from Fred Burr Lake. The mills used significant quantities of water for ore-processing and settled the tailings in dammed ponds, sometimes covering several hundred thousand square feet.

The scale of resource usage for mining was massive and this usage had considerable environmental impact. The impact is important because it

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75 Ibid., 64-65.
76 State Engineer's Office, Water Resources Survey, 13-14; Eugene Manley, interview by John Terreo, tape recording, Drummond, Montana, 27 July 1992; Emmons and Calkins, Geology of the Philipsburg Quadrangle, 203; Rossillon, Granite Resource Inventory, 24;
77 Ibid., 24-25.
shows how mining changed the natural world of Flint Creek. More importantly, showing the impact reflects the expectations of land use for resource extraction. The abundance is traded for economic opportunities and the land exists for the use of residents.

Conclusion

The streets of Granite are empty and I see more coyote prints than boot prints as I clamber up a steep hillside. The lush green of the valley and the scattering of ranch houses contrasts with the gray, forlorn remains of the mining town. To the south, snow glistens on the ski trails of Rumsey Mountain. While the mining boom has faded into the past, it lives on in the wealth, towns, and landscape it created. Other land uses have lasted longer, but none come close to the enduring impact mining had on the landscape and psyches in Flint Creek. Memories and physical remnants reinforce the residents' conviction that the watershed is a mining place and a place of plenty. As I turn west storm clouds are gathering, promising a spring squall. When the rains arrive, I'll be safely back in the truck and headed back towards Philipsburg. The rains will wash a little more of the tailings out toward the ocean, slowly erasing mining's remains.
Chapter 3
More than the Ore: Agriculture in Flint Creek

The valley bottom is verdant with alfalfa and hay grasses. Rolling down the Flint Creek valley on the Pintler Scenic Loop, fences and cattle straggle out across the meadows and up on the bench lands. The side hills are terraced by dozens of parallel animal paths and an occasional Beaverhead haystacker is silhouetted against the sky. Last time I drove this road, a family was moving a herd of cattle to pasture across the road. The cows blocked the road, so I turned the truck off and admired the way a girl of about ten handled the flank of the herd. She was wearing sneakers, intent on her task, and rode a full size horse. The herd heaving up one bank and across the pavement meant the beginning of another phase of the agricultural year, the animals heading up to grass on the bench lands. Five minutes spent watching cattle and the sky had an element of timelessness. This seasonal ritual of herd movement has continued as reliably as winter snows for more than 100 years.

While buried silver provided the primary boost to settlement and economic development in the watershed, agriculture played a crucial supporting role to silver's star. Agriculture grew up initially to support the mines. While the mines were booming, the farms and ranches served local needs. Following the 1893 crash of silver mining, this formerly subsidiary industry rose to prominence in the local economy. Agriculture provided a stabilizing economic force and held a core of population in the basin after the miners fled.¹

The thick native grasses, water available for irrigation, and "deep, rich alluvial soils" supplement the mineral wealth of the watershed. The grass

¹ I use the term agriculture to encompass livestock raising, crop production, as well as milk, egg, and vegetable production. Throughout this chapter, when the word agriculture is used it generally refers to both ranching and farming.
and soil make the Flint Creek basin well suited for agriculture. The growing season for crops is short; one year recorded only six days between the last spring frost and the first fall frost. Nonetheless, the valley offers excellent conditions for agriculture focused on grazing and hay. The construction of the railroad connected Flint Creek to outside markets as near as Anaconda and as far away as the East Coast. Agriculture principally developed in response to mining needs. However because of plentiful water, suitable growing conditions, and access to outside markets ranchers thrived after the mines were gone.

Unlike many former mining areas, the residents of Flint Creek continue to ranch and farm in conspicuous numbers. Many Flint Creekers maintain a way of life a century and a half in the making. In the rich bottomlands north of Hall, a sign by a side road reads "Henderson Ranch, est. 1868." While mining has boomed more spectacularly, a significant and steady segment of the economy and populace has depended on agriculture. The relative stability of agriculture in the valley has shaped distinctive land use patterns that continue to the present. This stability can be attributed to the fertility of the valley's rich soil and irrigation water, connection to outside markets, and the continued abundance of grass in the basin. Examining these factors provides answers to the question of how agriculture managed to outlast the mining booms and busts and thrive in a cold, rocky Montana basin.²

² This chapter borrows theoretical pieces from William Wyckoff and Katherine Hansen, "Settlement, Livestock Grazing and Environmental Change in Southwest Montana", Environmental History Review 15 (Winter 1991): 45-71. In this article they suggest a settlement model for examining how "external forces impacted particular parts of the local landscape." (Ibid., 50) I borrow several of the key variables from the model including "the environmental diversity of the region, 2) the changing pace of population change, and 3) the encroaching nature of the global economy, particularly as related to the raising of domestic livestock." I also use Annie Gilbert Coleman, "A Hell of a time all the Time: Farmers,
Early Agriculture and the Silver Boom

Agriculture played a role in the land use of the valley beginning as early as 1859. That is the first year of documented use of the extensive valley bottom meadows for cattle grazing. These cattle belonged to Johnny Grant, who operated a successful road ranch and stock raising business in the Deer Lodge valley. He took advantage of the plentiful grass in Flint Creek and used the drainage for summer grazing. There is sporadic evidence of grazing use over the next several years and it is likely that Grant and the Stuarts ran summer cattle in the valley steadily during this time.\(^3\) The arrival of the Mullan Road made the passage of agricultural products easier and opened Flint Creek to both miners and ranchers. A few years later the arrival of the first silver bonanza brought more intensive cultivation to the basin.

The discovery of silver in 1865, and the settlement around Philipsburg in 1867, created an immediate need for farmers and ranchers to supply the miners with food. Settlements also grew along the river bank to serve the needs of travelers along the Clark Fork River and Flint Creek. Like Johnny Grant's establishment, these road ranches provided feed for stock and riders alike. In the lower valley Lucy Ann Coberly homesteaded and set up a hotel and road ranch to serve travelers on the 2 day ride from Philipsburg to Deer Lodge. Augustus Gird also set up a road ranch near present day Gird Creek in the early 1870's.\(^4\)

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\(^3\) Granville Stuart, *Forty Years on the Frontier*, Volume I, 133-140; Lyndel Meikle, ed., *Very Close to Trouble: The Johnny Grant Memoir*, (Pullman, Washington: Washington State University Press, 1996) : 64-80. Dan Metscher reports that Fred Burr ran cattle during this time and it is likely that Conrad Kohrs ran cattle in Flint Creek after he bought Grant's ranch but I was unable to find firm evidence to support these ideas.

The town of New Chicago was founded as a supply point for travelers and the agricultural community in the lower valley. It sat at the junction of the Mullan Road and the turn-off to Philipsburg. John Featherman started a store in 1872 that he maintained until he sold it in 1915. After the arrival of the railroad in 1883, he moved the store across the river to Drummond. The store did a brisk business with farmers and ranchers in the lower valley and the only surviving ledgers reflect the bounty of the harvests. Featherman routinely bought eggs, butter, wheat, and thousands of pounds of potatoes from residents of the area. The diversity of products raised by Flint Creekers also appears in the beets, peas, radishes, and rutabagas that Featherman occasionally bought from customers. There is no evidence in his records of beef and hay raised, but it is certain that before the railroad arrived travelers and the stage coach used hay for stock.5

This first flood of agricultural settlers immediately changed the land use patterns. They were also well connected to outside markets from the beginning. Reports from a local newspaper claim that nearly one-fifth of the valley was homesteaded by 1869. In 1872 the same newspaper wrote, "All the way up the valley to Henderson and the confluence of the Flint and Boulder, the land, i.e., that which is most convenient for irrigation- is taken up." The Dingwall family had a ranch that reportedly supplied meat to miners. Other early ranchers included Joe Henderson and G.M. Douglas. The latter reportedly stored 50,000 pounds of vegetables in Deer Lodge for the winter in 1870. Pat Dooley raised horses in the lower valley near Willow Creek at this

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5 Ledgers Volume 2, 3, Featherman Mercantile Company Papers, K. Ross Toole Archives, Mansfield Library, Missoula, Montana; Paige, Carlyle, and McCoy, Ghost Town Trails, 28-32; New Chicago also served as a stop on the Mullan Road stage coach route according to Eugene Manley who grew up on a ranch right outside New Chicago and spent years at the stables there.
time. His race horses were apparently much coveted and drew buyers from as far away as Saratoga, New York. All of this activity centered much of the settlement in the rich lower valley where the growing season is longer and access to both the Philipsburg area and the Mullan Road was feasible.  

The first few years of settlement in the upper valley were unstable but the growth of the mines and mills created a market for agricultural products. By the 1880's, homesteaders began to fill the upper valley. They provided food to the miners and their stock at Philipsburg and Granite. At this time, the chief products of the valley ranches were hay for the stock at the mines and farm products like butter and milk. A lifetime upper valley resident remembers,

In the early days they raised hay for [stock], because they used a tremendous amount of horses and mules in the mining operation, and they had to have milk and beef. So that's why in the upper end particularly the agriculture was started here. He also remembers that his great aunt settled near Philipsburg to provide milk and cream to the miners from her dairy cows. J.A. MacKnight reported in 1892 that the valley was "settled in its entire length." The valley bottoms filled with settlers at this time because the soil was rich and water was more reliable. This original agricultural settlement created a land use pattern that continues to the present, with many of the oldest families holding the best water rights and the most fertile ground.

In addition to feeding hungry miners, the horses and mules of the livery stables and freight hauling operations in Philipsburg and Granite

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6 New Northwest, 8 June 1874, 3; New Northwest, 27 May 1872, 3; New Northwest, 18 March 1870; Metscher, Flint Chips, Part 47; Eugene Manley, author's interview, Tape 3, Side A; New Northwest, 9 September 1870, 3. Dan Metscher has spotty but engaging information from this period included in his book. Unfortunately it often lacks footnotes so it is difficult to obtain more thorough background on his vignettes.
7 Pat McDonald, Tape 1, Side B.
8 J.A. MacKnight, Mines of Montana, 79.
needed feed. All supplies were hauled up the steep road to Granite by teams. There were also rumored to be 2,000 mules working at the mines and carrying wood from the surrounding hillsides. The ledgers of the Granite Mountain Mining Company reveal that it bought both hay and oats from local residents. While there is no comprehensive record of mining company purchases of fodder, all this activity boosted agriculture in the basin.9

The arrival of the Northern Pacific Railroad along the north edge of the valley in 1883 increased agriculture's access to larger markets. The line was extended to Philipsburg in 1887 and opened the entire valley to easy railroad access. This meant that the markets of mining camps like Butte were more readily available to Flint Creek ranchers and farmers. An indicator of agriculture's growth is seen in the statistics of Montana's Department of Labor, Industry, and Labor. By the time the first comprehensive state report on agriculture was issued in 1893, the county boasted 5,298 horses, 846 cows, 5,738 stock cattle, and 10,960 sheep. Their assessed value, along with the value of various crops, amounted to $243,714.10 While this number pales in comparison with the $2.8 million produced by the Granite Mountain Mine in

9 Pat McDonald, Tape 3, Side B; Granite-Bi-Metallic Consolidated Mining Company Records, Montana Historical Society, Helena, Montana: Box 15, folder 17; Garnet Stephenson, Silver Empire, 5.

10 J.A. MacKnight, Mines of Montana, 79; Chadwick, "Silver Boom and Bust," 21; Emmons and Calkins, Geology of the Philipsburg Quadrangle, 191-192; First Annual Report of the Bureau of Agriculture, Labor, and Industry of Montana, 1893,(Helena: State Publishing Company, 1894): 240-242; Unfortunately there are no specific watershed statistics issued by the state. The figures quoted are for all of Granite County. The best agricultural land lies in the Flint Creek, Upper Rock Creek, and Clark Fork Valleys. Extrapolating precise figures for the watershed is difficult. The majority of settlement and the major markets at this time were concentrated in Flint Creek. It is important to understand that the bulk of this agriculture was in the basin but impossible to know exactly what percentage. The figures provide a good representative view of trends in the county and are indicative of general trends in the watershed.
a single year, it was nevertheless a significant, and growing, piece of the area economy. 11

**Post-Boom Stability: 1893-1990**

When the Panic of 1893 struck, mining in the basin declined precipitously. Despite the decline in population, agriculture managed to maintain a stable place in the economy. The relative consistency of agriculture helped hold a core population in the Flint Creek watershed. This is linked directly to good grazing land for livestock, a steady water supply, and connection to outside markets. These three factors provided a measure of stability to farmers and ranchers who have maintained a strong agricultural presence in the valley until the 1990s. Examining the state agricultural records for the century following the silver bust demonstrates the stability of farmers and ranchers for this period.

Mining enjoyed several revivals over the following century and the periodic surges in population helped local agriculture. However, mining never regained its former preeminence and farms and ranches rose to the top of the economic heap in the Flint Creek basin. An 1899 report declared that "these valleys are notably good agricultural districts and lying in close proximity to the large mining districts, the farmers find a convenient and

11 Granite Bi-Metallic Consolidated Mining Company Papers, Granite Mountain Mining Co. Annual Report 1892, (Philipsburg, MT: Office, Granite Mountain Mining Co., 1892), Montana Historical Society Library, Box 17, folder 9.
11 Seventh Annual Report of the Bureau of Agriculture, Labor, and Industry of Montana, 1899, (Helena: State Publishing Company, 1900): 153. The census data uses the term farms to refer to agricultural proprietorships that include both crop producers and livestock producers. In western language the words farmer and rancher conjure different images. The farmer riding a combine through wheat is distinct from a stockman out branding cattle. These stereotypes overlap in Flint Creek since many of the cattle ranchers also raise some crops. For the sake of this paper I will use the census designation of farm to refer to both types of agriculture. Unless ranches are specified, the word farm includes ranches as well. My apologies to the ranchers who are rankled by being referred to as farmers.
profitable market for their produce.\textsuperscript{12} The proximity to the thriving communities of Anaconda and Butte was crucial and boosted Flint Creek's agricultural sector. While local demand slipped after the silver mining bust, livestock numbers climbed. The constant value and quantity of livestock in the basin and the county for the next century underscores the continued demand for beef, wool, and lamb in markets beyond the border of the basin.\textsuperscript{13}

In the year following the Panic, the number of sheep being shorn in the county increased by almost a quarter to 3,800 and 22,000 pounds of wool was shipped at an average price of 8.5 cents a pound. Wool tumbled to half the price of the year before, but the herds in Granite County still grew. Almost 2,500 sheep were shipped to the slaughterhouse and wool sales amounted to nearly $30,000. By 1900 the number of cattle and cows had grown to 10,091 while sheep had increased to 15,655. The number of horses and mules fell to 3,534 in 1897 and then to 2007 in 1900. This is probably due to the decreased demand for mules and horses working at the mines. The disappearance of so many miners and mining towns hurt local demand for agricultural products. However easy access to outside markets by rail kept the amount of livestock and its value fairly steady.\textsuperscript{14}

\textsuperscript{12} \textit{Seventh Annual Report}, 153.
\textsuperscript{13} Cattle were the keystone to agriculture's prosperity in the basin. Demand from outside the basin shaped land use. This demand was crucial for supporting agriculture after local populations plunged. The trend continues today, with national beef demand driving ranching in Flint Creek. For example, in the 1950s and 60s the vast majority of cattle from Granite County were shipped out of the county. In 1958 18,596 cattle were moved out of the county. Eleven years later 22,995 cattle were shipped out of Granite County. See \textit{Montana Agricultural Statistics Volumes VII to XII} for more information about cattle movements during this time.
From 1900 to 1910 the population of the county declined from 4,328 to 2,912. At the same time the number of farms leaped from 205 to 295. This underscores the shift in Flint Creek from mining to agriculture. The rural farm population rose while the population of Granite petered into oblivion. The town of Philipsburg slipped from an estimated 2,000 in 1900 to 1250 in 1910. By 1914, even Montana Opportunities noted this shift in its general remarks. "Granite County contains rich mineral resources, and Philipsburg was for many years one of the greatest silver camps in the West. Much attention is now being paid to the breeding of high grade horses and cattle." Such changes meant settlement and land use patterns continued to shift. The mining populations emptied from the hills and the remaining residents were concentrated in Philipsburg and along the fertile valley bottoms.

For the next decade, the value of livestock remained fairly constant and then began to climb. By 1909 the number of cattle rose significantly and the total value of agricultural property rose with them. There were 13,997 cattle and cows that year with an assessed value of $239,681. The vast majority of these were yearlings, two year olds, and stock cattle. There were also about 8300 sheep and values for all livestock totaled $396,436. Livestock dwarfed grain raising because the rich grasses of the basin were more abundant than the frost free days necessary to grow wheat and oats. Some years the value of grain and other crops amounted to less than $2,000. At this time some winter

16Montana: Resources and Opportunities, 1914, (Helena: Department of Labor, Agriculture, and Industry, Division of Publicity, 1914): 261.
wheat, oats, and a smattering of other crops were produced, but the bulk of Flint Creek's agricultural wealth was on the hoof.\textsuperscript{17}

The constant availability of good forage formed a reliable resource for basin residents. Agriculture continued to rely on plentiful native grasses. A 1907 report noted that hay was a principal crop in the upper end of the valley and said, "There is some timothy and clover but most of the hay is from native grasses. No alfalfa is grown."\textsuperscript{18} That same year forty carloads of hay were shipped via rail from Drummond. This native grass also fattened the cattle that dominated the basin's grazing land.

Despite heavy dependence on cattle and hay production, the agricultural economy grew somewhat more diversified at this time. A new creamery was built in Hall to supplement the creamery at Philipsburg.\textsuperscript{19} Cream production played an important role as supplemental income for many families. Eugene Manley recalled that

in the lower valley there were quite a few, a big share of the ranches, that had anywhere from five to fifteen, twenty milk cows. And so what they used to do was ship that by rail. I don't know where it went from there, probably Butte or Missoula and a lot of those people were very dependent on those weekly cream checks.\textsuperscript{20}

Dairy cows helped round out ranch incomes through the late 1970s when there were still about one hundred cows in the county. By 1997 dairy cows had disappeared entirely from Flint Creek and the county.


\textsuperscript{19}Twelfth Biennial Report, 202; Thirteenth Biennial Report, 258-259

\textsuperscript{20}Eugene Manley, interview, Tape 4, Side B.
Crops like wheat, barley, and oats also added diversity to the agricultural economy. In 1910, 2,698 acres were planted in oats and 1,590 acres were planted in wheat. Some wheat and oats were shipped outside the county to Butte and Missoula. By 1977 there were 1400 acres of barley and 400 acres of oats in Granite County and twenty years later there were no oats or wheat but still 2,000 acres of barley planted. Apple orchards in the lower valley and potatoes also added to the grass dependent agriculture of the 1910s and 1920s. Such diversity helped stabilize agricultural incomes in the basin. While playing a more significant role from the 1910s to the 1970s crops remained a small piece of the agricultural puzzle.21

For much of the remainder of the century, agriculture remained a remarkably stable force in basin land use and economy. This stability is reflected in the relative consistency of livestock numbers, hay production, and the acreage in farms and ranches for this seventy year period. The number of acres devoted to agriculture in Granite County increased from 184,393 in 1925 to 341,332 in 1954. In 1969 there were only 140 farms in Granite County but acreage climbed to 394,223. Twenty three years later 138 farms and ranches remained and occupied 349,938 acres.22


The number of cattle stayed nearly constant until the 1990s and there was rapid growth in the number of sheep in the valley until they reached a peak in the early 1930s. There were 27,800 cattle and calves in Granite County by 1954, nearly double the number that were on farms and ranches in 1909. This number climbed above 30,000 by 1960. Cattle and calves topped 36,000 in 1970, in 1979 there were 31,700, and the cattle numbers in the county fell slightly to 26,600 in 1996. Sheep had more dramatic growth in the post-mining era. By 1917 there were 18,273 sheep in Granite County and the number grew to 26,611 by 1930. Pat McDonald remembers a band of perhaps 10,000 head in the upper valley in the 1930s and several bands in the lower valley. After this peak, sheep raising declined in Granite County as ranchers focused on more profitable cattle.23

Hay production was another consistent land use and steady contributor to the local economy. From the early days of supplying the mines, much of the rich valley bottom was dedicated to raising hay. In 1892 roughly 3,306 acres were used for hay. In the years following the silver crash, demand for hay at the mines declined but other livestock in the basin kept overall demand steady. The beginning of stream irrigation by ditch in the decades following boosted this acreage considerably. By 1945 hay was raised on 33,600 in Granite County. Land remained in steady hay production and hay crops

occupied nearly 34,000 acres in 1970. This acreage fell to 26,700 by 1979, but twenty years later there were still 31,000 acres in hay production.24

Many ranches in the upper Flint Creek valley raised hay as their main product until the 1930s. Pat McDonald remembers that the arrival of motor vehicles diminished the need for horses and hay. His father switched from hay to beef cattle in 1934. With constantly productive hay land and a drop in hay prices, it made more sense to feed the hay to cattle in the winter than to sell it at depressed prices. Other ranchers in the basin began shipping hay out of state to better markets. Apparently buyers in Kentucky "wanted timothy hay and paid a premium for it."25 During the Depression years government purchases of hay also helped sustain an ailing market. Eugene Manley's father depended on hay sales and the government paid top dollar for hay. In 1935 and 1936 the government paid five times the local price of $3/ton for hay in Flint Creek. The hay was then shipped from Drummond to drought areas in Minnesota and the Midwest.26 This outside demand helped keep Flint Creek agriculture on an even keel through the lean years of the Depression.

Another measure of agriculture's steadying role in Flint Creek is the value of crops and livestock. The year 1928 provides a good benchmark for agriculture's relative importance in the basin and Granite County. Livestock sales of sheep, cattle, horses, and mules accounted for nearly $800,000 that year. Grain production also grew at this time and the wheat, oat, and barley yields amounted to $125,000 in 1928. In 1928 agriculture clearly outstripped all other revenue sources in Granite County with the combined value of

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25 Pat McDonald, interview, Tape 4, Side A.
26 Eugene Manley, interview, Tape 4, Side A.
livestock and crops totaling $1,333,168. Mining revenue amounted to $500,000 while the estimated value of manufacturing was $125,000. In 1950 livestock sales accounted for $1.7 million in cash receipts and crops brought in $229,600. This compared with $90,325 generated by mining in the Flint Creek basin and $97,000 by all mining in the county that year. This agricultural dominance continued through the 1960's. That year there were still 267 people working in farming jobs, and agriculture represented the largest single source of income, leading mining, manufacturing, and retail business.27

Agricultural dominance of the economy began to shift in the mid-1970's, though it remained a stable part. In 1974 the number of farm owners and employees barely outnumbered government workers in Granite County. That year there were 252 farm owners and workers, and 251 federal, state, and local government employees. Agriculture still accounted for 21 percent of the employed workforce of the county and generated $4.36 million in income. As late as 1993 there were still 189 people working on farms, about 12.5 percent of the employed workforce. Farm income in 1993 was $2.2 million while mining accounted for $933,000 in Granite County. Despite recent declines in Flint Creek agriculture, it exerted a steadying influence on the economy and population during the century after silver mining went bust. This anchoring role is seen in consistent land use and values for agricultural production. The pattern of stable cattle herds, hay production, and total agricultural acreage remained prevalent all the way to the present.28

Such changes have not altered land use patterns in Flint Creek significantly. Cattle grazing and hay crops still dominate basin agriculture. While land use patterns have held steady since the turn of the century, agriculture has changed some of the natural world of Flint Creek. This is particularly seen in plant communities. The bulk of the hay crop has changed from a composition of primarily native grasses to a mixture of timothy, clover, native grasses, and alfalfa. In 1905 a report noted "...most of the hay is native grasses. No alfalfa is grown." By 1997 nearly a third of Granite County's hay land was planted in alfalfa. Rough and Idaho fescues have been replaced by crops in many valley bottom sites. Some of the upland benches also reflect the effects of grazing in altered plant composition and stream channels. While it is clear native grasses have been supplanted, there is no comprehensive range land study available for Flint Creek. Despite this change in composition the grass remains abundant, continuing to provide the foundation for agriculture.

Nature's Supplement: Irrigation

The natural grasses that played such a critical role in supporting agriculture were supplemented by irrigation beginning in the 1870's. The artificial ditches, dams, and reservoirs buttressed the influence of agriculture by stabilizing the availability of water. Pat McDonald recalls that his ancestors soon discovered that forage for winter herds was critical and began irrigating.

29 Tenth Biennial Report, 331.
30 Agricultural Statistics: Volume XXXV, 77,79; John Joy, "Vegetative Resource", 2,4, 7,11; Boulder Creek/ Fred Burr Landscape Ecology Unit; National Forest Management Act Integrated Resource Analysis, (n.p.: Beaverhead-Deer Lodge National Forest, 1996): 20, 40. This study notes that "livestock grazing in the Boulder/Wyman analysis area has adversely affected the function of stream channels directly by altering channel morphology, and indirectly by changing riparian composition."
During the winter of 1889-1890 the Granite Mountain Star noted "every rancher in the Flint Creek Valley lost more or less stock" and attributed this loss to a lack of hay. Such experiences inspired valley ranchers to irrigate from streams in order to ensure adequate winter food supplies for their herds.

There was a slow but steady growth in the number of irrigated acres and hay yields because of that irrigation. Many of these ditches were dug by hand and by 1905 there were seventy miles of irrigation ditches in the county, the vast majority in Flint Creek. The importance of irrigation is demonstrated by the difference in land prices between irrigated ground and dry ground. In 1912 an acre of irrigated land was worth $50 to $100 per acre while land without water was worth roughly $15 per acre. This gap was still in evidence in 1928 when improved irrigated land was worth $40 to $75 per acre while non-irrigated land was worth $8 to $15 per acre. The gap continues today with irrigated land commanding roughly $1200 per acre while non-irrigated agricultural land averages roughly $300 per acre.

During the 1930s, with the help of the Works Progress Administration, the State Water Conservation Board built the East Fork of Rock Creek Reservoir to provide water via ditching to the Flint Creek valley. When the dam was completed in 1938, it delivered supplemental irrigation water for 25,000 acres in the basin. The reservoir doubled available water supplies for the basin and water from the project was immediately put to use for

31 Granite Mountain Star, 29 March 1890, 4.
32 Montana: Resources and Opportunities, 1912. (Helena: Department of Labor, Agriculture, and Industry, Division of Publicity, 1912): 233:Resources and Opportunities, 1928, 282. With the valley land increasingly bought for uses other than agriculture it is more difficult to determine the differential. Conversations with the Department of Agriculture, Jim Dinsmore, and several real estate agents provided the approximate figures I use here. The Department of Agriculture no longer calculates the difference but only an average for all agricultural land in the county. Real estate advertisements in the Philipsburg Mail for May and June 1999 listed asking prices for irrigated agricultural land as high as $2500 per acre.
Irrigation in the Flint Creek basin changed dramatically in 1938 with the completion of the East Fork Rock Creek Reservoir. Unlike Georgetown Lake and Lower Willow Creek Reservoir, this water, administered by the Flint Creek Water Users Association, is additional water that would not have entered the basin at all without the project. . . during a drought this water can almost equal the total natural runoff of Flint Creek in summer.³⁴

The reservoir added stability to the irrigation water supply and guaranteed that, even in drought years, water would be available to support hay and grazing. Another reservoir was built on Lower Willow Creek in the early 1960s, further buttressing water availability for irrigation.

The irrigated land had higher yields and accounted for most of the hay and other crops raised in Flint Creek and Granite County. In 1900 there were 168 farms irrigating 18,513 acres in Granite County. This acreage climbed to 24,107 just ten years later. By 1954 roughly 34,500 irrigated acres yielded nearly $1 million in crops, while non-irrigated crops accounted for less than $100,000. In 1959 Flint Creek and its tributaries irrigated 17,273 acres while the rest of Granite County had roughly 10,000 acres under irrigation. County crop values that year were nearly identical to those five years earlier. In 1997 Flint Creek still contained 25,200 acres of irrigated ground, nearly all of Granite County’s harvested total of 29,900 that year. Hay production on irrigated land that year was 74,000 tons dwarfing the meager output of 2,500 tons from non-irrigated land. The fact that hay was only harvested on 1500 non-irrigated

³⁴ Ibid., 21.
acres is an indicator of how critical irrigation is to hay production and agricultural stability.\textsuperscript{35}

Irrigation was a key factor in the stability of agriculture in Flint Creek. Without the life-giving irrigation waters the land use pattern in the basin would be very different. The constant production of hay, so necessary for the cattle in the basin, would have been impossible without the additional moisture from irrigation. This water supply allowed ranchers to maintain a consistent level of production and consistent place in the valley's economy. This consistency created distinctive land use patterns and held a core of the basin's population in the century after mining collapsed.

Conclusion

Now the reservoirs are filling with spring runoff and the hay grows fast in the hot summer sun. Up on the bench lands, the cattle I saw this spring fatten on native grasses. For the last century this pattern has continued in a steady cycle. Despite changes to the natural world, grazing and hay remain plentiful in the Flint Creek basin. This is due in large measure to reliable irrigation flows, easy access to outside markets, and rich soil in the valley bottoms. The amount of farm acreage reflects a remarkable consistency in the land use of Granite County and Flint Creek for nearly a century. Agriculture's role was especially strong after mining crashed in the 1890's. Farms and ranches held a core of the population in the basin after many miners fled. While there have been some fluctuations, the basic pattern of

\textsuperscript{35} Montana Agricultural Statistics: Volume VI, 12,100; Montana Agricultural Statistics: Volume VII, 13; Water Resources Survey, 28-29; Montana Agricultural Statistics: Volume XXXV, 49, 77. Unfortunately I was unable to unearth precise irrigation totals for the Flint Creek Watershed except for the year 1959. It may be possible to discern from water records in the Deer Lodge and Granite County courthouses but I failed to find a method to do so. There are records for how many acre feet each water right holder has but no record of how they allocated that right in a given year. If 1959 is indicative, then Flint Creek agriculture represents about two-thirds of all irrigated acres in the county.
irrigated ranches, cattle grazing, and hay production remains startlingly stable and continues to dominate the landscape. The steadying force of agriculture has prevented the rest of Flint Creek from resembling the mining ghost towns that dot its hills.
Chapter 4:
Evaporation: What Remains of the Flint Creek Valley

Just south of Philipsburg, the ground spreads out a luminous yellow-green and the paths of old streams end in a plantless plateau. Uphill of this tailings plateau lies the crumbling chimneys of the old Bi-Metallic mill and the abandoned mines of Granite. Across the valley irrigated fields spread along the banks of Flint Creek. At the bottom of the hill, the pickups rumble down Broadway and over the Sunshine Station bar hangs a bumper sticker proclaiming, "If it can't be grown it must be mined." Along with the water in the tailings ponds, the mining industry and economic good times it brought to the Flint Creek Valley have evaporated. What remains of the booming mining industry is some arsenic, a handsome though aging downtown, and a fierce pride in place.

With the ongoing bust in mining and a recent decline in agricultural prices, the way people conceive the Flint Creek Valley is being challenged. Increasingly, residents are forced to reconcile the decline of a natural resource based economy and the exhauston of their most commercially marketable resources with a conception of place that is based on resource abundance. The loss of cultural foundations that accompanies the consumption of natural resources is a source of struggle for Flint Creek residents in the 1990's. As mining's twilight fades from the Flint Creek valley and ranchers face an uncertain future, the nostalgia about the mines, ranches, and "old times" grows stronger and more pervasive. The stories some residents tell and the memories they hold dear merge into a eulogy for a place that never was.

Mining and ranching have figured prominently in the history of the basin. Resource extraction and the jobs it provided has had a profound
impact on the way that people view the Flint Creek basin. As the economy begins to shift from the traditional industries to a more diverse and less tangible foundation, the way that Flint Creekers relate their sense of place and construct their histories provides a mirror for much of the struggling rural West at the turn of the millennium. Understanding the sense of place and history in Flint Creek provides crucial insight into similar struggles throughout the region and yields clear examples of how some westerners try to cope with the waning of an economic way of life a century and a half old.

The stories of recent Flint Creek residents add crucial depth and a local voice to the more formal history of the watershed that precedes this chapter. The way people portray the place they live, and the value and history they give that terrain and their place in it, speak volumes about their lives and their relationship to the land. The relationship between people and place can be traced through formal history, and through the way that Flint Creekers describe both the landscape of the basin and their own history. Their constructions reveal a sense of pride, abundant natural resources, and landscape. Historical land use and basin culture are intimately linked as evidenced in the way their stories are told.

Faced with the evaporation of an economy and a way of life almost 140 years in the making, older Flint Creek residents share a similar definition of the place they live in and many link it directly to resource extraction. The utility of the land is a point of narrative congruence that is common to many of the stories told by these residents. The abundance of natural resources supported the economy and the settlement of these older residents. As these resources, and the accompanying economy, begin disappearing, residents continue to center their sense of place on resource abundance.
While mining appears to have left Flint Creek for good, ranching continues to provide a measure of stability. In stories, residents cling tenaciously to the presence of constantly renewable water as the sole resource that continues to support the type of productive economy that they understand and care about so deeply. The continued flow of water prevents the evaporation of the remaining community. The relatively steady availability of water for irrigation and ranching protects the community from complete dissolution. Some residents fear, however, that the binding tie of water may not be enough to maintain a valley economy, a relationship with the land, and community that they understand. To buttress themselves from the sense that this abundant past may be slipping away, some residents construct a history that emphasizes natural resource extraction. The history and stories about the landscape reveal a deep-rooted sense that Flint Creek is both a place of historical abundance, and a place in danger of fading away.

In recent years, the number of ranches and agricultural earnings in the area have declined. Economies of scale, and the low price of beef, force ranchers to consolidate in order to survive. After serving as an economic and cultural anchor for nearly a century, agriculture's financial hold is growing more tenuous. Accompanying this decline in agriculture is growth in government and service jobs, with the retail trade adding nearly 100 new jobs in the last six years while farming lost 18. A glance through the Philipsburg Mail reveals advertising for a handful of subdivisions and a few "exclusive mountain retreats." This recent shift in the economy of the basin adds urgency to an older generation's need to preserve a sense of place. The traditional resource relationship with the land is threatened, and with it, the culture and community that have grown up to support it.
Community Loss and Consumption

Community loss and survival is also addressed by Janet Finn in her book *Tracing the Veins*. She focuses on the struggle for community in both Butte, Montana and Chuquicamata, Chile. She uses the idea of consumption as an analytical tool for examining the relationship between people, place, and mining. This concept is manifested in the actual consumption of miners' bodies by silicosis, and by the general physical toll of working in the mines. She also addresses the consumption of both community space in Butte and community solidarity in Chuquicamata. "At present, a dominant discourse in both communities is that of the consumption of community values and the loss of their mode of life."¹ This loss is tied directly to the consumptive nature of the dominant industry in both locales: copper mining.

Finn uses the "ever-widening open-pit mines" as symbols of the consumptiveness of copper mining. Resource extraction required the consumption of physical space. The Berkeley Pit in Butte crept out to engulf whole neighborhoods and residents watched their homes and sacred places disappear. "For many [residents], the loss ran deeper than displacement from houses and the disruption of neighborhood ties."² The loss of physical space resulted in a loss of community and a sense of betrayal. Finn finds a similar loss of community in Chuquicamata, though it is tied to the loss of freedom under Pinochet's dictatorship, not the loss of physical space. It is also tied to the exhaustion of copper and the resulting loss of jobs. With the gradual

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¹ Janet Finn, *Tracing the Veins: Of Copper, Culture, and Community from Butte to Chuquicamata*, (Berkeley: University of California Press, 1998), 178. This theme of community loss and community survival is addressed by Dayton Duncan in his book *Miles from Nowhere: In Search of the American Frontier*, (New York: Penguin Books, 1993). He visits many of the sparsely populated counties in the West and examines the qualities that have enabled marginal rural places to hang on.

² Ibid., 191.
closure of the mines, the basis for community identity is eroded. "Residents of both communities spoke sadly of the ultimate consumption of their copper reserves and the concomitant loss of a familiar way of life." As the resources disappear, so do the communities and cultures that grew to support the extraction of those resources.

This theme of loss and consumption is applicable at varying scales to resource extraction communities all over the Western United States. Even those communities that sold their scenery and became resorts underwent a fundamental shift in the way that people related to the landscape. This change brings a concomitant change in local culture. Right now, the struggle to cope with a changing economy, and the consumption of the most accessible and marketable resources, is underway in the Flint Creek Valley. The silver and manganese ore has been mined and the best timber has been cut. The result has not been the destruction of whole neighborhoods or the creation of a Superfund site. Nevertheless, the hills of the Flint Creek Basin are littered with the ghosts of old mining towns. The population that peaked in 1893 has declined steadily ever since. Large scale mining operations ceased in the 1970s and most sawmills closed by the late 1980s. This shift away from a dominantly extractive economy is a relatively recent phenomenon. The consumption of the valley's marketable natural resources imbues residents with a sense of loss and an economic identity crisis. Like the people in Butte, and in so many other Rocky Mountain places, the residents of Flint Creek experienced a resource boom and are coping with the accompanying bust.

3 Ibid., 195.
Nostalgia

Combining Finn's ideas about consumption with the work of Kathleen Stewart lends insight into Flint Creek residents' sense of their history and place in the face of an apparent loss of community. In her essay "Nostalgia - A Polemic", Kathleen Stewart addresses the pitfalls and possibilities that cultural memory provides. In particular, she highlights the idea that nostalgia is linked to a sense of place.

To narrate is to place oneself in an event and a scene - to make an interpretive space - and to relate something to someone: to make an interpretive space that is relational and in which meanings have direct social referents.4 Stewart applies this notion of interpretive space to the stories of coal mining people in Raleigh County, West Virginia. She analyzes nostalgia to search for the motivations and meaning behind these stories. Stewart's idea of an "interpretive space" created through narrative offers a promising angle for viewing the stories and nostalgia of Montana's Flint Creek valley. The stories of Flint Creekers reveal pieces of local culture, and add a layer of detail that enriches the formal history. These stories offer insight into the way that residents view landscape and place in the watershed.

In Stewart's essay, the coal miners of Raleigh County are living "where the 'local' economy has collapsed."5 The coal mines formed an apparent cultural anchor for the people of the region. With the closure of the mines, the community's cultural compass was set adrift. Stewart describes the people there as "painfully holding on to closeness in a world that has already deserted them."6 What remains for the people of Raleigh County, according

5 Ibid., 259.
6 Ibid., 260.
to Stewart, is their narrative conception of their place in the world. This sense of self and place is reflected in their nostalgic stories. By using Stewart's ideas of constructed narrative space, it is possible to examine the stories of Flint Creek residents to understand how they see their world and the departure of mining abundance and recent agricultural decline.

The way that many residents of Flint Creek construct the place they live is connected to the abundance of minerals, timber, grazing land, and water available in the basin. This abundance contrasts with the notion of consumption. In many stories, the resources of the valley have been exhausted, leaving memories of good days but casting a shadow over the present. The consumption of resources in Flint Creek is not as physically profound as the disappearance of whole neighborhoods in Finn's Butte. Nevertheless, the exhaustion of some resources and the decline in market demand for others has created a gradual collapse of the local economy and a consequent collapse of local culture.

**Abundance and Local Memory**

The free newspaper of the Chamber of Commerce directly addresses the community's conception of place and resources. The very first paragraph begins

> Since 1864 Granite County has survived the boom and bust cycle of mining, fought droughts and blight in logging and ranching and survives today, dependent upon abundant natural resources and the strength and character of its residents. 7

This is a booster's slightly optimistic picture of the basin but it highlights the notion of dependence on natural resources. When asked what has kept Philipsburg going long-time resident Leland Page replied, "The mining, the

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milling, and the sawmills and the big cattle ranches."\(^8\) When Boynton Paige, who ran the Flint Creek Valley Bank for nearly 40 years, was asked about the outlook for the future he replied, "It depends on the price of metals. Right now silver and gold are depressed which has some effect. Hopefully they'll come up."\(^9\) Referring to the manganese boom Harold Kaiser, another resident, says, "That is what Philipsburg lived on for a long time."\(^10\) With the idea of reliance on natural resource extraction comes a consequent conception of vulnerability when resources are consumed.

The conception of place offered in stories, and in print, intimately links history, nostalgia, and abundant natural resources. Abundance, the consumption of the basin's natural resources and an accompanying evaporation of the population, and the hint of community loss are constant threads stitching the stories of residents together. Many older residents' stories about place focus on natural resources. Often they paint a declensionist picture, centered around waning abundance and a consequent plunge in the economic fortunes of the basin.

This sense of decline contrasts with the way some residents see the abundance of the past. Agnes Kearns remembers that during World War I "Philipsburg was the greatest manganese town in the country."\(^11\) Harold Kaiser claims, "What really put Philipsburg on the map was the manganese that was here."\(^12\) Others discuss the critical role that manganese played in the

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8 Leland Page, interview by Laurie Mercier, 24 January 1984, Interview 736, tape 3 side A, Small Town Oral History Collection, Montana State Historical Society, Helena, MT.
9 Boynton Paige, interview by Laurie Mercier, 26 January 1984, Interview 803, Tape 1, Side A, Small Town Oral History Collection, Montana State Historical Society, Helena, MT.
11 Agnes Kearns, interview by Laurie Mercier, 25 January 1984, Interview 738, Tape 1, Side A, Small Town Oral History Collection, Montana State Historical Society, Helena, MT.
12 Harold Kaiser, interview, Tape 2, Side A.
war effort and the relative importance that such a role conferred on Philipsburg. Written stories also emphasize the importance of the silver mining in the area including Clyde Neu, who wrote a local history of Philipsburg titled *A Town Founded on Hope*, named after the first mill and mine in town. Another local history refers to the ghost town of Granite's former nickname as "Montana's Silver Queen" and a part-time resident's article on area history mentions "Granite Mountain - the richest silver mine on earth."14

This perception of resource abundance is a surprisingly accurate, though slightly outdated, view of the watershed. The mines and ranches of the basin dominated the economy for more than 100 years. Populations and prosperity peaked during the silver and manganese mining booms. There were close to twice the number of residents in Granite County in 1920 as there are now. Agriculture was the largest and most stable employer for a half-century following the most recent mining collapse. By the early 1970s this began to shift and the number of government employees is now nearly double the number of people working in agriculture. The view that natural resource extraction brought financial good times to Flint Creek in the past is substantiated by the historical record.15

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This former abundance contrasts sharply with the perceived impoverished state of the watershed relating to the fact that most marketable resources have been consumed and the jobs have evaporated. The Chamber of Commerce writes, "The population of the county has steadily declined since the boom years. Reliance on natural resources has led to a steady decline in jobs and income." Agnes McDonald, another lifelong resident says,

See the mines have been down, the only ones that are active are these out at Black Pine. We lost our tax base when the mines closed, I mean the majority what (sic) brought the most money was the tax base from the mines and the railroad.

A long-time resident, Walter Johnson, lamented the decline of the political clout of the valley and the fact that the area no longer has its own legislative representative. With a strong sense of irony he discussed the town's decline.

Philipsburg is a real good town for real estate. I just got through telling you in 1867 when the town was first formed there was 1500 people. You got 960 people now, isn't that a hell of a good place to have real estate. I mean it's really coming up.

This perception of diminished opportunity may be tied in part to changes in agriculture. While agriculture remained pivotal in the Flint Creek economy until the 1990's, the basic shape of farming and ranching began to change beginning in the mid-1930s. This shift led to increasingly larger ranches. This rise in average farm size and total agricultural acreage has forced out many smaller operators and narrowed the number of people

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Agnes McDonald, interview by Laurie Mercier, 26 January 1984, Interview 739, tape 2, side A, Small Town Oral History Collection, Montana State Historical Society, Helena, MT.

Walter Johnson, interview by author, January 19, 1999, Philipsburg, Montana, Tape 1, Side B.
Main Street, Granite, Mt., June 13, 1902.
Photo no. 69-20, K. Ross Toole Archives, The University of Montana - Missoula.
who make a living from agriculture. The changes were reflected in conversations with various Flint Creek residents and ranchers who emphasized the gradual consolidation of ranches in the valley. Eugene Manley discussed this trend as it related to Flint Creek.

I see, especially pasture land, being sold to bigger and bigger ranches. We're reaching a point where machinery is becoming so expensive that you have to have a bigger place to be able to continue to operate. You know there were a lot of ranches, I think around this valley that got by raising a hundred head of cows... What today I would say, unless you have outside employment, you've got to have a three or four hundred head cow ranch.19

His observation is borne out by looking at average farm sizes in Granite County. In 1925 the average farm in the county was 812 acres and there were 227 farms. By 1992 the number of farms had dropped to 138. Average size rose steadily to 1,449 acres in 1940, 1,886 acres in 1954, and 2,536 by 1992.20 Economies of scale and modern agriculture's increasing reliance on machinery have forced ranches in the basin to grow in order to survive. That consolidation has eliminated traditional ranching jobs and contributes to residents' notion of economic decline.

The consumption of mining and timber resources, coupled with the recent downturn in agriculture, has caused a decline in local population and a loss of a sense of community. A third generation rancher says, "About the only people left are the retirees and the ranchers and that's it. There's not

19 Eugene Manley, interview, Tape 3, Side B.
much employment left in this valley."\textsuperscript{21} The Chamber of Commerce writes, "Today there are no regular jobs in mining and logging has been all but eliminated on Federal Lands. Only ranching and small businesses remain to support the community."\textsuperscript{22}

"All We Have Left": Water and the Big Resource Picture

With the closure of most mines and timber operations, other available resources rise in importance. This is particularly true of water since it has provided a stable economic base that protected the community against some of the vagaries of mining's uncertainty. The residents' sense of natural resource decline is evident in their discussions of water. It is perceived as the remaining resource that allows more traditional extractive industries like ranching to continue. When asked about the importance of water in the valley, a long time ranching resident placed water in historic context with other natural resources in the basin. He replied,

Water is all we've got left. About 80\% of the income in the basin is dependent on water. Here's an example- about 80\% of the people in this basin work for the government in one form or another- highways, school teachers, Forest Service, whatever. They're not producers. They're consumers I guess but as far as actually producing anything in this basin there's one little pole operation and the ranchers and that's it.\textsuperscript{23}

Later he adds, "At this point and time water is the lifeblood of this county as far as revenue and taxes. . . . The mines are all down, there is no more mining and logging is down, there's the one mill."\textsuperscript{24} Another rancher says, "In my mind water is one of the few things that sustains this valley. If we didn't have water resources there wouldn't be much in this valley."\textsuperscript{25} These

\textsuperscript{21} Pat MacDonald, Tape 3, Side B.
\textsuperscript{22} Philipsburg Territory, 3.
\textsuperscript{23} Walter Johnson, interview, Tape 2, Side B.
\textsuperscript{24} Ibid., interview, Tape 2, Side B.
\textsuperscript{25} Eugene Manley, author's interview, Tape 3, Side B.
sentiments are echoed in the words of Walter Johnson, who says, "And whoever controls the water controls Granite County; it's that simple because that's all we have left. We don't have any other natural resource left."\(^{26}\) Another rancher in the lower valley provided a sense of historical perspective when he said, "The courthouse in Philipsburg was built with mining money and filled up with water records."\(^{27}\)

Much of the Rocky Mountain West shares the characteristic scarce rainfall of the Flint Creek basin. In such relatively dry places, water is crucial for the continued availability of irrigation. Given the stabilizing role that agriculture played in the local economy for so many years, it is little wonder that residents, particularly ranchers, view water as critical. Emphasizing the importance of natural resources in residents' conception of place, Eugene Manley actually begins his discussion of water by telling the story of his grandmother's first husband who was killed in a water rights dispute. Since water is seen by many as the last remaining resource that supports a way of life that residents can understand, it is fiercely defended. Pat McDonald mentions a story his father told him about a water disagreement in the Upper Flint Creek Valley.

There were some guys diverted Storm Lake Creek onto the Warm Springs Creek drainage to do some placer mining. They gathered up their shooting irons and dashed up there and said, 'Knock it off, that's our water' and they did.\(^{28}\)

Eugene Manley, a third generation resident of the valley remembers his father telling him,

\(^{26}\) Walter Johnson, interview, Tape 1, Side B.
\(^{27}\) Jim Dinsmore, conversation with the author, January 19, 1999, Drummond, Montana, notes in possession of author.
\(^{28}\) Pat McDonald, interview, Tape 2, Side B.
Eugene if you're going to ranch the most valuable asset you will ever own are your water rights. They're more valuable than the land. Whatever you do, stop at nothing to make sure those water rights are protected.29

Pat MacDonald adds later, "There's an old saying in Montana- You might mess with a guy's wife and live to tell about it but don't mess with his water."30

The constancy of water may account for the persistence of ranchers in the valley. Despite the occasional drought, water remains a renewable resource. The winter snows and spring rains annually replenish the lakes and streams of the basin. Water's renewable nature has been the basis of reliable economics in the basin since the first waning of mining in the 1890's. The sustainability of water use has provided a measure of stability to settlement in the valley. While the silver ore has played out and the trees have been cut, the water continues to flow in Flint Creek. Speaking about the Depression, Harold Kaiser addresses the stabilizing influence of ranchers,

At that time there was practically nothing doing in mining ways. . . . The town never died. It never actually died because there was enough ranchers around here to support 2 or 3 stores. And what lesseers and some of 'em were scrounging around pretty thin at times, their ribs showing through their shirts but they held on. But the town never actually died.31

The Chamber of Commerce brings his observation up to date and writes,

"Today ranching accounts for $11,828,000 of county income. Ranches are a principle source of stability in Granite County and it is expected they will remain so in the future."32 Relying on irrigation water and grass, ranchers have endured despite the challenges of agricultural life.

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29Eugene Manley, author's interview, Tape 2, Side A.
30 Pat MacDonald, interview, Tape 3, Side A.
32 Philipsburg Territory, 12. It is interesting to note that while water, grazing land, and grass are all crucial to maintaining the beef ranches of the basin, the resource that residents focused
Many of the hopeful homesteaders of the early 1900's were driven out by lack of water but those ranches with access to the life giving waters of Flint Creek remain. Some ranchers have family dating back to the original homesteaders on a particular piece of ground. A number of current residents tell the story of those failed homesteaders as a cautionary tale of the problems that accompany the lack of access to water. Nevin Morse, a resident of the lower valley, recalls "homesteads on all the benches." He says most had "no hope of making a living" doing dry land farming in the period 1910-1915. They were forced to sell out in the drought years of the late teens and "that's what happened to all the homesteaders and there were dozens and dozens of them." Walter Johnson remembers the same homesteaders and adds,

There's no way on God's green earth that a man could come onto this valley with 160 acres and ever last. He's lucky if he proved up on it. Then when he proved up on it, he sold it for what he could get and got the hell out because he'd starve to death. . . . You couldn't make it on 160 acres to save your soul." Eugene Manley adds a story that his father related about returning from serving in World War I.

He told me he couldn't believe what had happened to this valley in the time he was gone. It was just burnt to a crisp. And this, I think, was along in June of 1919 and as a result of that virtually all of those people that homesteaded in these, those foothill areas lost their homesteads or moved off them just because they were non-productive.

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33 Nevin Morse, interview, Tape 1, Side A.
34 Walter Johnson, interview, Tape 1, Side B.
The clear failure of these waterless hopefuls underscores the critical importance of continuing access and the disaster that awaits those who are not cognizant of water's importance.

The construction of several reservoirs in the watershed by the federal government in the 1930's and 1960's augmented the natural flow of water and increased the stability of the water availability. The dam on the East Fork of Rock Creek diverts water into the watershed that would otherwise flow to the west. By artificially supplementing the natural abundance, these reservoirs sustain local settlement. In talking about the East Fork Project, Nevin Morse underscores the importance of this diverted water. He says,

Then they had enough [water] that they could raise something but until that time right out here on this bar where they raise the best crops in the valley, there wasn't even weeds on it. There was nothing there.36

Walter Johnson reiterated this when talking about the irrigation ditch from the East Fork Reservoir. He said, "That ditch really made this valley, it really did, as far as water and agriculture is concerned."37

The reliability of water in comparison with the more ephemeral resources in the watershed may account for the fierce interest and concern that some ranchers express. It literally is the "lifeblood" of agriculture and agriculture's stable role in the watershed leads to the notion that water is crucial to the continued economic survival of the valley as well. Threats to the availability of water are taken seriously. Some old-timers are concerned that changing water use practices will undermine the existing hydrologic conditions in the watershed. The lifeblood is vulnerable and worthy of protection. Among the other water uses mentioned as potential threats to

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36Nevin Morse, interview by Laurie Mercier, 10 February 1983, Interview 463, tape 2 side A, Small Town Montana Oral History Collection, Montana State Historical Society, Helena, MT.
37Walter Johnson, interview, Tape 1, Side B.
agricultural water availability are in-stream flows for fish and new subdivisions. One resident says,

Water is one of the most important natural resources we've got in town, especially now. . . . Whoever controls the water controls the county. There's a lot of influences trying to get hold of it right now. Pat McDonald mentions thirteen years of litigation to protect his water rights from a number of outside claims. He speaks with some frustration of people from outside the valley filing for water rights that were no longer valid and says, "They thought they could get a water right for nothing." He also mentioned a water rights dispute involving second-home owners around Georgetown Lake. The subdivision they built attempted to gain control of water that belonged to agricultural users. The case was dismissed as groundless but the threat lingers in memory.

Concern over losing water in the valley inspired ranchers to ask for a government study to reinforce their idea that return flows were crucial for recharging groundwater in the basin. Changes in use by some residents of the basin brings worries about resulting changes in hydrology. There is fear that changing irrigation methods will interrupt the delicate web of informal water relationships that have evolved over the last 135 years. Now Pat McDonald and Eugene Manley believe that irrigation changes in the upper basin may force the loss of some water rights because that water seeps down to the lower valley after it is used. They attribute this threatening loss of crucial water to the loss of historical water knowledge.

Certain observations led those people to develop certain practices of management of water in that, in these basins and all that is being lost.

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38 Ibid., interview, Tape 1, Side B.
39 Pat McDonald, interview, Tape 3, Side A.
... All of those things are being lost as we get new people moving in and subdivisions developed.\textsuperscript{40}

Pat McDonald tells a cautionary tale about similar water problems in the next state, where Idaho Fish and Game encouraged the use of sprinkler irrigation and dried up creeks and water rights in the process.\textsuperscript{41} He reiterates that, "One of the problems we have here is that there are a lot of new people moving in that don't have a clue how these things work."\textsuperscript{42}

The ranchers and their water form the current cultural foundation of the watershed. The ranchers fear that the continued resource extraction economy and the culture of work that accompanies it are turned upside down if the hydrology is disrupted. Many residents fear that the lack of jobs will force the evaporation of an economy based on resource extraction. There is clear evidence that the bulk of the economy has already started to shift away from resource extraction jobs. In 1994 fewer than 300 of the 1,636 jobs in Granite County were directly linked to resource extraction, though these jobs certainly support services. This contrasts with the 778 jobs that year in retail, services, and the government. By defending water so fiercely, residents defend the natural resource economy that is so integral to the traditional relationship with the land. As the economy changes, maintaining jobs and industries that support this relationship grows in importance. Many older

\textsuperscript{40}Eugene Manley, author's interview, Tape 1, Side A.  
\textsuperscript{41}Pat MacDonald and Eugene Manley, interview, Tape 1, Side A.  
\textsuperscript{42}Pat MacDonald, interview, Tape 1, Side A.  It is hard to assess the loss of something as intangible as historical knowledge. This makes it difficult to determine if these assertions that newcomers don't understand water are accurate. There are a number of new sub-divisions and Pat McDonald and Eugene Manley's stories contain evidence that there are, at the very least, misunderstandings between older water rights holders and some recent migrants. I was unable to determine whether these misunderstandings pose a serious threat to water in the basin.
residents are convinced if ranching vanishes from Flint Creek, it will carry much of the current culture with it.  

Good Old Days

In addition to this defense of what they perceive as the only resource standing between the basin community and evaporation, some of the residents of Flint Creek turn to history as a coping mechanism. Some residents struggle to preserve artifacts and a museum was started in Philipsburg in 1991. It is focused on mining and particularly on the silver boom days of the 1890's. The downtown has been declared a historic district and many of the buildings on Main Street have been repainted in the three-color brights of other resurrected mining towns like Crested Butte and Telluride. A recent local history ends the book's Introduction by saying, "We have learned that the history and preservation of our architectural heritage can be a richer mother lode than the silver mountains."  

The most pervasive method for retaining a sense of history and place is the stories residents tell. In a world that is growing increasingly complex, nostalgia and local histories fill the void left by vanishing industry. They use narrative to rebuild their past into a coherent whole. When older residents of the valley responded to questions about the history of their home, many began with stories of mining. Some of the stories focused on the initial discovery of silver, some mentioned the ghost town of Granite, and some mentioned the manganese boom of World War I. There are constant references to "boom days" and a wistfulness for the bustle of the mining camps. "There were people all over the place, there just wasn't enough

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43 Montana County Statistical Report-Granite County 1996, Table 5.9.  
44 Paige, Darling, and McCoy, vii.  
45 Kathleen Stewart, 261.
room, every living place was full of people."46 Another resident remembers, "This mining boom was on and there wasn't a vacant house or vacant place in Philipsburg with all the people who had come in."47 This contrasts sharply with the current town's empty storefronts and abandoned mills.

An often repeated story is one centering on St. Louis. Many older residents credit the mineral wealth of the basin with the growth in St. Louis during the 1880's and 1890's. The idea that "the mines at Granite built St. Louis" cropped up consistently in oral histories and interviews.48 Harold Kaiser said, "St. Louis got the cream of what was here."49 Residents spoke with pride about the number of people employed, the tonnage of ore produced, and the importance of area minerals to the rest of the country.

Residents also focus on their own work histories as a framework for their memories. Again, they generally highlight jobs related to production like logging, mining, mill work, and ranching while downplaying other jobs. Self-proclaimed "native son" Walter Johnson told a number of stories about mining to recover mercury, logging, and running feeder cattle but rarely mentioned his 30 years of teaching school. Many residents emphasize that work was hard, proudly recognizing the labor in their stories. Remembering the Depression a resident said, "Times were really, really tough, but we made it by working 20 hours a day."50 A long-time resident remembers miners and

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46 Harold Kaiser, interview, Tape 2 side A.
47 Agnes Kearns, interview, Tape 1, Side A.
48 Ronald Paige, conversation with author, 20 October 1998, notes in possession of author; Walter Johnson, interview by author, 17 January 1999, tape recording in possession of author. This idea was expressed by a number of people I listened to in my research and appears in a number of written local and regional histories also.
49 Harold Kaiser, interview, Tape 2, Side A.
50 Nevin Morse, interview, Tape 1, Side B.
walking the 4 miles from Philipsburg to Granite to go to work. "Men were more rugged in those days."\footnote{Willard Bruns, interview by Laurie Mercier, 4 February 1984, Interview 745, tape 2 side A, Small Town Montana Oral History Collection, Montana State Historical Society, Helena, MT.}

Some refer to classmates going directly from primary school to the mines and long time resident Leland Page says, "Opportunity at the mines was more important than going to high school. A lot of them went into the mines early when they was young punks."\footnote{Leland Page, interview by Laurie Mercier, 24 January 1984, Interview 736, tape 3 side A, Small Town Oral History Collection, Montana State Historical Society, Helena, MT.} This emphasis on work in the past contrasts with the sharply diminished opportunities currently available in the basin. Pat MacDonald, a third generation rancher, says of ranching, "Unless these young people have a really gung-ho attitude there's not enough return in it to really get their attention." A few minutes later he adds,

> They don't have the commitment, I guess, to the way of life that we had. I have got one son that is making $23 an hour for god's sake. That's more than I make in a month.\footnote{Pat MacDonald, interview, Tape 3, Side B.}

Many of the jobs that do remain in the watershed are not linked with production, and long time residents struggle to comprehend how this new economy works. With the loss of meaningful labor comes an accompanying loss of cultural boundaries. They see the importance of the valley changing when the chance for "real work" disappears. The reaction of Flint Creekers is to cling more tightly to traditional work and construct a history that buttresses their sense of place by focusing on this aspect.

Nostalgia is the defensive reaction to the arrival of new people in the valley and the waning of a resource-based economy. The community feeling and friendliness of the past is contrasted with the new culture of "strangers"
who have settled in the valley in recent years. This attitude towards newcomers leads Leland Page to say, "They've changed the whole country. They've moved a lot of families out. Now almost all your ranches around here now [are] bought from out of states."\textsuperscript{54} Pat MacDonald and Eugene Manley remember when downtown Philipsburg was "a lively place" filled with working men out drinking on weekends. Now they lament the emptiness of downtown. Walter Johnson says, "Right now in Philipsburg, Montana there are 11 business places that are empty. In the early 1940's there was a Safeway store and a Penney's store."\textsuperscript{55}

**Conclusion**

As the mines and mills close and ranches hold out against subdivision, the people of Flint Creek have shaped their memories to fit the changing world. The importance of production, abundance, and work in their stories reflect their historical relationship with the land. By emphasizing how friendly and hard-working the "old" valley was, residents have a counter for the bewildering complexity of the "new" valley. This "interpretive space" gives meaning to a sense of community that is rapidly changing. While jobs and population have moved elsewhere, the remaining residents of Flint Creek maintain their importance and value through the stories they tell about the way the valley was.

Many older residents see the future in rather bleak terms, since the loss of abundance leads to a disappearing way of life. When asked about the future of the basin Pat MacDonald mentioned that his son felt "the only thing left to do is sub-divide."\textsuperscript{56} With subdivision comes a different group of

\textsuperscript{54}Leland Page, interview, Tape 3 Side A.
\textsuperscript{55}Walter Johnson, interview, Tape 1, Side B
\textsuperscript{56}Pat MacDonald, interview, Tape 2, Side B.
residents who do not necessarily share the same culture. This belief was echoed by Walter Johnson who says

Give 'em a chance and you're going to see something happening in this valley that's happening in the Bitterroot already. A man sitting on a ranch that's worth 3.5 million dollars and he can no longer make a living on it so what does he do? I'll tell what he does, he goes to a realtor and he subdivides it. That's right, he gets his 3.5 million and he moves to Arizona and he lives happily ever after. Maybe he'll split it with his kids, maybe he won't, maybe the kids don't want it because it is such a pain in the ass. But you're going to see it. Hasn't happened here yet, just barely happening, all the subdivision now or most of em are in the mountains, in the timber. You know very few down in the valley. And the ranches that are here, the ranchers can still make a living. The day they can't make a decent living, they're going to subdivide even though they've been four generations on those ranches. They will, that'll be it. Then we'll look just like the Bitterroot. 57

Eugene Manley refers to people who "come in and want to change everything." 58 Pat MacDonald and Leland Page both note that many new residents of the valley buy ranches and then fence out other users. Page says, "Now you can't hunt here or fish there or anything. There's a no-no, no-no on all of 'em." 59

This theme of diminished economic options and the loss of abundance ran through many of the stories residents told. The familiar resource extraction jobs evaporated in the wake of the exhaustion of marketable natural resources. Faced with an accompanying loss of the cultural anchor of those jobs, residents cling tightly to both water and history. As long as the rain falls and irrigation ditches run the Flint Creek Valley will be, in part, a ranching place. As long as collective memories linger it will also be a mining place. As both agriculture and mining fade in importance Flint Creekers are forced to face tough questions about who they really are. As they struggle to

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57 Walter Johnson, interview, Tape 1, Side B.
58 Eugene Manley, author's interview, Tape 4, Side B.
59 Leland Page, interview, Tape 3, Side A.
cope with an identity that seems to be slipping away they must make some of the same decisions facing rural westerners across the Rocky Mountains.

Should they subdivide? Should they focus on tourism? Walter Johnson provides a fitting and pragmatic assessment of the future when he comments,

I don't know what is going to come up, yet I hear people my age and such and younger than me say, 'We don't want any of those bastards coming in here.' They damn well better come in here or we're going to starve to death.\(^6^0\)

In the wake of the evaporation of resources and in the face of change the residents are left with callused hands, empty pockets, a few tailings piles, diminished economic options, and the memory of a way of life that, in their minds, made sense.

\(^6^0\)Walter Johnson, interview, Tape 1, Side B.
Chapter 5: Conclusion

I first saw the Flint Creek valley as a tourist, heading for fresh powder on the back side of Discovery Ski Basin on Rumsey Mountain. I marveled at the alpine backdrop of the snowy Pintler Range and the friendliness of the employees at the ski area. I was exactly what so many rural residents of the West fear, a transplant from somewhere else stopping through to sample the scenic riches and shaking my head over the tailings and clear cuts that interfered with the view. After a year and a half of research I have a glimmer of understanding of the watershed that really requires a lifetime residency. The rhythms and subtleties of this landscape don't yield anything but the most obvious answers to casual inquiry. To understand the complexity of the relationship between people and place would necessitate watching the seasons ebb and flow, the migrants come and go, and getting dirt under my nails. Given my impatience, I need to content myself with a few sharp questions, a few maps, and a glimpse at some dusty documents. Even this slender sample tells me the basin is beautiful, with a history of natural riches, hard work, and a sense of place. Now the watershed is delicately poised on the edge of tomorrow, waiting to see if restless visitors like me will pause to listen to the stories and understand the landscape or only snap a photograph on their way to Yellowstone.

Flint Creek shares this uncertain future with places across the Rocky Mountain West. The shift from traditional resource based economies to the less tangible tourism and service economies can unbalance much of the established culture and community in these places. A look at where Flint Creek has been provides answers to the questions of historical land use, settlement, and the connection between local people and the land. Since the
first miners came seeking flint for their spears thousands of years ago, the
natural resources have drawn people to this corner of southwestern
Montana. Over the centuries they have used the water, the grass, and the
timber of the basin. Abundant wildlife provided food for Indians and
trappers traveling through the valley. For most of its history, the basin was
used only seasonally, the cold winters driving people to more hospitable
locations. In the last century and a half, settlers arrived in substantial
numbers and fashioned culture and communities here.

Land use since the 1850's has intensified. When local populations
grew into the thousands and the resources of the watershed were connected
to the outside world, a human-land relationship based on extraction
developed. The two most important and intensive land uses during this era
were mining and ranching. The wealth buried in the ground inspired the
first major flood of settlement. The valley swelled from being virtually
uninhabited to boasting towns with electricity and opera houses in a few
short decades. The silver mines near Granite and Philipsburg generated
millions of dollars in revenue and the largest mine employed close to 1,000
men.¹ Thousands of cords of wood were burned to fuel the mining works,
miners worked round the clock, and the mills turned ore into bullion and
tailings.

With the collapse of the world silver market, the single largest source
of wealth and employment in Flint Creek history also collapsed. Mining
boomed again with manganese during World War I and continues to provide
a smattering of jobs right up to the present. Mining left its mark in the

¹Emmons and Calkins, 194, 201-203; Granite Mountain Mining Company Payroll for 1893.
Compendium of the Eleventh Census-1890, 29; Ninth Census of the United States-Population
and Social Statistics, 195; Compendium of the Eleventh Census-1890, Part I Population, 258-
260, 867.
tailings piles, stumps, and memories of basin residents. While the trees have grown back and most of the tailings are being reclaimed, mining's memory lingers.

While not as spectacular as the mining boom, agriculture was the other major land use for the last 150 years. Livestock raising in particular has relied on the abundance of grazing land, water, and grass to form a solid economic foundation for Flint Creek's economy. This abundance, coupled with the outside market demand for beef, allowed ranching to thrive even after mining declined. Agriculture provided work and held a core of the population in the basin for the last century. The ranches supported valley residents as the mining camps in the hills became ghost towns. Agriculture also created distinctive land use patterns that persist to the present. Ranches are responsible for the characteristic meadows, irrigated valley bottoms, and the open bench lands of the basin.

These two dominant land uses cast a long cultural shadow. They have shaped much of the way that people view the landscape. This view, and many residents' sense of place, is based on the resource abundance and use that fueled mining and ranching. Much of local identity is tied to natural resource use and the work that accompanies such use. The stories that many residents told and the history they related reflects this perception. With this resource view of place, many people assume that extractive uses are the only basis for prosperity. When resources are consumed or market demands wanes, the culture built on work and abundance is threatened.

The stories of work, prosperity, and abundance are borne out by the historical record. Flint Creek's population and economic peaks occurred during the mining boom. Agriculture and irrigation water did stabilize the local economy and population for a long time. Now residents must cope
with the decline in both mining and ranching. The economy of the basin has shifted to a service and retail focus. This change has occurred gradually over the last three decades and culture has not always kept pace. A relationship with the land based on production dominates oral histories and local discourse. Now this perception needs to be reconciled with a changing economy. Since so much of Flint Creek's culture is based on this sense of place, it is difficult for some residents to adjust. They fiercely defend the remaining resources that permit the traditional land uses to continue. For some, a basin lacking extractive industry and work is akin to no basin at all.

Some places in the Rocky Mountain West, like Aspen and the Bitterroot valley, have shifted to tourism and subdivision. Their economies thrive on snow or scenery or a sense of urban escape. The relationship with the landscape in these places is fundamentally different than the relationship in mining, logging, and ranching economies. The resources are still being used but the working connection with the land and production is missing. This new relationship with the land may be better for the wolves and the grizzlies but it is hard on older residents and their sense of community. While the region has always been an economically and culturally dynamic place, the roots of the older resource extraction West are deep. It is difficult for many people to adjust to lawns and ranchettes in place of mines and livestock.

The Flint Creek basin is not facing the explosive growth that places like the Bitterroot and Flathead valleys are experiencing. Nor is it likely to become a tourist destination like Telluride or Park City. Nevertheless, it faces an uncertain future. The resource extraction industries that anchored the economy and the culture of the watershed are on the decline. Mining has virtually vanished and ranching is likely to continue as a stable, but waning
force in the valley. Most of the rural Rocky Mountain West confronts a similar decline in traditional resource jobs.

What remains in the basin when the resource boom is echoing into silence are a strong sense of place, a core of community, a distinctive landscape, and collective memory. The landscape created by mining and ranching lives on despite the declines in both industries. Many older residents of the Flint Creek watershed share a history and feeling of community that remain despite the economic struggles. The connection to the land remains founded on ideas and memories of work and abundance. Finally the belief that the Flint Creek basin is home, a valuable but beleaguered place, lingers in residents' stories.

This sense of what endures contrasts with the feeling of impending loss expressed by some residents as the relationship with the land changes. What the history of Flint Creek reveals is that the transition to a new human-land relationship will be a struggle for many rural people. These land uses have left a mark on the landscape and psyches of rural westerners. Changing 150 years of cultural belief in abundance, resource extraction, and an economy based on production is hard. It is crucial to understand that resistance to change is more than western cantankerousness. While the traditional resource economy was tough on trees, wild animals, and native grasses, the work created a bond with the landscape that reaches beyond economic gain. Giving up that bond means sacrificing some residents' identities and sense of place. While cultural evolution is an integral part of the passage of time, there is a loss that accompanies it.

By acknowledging the traditional link to the land and the stories that surround it, the scenery of Flint Creek is enriched by its inhabitants. In a West marked by transience, the endurance of rural people like those in Flint
Creek is remarkable. Understanding a connection between these people and their landscape that is three or four generations old, provides a glimpse of the one of the most enduring Western relationships with place since the Native Americans were herded onto reservations. In a footloose region, at the end of a restless century, comprehending those who stayed put is crucial to creating lasting communities in the Rocky Mountain West. Armed with this knowledge, Flint Creek yields clear lessons about boom, bust, and permanence. Only by connecting to place in a sustainable way will Westerners form bonds beyond the next bonanza. Only by committing to a place despite the vagaries of economic tides will the West be lived in and not just occupied. Finally, only by including the rural stickers, as well as the roving boomers, will there be a history of the Rocky Mountain West that captures the delicate dance between people and a particular place that lasts beyond a generation. Understanding this dance teaches us the practices, the pitfalls, and the promise of making this territory home.
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