Mining Glacier Basin
History of the Glacier Basin Mining District
Mount Rainier National Park



Greg C. Burtchard
Jacqueline Y. Cheung
Robert McIntyre, Jr.

foreword by
Arthur L. Storbo

National Park Service
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Ashford, WA 98304

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1912 *Mountaineers* Gathering at Mount Rainier Mining Company's Lower Camp
(University of Washington, Special Collections Division, PH Coll 341)

Cover:

Southwest Facing View of Glacier Basin and Inter Fork Glacier in 1915
(1915 Mountaineers Album, Tacoma Public Library, copyright 2002)

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Acknowledgements

Much of the research for this book is based on exhaustive archival records. Most of this work was completed by our co-author Robert McIntyre Jr. Bob gathered, compiled, and transcribed hundreds of pages of documents from Mount Rainier National Park Archives microfiche files; the National Archives in Seattle; and other mining-related sources. His transcriptions of the correspondence, appraisal reports, handwritten notes, and superintendent's and ranger's reports relating to Glacier Basin mining were sorted by date and topic. Mr. McIntyre's thorough transcription of the most seemingly mundane correspondence greatly helped us understand the full scope of the relationships between the National Park and its staff, and the various people involved in the Mount Rainier Mining Company (MRMC).

Jacqueline Cheung's role as a co-author involved organizing Mr. McIntyre's voluminous material –adding quotes, photographs, maps, and illustrations; and weaving his core research into what we hope is a worthwhile and interesting narrative of Glacier Basin activities as reflected in park records. Ms. Cheung's partner and archaeologist, Eric Gleason, edited and helped compile early drafts of this account. Eric also produced the Geographic Information System (GIS) derived maps included in the volume. The senior author developed the book's structure, contributed background information, edited and revised the text yet overall, and added new material from MRMC records, photographs, letters, and recollections; information that improved our understanding of Glacier Basin mining operations from the company's point of view.

It is important to note that a number of organizations and individuals provided information vital to the completion of this history. The project was made possible by support from the *Columbia Cascades Support Office* of the National Park Service in Seattle; and by funds provided by *Washington's National Park Fund* –a nonprofit organization supporting research and operations at Olympic National Park, North Cascades National Park Complex, and Mount Rainier National Park. *Mount Rainier National Park* Superintendent Randy King, Natural and Cultural Resource chief Roger Andrascik, and much of the park also supported the study throughout its long journey from inception to completion. Brooke Childrey, park curator and her volunteer staff searched for, and provided, many of the historic images that are an essential part of this book. Eileen Price with the *Washington State Historical Society* did an excellent job in finding, and making available, historical photographs of the White River Road and early National Park Service dignitaries at Mount Rainier.

Among McIntyre's many research folders was information recovered from Gretchen Luxenberg's *NPS Mount Rainier Mining File*. This included a copy of a map showing the location and name of all the original Glacier Basin Mining claims. Luxenberg, an historian for the [then] Pacific West Regional Office of the National Park Service, compiled the map presented in this document. Her work proved to be invaluable in helping to sort out the location and names

of the various mining claims acquired, patented, leased, and relinquished by Mount Rainier Mining Company during its tenure in the basin.

Mount Rainier park archaeologist, Benjamin Diaz –who has been involved with this project from the beginning– reviewed early drafts, and contributed GIS data needed to develop many of the maps contained in this volume. Patty McNamee, Charlieann Cross and Seattle National Archives staff provided finding aids and retrieved files. Many maps and original photographs from appraisal reports are in the files at the National Archives.

We also want to recognize park volunteers and former employees that played important roles in completing the Glacier Basin project. Park volunteers Carol and Jim Miltimore helped us decipher heretofore undocumented Glacier Basin cabin remains that may predate MRMC operations in Glacier Basin. Former Mount Rainier trails supervisor Carl Fabiani, and his wife Dinni, both enthusiastically interested in the park and its history, helped immensely with resolving issues related to correctly assigning Glacier Basin archaeological features with their associated historical origins. Carl also reviewed drafts of this report and arranged for the senior author to meet Arthur Storbo, grandson of MRMC's principle founder, Peter Storbo. Jim Ellis, an avocational historian with great interest in Mount Rainier, also contributed historical information on the basin. Janis Kretlow assisted with editing the final draft.

Finally, we gratefully acknowledge invaluable contributions made by Paul T. Stangeland and Arthur L. Storbo. Paul Stangeland, grandson of MRMC trustee Paul L. Stangeland, offered photographs, company documents, and personal letters (written in Norwegian) regarding Mount Rainier Mining Company activities taking place between 1907 and 1916. These letters were translated by Pacific Lutheran University Professor of Norwegian and Scandinavian Area Studies, Claudia Berguson. Tragically, after writing these letters to his wife Anna and son Anslem, the senior Mr. Stangeland died in 1917 from complications of an accident that took place in Glacier Basin the previous year. Even so, his accounts provide uniquely personal, and poignant, insight into company operation during its earliest and most exuberant years.

Arthur L. Storbo, an historian in his own right, graciously provided a wealth of information –including photographs, documents, maps, letters, and results of his personal research– related to Mount Rainier Mining Company, his grandfather Peter T. Storbo, and his great-uncle Bernt Korssjoen. Art also meticulously reviewed final drafts of the *Mining Glacier Basin* historical account for accuracy, and took the time to help identify company officials and contractors who played critical rolls in the rise and fall of mining operations in Glacier Basin. We appreciate Mr. Storbo's unique capacity, and gracious willingness, to write the Foreword to this volume. There is no doubt that Mr. Stangeland and Mr. Storbo's contributions moved this history from its initial park-centric view based almost solely on park-archived records, to a more complete, well-rounded account of the full history of mining Glacier Basin.

To these and others who have sustained a long-standing interest in Glacier Basin, we extend our thanks. There is no doubt that their efforts have made this a better document. We hope that readers will appreciate its content, forgive its shortcoming, and find it to be a useful springboard for continued improvement of our understanding of the history of the Glacier Basin Mining District.

Foreword

Arthur L. Storbo
Bellevue, Washington

Parts of the story of *Mining Glacier Basin* have been told in the Storbo family for over a hundred years. Now, for the first time, the full story has been set in print by former Mount Rainier National Park Archaeologist Greg Burtchard, historian Robert McIntyre, Jr., and archaeologist Jacqueline Cheung. They have done a masterful job in assembling the story, tracing the history of the Mount Rainier Mining Company (MRMC) and its interaction with the park from beginning to end – a saga spanning more than 80 years.

The first half of this story takes place between 1900 and the 1940s; a time when America was exploiting newfound resources that made it a world power, even while the public was becoming aware of the need to preserve pristine natural places for the enjoyment of future generations. The second half of the story, from the 1940s to 1984, takes place during the period when America became much more mobile by auto, and truly began to appreciate its National Park system. *Mining Glacier Basin* illustrates not only an evolution in preservation attitudes by National Park Service management, but also bygone days of manual labor, wild stock markets, early road building and motor vehicle development, and early-day mining technology. Here, I focus on the personal background of the main characters associated with Mount Rainier Mining Company during these times; especially Peter T. Storbo, Bernt Korssjoen, and the MRMC workers. My goal is to help readers understand their motivations as they struggled to develop a successful copper mining operation in Glacier Basin.

My grandfather Peter T. Storbo and his uncle Bernt P. Korssjoen were Norwegian immigrants to America in 1881-1882. In 1881, Bernt was 27 years old. He probably had five years of formal education as a youth in Røros, Norway, which had been a copper mining and smelting center since the 1600s. Peter, in 1882, was only seven years old; he had no formal education in the old country, and the family's 1880s pioneer village in Minnesota had no school. But Peter eventually got a third-grade education. Even so, by the time Bernt and Peter arrived in Enumclaw, Washington in 1902, they both could read and write, and were bilingual. Even so, they had no technical training except what they learned on the job. Bernt was said to have worked in the Røros copper mines in the 1870s, and Peter worked on a Dakota railroad in the 1890s. Also, both had been to the school of hard knocks in the wheat lands of Dakota Territory. There they came to know many immigrant farmers, mostly Scandinavians, who would later buy MRMC stock. One of these was Ole Oakland, who became MRMC president in 1940. All believed, or hoped, they would get rich in America.

Like many Scandinavian immigrants, Bernt and Peter were quite religious. They were founding members of their churches in pioneer Minnesota, Dakota, and Enumclaw. Like other

immigrants, they lost family members to deadly contagious diseases. In the 1880s, Bernt lost his first wife to tuberculosis, and his two daughters to diphtheria. He remarried in 1908 and had one son, Bernie, who played at Glacier Basin as a child, and later worked there. Peter's wife Gina visited Glacier Basin only once, on the Fourth of July, 1922 when the Lower Camp barn burned down. She usually remained at home in Enumclaw to tend the family's cows and kids as Peter managed daily tasks for MRMC. Similar to his uncle Bernt, Peter lost Gina and two of his daughters to tuberculosis in the 1920s. He remarried in 1927. Life was not easy for these two families, and for many others of their time; including the miners who worked at Glacier Basin.

Chapters 1, 2, and 3 of *Mining Glacier Basin* trace from the 1900s to the 1920s the development of MRMC's claims, mines, roads, housing, equipment, and other facilities; and describe National Park Service (NPS) efforts to reconcile legally-permitted mining operations with Park preservation mandates. In 1908, laws that predated formation of Mount Rainier National Park were revised to prohibit new mineral claims, and to regulate existing mining operations such as MRMC in Glacier Basin. By 1924, MRMC had been forced to give up most of its 41 claims for lack of mineral potential; but had received patents on nine of the most active claims. Through the years, the NPS regulated MRMC's operations with increasingly stringent permit requirements, but could not prevent MRMC from accessing and working their claims altogether. This created headaches for NPS personnel like Ranger Thomas O'Farrell and Superintendent Tomlinson who frequently had to deal with MRMC and my grandfather, Peter Storbo.

Mining has always been dangerous work, more so in earlier times. Some of the first MRMC employees were Peter and Bernt's immigrant relatives. Among them was a Norwegian cousin, teenager Albert Prestlien, one of three who died when their cabin was swept away by an avalanche off Burroughs Mountain. Another was Nels Storbo, a cousin from Sweden, who in the early years operated the sawmill downriver of Glacier Basin, cutting park timber as needed for mine shoring and buildings. Other employees were injured as well; the worst being Paul Stangeland whose back was broken while erecting power poles to carry electricity to the Glacier Basin Hotel. Peter Storbo himself escaped serious injury when he fell asleep and ran off the road near Greenwater while driving home to Enumclaw after midnight following a second supply run to the mine in one day.

In time, MRMC built, with the Park's concurrence, the 24-mile Storbo-White River Road to access Glacier Basin from Greenwater. The company also built a hotel in the basin for lodging miners and park visitors. In keeping with NPS practice at the time, private enterprises were allowed to develop such facilities as they brought visitors into National Parks. Eventually, most of these were taken over by the Park Service.

One of MRMC's main players in the design and construction of the Glacier Basin Hotel, as well as the access road, was Ole Olson, another immigrant from Sweden. Ole arrived in Seattle about 1900, an experienced bricklayer, house builder, and contractor. In 1905-1906 he had a contract with the City of Seattle to pave (plank) a mile of Alaskan Way, which at the time was mostly an offshore railroad on low trestles that extended over the water to carry out fill material generated by the Denny Regrade. Ole later became General Manager of MRMC, and was briefly president as well.

Raising sufficient capital to fund equipment and supplies, mine labor, and transport was a never-ending problem for Mount Rainier Mining Company. Until 1927, Bernt Korssjoen and Peter Storbo relied on the sale of stock which they sold personally. Bernt even became known in the Midwest as the 'Copper King' for his occasional sales trips. Peter sometimes traded stock for equipment and supplies; and although he paid his miners a going cash wage, he paid in stock when he could. Most of the miners had little choice in the matter as they needed jobs, even if located in a remote location. Furthermore, most believed that the mines would someday pay off. Bernt and Peter had the confidence of other stockholders as well. The amount of money these folks invested sometimes represented the current value of a new car. From the time of the first transcontinental railroads, the public had been attracted to buying stock; and in the 1920s, stock buying became a feeding frenzy. But by 1927, MRMC had still not paid any dividends to its stockholders.

In 1927, desperate to raise capital to expand Glacier Basin operations, Peter Storbo and his uncle Bernt Korssjoen hired 'professional' stock salesmen Charlie Cresser and Orton Goodwin to market MRMC stock. These two made extravagant claims about MRMC's potential in letter appeals (the infamous 'Mountain of Copper' letter contained in this history) to existing stockholders; urging them to buy more stock. Stockholder complaints led to an investigation by the US Postal Service. For Bernt and Peter, the end of MRMC involvement came with the end of that decade – they were indicted for using the mails to defraud investors. Bernt Korssjoen died in 1930, almost 76 years old, while awaiting trial. Peter Storbo, 56 years old that year, was convicted of mail fraud and sentenced to 18 months hard labor at McNeil Island Federal Penitentiary, plus a $1000 fine. He had been framed with false signatures, but failed to mount a sufficient defense for lack of money, poor hearing (he used a lot of dynamite), lack of understanding of the law, and perhaps all three.

Remarkably, many of Peter Storbo's friends in Enumclaw (some of them stockholders) remained convinced of his innocence even after he went to prison. A petition signed by some 1200 persons led to his early release, a pardon, and rescission of his fine by President Franklin D. Roosevelt. Charlie Cresser avoided trial with a doctor's letter claiming he was too ill with lung cancer to stand trial. He died within a year. Orton Goodwin was tried and went to prison as well, his past history of stock fraud having caught up with him. Peter Storbo died of old age in 1956. Mount Rainier Mining Company, however, lived on for another 28 years.

In Chapters 4 and 5, the authors trace the last 40 years of Mount Rainier Mining Company history in Glacier Basin; beginning with its 1932 bankruptcy and stock acquisition by Tom Englehorn, a wealthy North Dakota farmer; to a brief revival during and following World War II; to its eventually end in 1984. Throughout this period, the National Park Service made repeated efforts to reach agreement with MRMC on a buy-out. However, the remaining stockholders could never agree on price; clinging to the hope that the mines would pay off one day, or that they could cash out at an inflated price. Finally, in 1984, after most of the original stockholders had long since died, MRMC agreed to a price of $55,800. Mount Rainer National Park became free of its longest-lived mining operation and private inholding.

In retrospect, it is clear that Mount Rainier Mining Company and its Glacier Basin mines were destined to failure from the outset. First, there simply was not sufficient high quality ore in Glacier Basin to be commercially viable. But given the technology available to MRMC in the

1900s through the 1920s, this fact was not recognized. Shallow surface excavations and underground exploratory tunnels dug by manual labor could not uncover the rich ore body they believed was present. The understanding that there was no rich ore body to be found came very slowly. For many years, MRMC operated more on belief and hope than on hard science or demonstrated mining success.

Second, the cost of moving ore to market (the Tacoma Smelter) was prohibitive. The northeast corner of Mount Rainier National Park was truly remote until MRMC's first motor vehicle road was completed in 1916. In the early years, MRMC expended much of its capital building the 24-mile road from Greenwater to Glacier Basin, only to learn that the road, adjacent to and barely above flood level of the White River, required more maintenance than they and the NPS could afford to provide. Even with a better road, MRMC was not equipped with sufficient heavy trucks to haul large quantities of ore 47 miles to Enumclaw, and another 27 miles to the smelter at Tacoma. Equally difficult were the logistics of supplying Glacier Basin with necessary equipment, materials, food, fuel, and personnel; to say nothing of the need to supply water, power, communications, and deal with wastewater – all required to support a successful, large-scale mining operation.

Third, the working season in Glacier Basin was always very short – snow piles up deeply for seven months of the year and melts slowly in May and June; leaving only July, August, September, and early October for seasonal recovery and new mining work. Further, reasonably level space for ore processing and operations was extremely limited in Glacier Basin. Most of the land area covered by MRMC's nine mineral claims was on terrain that proved to be too steep for use in this way.

Fourth, raising sufficient capital for mining ventures has always been difficult. It usually is accomplished only by large organizations with deep pockets, sophisticated exploratory tools, and management with essential connections to supporting industries, smelters, and railroads for transportation. MRMC had none of these.

Last, but no less important, mining Glacier Basin was incompatible with NPS preservation objectives. One wonders at the tenacity of the Park Service and the perseverance of Mount Rainier Mining Company in taking so many years to reach agreement. But the Park Service was constrained by 1800s mining laws and by NPS regulations. MRMC was constrained too, by the unrealistic American dream of riches.

What we are left with today, though, is an interesting historical account of mining in early-day Mount Rainier National Park, and a brief look into the lives of the many people, stock investors, miners, and park staff touched by Glacier Basin mine operations – sometimes good, sometimes not so good. As a child I listened to some of Grandpa Pete's tales, not old enough to fully comprehend the whole story. I remember him as a cheerful old man, one who liked to sit and tell stories until midnight. I was fortunate to have aunts and uncles who told me more of his tales later, and fortunate again to make the acquaintance of Greg Burtchard only recently. I hope that readers will enjoy this story of *Mining Glacier Basin* as much as I have. It is a part of our national, state, and local history well worth reading. It is also good background for the hiker who wants to enjoy walking bits of the old Storbo Road upstream and downstream of White River

Campground; and revisit the quiet solitude and beauty of Glacier Basin, now holding only traces of its once-busy past. Best of all, Glacier Basin can be enjoyed by future generations.

With a little imagination, one can almost feel Peter T. Storbo's presence along the trail. Reporter Bart Ripp said it well in his May 31, 1999 *Tacoma News Tribune* article "In the brief summer at Glacier Basin, when wildflowers shroud tailings gouged from its mines, it is possible to imagine Pete Storbo coming up the trail in an old truck, grinding gears and bouncing on hard rubber wheels, his ears ringing from dynamite and his head aflutter at finally finding that mountain of copper."

Arthur L. Storbo, family historian and retired Civil Engineer

Chapter 1: Introduction to Glacier Basin and its Mining History



Figure 1.1. Northwest Facing View of Lower Glacier Basin in 2013.
View overlooks the former sites of Reven Lode mine at the base of Mt. Ruth; Lower Camp (aka Storbo Camp) beyond the Inter Fork floodplain; and Upper Camp on the lower slopes of Burroughs Mountain.

Because of uplifted geological exposures, mountains have long attracted miners in search of commercially valuable minerals. Mount Rainier is no exception. Its great height and massive breadth dominate west-central Washington's Cascade Mountain landscape –a siren beckoning to those seeking mining wealth at the close of the 19th Century.

Used seasonally by Native American populations for thousands of years,[1] Mount Rainier became a focus of prospecting activity in the late 19th Century. Even though it generally disappointed in the end, the mountain's mining allure was difficult to resist in those early days. Its rugged terrain, deeply dissected river valleys, exposed side-wall slopes, and high mountain basins appealed to would-be miners and entrepreneurs moving west with the rapidly expanding American agro-industrial system –a process accelerated by the Alaskan Klondike gold rush via the Port of Seattle in the late 1800s.

[1] Burtchard 2009

By the time Mount Rainier National Park was founded in 1899, over 100 mining claims had been filed at various points around the mountain.

Located at about 6,000 feet on Mount Rainier's northeastern slope, Glacier Basin was the most prominent of the many locations where mineral wealth was sought. As early as 1896-1897, prospectors and miners followed trails up the White River and its Inter Fork tributary to stake over 40 claims, and their dreams of riches, along the seam between old and young Mount Rainier sediments exposed in Glacier Basin's valley walls.[2] Figure 1.1 above shows the basin landscape as it appeared in 2013. Figure 1.2 shows its location, and the position of the White River Road that served it, in the still-young Mount Rainier National Park in 1919.

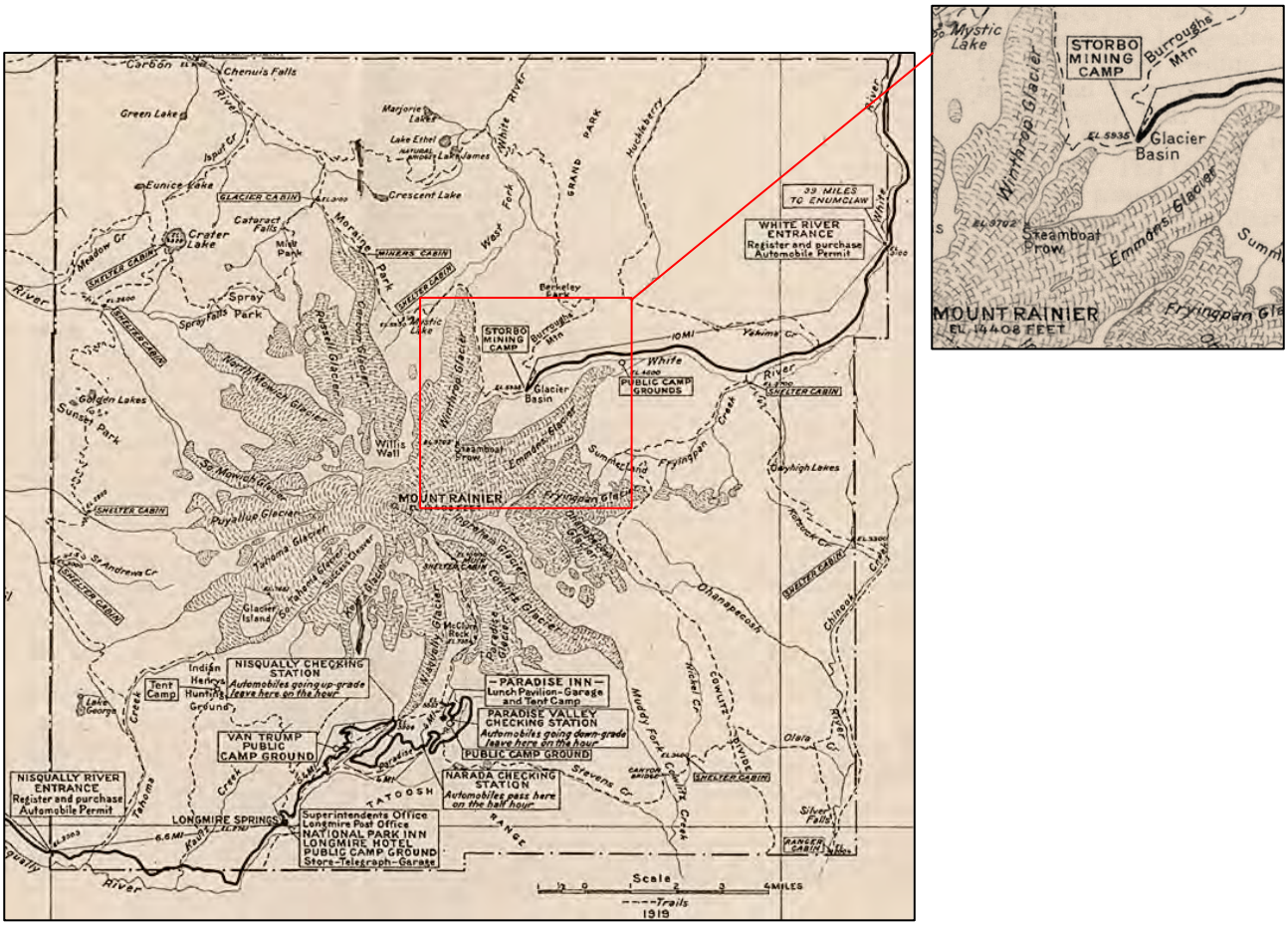


Figure 1.2. Mount Rainier National Park and Glacier Basin in 1919.

With sharply defined contrasts in elevation and color, and a commanding view-scape to the east, Glacier Basin's physical setting is visually stunning. While in retreat for some time, the basin's steep walls were carved by the Inter Fork glacier; still a prominent feature in the early 1900s as can be seen in this book's cover photo. The receding glacier, rain, and summer snow-melt feeds Inter Fork Creek; a White River tributary stream that flows though the center of the basin. Figure 1.1 shows the Inter Fork

[2] Chamberlain (n.d.), Martinson 1966, Parsegan 1966

floodplain and boulder outwash transported by exceptionally vigorous flood events. A small meadow and pot-hole lake rests at the foot of the basin just below tree-line in the historical location of Mount Rainier Mining Company's Lower Camp.

As can be seen in Figure 1.1, patchy subalpine forest covers the basin's lower slopes; giving way at higher elevation to steep and barren upper valley walls. These high valley walls, perhaps better than anywhere else on Mount Rainer, expose yellowish-brown sediments linked to the granitic Tatoosh Pluton (intermittently bearing copper and a variety of other commercially-valued minerals) overlain by gray andesitic rock associated with geologically younger (and mineral poor) Mount Rainier proper.

In a sense, Glacier Basin's mining history and the 20th Century begin together. While a number of Glacier Basin claims were filed in the late 1800s, very little had been done to test their mineral content; and virtually no effort had been undertaken to extract and transport ore out of the basin through the mountain's rugged and roadless terrain. The situation began to change in 1902 when Enumclaw residents Peter Storbo and his uncle, Bernt Korssjoen, purchased over 40 previously filed Glacier Basin mining claims. Within a few years, they had established the Mount Rainier Mining Company and begun selling stock to finance their copper mining venture. Mount Rainier Mining Company (MRMC) was to remain a presence in Glacier Basin for the next 80 years; outlasting all the other mining operations as the last private inholding in Mount Rainier National Park. The park finally acquired ownership of MRMC's patented claims in 1984.

Despite a robust beginning, most mining activities in Glacier Basin ended well before final National Park Service acquisition of MRMC holdings. The active and optimistic years of the early 20th Century faded in the late 1920s amidst legal entanglements and the effects of the Great Depression that soon followed. Attempts to revive the mines in World War II, and again in the 1950s, led to only limited short-term success. By the 1980s, most of the tunnels had long-since collapsed or been covered by landslide debris. Most mine-related structures had collapsed. Abandoned machinery lay scattered and rusting. Even so, mining related artifacts and features, along with archival documents, remain to tell the Glacier Basin story. It is this story, the history of mining in Glacier Basin, that is the subject of this book.

Document Structure

The history of mining at Mount Rainier National Park has been a topic of interest by park interpreters, historians, curators, and archaeologists for many years. A number of individuals have gathered information, written brief historical overviews and summaries, and recorded mine locations and mining-related artifacts in the park. Several accounts have touched on mining in Mount Rainier National Park in a general sense. Many of these have provided context for this more focused Glacier Basin report. These include Erwin Thompson's 1981 *Historic Resource Study*; the *Glacier Basin Mining District Cultural Landscape Inventory* (CLI) written by Mary-Sue Gee and Lisa Raflo in 1997, Thomas Catton and Janene Caywood's 1999 *National Register of Historic Places Multiple Property Documentation Form for Historical Mining Properties in the Pacific Northwest*; a 2002 unpublished report by Hugh Rumball-Petre titled *History of Mining at Mount Rainier National Park*; and a draft manuscript by Robert McIntyre, Jr. on *The Effect of Mining on Public Lands* completed in 2004. The concept of the "Glacier Basin Mining District" as a National Register eligible archaeological district grew out of archaeological inventories

completed in 1996 and 2007,[3] and 2010 and 2013.[4] To our knowledge, until now, no one has attempted to develop a thorough history of mining in the park, or in any of its major mining districts such as Glacier Basin.

While briefly summarizing mining operations throughout the park, *Mining Glacier Basin* focuses primarily on the Glacier Basin Mining District; and especially on Mount Rainier Mining Company's involvement in the basin. It brings together archival sources from the park and National Archives, as well as letters, photographs, and documents generated by, and directly related to, MRMC operations in the basin. It's sister volume intended for park management, interpretive, and research purposes –*History and Archaeology of the Glacier Basin Mining District* [5]– includes the present Glacier Basin history as well as a second part addressing the character of the basin's surviving archaeological record. We believe that both volumes document and illustrate the manner in which the young park managed an extractive, environmentally compromising, operation while attempting to protect scenery, resources, and public recreational opportunities. The volumes also document the difficulties inherent in attempting to operate a mining operation within a National Park, at high elevation, with difficult access, severe weather, and as we shall see, only modest commercially-valued mineral content.

This book focuses specifically on the history of mining operations in Glacier Basin; the ups and down of the Mount Rainier Mining Company, the related development of Storbo-White River Road through the White River valley and up to Glacier Basin, and the role of the National Park Service in administering and overseeing these operations. Following this introduction, the history unfolds in four chapters; including an overview of the park's mining enterprises generally, followed by three chapters detailing Mount Rainier Mining Company and Park Service interactions during early, middle, and final stages of mining activity in Glacier Basin.

Chapter 2 that follows introduces the origins of mining in the Pacific Northwest, and summarizes various mining ventures developed within the boundaries of Mount Rainier National Park during late 19th and early 20th Centuries. It culminates with a brief summary of the origin of Mount Rainier Mining Company, development of the Storbo-White River Road, and onset of mining in Glacier Basin.

Chapter 3 focuses on the early days of Glacier Basin mining from 1902 to 1921 when most of the infrastructure was built, enthusiasm was high, and expectations of success were great. It deals with origins of Mount Rainier Mining Company, the onset of mine tunneling, construction of White River Road from Enumclaw to the basin, and interactions between MRMC and the young Mount Rainier National Park. Original park records document the development and character of National Park Service oversite of mining operations in these early days. MRMC documents, investment prospectuses, photographs, and letters help to understand the motivations underlying the substantial efforts required to extract copper ore from the basin, and transport it to smelter over 80 miles distant. Combined, these sources illustrate the ebb and flow of events as the National Park strove to accommodate mining activities while protecting scenic and environmental values; and MRMC sought to realize a dream of riches while coping with the difficulties of mining and the park's increasingly restrictive regulatory structure.

[3] Hungar et al. 1996; Burtchard 2007
[4] Cheung et al. 2017
[5] Cheung et al. 2017

Chapter 4 documents MRMC's years of frustration and decline from 1922 to 1945 as the company came to grips with lower than expected ore yields; difficulties imposed by Mount Rainier's harsh upper elevation environment; and recognition that, without substantial copper profits, Glacier Basin mining could not be supported adequately by stock sales alone. In a sense, the chapter includes three sub-periods. The first of these saw continuation of Glacier Basin mining, but with a sense of urgency that involved attempts to expand operations through aggressive stock sales –efforts that came to an abrupt end in legal challenge and incarceration in 1930. With virtual inability to continue stock sales and onset of the Great Depression, Glacier Basin mining came to a virtual halt. Lack of routine maintenance resulted in marked deterioration of the infrastructure so painstakingly built in the early days. Events of the late 1930s briefly resurrected hope of renewed mining operations as the company changed directions and sought, ultimately unsuccessfully, to market copper and previously unmined molybdenum in support of the looming war effort.

Chapter 5 concludes our Glacier Basin history by relating efforts by Mount Rainier Mining Company to reorganize under new leadership, and to secure funding to resume mining operations in the basin. And mining did resume, if briefly, in the 1950s when the new company reopened tunnels south of the Inter Fork across from the now essentially abandoned Lower Camp, and sought to exploit molybdenum deposits on the lower flanks of Burroughs Mountain above Upper Camp. After once again failing to find commercially viable deposits, mining ceased altogether in 1957, and did not resume in Glacier Basin until it was ended permanently by Park Service acquisition of MRMC's patented claims in 1984.

While the *Mining Glacier Basin* story ends with sale of Mount Rainier Mining Company claims, it begins again here in the chapters that follow. We trust that readers will enjoy the account, and in the reading, will learn a bit more about historical processes that have become an integral part of Mount Rainier National Park.

Chapter 2: Prospecting in the Pacific Northwest and on Mount Rainier

Home to indigenous populations for 17,000 years or more, the Pacific Northwest became the focus of increasing attention by European trading powers in the mid to late 1700s as Russian, Spanish, French, British, and eventually American interests sought effective trade routes to and across the Pacific, and vied for influence and fur trading dominance in the region. In 1792, Spain established the region's first permanent (albeit short-lived) European settlement at Neah Bay; Robert Gray discovered, and named, Gray's Harbor and the Columbia River; and George Vancouver explored the lower Columbia and Puget Sound in search of Juan de Fuca's legendary northwest passage. Unaware of, or ignoring, indigenous terms sounding something like *Takhoma*, Captain GeorgeVancouver named the great mountain that dominated the horizon southeast of Puget Sound *Mount Rainier* after his friend Peter Rainier, a Rear Admiral in the British navy.[6]

Overland incursion into the region soon followed the 1700s maritime expeditions. Driven by political and economic competition, the growing United States was the first to launch an expedition through the newly acquired Louisiana Territories to the Pacific Ocean in search of, among other things, "the most direct and practical water communication across the continent, for the purpose of commerce."[7] While not finding a direct water route, Lewis and Clark's *Corps of Discovery* successfully reached the Pacific at the mouth of the Columbia River in 1805. Even before they returned home, British Canada also was establishing its claims to the region through Simon Frazier's explorations in British Columbia for the North West [Fur] Company. David Thompson, also exploring for the North West Company, responded to Lewis and Clark's effort in 1807 with the first of several westward journeys across the upper reaches of the Columbia River system in Montana, Idaho, and British Columbia.[8]

American and British interests and settlement continued to grow slowly through the first half of the 19th Century as represented by fur traders, missionaries, and increasingly, land-consuming settlers and speculators. The process accelerated sharply in the latter half of the century. In the 1850s and 1860s, Oregon became a state; Washington and Idaho became independent U.S. territories; Indian treaties abrogated native claim to vast land areas (including Mount Rainier); the Civil War erupted in the east; and importantly for our purposes, gold was discovered in California, Oregon, eastern Washington, Idaho, and Alaska. Citing William Goulder in *Reminiscences: Incidents of the Life of a Pioneer in Oregon and Idaho [1909]*, Schwantes notes that "In the spring of 1861 came the mad rush up the Columbia, simultaneous with the booming of cannon on the coast of South Carolina. The Civil War was on in the East, and a new golden era [of white settlement] had opened in the West."[9] That settlement, not so golden for long-

[6] See Schwantes 1996:19-52, and Morgan 1979:3-17
[7] Thomas Jefferson in Parsons and Shiach 1902:8
[8] Schwantes 1996:64
[9] Schwantes 1996:124

enduring Native American populations, was driven by a number of factors related to national expansion, not the least of which was the lure of gold and other mineral resources –a drive that ultimately brought mining ventures to the slopes of Mount Rainier itself.

Mining, A Dream of Riches

Striking Gold

Mining was, and remains, a gamble. Manpower and equipment needed to conduct these operations are not cheap. Return on investment is always unpredictable; ranging from great wealth to great failure. In the Pacific Northwest, the initial mining rush was driven by the lure of gold that promised, though seldom delivered, great return for investment. Attempting to explain the nearly universal lust for gold acquisition by emerging European states during the 15th through 19th Centuries, Burtchard suggests that

> Social systems dependent on long and complex networks for moving resources from points of extraction or production to consumers rely on some commonly accepted item (money) to facilitate the necessary exchanges. Gold for some time had been used as a standard commodity underlying such exchanges in and among trading nations. Since gold was relatively rare and more or less equally valued among these states, it could serve as the basic medium underlying the more easily manipulated national and bank currencies. Given its critical role as an "exchange facilitator" in national and international systems that require complex exchanges for their existence, gold had become a most highly valued resource. It is not surprising that a nation, like the United States, rewarded individuals and companies highly for locating and extracting the mineral. In western, mid-19th century America, the potential rewards were indeed high, and attracted a large number of persons hoping to improve their economic situation.[10]

Gold discovery in North America, and the ensuing rush to obtain it, began in California in the late 1840s. In 1853, gold was spotted in Washington's Yakima River by a member of Captain George McClellan's road crew. At first, prospecting received more attention than roads; but soon pressure to open a wagon route connecting east and west sides of the Cascades intensified.

The largest rushes outside California focused on some of the most inaccessible parts of the West at the time. Examples include an 1855 rush on the upper Columbia River to a location near an old Hudson's Bay Company post at Fort Colville in northeastern Washington; and soon thereafter, another on the Fraser River just across the Canadian border in 1858.[11] Other finds, genuine and fictitious, followed across the greater inland Idaho-Washington-Oregon area. According to Schwantes, during the spring high-water season "…an army of gold seekers traveled by steamboat up the Columbia and Snake rivers from Portland to Lewiston, where they obtained saddle and pack animals to push on into the interior."[12] He goes on to note that, at roughly the height of the rush in 1861, $3,000,000 worth of gold dust drifted back down-river from these mines. At the time, gold dust was treated as legal tender; helping to stimulate a broader economic boom across the region.

[10] Burtchard 1980:57
[11] Pomeroy 1965:49
[12] Schwantes 1996:128-129

Somewhat later, onset of the Klondike gold rush in 1896 brought thousands of fortune seekers to Seattle to be outfitted for their continuing journey to Alaska. Finding gold intensified the region's already growing industrial-timber-agricultural economy; added to its developing urban centers such as Tacoma and Seattle; and helped to enmesh the Pacific Northwest more securely into the national economic system.



Figure 2.1. Klondike Gold-rushers Board for Alaska at Port of Seattle in 1906.
(Courtesy Museum of History and Industry, Seattle. PEMCO Webster & Stevens Collection, 1983.10.7520.)

All that Glitters…

West of the Washington Cascades, gold, while hoped for, was never found in sufficient abundance to support major mining efforts. Much of the economic benefit fell to businesses that supplied and served miners and the mining industry; as well as to benefit trading, and agricultural enterprises that developed across the region concurrent with the gold boom. Even so, local newspapers widely publicized and romanticized the search for metals such as gold, silver, and copper. Local teachers, farmers and businessmen read the news, and spent spare time prospecting in the hope of improving their economic status.

Of special concern to the western slope of the Cascades, and to Mount Rainier, was a rise in demand for copper in the late 1800s; its value driven up by industrial, military, and urban needs. As roads and rails were constructed, telephone and telegraph lines were erected along-side. Increasingly, miners west of the Cascades redirected their prospecting efforts toward the blue-green copper-bearing ore needed for this expanding network of communication wires.

While lacking the romantic appeal of gold, silver, or even copper, regional industrialization increased demand for coal –coal for trains, coal for steam-powered ships, coal for heat, and coal to be processed into coke for smelting and trade. Indeed, coal provided the primary energy source to fuel the growing industrial economy. As such, its economic importance increased throughout the 19th Century. Local coal sources were important in that they reduced costs involved in long distance overland and over-water transport.

As will be seen, both copper and coal played a role in the mining history of Mount Rainier.

Mining Regulations and Other Considerations

Following the rush to develop western mines came a series of regulations intended to standardize the manner in which mineral resources were claimed, extracted, and sold. In 1866, a national "Lode Law" became a legal guide to establishing and maintaining lode or vein mines. Unfortunately, the law did not specifically define limits to the area surrounding the mines; allowing unreasonably large tracts of land to be claimed as "mines."

In 1872, a law was passed to standardize the area of land granted with each claim. Even so, it remained unclear how much land could be used to construct mine-related housing, milling, storage, and blacksmithing facilities; and to provide shelter and pasturing for horses and other livestock.

Each year, mining improvements to registered claims had to be reported to a federal registration office. The mine owner could continue "holding" his or her mining claim by showing that each claim had been "improved" by mining or construction valued at least $100 annually.

When miners could afford the necessary equipment, most turned to hard rock mining; drilling and blasting their way into veins that they hoped held marketable quantities of gold, silver, copper, and other ores. The crude hard rock ore, once extracted, was heavy, difficult to transport, and held little value without further processing. The need to transport ore (and logs) to secondary processing sites stimulated development of an extensive short-haul rail as railroads extended tracks closer and closer to mines and timber cutting sites. Horses and wagons remained in use for transportation to railheads until the advent of reliable truck transport.

Ultimately, hard rock ores were delivered to smelters for final processing. W. R. Rust opened the Tacoma Smelter in 1889 to profit from refining ore brought in from all over Western Washington. Additional smelters later opened in Everett and Spokane.

When Mount Rainier National Park was formed in 1899, Section 5 of the act extended the mineral laws of the United States to lands within the park, thus allowing prospecting and mining. As prospectors moved in, the Secretary of the Interior and Acting Park Supervisor Grenville F. Allen urged Congress to repeal Section 5 and at the same time provide funds to manage the park and protect its resources. Mining regulations in National Parks changed under the Congressional Act of May 27, 1908 (35 Stats., 365) which restricted new mining claims and regulated existing claims. Mount Rainier National Park Regulations were amended to read:

> Hereafter, the location of mining claims under the mineral-land laws of the United States is prohibited within the park. Persons who have heretofore acquired in good faith rights to any mining location or locations shall not be permitted to injure, destroy, or interfere with the retention in their natural condition of any timber, mineral deposits, natural curiosities, or wonders within said park outside the boundaries of their respective mining claims duly located and held under the mineral-land laws.[13]

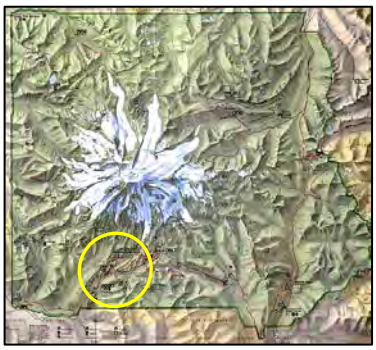
Although the 1908 act prohibited new mining, the numerous claims already established at Mount Rainier National Park would continue to trouble park staff for decades to come. The existing mining interests conflicted with the National Park Service's mission and values, so accommodating legitimate mining claims was a challenge to the young Mount Rainier National Park. In some cases, such as Glacier Basin, mining activities were to play a major role in the development of park infrastructure and policies.

Mining Ventures in Mount Rainier National Park

Mountains attracted unusual interest by small-scale miners because they tend to expose sub-surface geologic structure; making available otherwise more deeply buried ore-bearing strata. Accordingly, mountains across the west were sought out in the rush for mineral wealth. Mount Rainier was no exception. Given its size and visibility from growing population centers in Tacoma (named for Mount Rainier, aka *Takhoma)* and Seattle, the mountain was a beacon that attracted miners from the late 1800s until well into the 20th Century. Each claim on Mount Rainier generated hope of wealth. Each claim turned into disappointment.

Below, we briefly outline mining ventures on Mount Rainier beginning with Longmire Meadow in the park's southeast quadrant, and ending at Glacier Basin on the mountain's northeastern slope.

Longmire Meadow – Eagle Peak Area



The Longmire Family and Longmire Meadow

The James Longmire family was one of only two prospecting entities fortunate enough to patent, and thus own, a mining claim on Mount Rainier. The other was Mount Rainier Mining Company in Glacier Basin itself.

On his return from a climbing expedition in 1883, James Longmire happened on a meadow dotted with mineral springs while searching for lost horses. Sensing a business opportunity, he applied for a homestead that included the meadow. Failing that (Longmire already had been granted a homestead on Yelm Prairie west of Mount Rainier), Longmire successfully filed an alternative mineral/placer claim in 1887 for 18.2 acres of the meadow and surrounding landscape. The claim was patented in 1892. While Longmire's primary objective was to develop a mineral springs resort on the site, his placer claim ostensibly was for extracting iron oxide deposits located just upslope of the meadow. The iron was to be pulverized and marketed as a

[13] Regulation attached to Superintendent's Annual Report of 1909.

reddish-brown paint pigment; and, in fact, was used to paint the Longmire Springs Hotel some years later.[14]



Figure 2.2. Longmire Springs Meadow in 1888.
Iron oxide deposits are found on elevated ground to the right and above the bathhouse at photo left; later the site of "Iron Mike" spring and Elcaine Longmire's cabin. (MORA Archives)

Longmire and his family handled a growing tourist trade by building a hotel and creating other accommodations connected to the purported medicinal properties of the springs. Mining was too time consuming and non-productive to take up much of their interest.

Ultimately, the federal government purchased the deed to the Longmire family claim for $30,000 from Longmire Mineral Springs Company on June 14, 1939; incorporating the claim officially into Mount Rainier National Park.

While not literally miners, the Longmire family deserves credit for advertising Longmire's Springs, and for building a horse trail and wagon road up the Nisqually River as access to their property. When word got out that it was relatively easy to reach Mount Rainier via this road, traffic increased proportionately. As the quantity of summer visitors increased, so too, the number of prospectors and miners increased; resulting in the filing of several mineral claims in the southwestern quadrant of the park.

Eagle Peak Mining – Eagle Peak Copper Mining Company

Eagle Peak is an imposing sight within easy walking distance of Longmire Meadow. Prospectors and miners searched for mineral deposits on its steep slopes and exposed cliffs as early as 1892. Among

[14] For a short, illustrated history of Longmire Meadow history see Burtchard et al. (2012) *Finding Longmire Springs Hotel* available as a digital file in the park's Natural and Cultural Resource division digital reports library at *NCR(\\INPMORALOFS02(M:)\MORAShare\Reports Library\Archaeology\2012 Finding Longmire Springs Hotel.pdf*.

these miners were Roy Herbert Wheelock and Baker Long[15] who worked as a team; searching particularly for copper on the southern slopes of Mount Rainier. Wheelock and Long worked in this location during snow-free months each year.

Mary A. Gehrett (who later married Baker Long) filed for the Aldula Claim in 1904, and her son Robert Wheelock filed an adjacent claim in 1906; both claims located at the base of Eagle Peak, downstream of the confluence of the Nisqually and Paradise Rivers. These claims were the focus of their family business, the Eagle Peak Copper Mining Company, formed in 1908 with $150,000 of capital stock. The operation included a "mill site" on the level land on the west side of the Nisqually River where they had built cabins, and later, a mill. By 1923, the operation included an adit, mine shed with a blacksmith shop, machinery, a power plant on the Paradise River (leased from the Paradise Mining and Milling Company), a log boarding house, and cable-tram across the Nisqually River.

The mine remained active until 1974, even as buildings deteriorated and lack of funds delayed assessment work and fee payments. In 1927, Mrs. Baltuff –a determined stockholder– traveled to the mine with a load of supplies to do the assessment work herself. In 1948, the park's district ranger reported that Wheelock, then in his 70s, was still working at the mine.

Wheelock died in 1966 at the age of 90. The property reverted to Mount Rainier National Park in 1974.[16]

Eagle Peak Mining – Hendricks Claims: Discovery and Short Canyon Lode Claims

Another family team (Frank, Emma and Peter Hendricks) prospected the Eagle Peak area soon after Mount Rainier National Park was designated. Taking advantage of improved access to this part of the park, Frank and Emma established several claims on both sides of the Nisqually River a short distance northeast of Longmire Meadows in 1902. According to Thompson,[17] they also claimed "Short Canyon Lode" adjacent to the Paradise River –a tributary stream flowing into the Nisqually River near the area now known as Cougar Rock.

The Hendricks set up their mining camp near their claims north of Longmire Springs, and built their own access road branching off the road built earlier by the Longmire family. Frank Hendricks reported that improvements on his Discovery Claim in 1902 and 1903 consisted "of 3 quarter of a mile wagon road, cabin 12 by 22; one ten ft. tunnel 4 by 5 ft. then down a shaft 4 by 4 ft. deep; another shaft 4 by 4 ft. 12 ft. deep; total amount to 5 hundred and twenty-five dollars." His improvements in 1904 "consist of 30 ft. shaft, blacksmith shop and shed 8 by16 feet, one pump, windlass, one bucket, drills, pick, hammers… ."[18] Hendricks' Short Canyon lode claim was filed on May 1, 1907. By 1914, Hendricks had built a cabin; blacksmith shop and outbuildings; and excavated several tunnels, pits, open cuts, and a shaft.

[15] Thompson (1981) uses "Baiker" and refers to "Roy H." Wheelock and states that he is Mary Gehrett's, son. Catton and Caywood (1999:55) uses "Baker" and "Robert" Wheelock. Rumball-Petre (2002) uses "Baiker" and "Roy H." Wheelock." These variations may be due to misspellings in the original documents, or the use of a nickname; we did not examine the original documents.
[16] Catton and Caywood 1999:55, Thompson 1981:117-123, 139, Rumball-Petre n.d.
[17] Thompson 1981:109-110, 138
[18] Letter from A: Hendricks to Hon. Secretary of the Interior, July 22, 1904. (NARA Archives L3023 Files, Fiche 54)

By 1915, Hendricks had moved away from the park. The Short Canyon Mining Company of Seattle acquired the claims, but did little to no work on them. By 1923, when Mineral Inspector Cox examined the claims, he reported that they had been abandoned.[19] Adverse proceedings regarding the two claims followed in short order. The Acting Commissioner, Department of the Interior, General Land Office, Washington DC made the following points: "1) The land is non-mineral in character; 2) there has not been made a valid discovery of a vein or lode of quartz or other rock in place bearing gold or other valuable deposits on the discovery lode mining claim; and 3) for the years 1920 to 1922, inclusive, there was no annual expenditure made on or for the benefit of the Discovery and Short Canyon lode mining claims."[20] The above charges were not successfully challenged. The land reverted to park control in 1923.

Eagle Peak Mining – Narada Mining and Milling Company

Prospectors active in the Eagle Peak area in 1904 and 1905 found another potential mining location on the south side of the Paradise River near its juncture with the Nisqually River. Six claims were registered, and Narada Mining and Milling Company was formed in 1907. The company controlled capital stock of 1,000,000 shares at par value of $1.00 each. Sixty thousand shares were to be sold. Stock sales, however, were less than anticipated, and very little work was done on the claims.[21]

Park Ranger Samuel Estes inspected the claims in September 1909 and reported to Acting Superintendent Allen:

> I will write you in regard to the location and improvements on the Narada Mining Co.'s claims. As Mr. Barr and myself have been over them and could find no minerals and they are holding six claims and have not got them staked off, and have not the required amount of work for the time of holding.
>
> Have they any right to survey and locate corners and blaze lines when they have not complied with the State nor park laws heretofore? Without located corners and established lines I cannot determine where the claims that is so represented are as to boundary lines. Probably if this is investigated correctly at once those claims can be taken from this Company. As to my judgment it is a matter that should have immediate attention.[22]

The General Land Office declared claims null and void November 1911.[23]

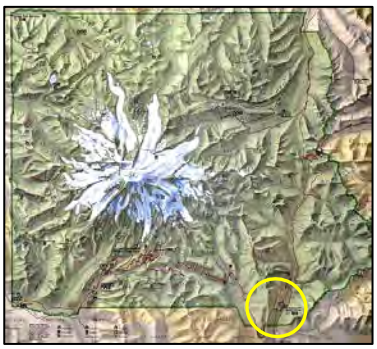
Eagle Peak Mining – Paradise Mining and Milling Company

Brothers Ike and Sherman Evans filed a number of claims in the Eagle Peak area between 1906 and 1908 just before congressional action prohibited new mining claims in the park. The brothers partnered with Roy Wheelock, owner of Eagle Peak Copper Mining Company. Their mines were located close beside one another on the lower west face of Eagle Peak, and their mining camps near to one another on the west side of the Nisqually River. In effect, Wheelock leased and managed the Paradise mine during part of World War I while the value of copper was inflated. When the claims were inspected by the General Land Office in 1931, the report described a 420 ft. crosscut tunnel, an air compressor, tram line, ore cars and an air drill. A sample of ore that was assayed contained 13.47% copper.

[19] Thompson 1981:109-110
[20] NARA Archives L3023 Files, Fiche 54
[21] 1907 Prospectus (NARA Archives L3023 Files, Fiche 56)
[22] NARA Archives L3023 Files, Fiche 56
[23] Thompson 1981:111

In 1946, the Evans Brothers, both in their 70s, offered to sell their claims to the Federal Government. Congress, however, failed to appropriate the funds. The National Park Service instituted condemnation procedures against the company claims. In 1950, the property finally was sold to the government for $6,000.[24]

Ohanapecosh Area



The Ohanapecosh area takes its name from Ohanapecosh River, a non-glacial clear-water stream with a distinct bluish tinge; the result of slightly elevated copper content. Ohanapecosh mining, however, had little to do with copper. Rather, local entrepreneurs sought to gain control of a series of hot springs east of the river by filing a mineral claim similar to that used by James Longmire to acquire rights to similar springs on the southwestern side of the mountain –springs that still bear the Longmire name.

At Ohanapecosh, local resident John Snyder filed the "Silver Spray Placer Claim" for a 20-acre parcel centered on Ohanapecosh hot springs (then known as Cowlitz Hot Springs) in 1907. Snyder transferred the claim to Rhode Green, a survey engineer with the short-lived North Coast Railway Company. By end of the following year, Green and Snyder had cleared trails from the hot springs to Lewis, Washington (now Packwood); built a one-room cabin; set up a primitive campsite; dug bathing pools; constructed bathhouses; and were welcoming pack trains with visitors to the hot springs mineral baths. In October 1908, assistant Forest Service Ranger Harry M. Cunningham reported that several hundred people visited the spring that year.[25]

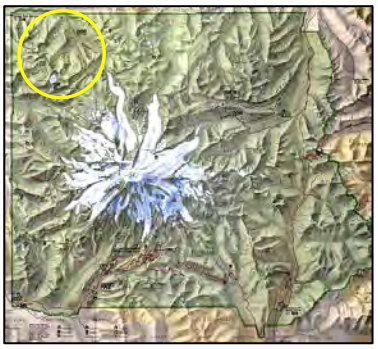
Snyder and Green's mineral claim to the Ohanapecosh/Cowlitz hot springs was challenged almost immediately by the United States Forest Service.[26] The Forest Service claimed that Snyder "did not make said location for mining purposes but for the purpose of securing control of a hot spring located thereon."[27] Snyder and Greene maintained that the claim contained valuable lime deposits that could be extracted for fertilizer, or for manufacturing Portland cement; and that the mineral springs had little medicinal value, and hence, were not the object of the claim. In the effort to demonstrate mining activity, several shafts and open cuts were excavated by 1909. Snyder planned to do a little assessment work each year so that he could eventually file a patent on the claim. Meanwhile, the mineral baths continued to attract health-seekers willing to make the pack journey north from Lewis.

Court battles over legitimacy of the Silver Spray Placer Claim continued for some time. Ultimately, in 1917, the courts decided in favor of the government in *United States v John Snyder, locater*

[24] Thompson 1981:123-125, 139
[25] Letter from Henry M. Cunningham to Forest Supervisor Allen, October 15, 1908, Gifford Pinchot National Forest. (NARA RG 95, Box 31)
[26] At the time, the Ohanapecosh area was part of the Mount Rainier National Forest reserve. The National Park Service did not assume control of the area until 1931.
[27] H.S. Riggins Report on Silver Spray Placer Claim, June 30, 1909. (NARA RG 95, GP04, Box 31)

and Rhode Greene, transferee Involving the Silver Spray Placer location Serial No.01663.[28] Use of the hot springs as a mineral bath camp and resort continued as Forest Service concession –the Ohanapecosh Hot Springs Company– through the early 1900s; but without the pretense of a *bona fide* mining operation. The National Park Service assumed control of the Ohanapecosh area in 1931; continuing to maintain the concession until it was purchased by the government in 1962.

Carbon River – Mowich Lake Area



Access by trail to the Carbon River area on Mount Rainier's northwestern slope was improved by Bailey Willis in the early 1880s. Indeed, Bailey Willis' "Grindstone Trail" was perhaps the earliest historic-period trail to be built onto this part of the mountain. Willis, a geologist employed by Northern Pacific Railroad, was searching for coal deposits on Mount Rainier; as well as for practicable routes to access and transport them by rail.[29] Later, Northern Pacific laid track toward the current park boundary; successfully meeting the transportation needs of lumber companies, tourists, and coal miners in the region. Prospectors and miners, particularly those interested in finding gold, copper, and other metals took advantage of newly available rail access early in the 20th Century; as well as Bailey Willis' Grindstone trail route to access more deeply terrain that soon was to become Mount Rainier National Park.

In 1908, nine years after the park was established, Acting Superintendent Grenville Allen and newly assigned park ranger Thomas O'Farrell inspected the Carbon River mining area. Allen believed that new restrictions to mining inside the park needed better enforcement. O'Farrell put extraordinary effort into learning the history and current activity of mining in the area. His goal was to help the superintendent find and clearly identify illegal mining in the park. O'Farrell continued supporting mining restriction and elimination within the park throughout his tenure, and through a succession of park superintendents.

Carbon River - William Evans Claim

W. L. Evans, known as "The Squatter," settled along Carbon River in 1895 in an area which is now inside the park. During his eleven-year residency, his home was destroyed by both flood and fire. William was moderately successful as an agricultural homesteader; constructing a 6-room house, storehouse, root house and blacksmith shop; and planting a vegetable garden. However, he found no success in mining several claims in the vicinity. Ownership of his property reverted to the government when he died in 1906.[30]

Carbon River - Hephizibah Mining Company, Atlas Group of Claims

Beginning about 1898, the Sexton family (J. I. Sexton, Frank B. Sexton, and Jennie Sexton) mined at least six claims, and made use of a mill site located on the south side of Carbon River, now within park boundaries. They extensively worked only one claim. By 1923, all the claims had been abandoned. The General Land Office ruled these claims invalid.[31]

[28] NARA RG 95, GP04, Box 31
[29] Catton 1996:49
[30] Thompson 1981:116-117
[31] Thompson 1981:112-114, 138

Carbon River - Washington Mining and Milling Company Claims

Washington Mining and Milling Company perhaps had the largest mining-related impact in the Carbon River area. Beginning in 1906, the company expanded its holdings by locating 38 claims within the park, on both sides of Carbon River. If it hoped to succeed, the company knew it had to move ore to the Tacoma refinery at the lowest possible cost. In 1907, they applied for the right to construct a road from their mines to a rail connection at the town of Fairfax northwest of the park. They received approval, and immediately started building their road by clearing the way from their active mining sites westward along the south side of the Carbon River toward the park entrance.

Road construction proceeded at a slower pace than planned. Company officials made it difficult for Ranger O'Farrell to inspect the mining properties; claiming ownership of the road, and granting road access only to employees and those approved by the company. It soon became clear, however, that the company was not keeping up with either mining or road construction plans. In 1910, the General Land Office issued an adverse report, and directed proceedings against 24 of the claims. Those claims were relinquished. Progress on the remaining 14 claims slowed, road construction ceased altogether, and Washington Mining and Milling Company operations within the park ended by 1913.[32]

Carbon River - Fritz Hoose Claims

In 1911, Ranger O'Farrell's note to Superintendent Hall mentioned the Hoose holdings: "Mr. Fritz Hoose of Fairfax held two claims in the park on Carbon River, but owing to the vigilance of this office in watching for failure to do assessment work, these claims were abandoned in 1909 and the possession reverted to the park."[33]

Mowich Lake - Browne Family Claims

Around 1903, Belmore and Jack W. Browne of Tacoma, and partners from Orting, held two claims near Mowich Lake (then known as Crater Lake). They accomplished very little mining or development work, but managed to build a well-used lakeside cabin. This was obvious to Ranger Thomas O'Farrell when he inspected the claims in 1909 and 1910; finding only a short prospect hole and no machinery. Following the inspection, the park seized the 16 by 22 ft. cabin; suspecting the claims were made for the purpose of establishing a recreational site. Jack Browne, who once served as a ranger at Mount Rainier, protested; claiming he intended to work the claims and patent them. During another later visit, O'Farrell reported seeing a vase of wildflowers on the table in the cabin and the presence of cartridges indicating hunting. The mining claims were declared invalid after 1913.[34] Figure 2.3 below shows the cabin in use. Barely visible remains are recorded as MORA archeological site FS2003-06 (45PI01060).

[32] Thompson 1981:114-116, 138
[33] Thompson 1981:111
[34] Thompson 1981:137-138, Rumball-Petre n.d.

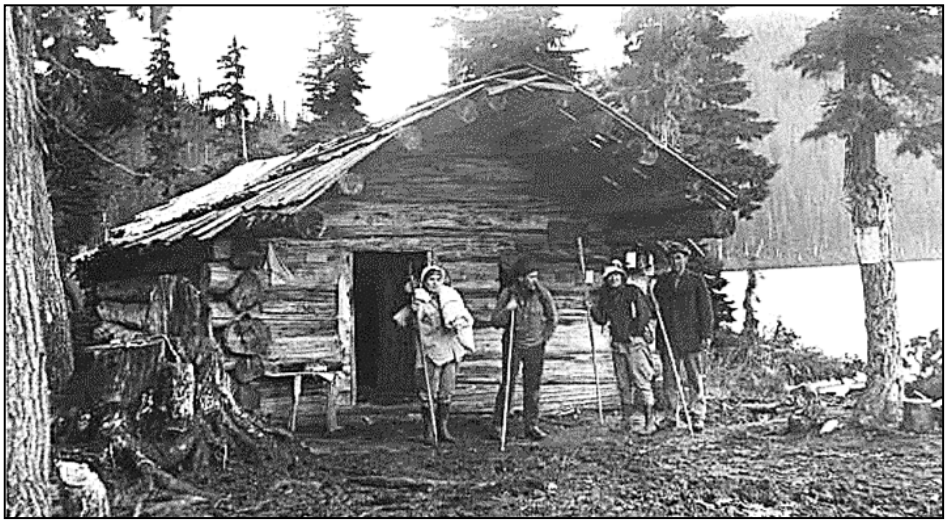
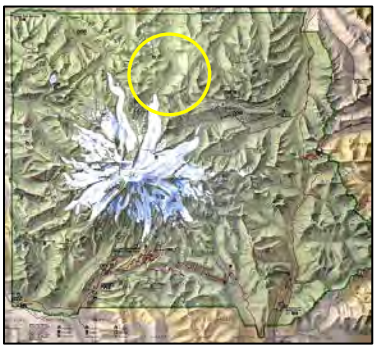


Figure 2.3. Mowich Lake Cabin ca. 1903 to 1913.
Originally built by J.W. Browne as a mining cabin. Mowich Lake in the background**.**
(MORA Archives)

Mowich River - Mountain View Claims Group

Former Washington Cooperative Mining Syndicate employees Robert Thompson and Mr. Smaby, plus J.T. Boddington and D.J. Leonard, took ownership of vacated claims in the Mowich River area. They did this to try to sidestep the 1908 Congressional action that prohibited new mining claims in the park. In 1908, Boddington and Leonard relocated a claim near the head of the Mowich River that had been abandoned approximately two years earlier by an unknown party. The partners built a 500 ft. flume to aid the mining operation. They eventually abandoned the claim, however, after deciding it was not productive enough to succeed.[35]

Mystic Lake – Winthrop Glacier Area



The Mystic Lake and Winthrop Glacier area is situated on the northern slope of Mount Rainier in an area served only by pack trails, and well away from population centers. Nonetheless, there was sufficient evidence of copper veins to entice miners to search a wide area, generally without success.

Chamberlain Family Claims

Fred J. Chamberlain prospected along the White River in 1896. He and his partners chose their first claims that summer in the Grand Park area, but an accident caused Fred to return home to Buckley before the summer was over. His partners left Fred's name off of the registration of claims.

In 1897, Chamberlain prospected on his own. He returned to the high country following the same White River route as before, but veered further west and headed to the Winthrop Glacier where exposed

[35] Thompson 1981:106, 137

copper veins looked promising. The bulk of his mining effort was spent on the Lorraine claims on the lower slopes of Skyscraper Mountain, very near to Winthrop Glacier.

Fred brought his family into the area in 1898. Together, they filed claims and constructed a log cabin residence on Mineral Mountain, south of Mystic Lake. Work also continued in the Lorraine area. There, they built a cabin and evaluated the area to enable them to borrow money to fund further expansion. The Lorraine Copper Mining Company was incorporated April 13, 1900. The owners hoped to raise capital by selling 1,500,000 shares of stock at $1.00 per share.

By 1910, Chamberlain had constructed a horse trail between the Winthrop and Carbon Glaciers; extending a known route up the Carbon River. The mining company also reportedly spent $10,000 developing the claims, including excavation of an 86 ft. shaft and two adit tunnels. However, the company failed to carry out the required assessment work at the Lorraine claims in 1910, and unhappy stockholders replaced the president. The family attempted to resume work in 1911, but workers were turned away by a park ranger. Additional attempts to open the Lorraine mine failed because the mine had been crushed by a shift in the glacier's lateral moraine.[36] In 1926, all of the Lorraine Copper Mining Co. claims were ruled invalid by The General Land Office.

Lost Creek Claims

A number of claims were registered in the Lost Creek and Lost Canyon area feeding into Huckleberry Creek. None were considered significantly active by the park to constitute *bona fide* mining operations.

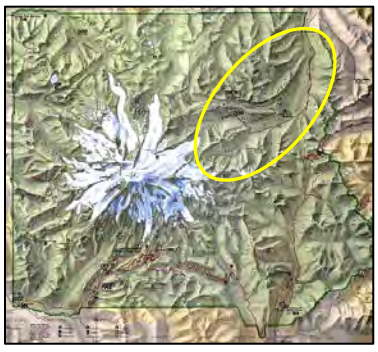
Lodi Creek Claims

Two claims, Lodi No. 1 and Lodi No. 2, were located on Lodi Creek by Dr. J. L. Reese of Spanaway. There was a cabin and tunnel on the claim, but a 1911 ranger report noted that the claim was not well developed (Thompson 1981:111).

Pinto Horse Mine

Forrest and Farrell of Tacoma managed six to eight claims in Huckleberry Creek basin. Their mining operation, known as the Pinto Horse Mine, was only mentioned in ranger reports by Thomas O'Farrell.[37]

White River – Glacier Basin Area



White River, and its adjacent ridgelines, provided easy access to Mount Rainier's high country. Early prospectors followed an old White River trail to Glacier Basin; one with an easy grade, and surrounded most of the way by abundant timber. One of the earliest prospectors using this trail to access the area was Henry W. Knapp. It

[36] Thompson 1981:107-108, 137

[37] Ranger Reports by Thomas O'Farrell, August and September 1910, and August 1911. (MORA Archives), and Thompson 1981:111

is Knapp, we believe, that filed most of the early mining claims in Glacier Basin in the 1890s.[38]

While the trail was good enough for horses, wagons and trucks ultimately would be needed to haul commercially viable quantities of construction materials and ore into and out of Glacier Basin. By the early 1900s, an adequate road system was badly needed to support mining operations developing in this part of the park. The road that was eventually built came to be known as the White River Road, Glacier Basin Road, or simply *Storbo Road* after Peter T. Storbo, one of the principle founders of the Mount Rainier Mining Company (MRMC). It was MRMC that developed mining claims in Glacier Basin, and in conjunction with the Park Service, built the Storbo-White River road. This road, shown in Figure 2.4, and Mount Rainier's Glacier Basin Mining District are the primary focal points of this report. Below is a brief summary of mining developments in Glacier Basin. A more detailed history follows in subsequent chapters.

Glacier Basin Mining Company

Six claims were held by A.M. Bryant and associates along the White River within the boundaries of Mount Rainier National Park. Bryant was doing assessment work on claims abandoned by the Glacier Basin Mining Co. prior to 1908 –the year that mining became restricted in the park. In 1910, adverse reports concerning those claims were made by W.R. Davey of the General Land Office. The properties were vacated in 1911.[39]

Mount Rainier Mining Company

In the early 1900s, Peter T. Storbo of Enumclaw, Washington fixed on the idea of purchasing mining rights in Mount Rainier's Glacier Basin. In 1902, Storbo and his partners registered a total of 41 claims in the basin. The Mount Rainier Mining Company (MRMC) was incorporated in 1905; enabling the partners to sell stock and raise money to fund mining activities in what was to become the park's largest, and longest-lived mining enterprise.

In accord with 1908 mining restrictions, all but nine of the Glacier Basin claims were relinquished in 1912 as a result of General Land Office proceedings. Mount Rainier Mining Company, however, negotiated continued use of some of the relinquished claims; including those where the MRMC camp and power plant were located, and those that provided access to mine tunnels already being worked. Subsequent improvements to Storbo-White River Road linking Glacier Basin to Enumclaw, opened hauling access from the basin to smelters in Tacoma. Figure 2.4 shows the route of this road –a road that not only benefited MRMC, but assisted the young Mount Rainier National Park by providing the first automobile route to the park's northeastern quadrant.

MRMC required substantial quantities of timber for construction, shoring mine tunnels, and general maintenance. This need was met by a series of park-issued special use permits; allowing the company to cut a specified number of trees within the park at an agreed price.

[38] Carl Fabiani Personal Communication 2017 referencing park ranger A.B. Conrad diary from January 1906. Conrad met with Knapp in Buckley, Washington; describing him as one of the "original locaters of most claims [in Glacier Basin]." We believe that Knapp, and perhaps A.M. Bryant and associates, held most, if not all, of the Glacier Basin Claims purchased by Peter Storbo and Bernt Korssjoen for Mount Rainier Mining Company in 1902.
[39] Report from Ranger T.E. O'Farrell to Supt. Hall, August 25, 1911. (NARA Archives H2621 Files, Fiche 04)

Mining activity by Mount Rainier Mining Company slowed dramatically during the 1920s and 1930s because of financial complications brought on by disagreement and misrepresentation of Glacier Basin ore values. Many stockholders felt cheated, and new MRMC shares became difficult to sell. Legal proceedings regarding these issues resulted in fines and prison time for Peter Storbo and an associate, Orton E. Goodwin. Even so, various company officers attempted to continue mining. However, loss of Storbo's leadership contributed to funding problems that had plagued the company for some time. As work became more sporadic, structures and tunnels collapsed, and the access road deteriorated.

The federal government made repeated offers over the next 50 years to purchase Glacier Basin claims. One such offer was made following a 1951 real estate and mineral appraisal of Mount Rainier Mining Company property; including its dilapidated structures and accessible ore bodies. The company asked $252,000 for the combined mine-related properties. The government counter-offered only $10,000 (Thompson 1981:125-136, 139-140), and sale agreement between the park and MRMC could not be reached. Final sale of the property eventually took place in 1984 when the park acquired the Mount Rainier Mining Company property for $55,800.[40]

The longer story of Mount Rainier Mining Company's venture on Mount Rainier, and the Park Service's responses to it, is the central subject of *Mining Glacier Basin*. We trust that readers will find the account enjoyable and useful as a means to better understand the history and consequences of the long-held dream of riches to be gained by mining Glacier Basin.

[40] Catton 1996:208

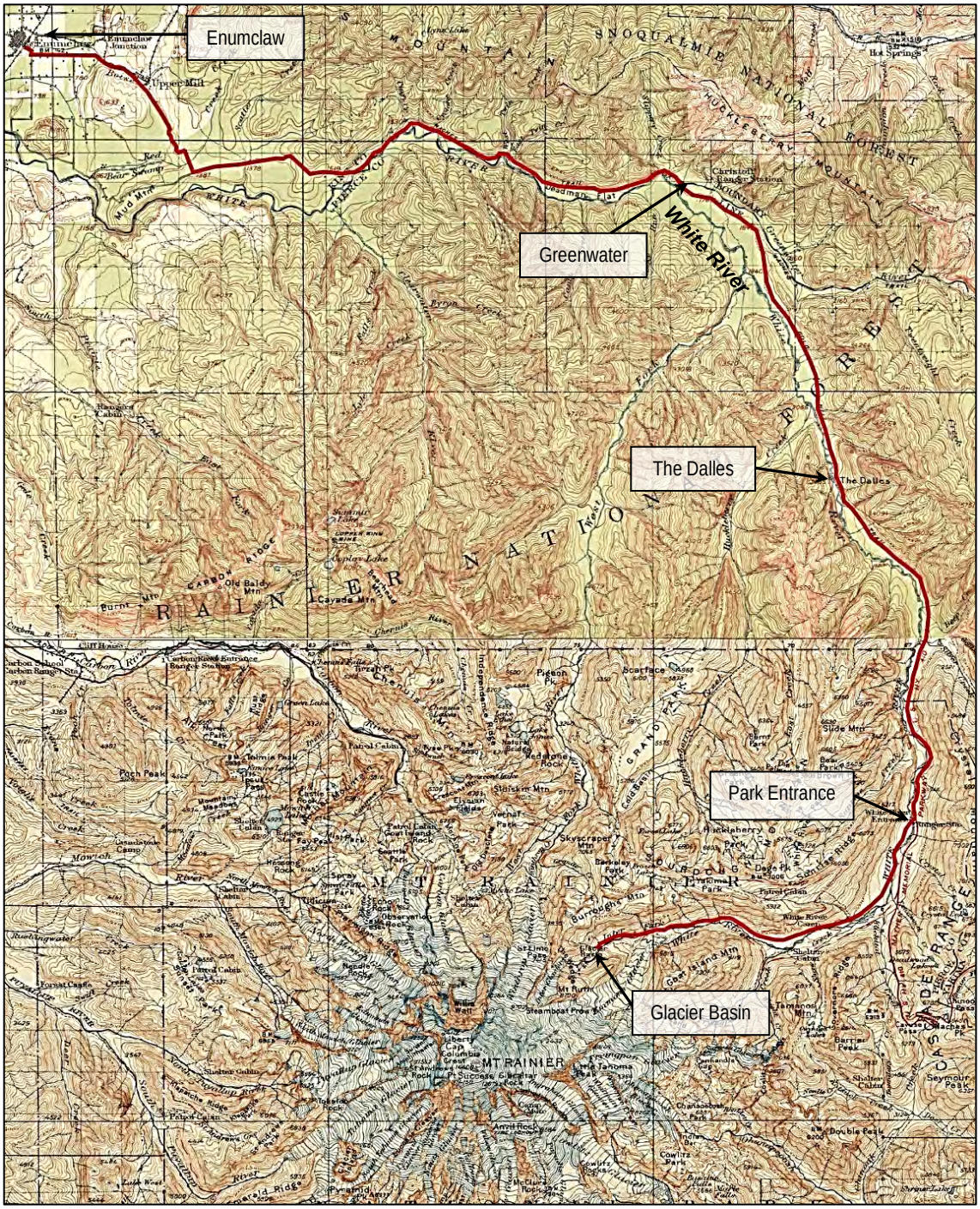


Figure 2.4. Early 1900s Route from Enumclaw, Washington to Glacier Basin on Mount Rainier. Variously referred to as White River Road, Glacier Basin Road, and Storbo Road, much of the route between the park boundary and Enumclaw remains a primary entrance road to Mount Rainier National Park to this day. View combines topographic maps of Cedar Lake (1911) and Mount Rainier (1928) Quadrangles. (Courtesy University of Texas www.lib.utexas.edu/maps/topo/washington)

Chapter 3: Mining Comes to Glacier Basin
Mount Rainier Mining Company & White River Road
The Early Days − 1902 to 1921

Founded in 1902 and incorporated in 1904, the Mount Rainier Mining Company (MRMC) operated solely in Glacier Basin; a relatively remote area of Mount Rainier National Park on the opposite side of the mountain from the park's primary activity centers at Longmire and Paradise. Glacier Basin was an area that was rarely patrolled, and difficult to manage by the young park's administration. Despite the difficulties, the park supervisor, Grenville F. Allen, made efforts to assess MRMC holdings and operation in the basin. Allen assigned responsibility for inspection and reporting on that part of the park to Thomas E. O'Farrell, the only full-time ranger located on the northern side of Mount Rainier. Much of the information relevant to Glacier Basin and mining operations centered there, from the park's point of view, comes from O'Farrell's reports. These, and a variety of other news, literary, and donated sources give us a picture of how the MRMC developed, grew, and ultimately collapsed. We begin that story here.

Origins of Mount Rainier Mining Company; Peter Storbo and Bernt Korssjoen in Charge

In the late 1890s, it was common for residents of Enumclaw, and other towns along the White River north of the park, to join in exploration of Mount Rainier's foothills; hoping to discover marketable minerals. As early as 1896, would-be miners were using an "old Indian trail" that followed the main branch of White River to the northeastern slopes of the mountain.[41] The possibility of prospecting for wealth drew men away from schools, farms, and businesses to camp and explore Mount Rainier's highlands. Many of these turned off the White River; finding it easier to travel ridges leading to mid and upper elevation landforms on the mountain. Whether by ridgeline or river, early exploratory efforts began to concentrate on Glacier Basin where at least 40 claims were registered by as early as 1902.

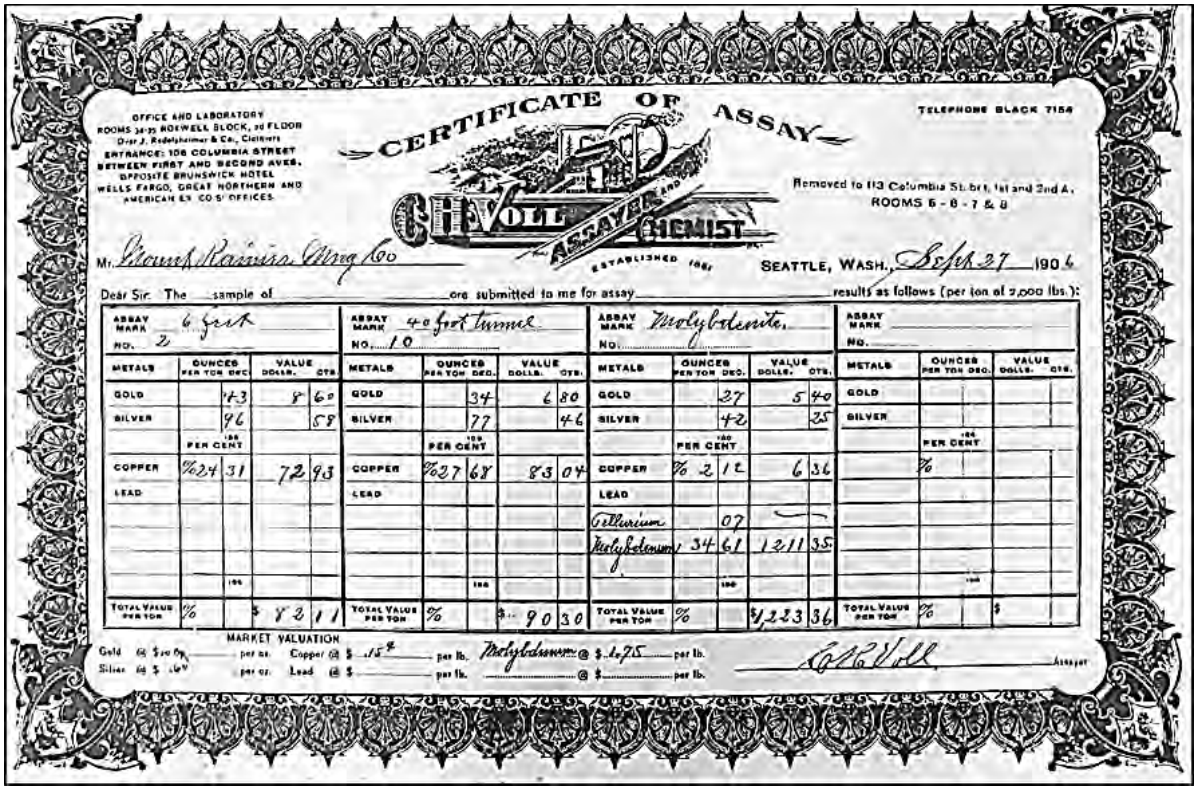
Peter T. Storbo and his bride Gina Arneson moved to Enumclaw, Washington in 1902; joining his uncle, Bernt Korssjoen, who had arrived a year earlier. Soon after arriving, Storbo purchased a dairy farm and local hotel.[42] Storbo and Korssjoen's interests, however, also included a passion for mining –a passion that directed their attention to the huge mountain that loomed on Enumclaw's southern horizon.

Glacier Basin, situated at about 6,000 ft. on Mount Rainier's northeastern slope, was already the site of just over 40 mining claims when Korssjoen and Storbo arrived. Wasting little time, they negotiated

[41] Chamberlain n.d.. *Mountains, Mines and Memories.* Unpublished, undated, typewritten manuscript at MORA.
[42] Peter Storbo was born in Norway with the given name of Peter Theodore Pedersen. Upon moving to Minnesota, he changed his last name to Storbo taking the name of a Swedish town near his home town of Roros, and thus distinguishing himself from the numerous other Minnesota Pedersens. (The News Tribune, Tacoma Washington, May 31, 1999). His name was commonly misspelled "Starbo" on documents and maps.

an acceptable price, and purchased the entire lot in 1902. That summer, he and Korssjoen, traveled crude trails to the basin to begin work on the newly acquired property. They established a campsite in the meadow on the Lake City claim, hired workers, and began digging.[43] The camp (known variously as Lake Camp, Rainier Camp, and Storbo Camp) remained the center of early Glacier Basin mining activity through the mid-1940s.

Peter Storbo officially incorporated the Mount Rainier Mining Company, on January 16, 1904; enabling him to raise funds via stock sales. The original 104 stockholders added much needed cash to the company's coffers to cover the high costs of mining.[44] In the coming years, MRMC came to rely heavily on stock sales for its operation; actively courting and recruiting buyers in the mid-western United states. In 1906, Storbo sent out his first ore samples for appraisal; carefully selecting samples containing the high mineral content that he hoped would be recovered at Glacier Basin.[45] C.H. Voll, Assayer and Chemist in Tacoma, confirmed substantial copper content and value in two of the three samples; and found an astonishingly high value for molybdenum in the third as shown in Figure 3.1 below.



CERTIFICATE OF ASSAY

OFFICE AND LABORATORY
ROOMS 34-35 ROSWELL BLOCK, 2d FLOOR
Over J. Redelsheimer & Co., Clothiers
ENTRANCE: 108 COLUMBIA STREET
BETWEEN FIRST AND SECOND AVES.
OPPOSITE BRUNSWICK HOTEL
WELLS FARGO, GREAT NORTHERN AND
AMERICAN EX. CO.'S OFFICES

TELEPHONE BLACK 7154

C.H. VOLL ASSAYER AND CHEMIST ESTABLISHED 1889

Removed to 113 Columbia St. bet. 1st and 2nd Av.
ROOMS 6 - 8 - 7 & 8

Mr. Mount Rainier Mng Co. SEATTLE, WASH., Sept 27 1906

Dear Sir. The sample of ore submitted to me for assay results as follows (per ton of 2,000 lbs.):

ASSAY MARK / NO.	METALS	OUNCES PER TON DEC.	VALUE DOLLS.	CTS.
6 foot 2	GOLD	.43	8	60
	SILVER	.96		58
	COPPER PER CENT	%24.31	72	93
	LEAD			
	TOTAL VALUE PER TON	%	$ 82	11

ASSAY MARK / NO.	METALS	OUNCES PER TON DEC.	VALUE DOLLS.	CTS.
40 foot Tunnel 10	GOLD	.34	6	80
	SILVER	.77		46
	COPPER PER CENT	%27.68	83	04
	LEAD			
	TOTAL VALUE PER TON	%	$ 90	30

ASSAY MARK / NO.	METALS	OUNCES PER TON DEC.	VALUE DOLLS.	CTS.
Molybdenite	GOLD	.27	5	40
	SILVER	.42		25
	COPPER PER CENT	% 2.12	6	36
	LEAD			
	Tellurium	.07		
	Molybdenum	34.61	1211	35
	TOTAL VALUE PER TON	%	$1,223	36

ASSAY MARK / NO.	METALS	OUNCES PER TON DEC.	VALUE DOLLS.	CTS.
	GOLD			
	SILVER			
	COPPER PER CENT	%		
	TOTAL VALUE PER TON	%	$	

MARKET VALUATION
Gold @ $20.67 per oz. Copper @ $ .15 per lb. Molybdenum @ $ 1.75 per lb.
Silver @ $ .60 per oz. Lead @ $ per lb. @ $ per lb.

C.H. Voll Assayer

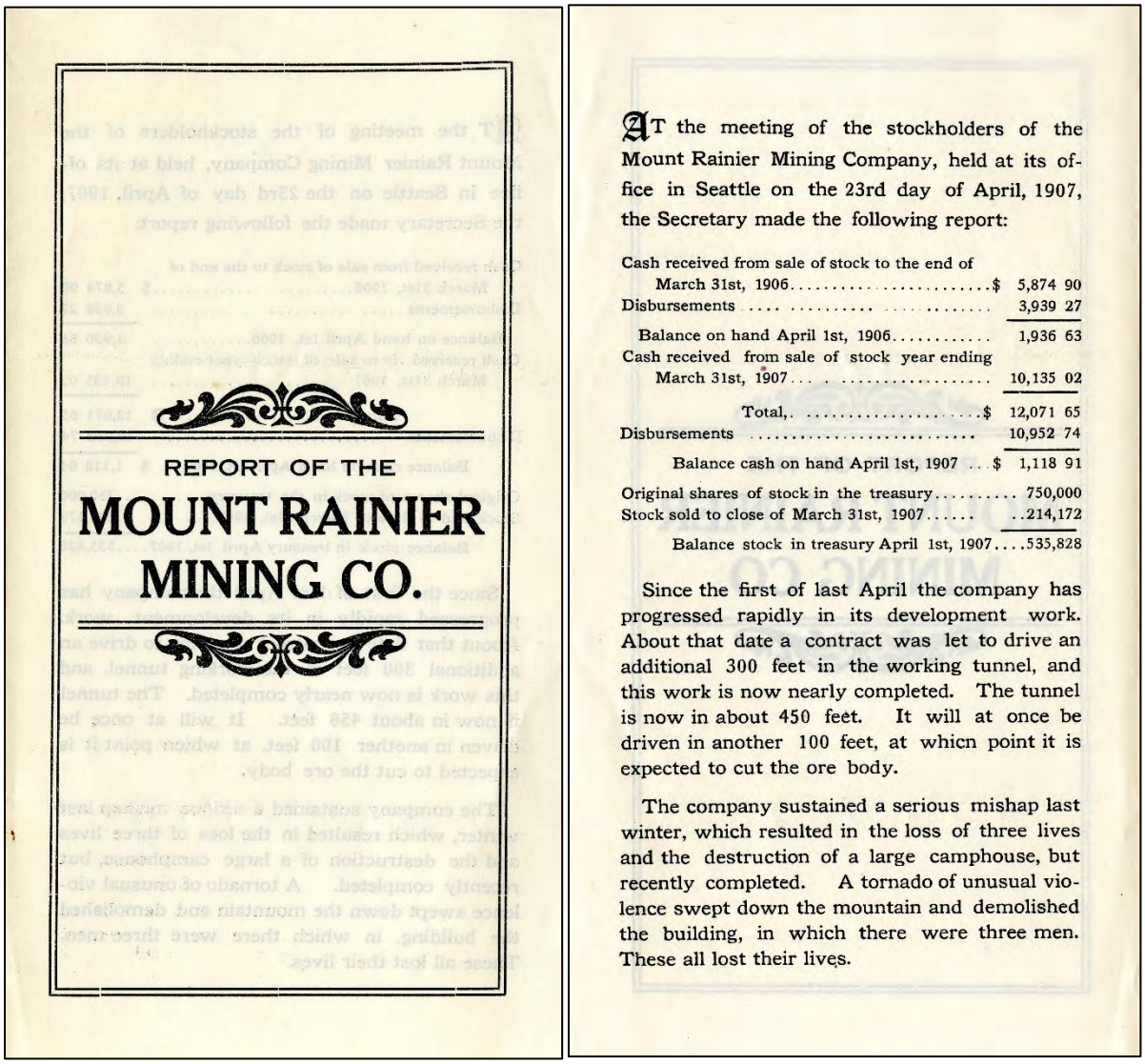
Figure 3.1. Certificate of Assay for Mount Rainier Mining Company Ore Sample Submitted in 1906.
(NARA Archives L3023 Files Box 51 Folder 61 Fiche 68)

Peter Storbo, perhaps cannot be faulted for selecting his Glacier Basin ore sample in the way he did. The practice was common, and his cuts were shallow (six and forty feet); plausibly not reflecting the

[43] Mount Rainier Mining Co. letter, September 3, 1925. (NARA Archives L3023 Files, Fiche 60)
[44] Paul Shorrock letters to Dee Molenaar on May 19,1969, and to Jerry Sable on October 21, 1975; Prospectus, 1926. (NARA Archives L3023 Files)
[45] Assay Report, September 26,1906. (NARA Archives, L3023 Land Use Files, Box 51, Folder 60, Fiche 67)

true nature of the deposits (especially copper) once the tunnels were deepened. In any case, the high valuations undoubtedly were useful in marketing stock for the young Mount Rainier Mining Company.

In April of the following year, MRMC issued its first mining report. It was intended to provide information about the status of Glacier Basin mining to current and prospective shareholders. While it would have been in MRMC's best interest to cast the company, and its Glacier Basin operations, in a favorable light, the report is remarkably candid; even to describing a fatal accident that occurred the previous winter. The 1907 prospectus provides a glimpse into what the company had accomplished to that point; including financial status, mining-related construction plans, stock share prices, and the state of the pending White River (aka Storbo) Road into the park and up to Glacier Basin (see Figure 2.4). Figures 3.2a and 3.2b are direct copies of the April, 1907 Mount Rainier Mining Company report.



REPORT OF THE

MOUNT RAINIER MINING CO.

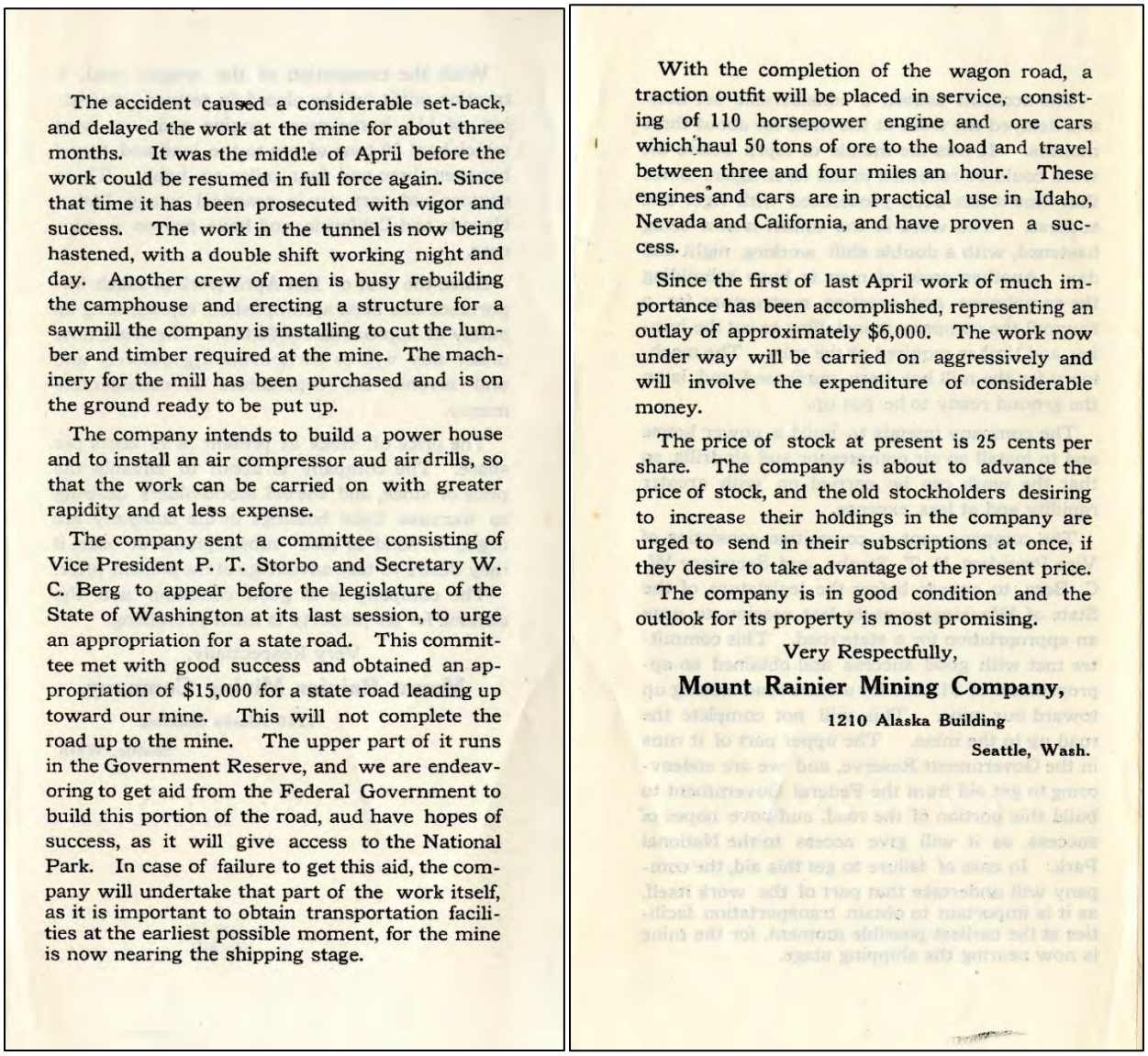
AT the meeting of the stockholders of the Mount Rainier Mining Company, held at its office in Seattle on the 23rd day of April, 1907, the Secretary made the following report:

Cash received from sale of stock to the end of March 31st, 1906	$ 5,874 90
Disbursements	3,939 27
Balance on hand April 1st, 1906	1,936 63
Cash received from sale of stock year ending March 31st, 1907	10,135 02
Total,	$ 12,071 65
Disbursements	10,952 74
Balance cash on hand April 1st, 1907	$ 1,118 91
Original shares of stock in the treasury	750,000
Stock sold to close of March 31st, 1907	214,172
Balance stock in treasury April 1st, 1907	535,828

Since the first of last April the company has progressed rapidly in its development work. About that date a contract was let to drive an additional 300 feet in the working tunnel, and this work is now nearly completed. The tunnel is now in about 450 feet. It will at once be driven in another 100 feet, at which point it is expected to cut the ore body.

The company sustained a serious mishap last winter, which resulted in the loss of three lives and the destruction of a large camphouse, but recently completed. A tornado of unusual violence swept down the mountain and demolished the building, in which there were three men. These all lost their lives.

Figure 3.2a 1907 Mount Rainier Mining Company Prospectus Panels 1-2.
(Document courtesy Paul Stangeland. Original in MORA Archives)



The accident caused a considerable set-back, and delayed the work at the mine for about three months. It was the middle of April before the work could be resumed in full force again. Since that time it has been prosecuted with vigor and success. The work in the tunnel is now being hastened, with a double shift working night and day. Another crew of men is busy rebuilding the camphouse and erecting a structure for a sawmill the company is installing to cut the lumber and timber required at the mine. The machinery for the mill has been purchased and is on the ground ready to be put up.

The company intends to build a power house and to install an air compressor aud air drills, so that the work can be carried on with greater rapidity and at less expense.

The company sent a committee consisting of Vice President P. T. Storbo and Secretary W. C. Berg to appear before the legislature of the State of Washington at its last session, to urge an appropriation for a state road. This committee met with good success and obtained an appropriation of $15,000 for a state road leading up toward our mine. This will not complete the road up to the mine. The upper part of it runs in the Government Reserve, and we are endeavoring to get aid from the Federal Government to build this portion of the road, aud have hopes of success, as it will give access to the National Park. In case of failure to get this aid, the company will undertake that part of the work itself, as it is important to obtain transportation facilities at the earliest possible moment, for the mine is now nearing the shipping stage.

With the completion of the wagon road, a traction outfit will be placed in service, consisting of 110 horsepower engine and ore cars which haul 50 tons of ore to the load and travel between three and four miles an hour. These engines and cars are in practical use in Idaho, Nevada and California, and have proven a success.

Since the first of last April work of much importance has been accomplished, representing an outlay of approximately $6,000. The work now under way will be carried on aggressively and will involve the expenditure of considerable money.

The price of stock at present is 25 cents per share. The company is about to advance the price of stock, and the old stockholders desiring to increase their holdings in the company are urged to send in their subscriptions at once, if they desire to take advantage of the present price.

The company is in good condition and the outlook for its property is most promising.

Very Respectfully,

Mount Rainier Mining Company,

1210 Alaska Building

Seattle, Wash.

Figure 3.2b 1907 Mount Rainier Mining Company Prospectus Pages 3 & 4.

From the beginning, Glacier Basin's high elevation setting created a challenging work environment. As can be seen on the cover and frontispiece photo on page *ii* of this report, the basin is a wide, steep U-shaped valley. It lies at the foot of Inter Glacier and north of Mount Ruth, east of the rocky ridgeline of St. Elmo Pass, and south of Burroughs Mountain. Glacier Basin's valley floor, where the camp was located, supports open meadows, a pond (probably the "lake" for which Lake City claim was named), and patchy stands of mixed conifers. Patchy tree islands dot the surrounding slopes. The steeper slopes and ridge tops are bare and rocky. Copper, the primary focus of the Glacier Basin mining effort, is found within zones of weakness in the granitic rocks of the late Miocene and near their contacts with the overlying Eocene age Ohanapecosh andesites. The granitic rocks supplied the mineralizing solutions which deposited the copper and other minerals in those zones of weakness exposed within the mine workings. Glacier Basin was attractive to early mine explorers because those mineralizing granitic zones are exposed on the basin's steep southern and western slopes.

Despite environmental challenges and access difficulties, Storbo oversaw a number of major developments in the basin during the first six years. This was not easy. Each year, deep snow and poor road conditions resulted in delays of supplies. Harsh winters meant a short working season, avalanche hazards, and constant road maintenance. The avalanche, mentioned as a "tornado" in the 1907 prospectus, was the most serious catastrophe to strike the young organization to that time. It roared down a steep southeast facing slope on western edge of Burroughs Mountain on the basin's southern slope, covered a newly built MRMC cabin, and killed two men and a thirteen year-old boy. The men, Crescent and Nils Brun were buried in Glacier Basin's lower camp where they remain to this day. The younger man, Albert Prestlien, was "brought out in a log coffin by a horse,"[46] and buried in Zion Lutheran cemetery in Silvania, Washington.[47]

Figure 3.3 shows the cabin as it appeared shortly after construction in 1906. The interior view shows the construction crew at dinner. To our knowledge, this is the earliest photograph available of Peter Storbo and his half-brother Alfred in Glacier Basin. Both views illustrate the building's sturdy hand-hewn log construction. This may be the first substantial building constructed by MRMC for its new Glacier Basin venture. It was built in the upper, western edge of the basin to house miners working on the company's first tunnel dug into its Washington No. 1 claim. Despite the camp's 6,600 ft. elevation, the intent was to work through the winter of 1906-1907; housing the crew in the nearby cabin. Tragically, sturdy as it was, the cabin could not withstand the force of the avalanche that struck it later that winter.

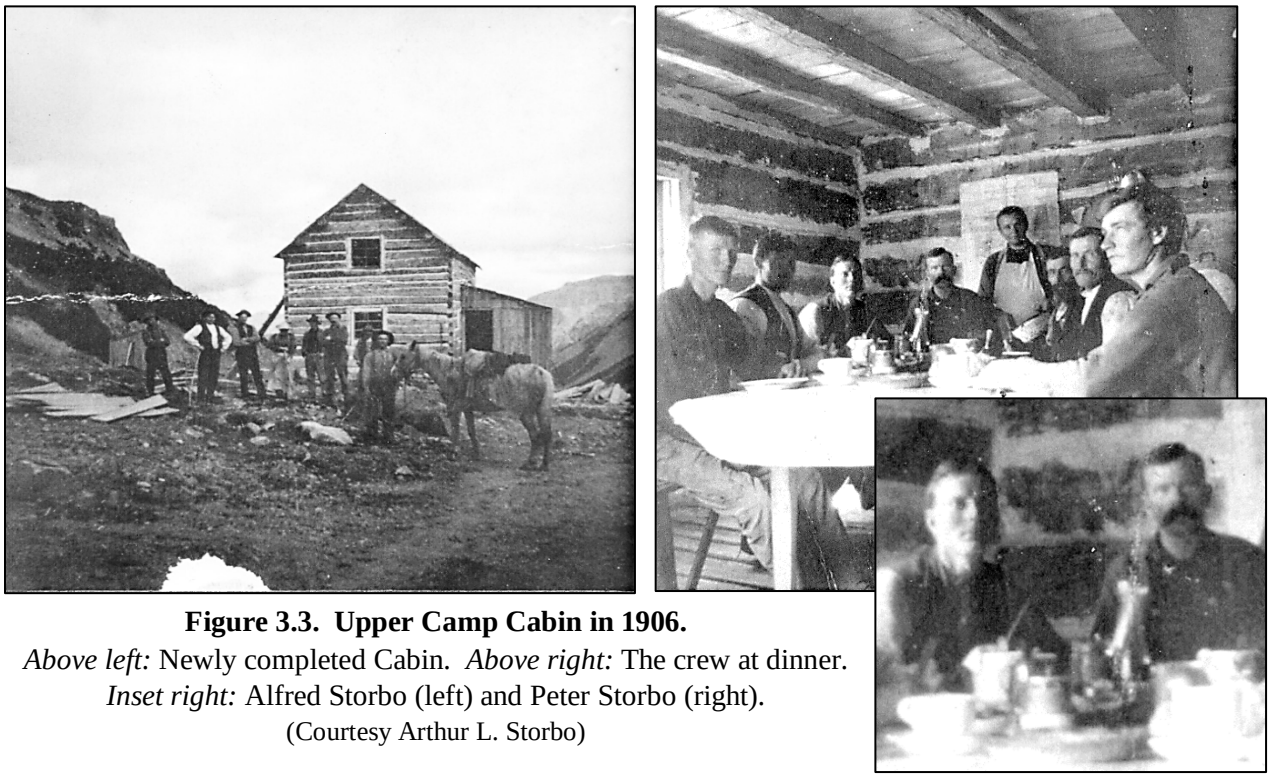


Figure 3.3. Upper Camp Cabin in 1906.
Above left: Newly completed Cabin. *Above right:* The crew at dinner.
Inset right: Alfred Storbo (left) and Peter Storbo (right).
(Courtesy Arthur L. Storbo)

[46] Paul Shorrock letters to Dee Molenaar on May 19, 1969, and to Jerry Sable on October 21, 1975. (NARA Archives L3023 Files, Fiche 67)
[47] Burial information: http://files.usgwarchives.org/wa/snohomish/cemeteries/zioinsil.txt. Additional detail from personal communication, Arthur L. Storbo, 2017.

Logistic, climatic, and geographical concerns were not the only challenges to mining Glacier Basin. The Congressional Act of May 27, 1908 (35 Stats., 365) restricted mining in National Parks; meaning that Storbo and the developing Glacier Basin mining operation came under increased scrutiny by the Park Service. To maintain their existing claims, MRMC was required to provide evidence of yearly improvements, and assay proofs of mined ores.

Even before the 1908 rule change, Supervisor G.F. Allen had begun to monitor ranger reports of mining at Mount Rainier, as reflected in his annual report of 1907. His essentially negative assessment of the mining situation throughout the park proved to be fairly accurate in the long-run. Allan correctly anticipated the progress of mining developments, ultimate ore value, and legal and environmental effects of the mining activities in the park. While directed park-wide, many of the issues he observed during these early mining days in 1906-1907 played out over the next 70-plus years that witnessed the rise and fall of mining efforts in Glacier Basin.

> The records of the auditor of Pierce County indicate 165 mining claims have been located in the park between July 1, 1906 and June 30, 1907…In some instances these claims were taken up in good faith but it is extremely doubtful if any of them will ever prove valuable and lucrative mining properties. There are not mines in or near the park which produce ore in paying quantities and pay dividends. A few of these claims are being developed and the expense of the work paid by the sale of stock. In most cases the claimant makes a summer camping trip, does a few days of nominal assessment work and returns to his usual vocation. At present the injury in the park caused by the presence of prospectors seems to be confined to the construction of unsightly cabins and to the probable violation of the game laws in the remoter parts…If the claims ever pass to patent, the existence of alienated lands within the park will be a very serious obstacle both to its protection from trespass and to its use and enjoyment by the public. For this reason I strongly recommend that a thorough examination of the mining districts in the park be made during the coming season with the view of the removal of all prospectors holding claims which have no mineral value, and further of ascertaining the conditions warrant the consideration by congress of an amendment repealing Section 5 of the Act of March 2, 1899.[48]

Allan's assessment of the state of mining claims park-wide notwithstanding, efforts at Glacier Basin were far more elaborate than the simple "summer camping trip" alluded to in his 1907 annual report. Indeed, in his 1910 report, Allen extolls the beauty of the basin, and remarks on the substantial work that had taken place on the MRMC claims. His report reads:

> This basin is situated at an altitude of 6,000 feet, between the White and Emmons glaciers. Owing to the profuse growth of mountain grasses and flowering plants and the fine groves of alpine timber, it is one of the most pleasing of the smaller parks. Mountain goats were formerly common in the vicinity. The mining claims are all contiguous and are located in the basin and on the ridges that surround it. The mining is done on the claims in the upper end of the basin and above the timber line. The tunnels run in the direction opposite to that by which the other claims would be reached. The lower claims in the group are in the timber, and a sawmill has been built to cut this timber into lumber for the mine. Considerable development work has been done on this property consisting of tunnels, two cabins, blacksmith shop, and barn….Immediate steps should be taken to ascertain the validity of all mining locations in the park.[49]

[48] Supervisor Annual Report September 27, 1907. (NARA Archives H2621 Files)

[49] 1910 Superintendent's Annual Report, Edward S. Hall. (NARA Archives, H2621 Files)

Consistent with the final line in his 1910 report, Superintendent Allen assigned Ranger Thomas O'Farrell to monitor and report on the activities of north-side mining operations. The U.S. Government also began a "thorough examination" of mining claims in the White River Area; sending Practical Miner, W.R. Davey of the General Land Office (GLO) to Mount Rainier to investigate. Davey's 1910 report found that most of MRMC's many claims were not properly marked or producing ore. After additional inspections, the legality of the non-producing MRMC claims was brought before a hearing. As a result of these hearings, MRMC was required to relinquish 32 of its 41 original claims in Glacier Basin.

During the GLO hearings, mining stopped and the Glacier Basin mining camp remained empty. Ultimately, in the fall of 1912, mining activities resumed on the nine remaining claims located on the high slopes of the basin. MRMC continued to use its established camps and sawmill located on the relinquished claims at the base of the basin, even though the company did not have permits to use those claims, or to cut timber for bridges, buildings, and tunnel braces.

These early interactions between *Mount Rainier Mining Company* and *Mount Rainier National Park* reflect the nature of an active mining enterprise operating within the boundaries of the young, preservation-oriented, National Park. In the early 1900s, the Park Service was only beginning to develop procedures to manage such extractive operations –operations that, for the most part, had proceeded essentially unfettered throughout the United States. In the section that follows, we look back on how management procedures developed in the early days of Mount Rainier National Park; and how they ultimately affected Glacier Basin mining claims, and MRMC operation in the basin.

Early Park Jurisdiction over Mining Operations at Mount Rainier

When Mount Rainier National Park was created by Congress in 1899, no money was set aside to pay for park management. Rather, the manager and rangers working on the *Mount Rainier Forest Reserve* that surrounded, and included, the new park were given "temporary" management responsibility for the park. Thus, on July 1, 1901, Grenville F. Allen, Forest Superintendent in Washington State, was assigned management duties for Mount Rainier National Park; filling this role in addition to his forest management duties. In his 1902 Annual Report, The Secretary of the Interior asked that National Park management of Mount Rainier be funded by Congress. After a tough battle, minimal funding was approved for fiscal year 1903. Funding and new park regulations that came into effect in 1903 helped stabilize Mount Rainier management. A yearly superintendent's report to Department of the Interior also was initiated at the close of fiscal year (FY) 1904.[50] The 1903 mining regulations were the first to stipulate certain environmental protection measures as follows:

> It is specifically provided that prospectors or miners will not be permitted to injure or destroy or interfere with the retention in the natural condition of any timber, mineral deposits, natural curiosities or wonders within the park outside the boundaries of their respective mining claims duly located and held under the mining laws.[51]

[50] Federal fiscal years begin on October 1 and end on September 30.
[51] Superintendent's Annual Report to the Secretary of the Interior, 1903. (NARA Archives H2621 Files).

These regulations were challenged and tested numerous times over the next few years. In 1908, mining came under more intensive scrutiny after congressional action restricted claims at Mount Rainier National Park.

> By act of Congress approved May 27, 1908, the location of mining claims under the mineral-land laws of the United States is prohibited within the Mount Rainier National Park. The act provides that existing rights previously acquired in good faith should not be affected. Where it appears that there has been no actual discovery and that the land is being held for other purposes than its mineral value, and where the mining law has not been complied with, a careful investigation should be made, and whenever the facts warrant such action, the proper measures taken to cancel the claims.[52]

The Act also limited renewal of claims already registered. Miners were required to prove that their claims were genuine mines, and that mining was actively taking place. Up to that time, it was not uncommon for individuals to file a claim to gain control of a resource, such as a mineral spring or hot spring, in order to develop the claim for tourism rather than for the mineral resource itself.[53] To counteract the problem, regulations specified that the mined ore must be tested to measure mineral content. Yearly maintenance and improvement at each claim was also required.

With these new mining restrictions in effect, acting Superintendent Grenville F. Allen was required to oversee and monitor existing claims, and prevent the creation of new claims. He noted that his was a particular challenge in the White River District and Glacier Basin in the "remote northern and eastern part of the reservation." Rangers made "occasional trips into this area but were not able to protect it properly."[54] In 1908, an additional ranger was hired to patrol this district. Allen also recognized that completion and extension of a new trail between the Carbon and White River Valleys was essential to patrolling these areas of the park; and to investigating the mining activities in part of the park that included Glacier Basin.

Allen summarized mining activities in the White River area in his 1908 Annual Report; indicating that the Pierce County auditor recorded 48 mining claims in the park, 35 of which were located after the 1908 congressional act. He estimated that there were "nearly 100" prospectors working in the park that year. Allen's report also expresses his skepticism about the mineral value and profitability of the claims.

> Prospecting has been carried on in the park for many years and traces of the precious metals have been found in several localities. The formation of the rock does not, however, justify the presumption that mineral exists in paying quantities. The results of such development work as has been performed has usually shown that the supposed veins terminated at a slight depth below the surface. The total number of locations which have been made from time to time is very large, but most of them have been abandoned. On the greater proportion nothing has ever been done beyond the posting of a notice of the location and the filing of it in the office of the county auditor. Some of them were taken in good faith and in a few instances considerable money and labor have been expended in developing them. *There are no mines in the park from which any profit is derived except from the sale of stock. In general it may be said that practical miners and men who*

[52] Regulation attached to Superintendent's Annual Report to the Secretary of the Interior, 1908. (NARA Archives H2621 Files)

[53] During this time, the government was challenging a mineral claim at the Ohanapecosh Hot Springs on the Rainier Forest Reserve at the southeast park boundary.

[54] Superintendent's Annual Report to the Secretary of the Interior, 1908. (NARA Archives H2621 Files)

> *are qualified as experts by experience and professional training are not engaged in mining operations in the park* [emphasis added]…
>
> I have further to recommend that an examination be made of the mining claims in the park by a competent geologist... [55]

At the end of 1909, Superintendent Edward S. Hall became the first full-time superintendent of Mount Rainier National Park; replacing G.F. Allen, and along with his other duties, assuming responsibility for the Glacier Basin mining district. Hall immediately saw that mining in the park was a problem, and assigned ranger Thomas E. O'Farrell the task of becoming familiar with the mining operation in Glacier Basin. By this time, O'Farrell had two years prior experience managing the Carbon River District under Allen. During that time he had become familiar with local mining problems. Under superintendent Hall, his area of responsibility was greatly expanded to include the active mining operation in the White River area. Allen, Hall, and successive park superintendents came to rely on O'Farrell for his knowledge of the area; and for his regular and thorough investigations of mining activities. O'Farrell was particularly instrumental in developing the terms and fee structures for the permits and leases between the Mount Rainier National Park and MRMC. He also ensured MRMC adhered to the permit and lease conditions.

Government Land Office Glacier Basin Investigations 1910-1911

While Ranger O'Farrell continued his inspections, Superintendent Hall and the Department of the Interior in Washington D.C. requested help from General Land Office (GLO) to determine the legitimacy of the Mount Rainier Mining Company holdings in Glacier Basin. In response, the GLO sent out Practical Miner W.R. Davey to complete a "thorough examination." Davey summarized his findings in an adverse report on the 41 mining locations claimed by the MRMC. Charges were filed early in 1911 against the company. Secretary of the Interior R.A. Ballinger summarized the charges in his February 11, 1911 letter to the General Land Office commissioner. In it, Ballinger states

> That none of said claims has been definitely marked upon the ground so that its boundaries can be readily traced;
>
> That the notices or certificates of said locations, as recorded in the office of the Recorder of Pierce County, Washington, do not contain such a description of the claims, or either of them, as will enable them to be identified on the ground;
>
> That no discovery of a mineral-bearing vein or lode has been made within the limits of any of said claims, and that none of them contains a valuable mineral deposit; [and]
>
> That no work tending to mineral development, and no annual assessment work, has been done upon said claims, or either on any of them. [56]

Louis L. Sharp, chief of the GLO Field Division, submitted a hearing report on March 1911; asking that official "trials" be delayed until June 1911. The adverse process went slowly. Ranger Frank Krogh visited Glacier Basin in July 1911 and found the camp vacant.[57] J.D. Speer, General Land Office Mining Inspector, re-examined the claims in August 1911.

[55] Grenville F. Allen, Superintendent's Annual Report September 30, 1908. (NARA Archives H2621 Files)
[56] R.A. Ballinger to Commissioner of the GLO, February 11, 1911. (NARA Archives, L3023 Files, Fiche 59, 60)
[57] Letter from Frank Krogh to Superintendent Hall, July 17, 1911. (NARA Archives, L3023 Files, Fiche 59, 60)

Mount Rainier Mining Company Relinquishes 32 Glacier Basin Claims

In 1902, Peter Storbo and his partners registered all 41 of the recently purchased Glacier Basin claims in the hope that they could raise money, and make money, on their mining operation. These original claims were contiguous; extending from the east side of Winthrop Glacier over St. Elmo's Pass to its junction with the Emmons Glacier; on both sides of the Inter Fork of the White River; and on the slopes of Burroughs Mountain (see Figure 3.4). Mount Rainier Mining Company could not mine all of these claims, many of which were wildly speculative. Rather, they focused activity on those that appeared to be most likely to succeed. In addition, the company used several of the lower elevation claims for mining related purposes –e.g., cutting timber, establishing the Glacier Basin mining camp, and building the generator and sawmill– rather than for mining proper.

When the General Land Office sent mining inspector Davey to investigate the legitimacy of MRMC's claims in 1910, the company began to assess the value of their claims in terms of the costs of developing and maintaining them, versus their genuine value in terms of probable return. At about the same time, Thomas O'Farrell continued his inspections of Glacier Basin operations on behalf of the park. In August 1911, O'Farrell reported that Peter Storbo proposed maintaining his productive claims while relinquishing the remainder. He went on to note that Storbo would apply for permits for development work needed to improve the retained claims. O'Farrell reported to Superintendent Hall that

> Forty one mineral locations were formerly held by the Mt. Rainier Mining Co. under the management of Peter Starbo [Storbo], of Enumclaw, Wash., in Glacier Basin. As the result of an examination made in September 1910, by W.R. Davey, Practical Miner, G.L.O. these claims were contested. At the present moment these claims are being re-examined by Mining Inspector J.D. Speer. In a conversation with the writer Mr. Peter Starbo [Storbo] and his associates exhibited a plat showing fifteen locations which they wish to maintain, relinquishing all the other claims. Only one of these fifteen locations is situated in the timber and is occupied by their mill and proposed power-house. A permit will be asked for to build a transmission line for electric power over the park lands from the power house to the tunnel. During the time that all of the claims were held by the Mining Co., considerable timber was cut on the ground which will be relinquished and the officers of the company appear to be willing to compensate for such timber and in every way avoid trouble.[58]

The GLO hearings began soon after the inspections were complete. In January 1912, the GLO Register at Olympia acted on the Department of the Interior's intent with a "Notice of Hearing, Serial No. 0562, Contest No. 1217, United States vs. Mount Rainier Mining Company (42 Mining locations in Mt. Rainier National Park[59])." A hearing was scheduled for March, 11, 1912 during which "said parties are hereby notified to appear, respond, and offer evidence" before the County Clerk and Clerk of the Superior Court of Pierce County, Washington, at his office in Tacoma. A final hearing was scheduled on April 15, 1912 before the Register and Receiver at the United States Land Office in Olympia.[60]

[58] Report from Ranger O'Farrell to Superintendent Hall, August 1911. (NARA Archives H2621 Fiche 4) Also what is probably an earlier draft map of the same area, made by Mining Inspector J. D. Speer in 1911 is found in NARA Archives L3023 Files, Fiche 60A.

[59] Most references report 41 early mining claims in Glacier Basin. Some report 42.

[60] Hearing ordered by GLO February 20, 1911 letter. (NARA Archives L3023 Files, Fiche 59)

By the time Louis Sharp, the GLO Field Division Chief, conducted his pre-hearing investigation in February of 1912, Storbo and his associates were able to provide a list and map of the claims they wanted to maintain, versus those they were willing to relinquish. While MRMC initially wanted to maintain 15 claims as reported by O'Farrell, the company later agreed to relinquish 32 claims "if allowed to retain the other nine…."[61]

The results of the hearing conformed with the government's adverse findings as outlined by Ballinger. At its conclusion, the nine retained Mount Rainier Mining Company claims listed in Sharp's report included "…Mary, Washington No.1, Washington No.2, Stronghold No.1, Stronghold No.2, Peach, Snowflake, Revin [Reven], and Orinda." Assistant Secretary of the Interior, C.A. Thompson instructed Sharp to accept the unqualified relinquishment of the 32 claims, and dismiss the adverse proceedings against the nine retained claims; with the understanding that the department "in no way recognizes the rights of the company to said nine claims or the validity thereof, that being left for future determination." The Department of the Interior also specified that, "If the company desires to lease land for use in connection with operating any of the claims, it should make application to the Superintendent of the park, who will, in turn, forward the same to the Department with such recommendation as he considers proper."[62]

Although Storbo agreed to relinquish the majority of the MRMC claims for mining *per se*, the company continued to use the structures and tunnel access found on several of the lower elevation *relinquished* claims when crews resumed work in Glacier Basin in the fall of 1912. Much of the company's infrastructure was located on the relinquished claims; including crew housing, the sawmill, and barn; as well as the stands of timber needed for shoring the mine tunnels. Ultimately, these claims were leased from the park, but in 1912, their status remained unresolved. Table 3.1 summarizes all of the relinquished, retained, and (eventually) leased claims.

The *Five Claim Group* included contiguous claims located at the eastern upslope edge of Glacier Basin. In the 1916 MRMC prospectus, this area is referred to as *Upper Camp* area.

The *Four Claim Group* was located at the base of Mt. Ruth across Inter Fork Creek south of Storbo Camp referred to as *Lower Camp* area in the 1916 prospectus. Figure 3.4 shows the spatial relationship of the claims to the landforms and glaciers that surround Glacier Basin.

[61] Letter from Secretary of the Interior Thompson to GLO, March 18, 1912. (NARA Archives L3023 Files, Fiche 59)
[62]GLO Notice of Hearing January 12, 1912. Hearing minutes are not in file. (NARA Archives L3023 Files, Fiche 59)

Table 3.1. Mount Rainier Mining Company Claims in Glacier Basin

Relinquished Claims		
1. Benny	13. Snow Cap	25. Klondike
2. Gate	14. Bisbee	26. White Glacier
3. Fergus	15. Perth	27. No. 1
4. Turtle	16. Throndhjem	28. No. 2
5. Lake City	17. Rob Roy	29. No. 3
6. O. I. C.	18. South Side	30. No. 4
7. Buty	19. Round Top	31. Jenny
8. New Discovery	20. Pedro	32. Gilt Edge
9. Gadge	21. Flate	
10. Bar	22. Odin	
11. Dandy	23. Henning	
12. Folden	24. Otter Tail	

Retained Claims	
Five Claim Group (Upper Camp Area)	
Stronghold No. 1	Discovery Cut and Tunnel (*Mine 4*)*
Stronghold No. 2	Discovery Cut
Washington No. 1	Discovery Cut, Tunnel and Storage (western end *Mine 1*)*
Washington No. 2	Discovery Cut
Mary	Discovery Cut and short molybdenum Discovery Tunnel (*Mine X*)*
Four Claim Group (Lower Camp Area)	
Peach	Discovery Cut
Orinda	Discovery Cut
Reven**	Discovery Cut, Tunnel, Mill and Storage (*Mine 5*)*
Snowflake	Tunnels, Water Wheel, Boarding House, Blacksmith Shop and Bunkhouse (*Mine 2* [upper tunnel], *Mine 3* [lower tunnel])*
Leased Relinquished Claims	
Lake City (*Lower Camp*)	Lower (Lake or Storbo) Camp: Boarding House/Hotel, Barn, Cabin, Blacksmith Shop
Turtle (*Lower Camp*)	Sawmill and Power Plant
Gate (*Upper Camp*)	Tunnel, Storage, Test Pits, Log House (eastern end *Mine 1*)
O.I. C. (*Upper Camp*)	Tunnel, Building Foundation (this claim is often combined into Gate)

*Italicized mine numbers are applied by the authors to eliminate overlapping, redundant numbers given to Glacier Basin mines at various times during their history. These numbers differ from those appearing on 1920s plat maps which number mine tunnels sequentially for individual claims. Except for Mary Lode, these numbers reflect those given to the mines during MRMC's later days. Molybdenum in Mary Lode was never mined commercially. Its short discovery tunnel received an *x* on later maps so is listed as *Mine X* here.
**Reven Claim was never patented.

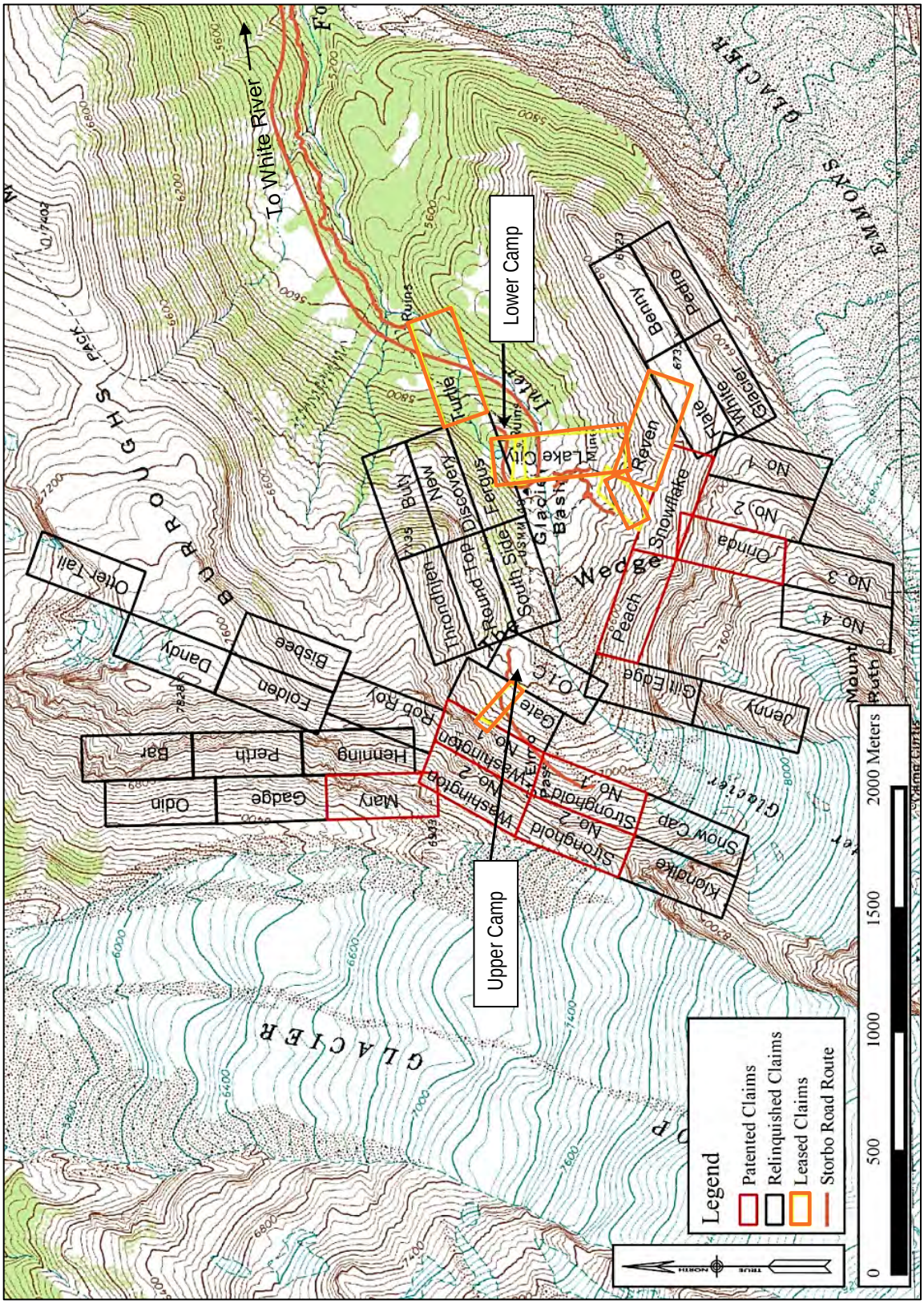


Figure 3.4. Map of Glacier Basin Mining Claims showing Relinquished Claims, and those Patented and Leased by Mount Rainier Mining Company.
(Map by Eric Gleason based on original compilation by Gretchen Luxenberg, NPS historian.)

Glacier Basin Mining Resumes - Controversy Continues

When Ranger O'Farrell, John C. Jennings, Pierce County Deputy County Assessor, and Peter Storbo drove out to visit the MRMC work crew in January of 1913, Storbo made it clear that he intended to expand his mining operations further. When O'Farrell reported back to Superintendent Hall, Hall wrote the Secretary of the Interior seeking advice.

> Referring to previous correspondence relative to the relinquishment of 32 mineral locations in the Mount Rainier National Park, by the Mount Rainier Mining Company, I have to state that a saw mill, camp house, and barn, built by this company, are all located on claims included with those relinquished, and that up to the present time the company has not made application through this office for permission to continue the use of these improvements on Government lands. I will therefore be glad to receive Departmental instructions as to what notice, if any, should be given the Mount Rainier Mining Company in the premises.[63]

After the Chief Clerk of the Department of the Interior examined the claim maps provided by Hall, he advised:

> [The marked map] …shows that the company has a cabin on Gate Location, a cabin and a barn on Lake City Location, and a sawmill on Turtle Location, all of which have been relinquished.
>
> The Department knows of no reason why the company should not be permitted to remove its improvements from relinquished to unrelinquished locations, if it desires to do so. Should the company make application to you for permission to remove the buildings as aforesaid, you are authorized to grant the necessary authority and to report your action to the Department.[64]

Peter Storbo, however, had no intention of removing his improvements from the relinquished claims. Later, when Hall reported back to the Department of the Interior, the chief clerk made it clear in his April 30, 1913, letter that "the Mount Rainier Mining Company has no right to use the buildings on relinquished mining locations in connection with operations on its unrelinquished claims, or for any other purpose."[65]

The findings put Mount Rainier National Park administration in a difficult position. While the sawmill and other improvements clearly were located on relinquished claims, it also was clear that the patented claims lacked suitably level ground for rebuilding those structures. In alerting the park of the "violation of the Department rulings," O'Farrell suggested that the park establish leases for Storbo to continue use of the sawmill and cabins on the relinquished claims. Beginning a new phase of negotiations with MRMC, the park started to work out a system of regulations, and a yearly permit process that ultimately helped resolve conflicts between MRMC and the Park Service. In the meantime, MRMC continued to use existing Glacier Basin facilities.

[63]Letter from Superintendent Hall to the Secretary of the Interior, March 8, 1913. (NARA Archives, L3023 Files, Fiche 59)

[64] Letter from the Chief Clerk of the Department of the Interior to Superintendent Hall, April 16, 1913, March 18, 1913. Maps are not included in the file. (NARA Archives, L3023 Files, Fiche 59)

[65] Letter from the Chief Clerk of the Department of the Interior to Superintendent Hall, April 30, 1913. (NARA Archives, L3023 Files, Fiche 59)

Negotiations continued late into 1914. Early in 1915, the park issued leases to the MRMC for the use of the relinquished claims; hammered out terms for a timber cutting permit; and collected fines, lease fees, and reparations for previously cut timber. Once they came to understand the strength that special use permits gave to their management system, park administrators increased their effort to define what was, and what was not, covered by the permits. Peter Storbo and MRMC soon found it necessary to apply for a number of government authorization permits as part of doing business in the park.

Details of the permit and lease agreements between Mount Rainier National Park and MRMC are discussed below. As will be seen in the section that follows, the agreement also granted MRMC permission to construct an access road (the White River, or Storbo, Road) to their claims "at no cost" –an arrangement that clearly benefited the park as well as MRMC. For the time being, the Park Service and the Mount Rainier Mining Company appeared to resolve the friction that had developed between them.

Annual Lease and Timber Cutting Permits in Glacier Basin

Glacier Basin Lease Permits – Land Used to Support Mining Operations

Superintendent Hall received a letter dated June 4, 1913 from MRMC applying for "a permit or lease for a camp site on the relinquished claim known as 'Gate'." Before the month ended, the scope of the request had increased substantially. On June 18, 1913, MRMC President B.P. Korssjoen and Secretary W.C. Berg wrote to Superintendent Hall; applying for permits to obtain leases to use relinquished claims for campsites, building a tunnel, the saw mill and water power sites, and for improving their mining road.

> We beg herewith to make application through you, to the Interior Department, for the following permits for use in connection with the mining property we are developing in the Park, to wit:
>
> We desire a permit or to obtain a lease for camp site, to maintain our present camp on the claim formerly known as Gate, and which we relinquished to the Government. Our camp buildings now thereon, were erected by us prior to said relinquishment. We also desire a tunnel site or permit to maintain a tunnel on said claim, which serves to develop the following claims now being held and developed by the Company, to wit:- Washington No. One, Washington No. Two, Stronghold No. One, Stronghold No. Two and Mary. The present tunnel, which is over 800 feet long, was built on said claim called Gate before we relinquished it to the government. It starts on said relinquished claim and continues on into the above named claims now held by us.
>
> We desire a lease or permit for a camp site on the claim formerly known as Lake City, which we heretofore relinquished to the Government. Our present general Camp is located on said relinquished claim, and was built by us thereon before relinquishment, and used for over ten years. We also desire a tunnel site or permit to build a tunnel on said relinquished claim, Lake City, to be located on the South side of the River. This tunnel we plan to carry onward to and into, to develop the following claims held and being developed by us, to wit: Reven, Snowflake, Peach and Orinda.
>
> We desire a saw mill site, and water power site and Rights or Permit to be located on the claim formerly known as the 'Turtle', and which has been relinquished by us. The saw mill and water power plant and flume now thereon, was built by us before said relinquishment. We desire to purchase ten thousand feet of timber to be selected from the mature timber that now has dead tops, and is ready to fall. These trees up there are scrub timber.
>
> We desire permit to build and improve the road we were granted a permit to build up to our mining property, in this particular. We desire to relay the upper three miles of the road nearest

> to our mine, and to build said three miles of road on the North side of the River instead of on the South side of the River, where it now lays, for the reason that the snow lays too long in the spring on the South side of the River, and also because a better grade can be obtained on the North side, and we desire permission to straighten out and improve the remaining and lower portion of said road, which continues on down the River to the Park line at stake No. 66.[66]

In July 1913, newly appointed Park Superintendent Ethan Allen inherited the continuing-use-of relinquished-claims and timber cutting issues. Resolution of the problem was not clear-cut because the Department of the Interior had not yet finalized rules and instructions governing leases of property and construction permits in National Parks. Adolph C. Miller, Assistant to the Secretary of the Interior, instructed Superintendent Allen to investigate each permit and lease request, provide a map showing the locations of the claims and "advise the Department whether in your judgment it is practicable to grant the privileges asked for" and to "fix the rate the Department shall charge for each privilege." Miller also instructed that "You should ascertain on what lands the company desires to cut timber and report as to whether in your judgment it should be paid for at Forest Service prices or at a higher or lower figure, should current prices for timber of the same class in that vicinity be in excess or lower than those charged by the Forest Service."[67]

Park Concerns about MRMC's True Intent in Glacier Basin

O'Farrell carried out most of this work. He made tracings showing the "forty-one alleged locations heretofore claimed by that company" on an area map, and marked the locations of all existing structures.[68] By the end of July, O'Farrell wrote a detailed report complete with recommendations. [69] O'Farrell voiced *serious skepticism regarding MRMC's true intentions* by prefacing his report with his opinion that "It is a pretty well established fact that there is no mineral in paying quantities in the Mt. Rainier National Park which would justify a prudent man in the expenditure of HIS OWN money in the development of any alleged mineral locations. It is also a fact that the Mt. Rainier Mining Company is a STOCK COMPANY, the officers of which are paid a salary for their efforts both as promoters and managers of the affairs of the company." He believed the mining company held the claims "as a base upon which to work this endless chain of promotion."

O'Farrell indicated that if the Department denied the permits, MRMC could not continue operations because the nine claims still held did not have suitable timber; or space for building camps, pasturing animals, or maintaining a sawmill. O'Farrell suggested that denying the permits would effectively end MRMC operations. However, he also recommended the terms, conditions, and costs for continuing permits and leases "If it is the desire of the Department that the Mt. Rainier Mining Company continue to develop their claims in the park *without regard for the adverse information relative to the character of the claims* [emphasis added] in the hands of the General Land Office, which information has been secured by such men as W.R. Davey, Mineral Inspector, etc., and the other facts above set forth." He proposed slightly higher fees in order to determine how serious the MRMC regarded the profitability of

[66] NARA Archives, L3023 Files, Fiche 59.
[67]Letter Adolph C. Miller to Superintendent Ethan Allen, July 18, 1913. (NARA Archives, L3023 Files, Fiche 59)
[68] The senior author notes that the tracings are not with the Fiche file, however McIntyre's files include a copy of a map with the locations of all the claims plotted on a 1971 USGS topographic map; the map may have been compiled by Gretchen Luxenberg, former NPS historian for the Columbia Cascades System Support Office in Seattle.
[69] Letter from Thomas O'Farrell to Supt. Ethan Allen, July 28, 1913 (NARA Archives, L3023 Files, Fiche 59).

their mining claims. "My idea in placing the prices of the concessions above a nominal figure, is to ascertain by the actions of the company whether or not they are acting in good faith and whether or not they are simply holding it as a base for a promotion scheme with which to fleece the public." O'Farrell enumerated his recommendations, most of which were incorporated into the language of the permit issued and signed in 1914.

O'Farrell's report and recommendations were forwarded to Adolph C. Miller, Assistant to the Secretary of the Interior. O'Farrell was under the impression that Special Agent J.D. Speer of the GLO had promised MRMC that the Department of the Interior (DOI) would consent to granting permits and leases if MRMC relinquished the 32 claims. Miller later indicated there was no such agreement. Miller, however, noted that "Section 5 of the Act of March 2, 1899 (30 Stats., 993), establishing the park, provides 'that the mineral-land laws of the United States are hereby extended to lands lying within the said reserves and said park;'" and that "this provision was changed by the Act of May 27, 1908 (35 Stats., 365), prohibiting the locating of mining claims under the mineral-land laws of the United States within the park." Miller concluded that "It appears from the correspondence here that it is necessary for the mining company to be granted, at least temporarily, the privileges it requests, in order that the nine unrelinquished claims may be developed, and you are, therefore, authorized to grant them a yearly revocable license, at the option of the Secretary of the Interior, using therefore form 1-399." Miller agreed with O'Farrell's suggested rates.[70] In short, the O'Farrell proposals would allow MRMC to proceed with plans, but would expand government control of mining and construction. The proposals laid the groundwork for a new permit system.

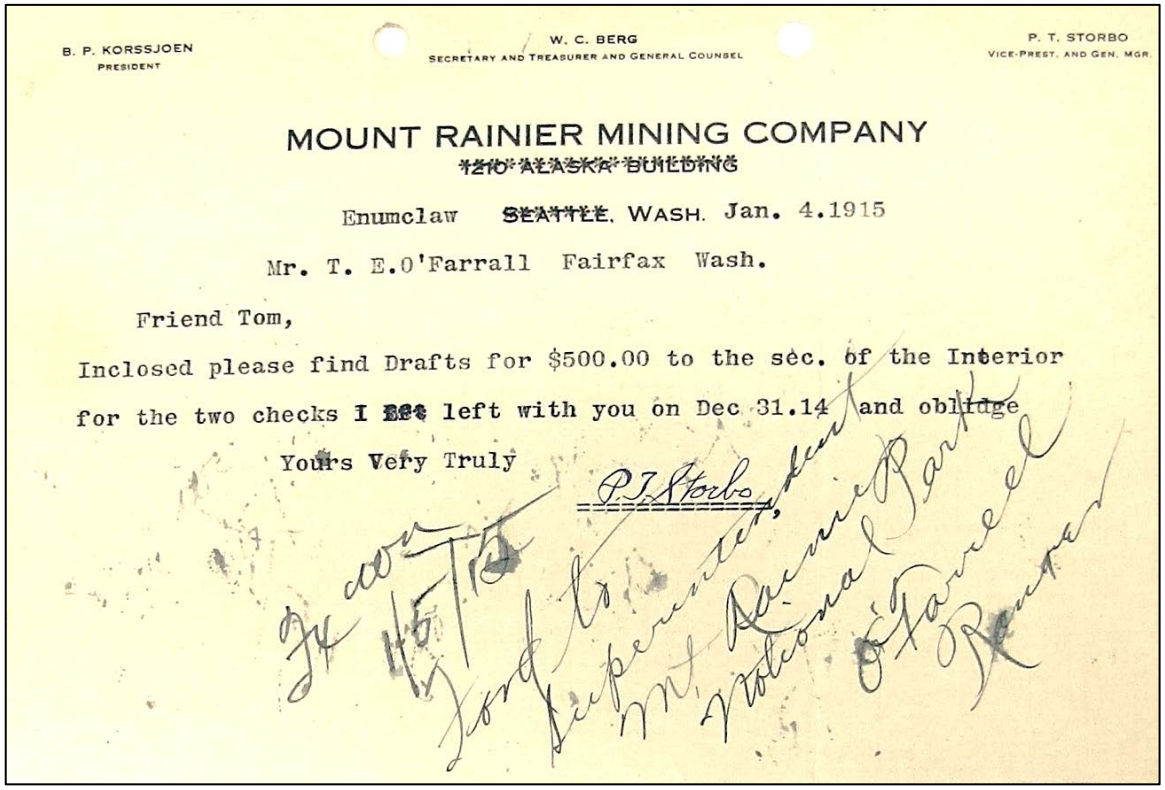
The Park Permits Use of Some Relinquished Claims

During the negotiations, MRMC was not idle. Even without permits, work crews occupied the cabins on the relinquished claims in Glacier Basin; were working in a tunnel on the south side of the Inter Fork; had cut timber and transported it to their sawmill (also on a relinquished claim); and were busy constructing a road about three miles inside the east park boundary. In August 1914, O'Farrell visited Glacier Basin and noted that work was being done without valid permits. Furthermore, he found the road crew using two canvas tents taken from a Park Service cabin without permission. O'Farrell travelled to Enumclaw to discuss the matter with Storbo; reported to Superintendent Allen; and then informed Storbo that "you will be considered in trespass on the National Park if you have not secured the permits referred to within a reasonable time... your alleged 'tunnel site claim' and your alleged 'camp site' and 'mill site' claims are not recognized as valid. Further operations in this matter of road construction will not be permitted on the Park lands until a settlement of the claim for timber already cut on the relinquished claims has been effected."[71]

By September 1914, the government had formulated detailed "Special Use" permits covering yearly rental, or lease, of the relinquished claims using standard form 1-399. Mount Rainier Mining Company initially complained of the restrictive terms, but eventually agreed to a yearly permit system. They were aware, however, that the permit requirements tended to benefit the government, which could annually readjust the rates and could revoke the permit if MRMC violated the terms.

[70] Letter from Adolph C. Miller to Superintendent Ethan Allen, November 4, 1914. (NARA Archives, L3023 Files, Fiche 59)
[71] Letter from Thomas O'Farrell to Peter Storbo, August 17, 1914. (NARA Archives, L3023 Files, Fiche 59)

In sum, the final permit granted Mount Rainier Mining Company the right to use camp sites on the relinquished claim known as "Gate" and on the former Lake City claim. The permit also allowed MRMC to use the tunnel on Gate claim, and to bore a tunnel on the south side of the Inter Fork to develop their retained mining claims. They also were permitted to continue operating their sawmill and water-powered electric generating plant on the relinquished "Turtle" claim. Ten thousand feet of timber could be cut, as approved by Ranger O'Farrell, and payment for timber previously cut on relinquished claims was listed. Permit fees ranged from $125 for a construction project to $500 for a permit that covered collective needs during a calendar year. The charge for cutting timber was based on footage or number of trees cut. Charge for use of mines and structures on relinquished sites was $300. The road construction permit was granted without fee, so long as the road was built where it could be used both by MRMC and the general public. There is no doubt that the park benefitted from the permit to construct the mining road, commonly referred to as "Storbo Road."[72] An access road was badly needed, and the park monitored progress made by MRMC; detailing the miles built and costs to the company –costs saved by the park for a road needed by park staff and by the general public.



B. P. KORSSJOEN
PRESIDENT

W. C. BERG
SECRETARY AND TREASURER AND GENERAL COUNSEL

P. T. STORBO
VICE-PREST. AND GEN. MGR.

MOUNT RAINIER MINING COMPANY
1210 ALASKA BUILDING

Enumclaw ~~SEATTLE~~, WASH. Jan. 4.1915

Mr. T. E.O'Farrall Fairfax Wash.

Friend Tom,

Inclosed please find Drafts for $500.00 to the sec. of the Interior for the two checks I ~~[illegible]~~ left with you on Dec 31.14 and oblidge

Yours Very Truly

P.T. Storbo

Figure 3.5. Note Accompanying Mount Rainier Mining Company's Special Use Permit Payment.
(NARA Archives L3023 Files Box 50 Folder 54)

The text of the permit for the 1914 calendar year adhered closely to O'Farrell's recommendations. It was adopted (as Mount Rainier National Park Permit No. 18); signed and approved by Bo Sweeney, Assistant Secretary of the Interior on September 14, 1914; and finally, signed by B.P. Korssjoen,

[72] See Superintendent Allen letter to Ranger O'Farrell of December 11, 1914; Supervisor Sheehan letter to Secretary of Interior March 18, 1915; and other correspondence. (NARA Archives L3023 Files, Fiche 59)

President, and P.T. Storbo, Acting Secretary of the Mount Rainier Mining Company. On the last day of December, 1914 MRMC wrote checks totaling $500 for that year's operations. Figure 3.5 is a note from Storbo accompanying those payments. Following is the text of Permit 18 in its entirety.

> Be it known that for and in consideration of the rents, covenants, and agreements hereinafter mentioned, to be paid, kept and performed by the Mount Rainier Mining Company, 14 Dravus Street, Seattle, Washington, permission is hereby granted said permittee, for the term of one (1) year from January 1, 1914, to January 1, 1915 to maintain, conduct, and carry on mining operations in Mount Rainier National Park, as follows:
>
> I. To use a camp site on the relinquished claim known as 'Gate' and to use the tunnel mouth on that claim paying therefore the sum of One Hundred Dollars ($100) in advance each year, renewable annually on approval of the Secretary of the Interior.
>
> II. To use the general camp site on the former claim known as 'Lake City' and to bore a tunnel through on the south side of the Interfork of the White River for the purpose of developing other mineral claims held by them paying therefore the sum of One Hundred Dollars ($100) annually in advance each year renewable annually on approval of the Secretary of the Interior.
>
> III. To use a mill and water power site on the claim formally known as 'Turtle' paying therefor the sum of One Hundred Dollars ($100) annually in advance each year renewable annually on approval of the Secretary of the Interior.
>
> IV. To cut ten thousand feet of timber under the immediate supervision of the Park Ranger on the south side of the Interfork of the White River, said timber to be paid for at the rate of Twenty Dollars ($20) per thousand, stumpage.
>
> V. Permittee shall make reparation for the timber heretofore cut on relinquished claims paying therefor Ten Dollars ($10) for each alpine tree and Five Dollars ($5) for each mature tree cut, compensation herefor to be made on count of stumps made by the Park Ranger.
>
> VI. A permit to build and improve the roads and trails in the park without charge to the Government is made in conjugation with the above mentioned items; said roads and trails to be located at points and places where they will be of use to the Mount Rainier Mining Company and the general public. All road improvement, trail improvement, timber cutting, brush piling and burning to be with the approval of the Superintendent of the Park and under the immediate supervision of the Park Ranger in the district of Mount Rainier National Park in which the mining claims herein mentioned are located. The permits herein granted are based on the distinct understanding that the use of the relinquished claims mentioned herein, the tunnels thereto and the camp sites are necessary incidents to the development of the unrelinquished claims held by the permittee, and with the understanding that the permits shall be paid for at the rates above mentioned annually in advance and that all permits are revocable at the discretion of the Secretary of the Interior.
>
> VII. The right is reserved to the Secretary of the Interior to annually readjust the rates to be paid hereunder whenever in his judgment the circumstances of the case appear to warrant such action.
>
> VIII. The said permittee, for and in consideration of such permission and its privileges in the premises, covenants and agrees to pay the Secretary of the Interior, or his duly authorized representative, the sum of Five Hundred ($500) dollars, in advance, and the remainder within thirty (30) days after statement shall be furnished said company by the Park Service.
>
> IX. The said permittee hereby agrees and obligates itself to observe strictly the provisions of the act of congress approved March 2, 1899 (30 Stat., 993) creating the Mount Rainier National Park; to obey the rules and regulations for its government promulgated by the Secretary of the Interior, and to require strict observance thereof by all guests and employees; and also to assist the Secretary of the Interior, or his duly authorized representative in the park, to extinguish forest fires in the vicinity of the tract herein leased, and in the preservation of good order within the metes and bounds of the said national park. It further agrees to

conduct said business in a proper, careful, and prudent manner, to the satisfaction of the Secretary of the Interior, and so as not to injure any part or portion of the said park; and of these matters, as of all others, the Secretary of the Interior shall be the sole judge.

X. Willful violation of the conditions hereof on the part of the said permittee, or by its employees will be sufficient cause for revocation of this license, and for any such violation this license shall be suspended by the superintendent of the park until action can be had thereon by the Secretary of the Interior.

XI. No Member of or Delegate to Congress, or Resident Commissioner, after his election or appointment, or either before or after he has qualified, and during his continuance in office, and no officer, agent, or employee of the Department of the Interior shall be admitted to any share or part of this contract, or agreement, or derive any benefit which may arise therefrom, and the provisions of section 3741 of the Revised Statutes of the United States, and sections 114, 115, and 116 of the Codification of the Penal Laws of the United States, approved March 4, 1909 (35 Stats., 1109), relating to contracts, enter into and form a part of this agreement, so far as the same may be applicable.[73]

Special Use Permits become Routine

The 1-399 special use permits for Mining Operations, first drafted in 1914, were renewed yearly until 1920. One permit allowed the MRMC to lease the relinquished claims and to construct roads. Some changes were made over the years to the terms, and to the size and location of the leased parcels, but the general terms and fee remained the same. An additional special use permit was required each year for other projects, such as for construction of a flume, aerial tramway or concentrator plant. After 1914, timber cut outside the road construction right-of-way required a separate timber cutting permit. The timber permits are described in more detail in the section below.

Permit No. 2 for Mining Operations changed slightly in 1915. At this time, John J. Sheehan took office as the park's new supervisor. Stephen T. Mather was the Assistant Secretary of the Interior. In March of that year, Mather amended Section 5(V) of the permit; adding language that regulated timber cutting.[74] The new rule was applied to timber cutting permits on park lands within the leased claims, but not within the road construction corridor.

In 1915, Storbo inquired about obtaining a permit to construct two buildings on the leased Lake City claim. These were to be built about 400 feet east from the old cabin on the claim. MRMC planned to build these structures from lumber "obtained from logs cut from, and now piled along the right-of-way for the wagon road built by this company." The Department of the Interior approved the plan.[75]

In 1917, terms of the permit were changed regarding the lease for the Lake City and Gate claims. The camp site in the Gate claim was abandoned, but MRMC retained a lease on the 10-acre tunnel site at a reduced fee of $50. An additional camp site was leased on 10 acres "immediately adjoining…and lying east of" the Lake city claim, at a cost of $50. The MRMC thus still paid a total of $300 for the leases; maintaining their tunnel site and sufficient grounds for campsites.[76]

[73] Permit No. 18, General Form 1-399, September 14, 1914. (NARA Archives L3023 Files, Fiche 58)
[74] Permit No. 2, General From 1-399, March 16, 1915. (NARA Archives L3023 Files, Fiche 58)
[75] Letter from superintendent Reaburn to the Secretary of the Interior, November 3, 1915. (MORA Archives)
[76] Correspondence between Superintendent Reaburn and MRMC, February-March 1917. (NARA Archives L3023 Files, Fiche 61)

In 1918, the NPS requested that the mining area be surveyed so the government could better understand why specific claims were leased. Following this survey, the permit included more detailed property descriptions of the leased claims and proposed construction areas. The MRMC also applied for a second permit to construct a flume, aerial tramway, electrical transmission line, and power concentrating plant. MRMC abandoned its permit for the concentrating plant in 1919; stating that the company was looking for an alternate location to site the plant.

Glacier Basin Timber Cutting Permits

Mount Rainier Mining Company needed more than just space for facilities, they also required lumber for shoring up their mines and improving their mining road. While the necessity of some of the projects was debatable, wood for others, such as building bridges, was critical for safety and access. Even so, the company provided adequate justification for constructing buildings and other structures, such as a flume and aerial tramway.

Even though the park objected to cutting trees on park lands, it was not able to legally prevent the cutting. Initially, the company only felled trees within boundaries of their claims and within the construction corridor of the White River-Storbo road. The MRMC sawmill on Turtle Claim in Glacier Basin converted cut timber to the lumber as needed. As the need increased, however, the mining company negotiated for an expanded timber cutting area.

Monitoring MRMC timber cutting practices in Glacier Basin was one of Ranger Thomas O'Farrell's many tasks; one that he fulfilled with much thought and attention to detail. He not only inventoried the amount of timber cut by the company; but also determined cost and value of the trees cut, and marked timber for cutting. In addition, O'Farrell drafted, implemented, and enforced the park's timber permits with MRMC. He personally inventoried trees in the vicinity that he felt could be cut without damaging the landscape's scenic value. A specific price/value was applied to each approved tree according to the type and size (in terms of linear footage). Then, the trees of specific value were lumped together in a package; the sum of which would equal a total contractual value.

O'Farrell's attitude toward value of the timber cut by MRMC is expressed in his March 9, 1914 letter to Superintendent Allen.

> Mr. Storbo and the Mt. Rainier Mining Co. appear to have failed to understand that they are operating in a national park, in which the natural objects are held, not for their value as represented by dollars and cents, but for a value which cannot be calculated. To try to place a value in figures or money on a tree or any number of trees, so situated in the park that their removal would leave a lasting blemish or scar upon the beauty of the landscape, would be the same as to try to place such a value on the sunset or the rainbow.
>
> There is no sum of money that will repay for the damage done to the beauty of the park in Glacier Basin by the cutting of timber already done by this company.
>
> In naming a money value on this timber in my former report, I did so with the profound regret that some unit of aesthetic value was not available in place of the unit of commercial value, --'dollars per thousand'.
>
> And I was gratified to learn that the officials of the Interior Department, in their wisdom, as well as yourself, had taken the same view and placed the almost prohibitive price recommended in my report in effect.[77]

[77] Letter from Thomas O'Farrell to Superintendent Allen, March 9, 1914. (NARA Archives L3023 Files, Fiche 59)

Earlier, in 1910, O'Farrell had reported to Superintendent Hall that "a considerable quantity of the alpine timber of the basin is being cut from their alleged claims and is being used in the development of the claims situated higher up on the ridge. Numerous poles have been cut and have been distributed for the erection of a transmission line for electric power."[78] After MRMC relinquished their lower elevation forested claims, and the claim on which their sawmill was located, they had to pay to lease and cut timber on those relinquished claims to have a ready source of timber for their operations.

By 1913, O'Farrell's recommendations for the terms of the timber cutting permits were accepted by the Park Service. Ranger O'Farrell proposed setting a fixed price based on cutting specific types of trees found in pre-determined locations. He created an inventory of trees growing in Glacier Basin, and specifically marked those that could be cut for milling. Section 3 of the permit specified "That the ten thousand feet of timber applied for be cut on the claims now relinquished at the rate of Ten Dollars per each 'Alpine' tree and Five Dollars per each mature tree."[79]

In 1914, Storbo, then Secretary of Mount Rainier Mining Co., wrote to Superintendent Ethan Allen concerning the proposed permit for cutting trees in Glacier Basin. O'Farrell had suggested a rate of "twenty dollars per thousand stumpage," which Storbo maintained was too high. "We are in need of timber, and are willing to pay what it is worth, but this price looks big."[80] O'Farrell explained the costs to Superintendent Allen, as quoted above in his March 9, 1914 letter. He clarified that the $20 per thousand feet was "per thousand feet board measure as the logs will scale when cut" and that the price set for each cut alpine and mature tree was for trees already cut on the relinquished claims, based on a count of stumps.[81]

Allen, in his reply to Storbo, fully supported O'Farrell. He wrote that "…your objections to the conditions set forth in the letter of the Department of the Interior, dated November 4, 1913, have been referred to Mr. Thomas E. O'Farrell …and he reports 'he can see no good reason why the Mt. Rainier Mining Co. should not comply with the conditions set forth in the Department letter of November 4, 1913.' I am not inclined to attempt to interfere with his enforcement of the orders of the Department of the Interior."[82]

Negotiations between O'Farrell and Storbo regarding timber agreement pricing and restrictions continued well into 1914. O'Farrell wanted a clarification of various proposed uses of timber by MRMC. He also inspected the mining operations, and checked to be sure that the company had obtained their needed permits. On one visit, O'Farrell noted that twelve mine timbers had been cut on park lands without permission and used in one of the mine tunnels. He cautioned Storbo that such actions were considered

[78] Letter from Thomas O'Farrell to Superintendent Hall, September 30, 1910. (NARA Archives Superintendent's Reports H2621 Files, Fiche 03)
[79] July 28, 1913 permit. (NARA Archives L3023 Files, Fiche 59)
[80] Letter from Peter Storbo, Secretary of the Mount Rainier Mining Company to Superintendent Ethan Allen, February 19, 1914. (NARA Archives, L3023 Files, Fiche 59)
[81] Letter from Thomas O'Farrell to Superintendent Allen, March 9, 1914. (NARA Archives L3023 Files, Fiche 59)
[82] Letter from Superintendent Ethan Allen to Peter Storbo, Secretary of the Mount Rainier Mining Company, April 2, 1914. (NARA Archives, L3023 Files, Fiche 59)

trespass on the National Park and that road construction should stop until there was "a settlement of the claim for timber already cut on relinquished claims."[83]

Before the end of 1914, O'Farrell was able to convince Storbo that the timber agreement was fair. With Storbo's approval, O'Farrell worked with the company to identify and mark trees that were acceptable to be cut. On November 7, 1914, O'Farrell met with Storbo and O.E. Olson and recorded on a "Detailed Scale Sheet" an estimate of "timber marked to be cut on Park Lands by Mt. Rainier Mining Co., in Mt. Rainier National Park." Written on the report was the note that the location of the marked trees was "on or around sawmill site" on Turtle claim. A total of 64 trees were identified and measured by "Butt Diam." Their diameters ranged from 14 inches to 48 inches. O'Farrell specified that stumps should be cut at a height of 24 inches or less, and that "no stumps to be cut over 36" high." Each tree was marked by a blaze and marked with "U.S." and its number. Each tree was marked on a high blaze so that MRMC could identify it if there was deep snow. Each tree also was marked on its stump so that it could be identified after it was cut.[84] Trees cut by the company in previous years were not included in the report.

Storbo, Olson, and O'Farrell then inspected the area on the other side of the Inter Fork and agreed to a compromise regarding the timber cut on the relinquished claims.

> This compromise is based on the fact that many of the trees cut on the relinquished claims were cut by former claimants, other than this company, several were cut for the construction of bridges on former roads and trails other than the road now being built into Glacier Basin by this company, several of the trees were cut to make boards or lumber to construct the cabins or buildings located on the relinquished claims…This compromise settlement calls for the payment by the Mt. Rainier Mining Co., of $100.00 for ten Alpine trees at $10.00 each, and of $100.00 for 20 mature trees at $5.00 each, or a total of $200.00 for the timber cut on the relinquished claims and used by the company on its mining locations now held.[85]

They also agreed that timber cut within the right-of-way and piled on the roadside could be used for mining at no charge; and that dead and down timber could also be used, as this would reduce fire danger. By December, 1914, MRMC had paid the Park Service $400 for cutting 10,000 feet of timber, and $200 for the timber previously cut on relinquished claims. As requested, MRMC also submitted payment for their 1915 permits and leases. The company was listed as Mt. Rainier Mining and Milling Company on their checks; implying that the timber cutting operation and sawmill were an integral part of the company.

When John J. Sheehan took office as park supervisor in 1915, he forwarded the MRMC permit and lease checks, as well as the O'Farrell's reports, to the Secretary of the Interior. Assistant Secretary, Stephen A. Mather approved the agreements and accepted the payments. However, he also inserted a modification to Section 5(V) of the permit (known as Section 5½); stating that timber cutting must be "with the approval of the Superintendent of the Park and under the immediate supervision of the Park Ranger in the district of Mount Rainier National Park in which the mining claims herein mentioned are

[83] Letter from Thomas O'Farrell to Peter Storbo, August 17, 1914. (NARA Archives, L3023 Files, Fiche 59)
[84] Report from Thomas O'Farrell to Superintendent Allen, November 10, 1914. (NARA Archives, L3023 Files, Fiche 59; the Detailed Scale Sheet is not included with the Fiche)
[85] Ibid.

located."[86] In other words, do not cut trees without specific park approval –the approval coming from the park superintendent, and Ranger Thomas O'Farrell.

Thus, O'Farrell became responsible for selecting and marking timber for several timber cutting contracts with MRMC over the next several years; reporting to each successive park superintendent-supervisor. During this time, the mining (and milling) company applied for permits to cut timber for constructing a bridge across the Inter Fork of the White River; for building a boarding house/hotel, snow sheds, culverts, drains, a flume; and for constructing an aerial tramway. MRMC argued that cutting timber in the park was necessary since there was insufficient timber available in the road right-of-way, and because poor road conditions made it unfeasible to use machinery to haul timber from outside the park. Park Supervisor DeWitt L. Reaburn was in favor of these contracts "In view of the fact that these buildings will ultimately become the property of the Government…"[87] These timber contracts included a long list of regulations such as the size of the trees cut, the height of stumps, and the disposal of brush. Trees that were cut or damaged by the contractor, other than those marked for cutting by O'Farrell, were added to the cost at double the price. Each contract included a deadline for cutting the timber, and for removing timber, branches, and brush from the cutting area. MRMC requested, and was granted, extensions to some of these contracts.

In 1916, MRMC requested a permit to cut 100,000 feet of timber; ten times the amount usually granted. Reaburn became concerned and asked Robert B. Marshall, the Superintendent of the National Parks for guidance. Marshall, in response, wanted a detailed report on how MRMC had used timber cut under previous permits. Storbo, hoping to expedite matters, sent Reaburn a check for 50,000 feet of timber and his permit request. An additional 50,000 feet was eventually approved and permitted.

Over the next few years, MRMC fell behind their timber cutting deadlines, and asked for extensions and renewals to cut timber under previous permits. Timber cutting also was included in their 1-399 special use permits in connection with road construction and clearing a proposed aerial tramway. In 1918, O.W. Curtis, now the White River Ranger, prepared a list of logs totaling 50,000 feet for MRMC under their 1918 permit.[88] After 1919, there are no records of additional timber sale agreements with the Mount Rainer Mining Company. Figure 3.6 below shows Thomas O'Farrell with several Mount Rainier and National Park Service officials that had a part in the decisions affecting MRMC during this period. Many of these people (e.g., Mather and Albright) remain important figures in National Park Service history.

[86] Permit No. 2, 1-399 for Mining Operations and Roadwork 1915. (NARA Archives, L3023 Files, Fiche 58)
[87] Letter from Supervisor Reaburn to Secretary of the Interior, December 9, 1915. (NARA Archives, L3023 Files, Fiche 58)
[88] (NARA Archives, L3023 Files, Fiche 61)

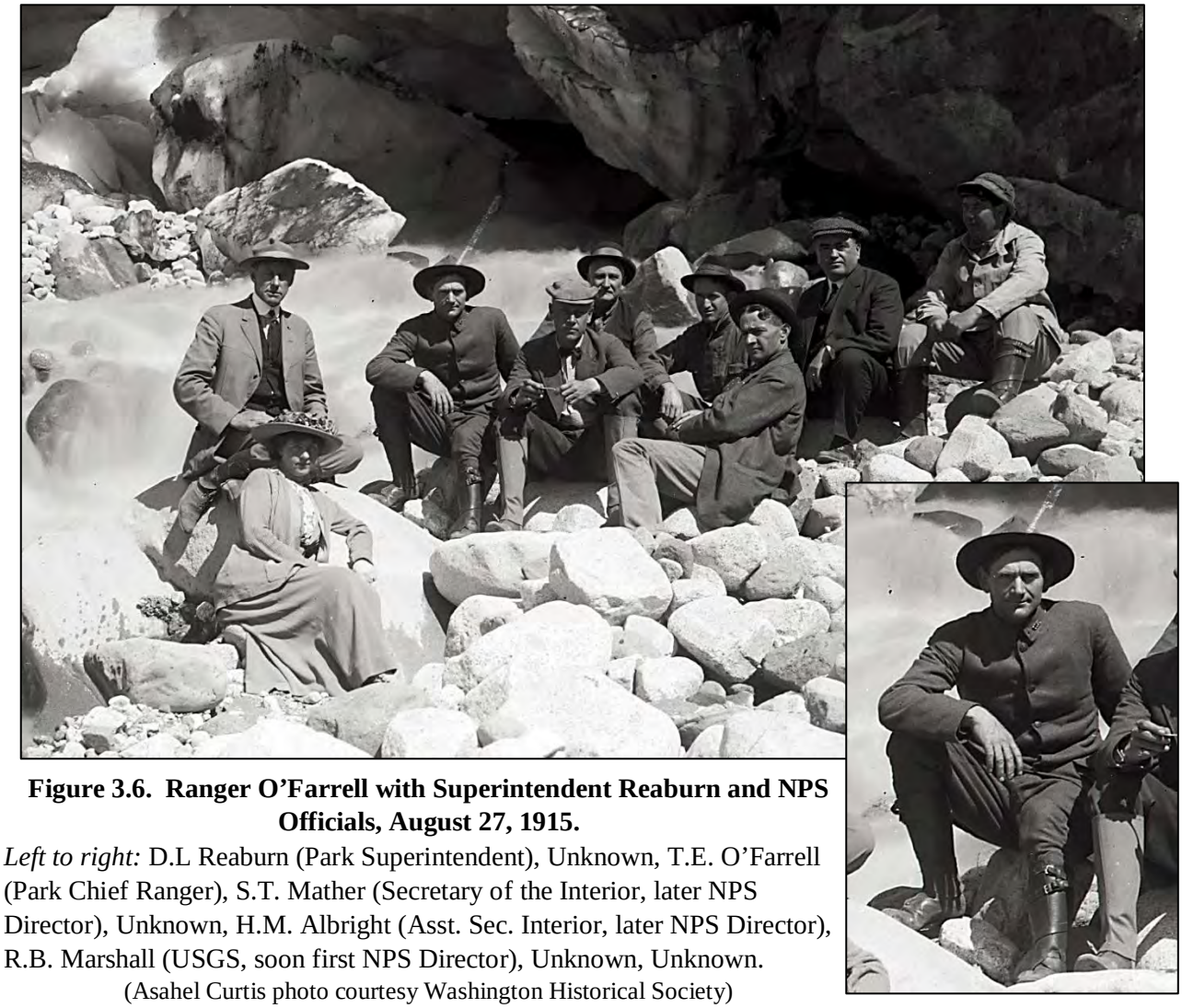


Figure 3.6. Ranger O'Farrell with Superintendent Reaburn and NPS Officials, August 27, 1915.

Left to right: D.L Reaburn (Park Superintendent), Unknown, T.E. O'Farrell (Park Chief Ranger), S.T. Mather (Secretary of the Interior, later NPS Director), Unknown, H.M. Albright (Asst. Sec. Interior, later NPS Director), R.B. Marshall (USGS, soon first NPS Director), Unknown, Unknown.
(Asahel Curtis photo courtesy Washington Historical Society)

The Storbo-White River Road Project

The history of mining in Glacier Basin is inextricably bound with development and maintenance of an all-season road linking Glacier Basin with cities north and west of Mount Rainier –principally Enumclaw (home of Peter Storbo, Bernt Korssjoen, and the Mount Rainier Mining Company), Tacoma, and Seattle. In this report, we have referred to this road variously, and perhaps confusingly, as the *Glacier Basin Road*, *White River Road,* and *Storbo Road*. Other names such as the *State Road*, *McClellan Pass Highway*, and *Washington State Route 410* were applied a bit later when the route from Enumclaw was extended through the eastern edge of the park; bypassing the westward turn-off to Glacier Basin and newly developed Sunrise Ridge. Here, we often use *White River Road* and/or *Storbo Road* because these terms link the route to its initial development as a combined park access and mining road in its early days –*White River* because of its route along its floodplain; *Storbo* because of the essential role played in its

development by Peter Storbo and Mount Rainier Mining Company.[89] By whatever name, construction and maintenance of White River-Storbo Road was critical to the process of mining Glacier Basin.

White River-Inter Fork Access Routes to Glacier Basin

As early as 1896, a number of prospectors and miners passed near, or entered, Glacier Basin in what was soon to become Mount Rainier National Park. The favored access route was an old mining trail along the floodplain of the White River from the Enumclaw area into the park employing a route similar to that shown on Figure 2.4. Along the way, branch trails lead to Mystic Lake, Grand Park, and other places on the north side of the mountain.

The early 20th century witnessed a significant increase in prospecting within the new park boundaries. Once miners learned of the impending 1908 legislation prohibiting new mining claims in the park, there was a renewed last minute prospecting rush to register claims on Mount Rainier. Owners of already approved claims found that they would be required to prove the worth and legitimacy of their holdings; meaning that ore samples had to be sent in to the nearest smelter for assay. The old mining trail, subject to frequent flooding and slides, was inadequate to handle the increased traffic of miners; let alone the transport of supplies and ore. Road improvement and maintenance became increasingly critical to the success of mining operations in Glacier Basin.[90]

During the early years of Mount Rainier National Park, the north-central and north-eastern sections were isolated from primary park operations at Longmire and Paradise; and even from secondary operation on the Carbon River. In 1906, Supervisor G.F. Allen described the eastern portion of the park as "difficult of access and little known." Despite yearly requests by superintendents for funding, the expansion of the park trail system into these more remote parts of the park did not begin until 1908. That year, the trail between Carbon River and White River watersheds was surveyed and construction begun.

About this time, and thanks to extensive press coverage and word of mouth, Glacier Basin became better known to the general public. The *Mountaineers* climbing and hiking club used the new trail, and camped in the basin, while on their outings to climb and circumnavigate the mountain. Voluntary public work parties supplemented the limited federal funding for construction and maintenance. The Mountaineers, Boy Scouts, and others helped expand a trail across the northern part of the park. At the same time that the park was trying to expand its trail system, MRMC was widening its rough White River mining trail in order to improve access to Glacier Basin.

Glacier Basin Mining, Road Building, and Permits

Mount Rainier Mining Company arguably was the primary entity using the White River trail route shown in Figure 2.4. They needed the route, of course, to gain access to their claims in Glacier Basin, and to transport ore from it. Shortly after purchasing the Glacier Basin claims, Peter Storbo forwarded a

[89]It also can be argued that, for the historic-period of interest here, *White River Road* is best applied to the portion of the route that parallels White River through park lands to White River Campground, while *Glacier Basin* or *Storbo Road* refers to the remaining section up the Inter Fork to Glacier Basin.

[90] Forest Supervisor Allen, July 17, 1905 report; letter from Paul Shorrock to Dee Molenaar on May 19, 1969; Paul Shorrock letter to Jerry Sable, October 21, 1975. (NARA Archives L3023 Files, Fiche 67)

request through Supervisor Allen to the Secretary of the Interior, asking for the right to improve the mining trail. Allen agreed that MRMC should be permitted to work on a road to Glacier Basin. The permit was granted without fee on July 2, 1906 by J.E. Wilson, Assistant Secretary of the Interior.

> In compliance with the recommendation contained in your letter of the 22nd instant, authority is hereby granted you to permit Mr. P.T. Storbo to repair, alter and enlarge the trail leading from the northern boundary of the [Mount Rainier] reservation up White River to his mining camp near the Emmons Glacier, in the Mt. Rainier National Park.
>
> This permit is granted for the reason that you state the proposed improvement of the trail will be a great convenience, not only to the applicant, but also to the public and the Forest officers [patrol].[91]

In this way, the park entered into a partnership of sorts with MRMC to construct a road along the White River floodplain and on up the Inter Fork tributary to Glacier Basin. In the coming years, this partnership would become an uneasy relationship; especially in regard to establishing responsibility for road maintenance and construction financing. During initial construction phases, Ranger Thomas O'Farrell monitored and reported on White River Road progress, and developed and enforced regulations concerning timber cutting within and outside the road right-of-way. By 1914, wording on the permit regarding road construction was included as Section 4 of the general purpose special use permit between the Park Service and MRMC.

> That a permit to build and improve the roads and trails in the park without charge be granted, said roads and trails to be located at points and places where they will be of use to the Mt. Rainier Mining Company and the general public.[92]

The lease permit eventually would include regulations and costs of the timber cut for road improvements.

White River Road Replaces the White River Trail

Clearly, MRMC needed a road suited to heavy wheeled vehicles, not merely a horse or mule trail, to conduct mine operations properly. To assist with the effort, Peter Storbo assigned some of his Glacier Basin miners to roadwork; his crew supplementing state construction crews working on the White River Road outside the park. Initially, Storbo's crew widened and maintained the existing trail, but later progressed to actual road construction both within and beyond park boundaries. Improved road access meant that MRMC could haul heavy mining equipment into Glacier Basin, and haul ore out to the nearest smelter in Tacoma.

Ranger Thomas O'Farrell reported on road construction activities. By August 1911, the road was described as "leading from the [White River] camp of the Mt. Rainier Mining Co. to a point a mile or two below the foot or nose of the Emmons glacier."[93] The following year, he reported that "The trails in the White River region are all the results of mining operations and are poorly located for tourist or patrol purposes but are sufficient for the present travel and patrol demands."[94] Figure 3.7 shows the location of

[91] Letter from Assistant Secretary of the Interior Wilson to Supervisor Allen July 2, 1906. (NARA Archives, L3023 Files, Fiche 60)
[92] NARA Archives L3023 Files, Fiche 59.
[93] Report from Ranger O'Farrell to Superintendent Hall, August 25, 1911. (NARA Archives L3023 Files, Fiche 59)
[94] Report from Ranger O'Farrell to Superintendent Hall, September, 1912. (MORA & NARA Archives)

the White River (aka Storbo) Road in 1915. At the time, the *bridge* location across White River also led to the formal northeast entrance to Mount Rainier National Park.

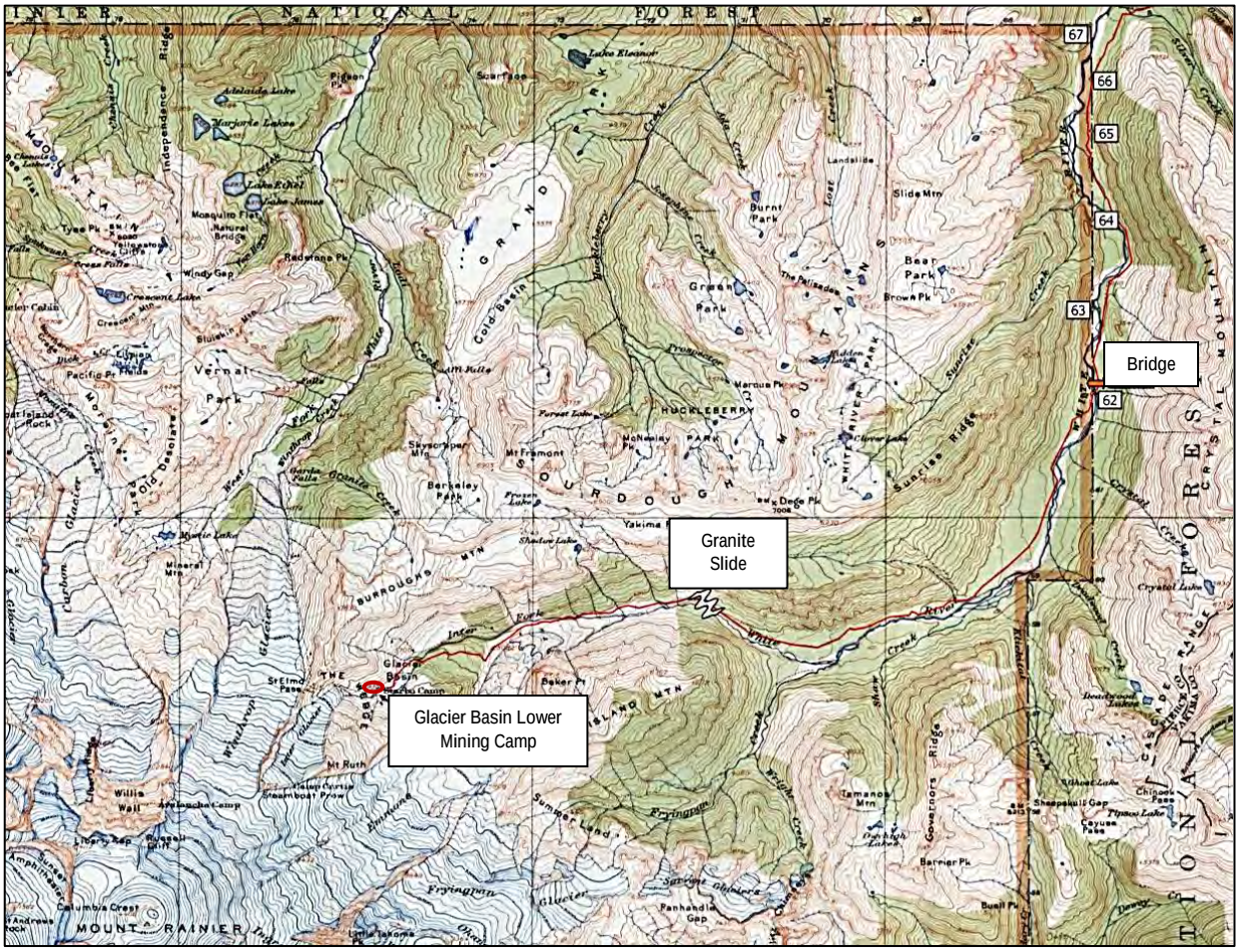


Figure 3.7. 1915 Mount Rainier National Park Map Showing White River-Storbo Road.
The road is shown in red with approximate locations of boundary posts, bridge crossing White River from east to west, *Granite Slide*, and the Glacier Basin (aka Storbo or Lake) Mining Camp.

O'Farrell's inspection visit in 1914, resulted in a detailed report on the status of road construction at that time. It serves as an example of the type of work involved, and the park's favorable opinion of the White River Road construction effort. Prior to his field visit, O'Farrell received a road construction report from Peter Storbo in October 1914.

> Mr. Storbo advises me that he has the road completed up to the 'Granite Slide' which is about one mile of proposed road between their work on the present project and the lower end of the old work from Glacier Basin to the Cousins cabin. This old road followed the North side of Emmons Glacier on the South side of Inter Fork. Mr. Storbo proposes to construct the new road up the North side of Inter Fork on the South [facing] slope instead of on the North [facing] slope as it is now located.[95]

[95] Report from O'Farrell to Superintendent Allen, November 10, 1914. (NARA Archives, L3023 Files, Fiche 58, 59)

O'Farrell traveled to Glacier Basin on November 5, 1914; meeting Storbo along the way and accompanying him to his camp. The boundary posts mentioned in his descriptions are clearly marked on the 1915 U.S.G.S. topographic map of Mount Rainier National Park (Figure 3.7 above).

> …Mr. Storbo took a saddle horse and pack horse and we proceeded to the road camp of his company at the foot of the ice of Emmons glacier, arriving there at 10 p.m.
>
> I took with me on this trip my cycle measuring device with cycle meter attachment, and at a point near Silver Creek at which Mr. Storbo maintains a supply tent, began to measure trail and found the distance from this point to Boundary Post No. 66 to be .8 mile. From Boundary Post 66 The Mount Rainier Mining Co. maintains a wagon trail for an additional 1 mile on the park lands at which point the trail leaves the park and follows the Eastern Boundary for an additional three miles, crossing the White River on a new bridge built by the Mt. Rainier Mining Co. at a cost of about $6,000. This bridge is 1/10 of a mile North of boundary Post No. 62 and just outside of the Park line, the Western approach being about two rods from the boundary. The wagon trail becomes a well constructed wagon road at a point about east of post No. 64, in the National Forest. From Silver Creek down the river to the State Road there is nothing yet but a pack trail. The State Road is completed to a point one mile above the Greenwater River.
>
> At the western end of the bridge, …the road again enters the park and continues long straight stretches and well laid out curves and grades on the north side of White River to a point .3 miles below what is known as the Granite Slide[96] where the grading is completed to, but the swamping, blasting and bridge construction is completed to the Granite Slide. The distance from the point at which the road re-enters the park at the bridge to the Granite Slide is 6.6 miles, with one mile of fair wagon trail in the park next east of Post 66.
>
> There is no temporary work being done in connection with this project, all bridges and culverts being of the most permanent character, the grades moderate, (not over 6 to 9 per cent at the steepest places). The timber is cut and neatly piled along the road side and a very creditable showing made.
>
> Mr. O.E. Olson, formerly connected with the re-grade of Seattle is in charge of the work and shows an excellent spirit in complying with Park requirements as well as pushing the work for the company. It is estimated that the improvements put in on this road project during this season have cost about $16,000, including the bridge across the White River, most of the road work being in the Park.[97]

Storbo reported to O'Farrell that MRMC spent a total of $10,996 on road construction that year: $2,310 on clearing and grubbing, $4,056 on grading, and $4,630 on bridges.[98] In a letter accompanying his November 10 report, O'Farrell expressed support for MRMC operations to Superintendent Allen.

> I beg leave to suggest that you recommend to the Department that: whereas, the Mt. Rainier Mining Co. is furnishing considerable revenue to the Mt. Rainier National Park Office, and whereas, up to and including the present season no park funds have ever been expended in the vicinity of Glacier Basin or the valley of White River in the improvement of trails or the construction of roads or trails; a reasonable amount of the revenue so derived be allotted for expenditure in that district in the manner above indicated.

[96] In the February 17, 1915 letter, O'Farrell notes that "The point referred to in Mr. Storbo's letter as the 'Granite Slide' is where the 4100 foot contour crosses White River …below Emmons Glacier and on the north side of the stream." (MORA & NARA Archives, Fiche 58)

[97] Report from Ranger O'Farrell to Superintendent Allen, November 10, 1914. Photos not included. (NARA Archives, L3023 Files, Fiche 58, 59)

[98] Superintendent's Annual Report 1914. (NARA Archives H2621 Files)

> I am assured that the Mt. Rainier Mining Co. intends to maintain operations during the entire winter to come and improvements will continue in that vicinity until the road is completed. The State Road will probably be built up to Silver Creek during the next summer thus connecting up the 'Missing link', which will render auto travel available to an elevation about equal to that of Reese's camp on the South Side, via water grade from Enumclaw. You will note that 'Storbo Camp' in Glacier Basin is at 5933 El…[99]

The 1914 roadwork described in O'Farrell's report was accomplished by MRMC "operating one donkey engine, seven horses, and a crew of men ranging in number from thirty to forty." The company kept a supply tent near Silver Creek and transported supplies by pack or wagon to their construction sites.

That year, the MRMC constructed road began "at the terminus of State Road 1, 20.5 miles east of Enumclaw" and extended along the White River Valley to just above the mouth of Huckleberry Creek. MRMC also contracted out the cutting and grading of a segment at The Dalles. Roadwork on this segment outside the park included construction of "four bridges, each of heavy split cedar material, between Green Water River and 'Flat Creek'. These bridges are 16 feet wide." Where the road crossed the White River near Boundary Post No. 62, MRMC built "an excellently constructed 400 foot bridge in which there are two 60 foot spans with a rock filled cribbing 36 feet by 70 feet between. To throw the water into the channel beneath the two spans there is a breakwater built of logs, rock and cribbing extending diagonally up and across the river bar on the east side of the stream for a distance of 450 feet."[100] Figure 3.8 shows the east-side footing and continuation of MRMC's log stringer bridge over White River in August, 1914.

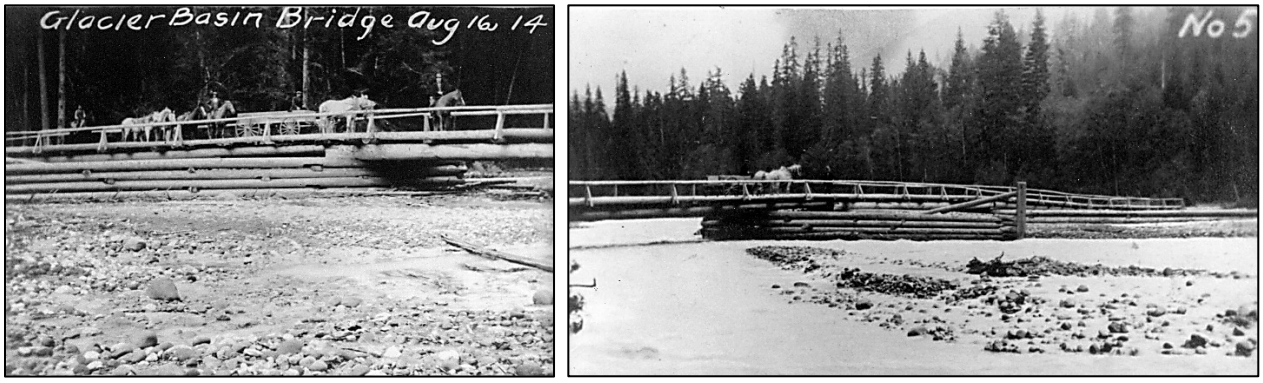


Figure 3.8. Log Bridge over White River and into Mount Rainier National Park in 1914.
(Courtesy Arthur L. Storbo)

Improvements inside park boundaries brought the new construction up the White River Valley on the north side of the Inter Fork to the point where the 4400 foot contour crossed the valley floor. That year, the road crew built 19 bridges and culverts in the last 1½ miles of road along the White River. [101]

In 1915, work on the mining road intensified further. Mount Rainier Mining Company repeatedly requested that more timber be cut and milled. Initially, their permit request covered construction of a

[99] Report from Ranger O'Farrell to Superintendent Allen, November 10, 1914. Photos not included. (NARA Archives, L3023 Files, Fiche 58, 59)
[100] Impressive as it was, this bridge has long since been destroyed by White River flooding.
[101] Report from Ranger O'Farrell to Supervisor Sheehan, February 17, 1915. (MORA & NARA Archives, Fiche 58)

particular wood bridge crossing Inter Fork River. During the summer of 1915, however, multiple requests made it obvious that a number of bridges were needed in order to allow transport of ore for milling. Park Ranger O'Farrell estimated that 10,000 ft. of timber was needed. Superintendent Reaburn approved; adding the comment "The proposed bridges are to be open for public use."[102] By December of that year, Reaburn reported that MRMC "…expect to complete the road work on the upper section and then complete the 4½ mile hiatus outside the Park boundary. They contemplate the use of a Phoenix Caterpillar truck, and wide tired trailers early next spring for hauling ore to Enumclaw."[103] In February 1916, Storbo bought a Jeffery Quad Truck with hard rubber tires for driving up to the mine.[104] When MRMC submitted a letter report to Ranger O'Farrell listing the work and costs for 1914-1915 (Table 3.2) the company had spent almost $33,000 on road construction. Apparently grading costs were much higher in 1915, likely due to more rocky terrain.

Table 3.2. Road Construction 1914-1915 as reported by Mount Rainier Mining Company.

Construction during the year 1914	
Clearing and grubbing 7 and 7/10 miles at $30.00 per tenth mile	$2,310.00
Grading of 7 and 7/10 miles at $52.50 per tenth mile	$4,056.00
Bridges, Culverts and Drains: 746 lineal feet of Road-way by 12 feet in width at $5.00 per lineal foot	$3,730.00
Breakwater Bulkhead; 450 lineal feet of Breakwater Bulkhead at $2.00 per lineal foot	$900.00
Total for 1914	**$10,996.60**
Construction during the year 1915	
Clearing and grubbing 4 and 5/10 miles at $30.00 per tenth mile	$1,350.00
Grading of 4 and 5/10 miles at $396.00 per tenth mile	$17,820.00
Bridges, Culverts and Drains: 393 lineal feet at $7.00 per lineal foot of Road-way, by 16 feet wide	$2,751.00
Total for 1915	**$21,921.00**
Grand Total	**$32,917.60**

Source: Mount Rainier Mining Company letter to Ranger O'Farrell detailing road construction in 1914 and 1915. Dated March 7, 1916 (NARA Archives L3023 Files Box 50 Folder 56).

Mount Rainier Mining Company reported that from 1914 through 1916 the company constructed 23 miles of road; half within the park boundaries and half outside the park. During that period, the company claimed to have spent just under $70,000 dollars in total; $38,000 within the park boundaries.[105]

[102] Letters O'Farrell to Superintendent Reaburn, July 29-September 27, 1915. (MORA & NARA archives, Fiche 58)
[103] Report Supervisor Reaburn to Secretary of the Interior, November 3, 1915. (MORA & NARA archives, Fiche 58)
[104] Bart Ripp "Mount Rainier Mining Company: Lots of Rock, Less Copper", *The News Tribune,* Tacoma Washington, May 31, 1999. Modified by Art Storbo personal communication, March 28, 2017.
[105] Letter from Ole Olson to Supervisor Reaburn, September 29, 1916. (NARA Archives, L3023 Files, Fiche 61)

Expenses were high. Road construction in this area was not easy. It involved not only clearing, grubbing and grading; but also building numerous bridges and culverts as the numerous reports attest. Furthermore, the road was built to motorized vehicle standards; 16 to 20 feet wide with grade varying from 1½% to 13%. By 1916, MRMC reported that "The present condition of the road mentioned is such, that we are navigating up and down with ordinary touring cars and trucks with full capacity loads on, running in intermediate and high gears, except where grades prevents them." [106] In 1917, the first heavy machinery was taken in by truck to Glacier Basin.[107] Figure 3.9 shows a section of the White River Road under construction north of the park in 1916 . Figure 3.10 shows a fully loaded horse-drawn wagon on the upper end of Storbo Road in the Lower Camp-Four Claim Group area of Glacier Basin during the same year.

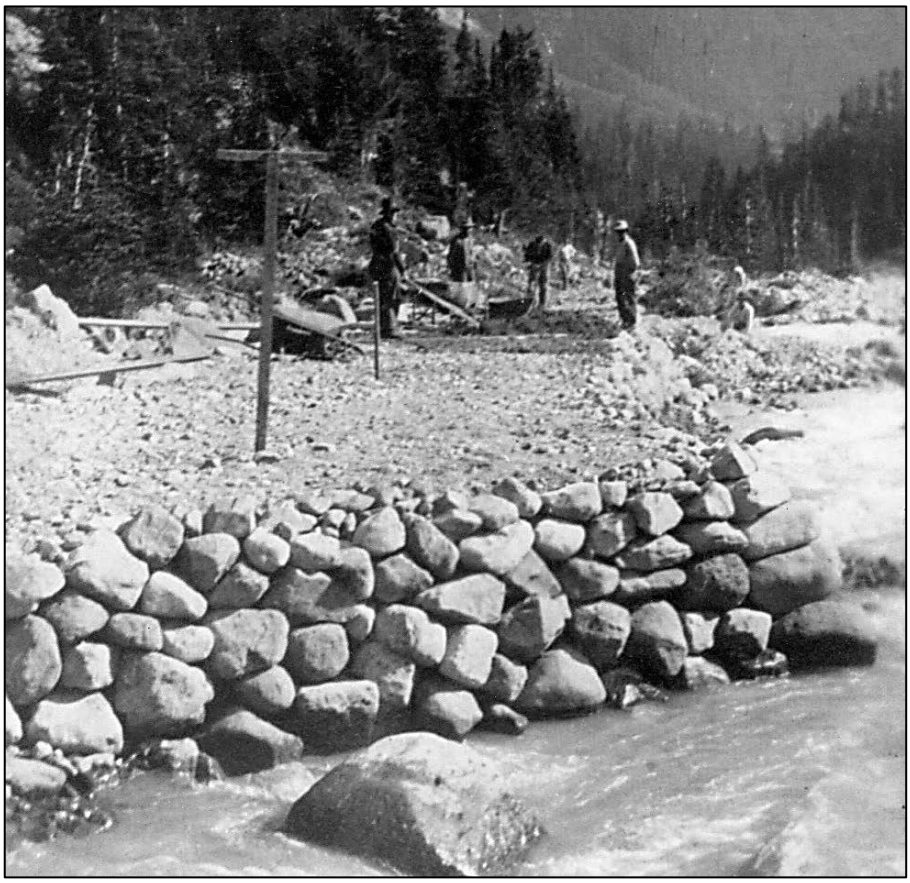


Figure 3.9 White River Road Under Construction above Silver Falls in 1916.
(Courtesy Arthur L. Storbo)

MRMC did not work entirely alone in building and maintaining the White River-Storbo Road. The National Park Service also contributed to its construction and maintenance; repairing washouts, doing

[106]Report from Ranger O'Farrell to Superintendent Allen, November 10, 1914, Report from Ranger O'Farrell to Superintendent Reabun, March 26, 1914. (NARA Archives, L3023 Files, Fiche 58, 59)

[107]Letter from Paul Shorrock to Dee Molenaar on May 19, 1969 and Letter from Paul Shorrock to Jerry Sable on October 21, 1975. (NARA Archives L3023 Files, Fiche 67)

grading work, and widening and surfacing. This work was especially important after record rainfall in December, 1917 caused extensive damage to park roads generally.

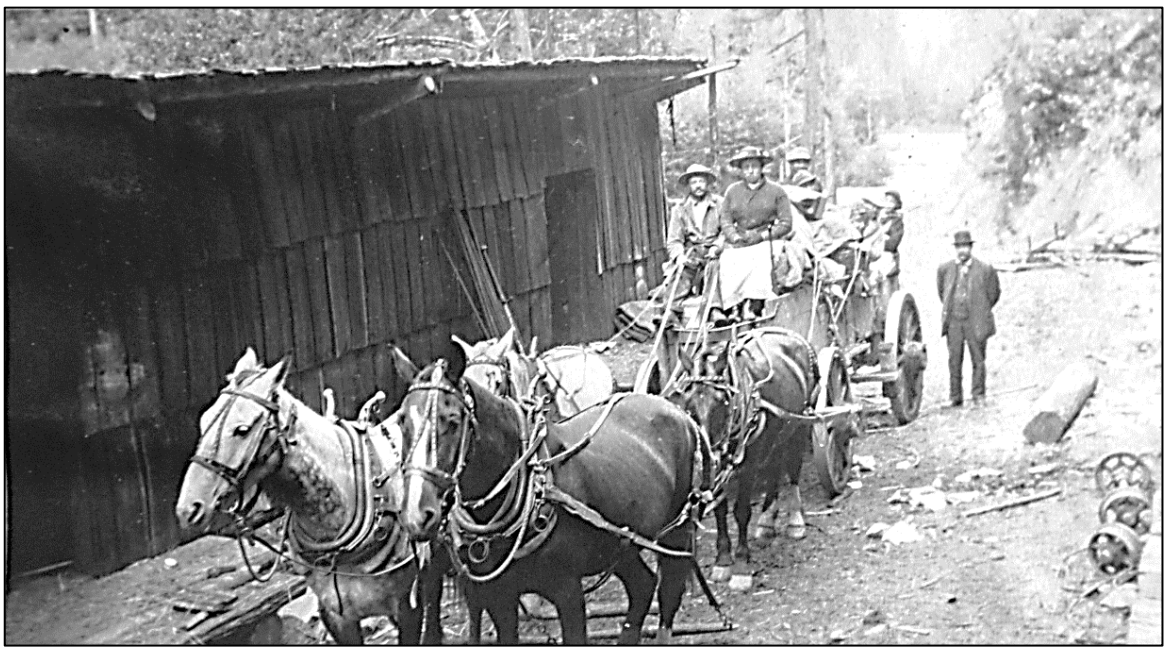


Figure 3.10. Branch of Storbo Road, Equipment Shed, and Mining Gear in Glacier Basin ca. 1916.
(Courtesy Paul T. Stangeland)

In his 1918 Annual Report, Superintendent Reaburn described the status of the road. By this time, MRMC had spent about $38,000 to construct about 10 miles of single-track wagon road up the northern side of the White River from the ranger station at Boundary Post 62 to Glacier Basin. The road was about 12 feet wide between ditches, and the bridges and culverts were 16 feet wide. In 1917 and 1918, the National Park Service repaired washouts and widened and surfaced the lower 3.5 miles of road. In 1917, the park spent $12,990 on about 3.5 miles of road between the White River entrance and Glacier Basin to make it passable for automobiles and trucks. The work was described as follows:

> New side hill construction 2,100 ft.;
> Graded and widened to 16' 3.6 miles;
> Surfaced 6" to 12" deep 2.0 miles
> Amount expended: Labor $4,370.24; Team and Truck Hire $1,412.13; Materials $890.93; Rented Equipment $600.00; Hauling $434.21; Subsistence $2,129.69; Total $9,837.20. 3 miles @ $3,285.73 [per mile].
> About $1,250…was expended in June 1918, in repairing the damage done by the floods of December 1917.[108]

The park's involvement in improving the upper portions of White River-Storbo Road declined as its focus shifted to construction of a new White River Entrance Station shown on Figure 3.11, and road connections to State Route 410 (then known as simply the State Road, or McClellan Pass Highway).

[108] Superintendent Reaburn's Monthly Reports, November and December 1917. (NARA Archives H2621 Files)

Accordingly, these less used and difficult to maintain sections of the road to Glacier Basin suffered from neglect.

Work on the road outside the park also began to stall as early as 1918 due to the outbreak of World War I. The slow-down left a 10-mile section between The Dalles and the park's White River Ranger Station incomplete. In the park, the road was closed altogether in 1919 because of washouts and slides. The park simply did not have funds to make the necessary repairs. Ironically, the park had just printed a visitors pamphlet showing and describing White River Road (see Figure 3.12).

> The Storbo Road from the White River Ranger Station on the northeast boundary of the park to Glacier Basin, 10 miles long, was constructed by the Mount Rainier Mining Co. under permit from the department for use in connection with their mining operations and is now open to the public. It is a one-way road, 12-14 feet wide with grades from 2½ per cent to 13½ per cent. The recent trail improvement and new trail construction has opened many beauty spots and scenic wonderlands, making them easier of access to the public.[109]

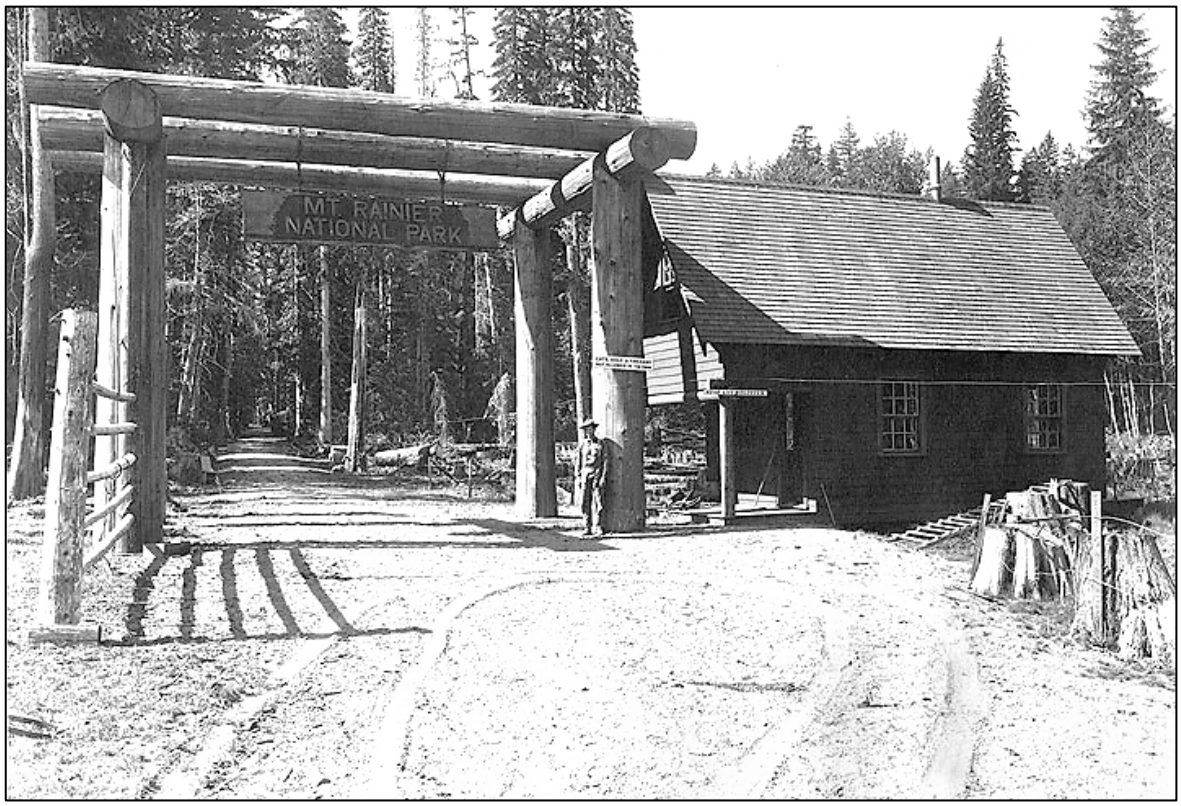


Figure 3.11. White River Entrance and Ranger Station in 1915.
White River-Storbo Road (aka McClellan Pass Highway) at Mount Rainier National Park entrance.
(Photo by Asahel Curtis courtesy Washington State Historical Society)

While some portions of Storbo Road deteriorated, the 29-mile section of highway outside the park from Enumclaw to The Dalles was completed and surfaced. In 1920-1921, the State Highway Department

[109] *General Information Regarding Mount Rainier National Park 1919: Season from June 15 to September 15.* Washington Government Printing Office 1919.

continued work on the 10 mile section between The Dalles and the White River Entrance; using funds from the Washington State Legislature and the Department of Agriculture. Improvements to this section of road provided visitor access to the east and northeast boundary of the park and to the Wonderland Trail.

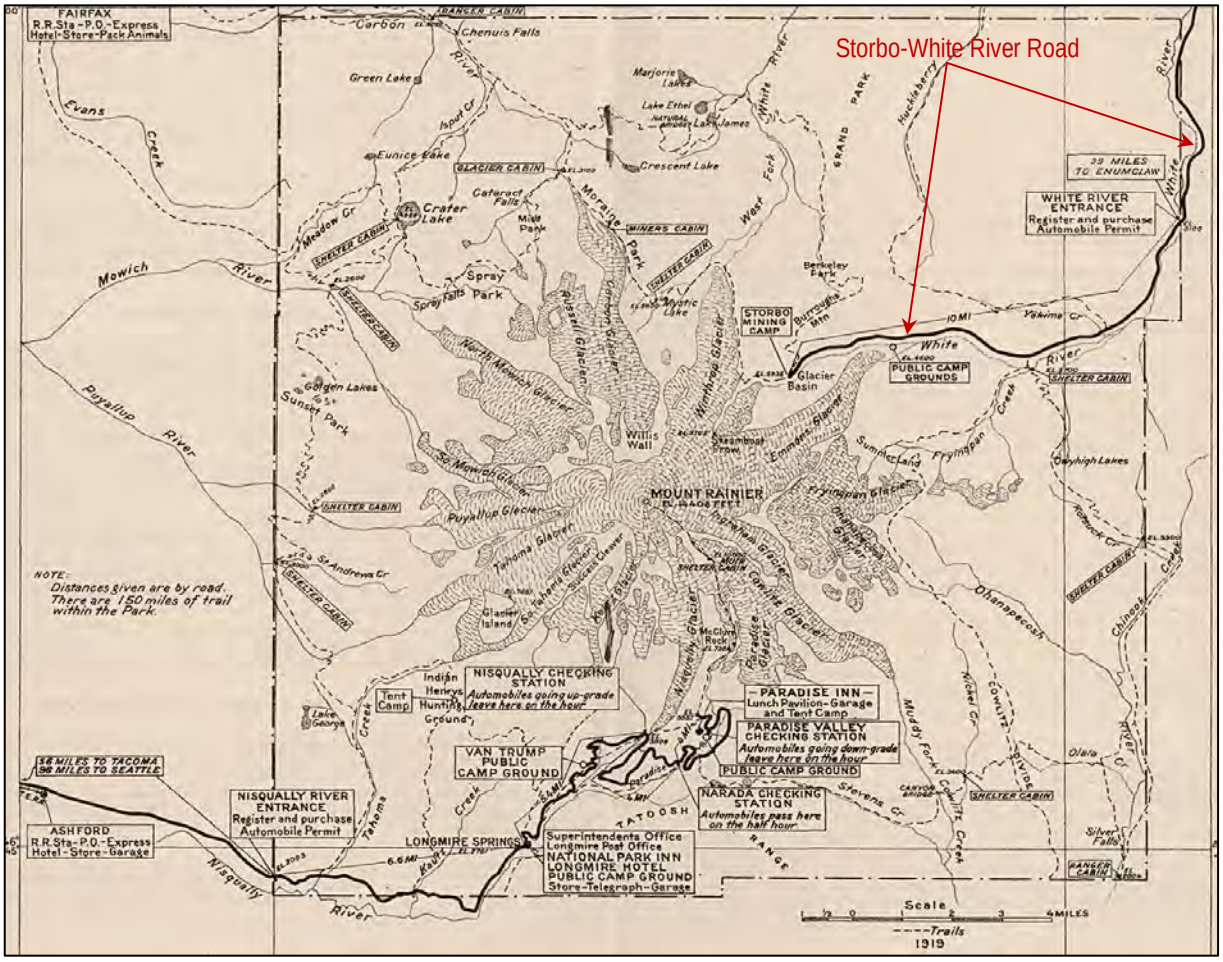


Figure 3.12. 1919 Map of Mount Rainier National Park Showing Drivable Roads. (MORA Archives)

Mount Rainier National Park Company, anticipating increased visitation to the area via the newly completed McClellan Pass Highway, built and operated a tourist camp on White River Road about four miles west of the park entrance. The camp was popular, but the NPS director expressed frustration that the park could not improve access to Glacier Basin for visitors. "Here is another case where we have been forced to lag behind in development and let the initial step in opening a new region be taken by private enterprise. Even now, we are not in a position to encourage the Rainier Co. in the extension of its White River plant, because we can not do a thing to improve the road in that region. With a comparatively small sum the old mining road could be made passable for automobiles to its terminus in Glacier Basin."[110]

In sum, by 1921, substantial improvements had been made to lower elevation sections of the White River-Storbo Road as can be seen in Figure 3.13. However, the upper nine miles of road into Glacier Basin had deteriorated to the point that it was not considered passable for automobiles. Mount

[110]1919 Report of the NPS Director, p. 81-82; 1912 Report of the director of the National park Service, p.79.

Rainier Mining Company, while pursuing patents for its claims, was doing little actual mining and could not keep abreast of road maintenance. Poor condition of the road notwithstanding, in 1924, Superintendent Tomlinson's mother reportedly drove her Dodge automobile up to Storbo Camp and stayed at Glacier Basin's hotel-boarding house described later in this chapter.[111]



Figure 3.13. White River Road Northeast of the Park Entrance ca. 1918-1920.
(Courtesy Arthur L. Storbo)

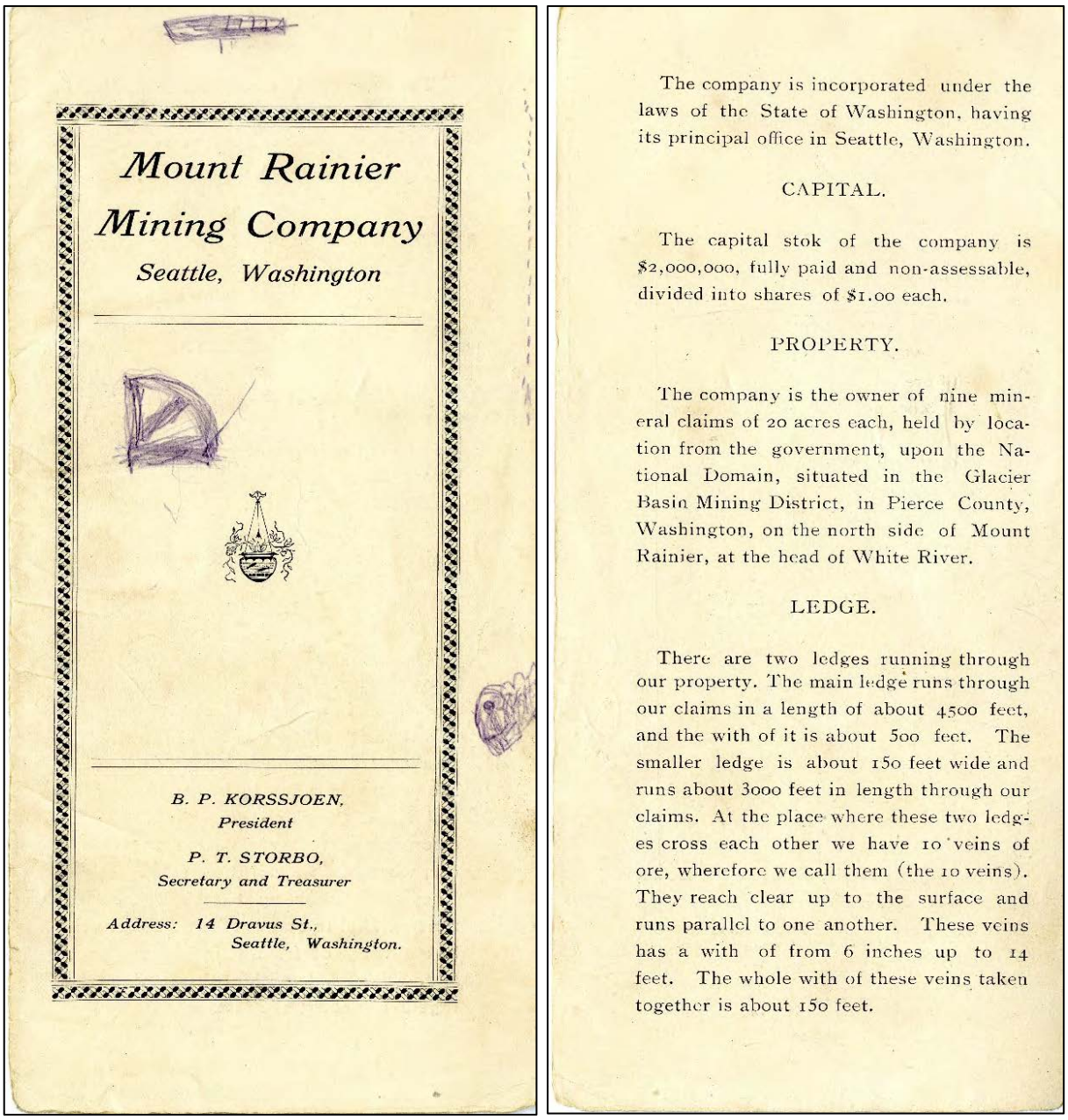
Mining Glacier Basin 1914-1921; The Future Seems Bright

By 1914, Mount Rainier Mining company had made substantial improvements to their facilities in Glacier Basin, and to their capacity to move ore from the basin to Tacoma smelters via the White River-Storbo Road. Even though that road benefitted park operations, the central reason that MRMC devoted so much capital and labor to the effort was to support Glacier Basin mining operations.

Earlier, we described registration, inspection, relinquishment, and leasing of MRMC claims during the early mining years in Glacier Basin. In this section, we turn to the company and its operations as MRMC became a more mature organization. Here, we focus on MRMC stocks, finances, facilities, mine patents, and Glacier Basin mines themselves. The story begins with the company's 1914 prospectus. Figure 3.14 is that document –doodle marks, corrections and all. It provides a glimpse into how MRMC viewed, and promoted, itself to current and prospective shareholders.

[111] Letter from Paul Schorrock to Jerry Sable, October 21, 1975. (NARA Archives L3023 Files, Fiche 67)

The basic tenor of MRMC's 1914 prospectus was that of a company on the verge of great things – copper veins were located, mine tunnels were begun, support facilities were built at upper and lower Glacier Basin settings, and the White River Road (State Road) connecting to rail lines at Enumclaw was nearly complete. The company also extolled the profits to be made in copper by reference to lucrative operations elsewhere; and hinted at a pending stock price increase from 50¢ to $1.00 per share.



Mount Rainier
Mining Company
Seattle, Washington

B. P. KORSSJOEN,
President

P. T. STORBO,
Secretary and Treasurer

Address: 14 Dravus St.,
Seattle, Washington.

The company is incorporated under the laws of the State of Washington, having its principal office in Seattle, Washington.

CAPITAL.

The capital stok of the company is $2,000,000, fully paid and non-assessable, divided into shares of $1.00 each.

PROPERTY.

The company is the owner of nine mineral claims of 20 acres each, held by location from the government, upon the National Domain, situated in the Glacier Basin Mining District, in Pierce County, Washington, on the north side of Mount Rainier, at the head of White River.

LEDGE.

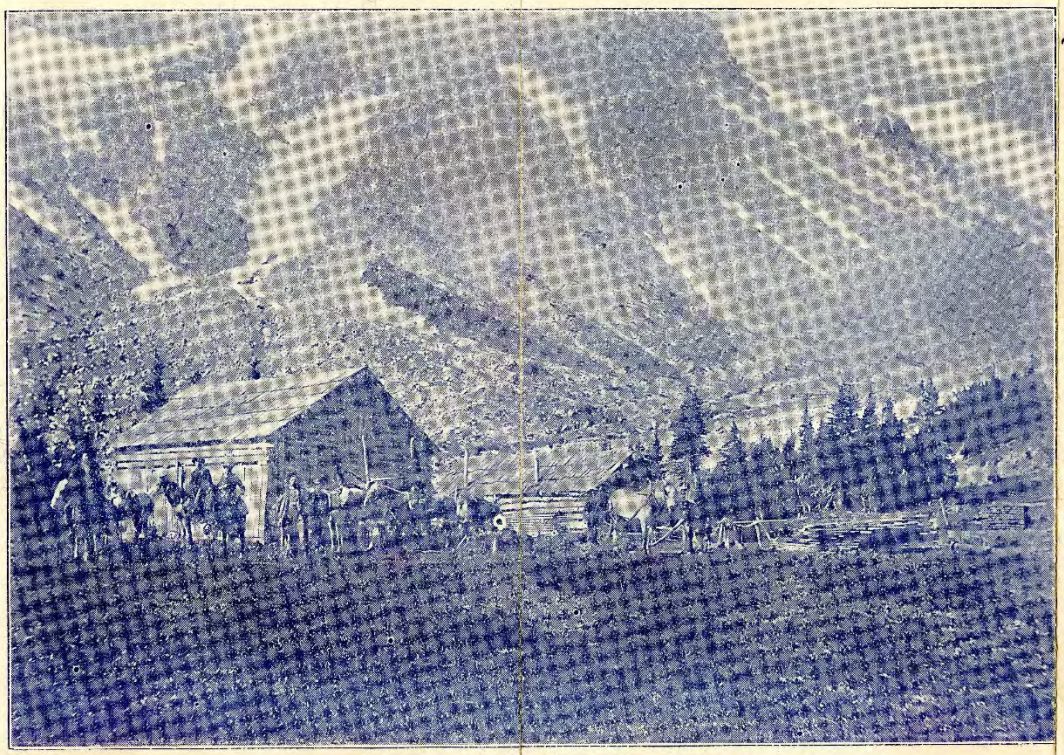
There are two ledges running through our property. The main ledge runs through our claims in a length of about 4500 feet, and the with of it is about 500 feet. The smaller ledge is about 150 feet wide and runs about 3000 feet in length through our claims. At the place where these two ledges cross each other we have 10 veins of ore, wherefore we call them (the 10 veins). They reach clear up to the surface and runs parallel to one another. These veins has a with of from 6 inches up to 14 feet. The whole with of these veins taken together is about 150 feet.

Figure 3.14a. 1914 Mount Rainier Mining Company Prospectus, Panels 1-2
(Courtesy Paul T. Stangeland)

DEVELOPMENT.

We have now 6 tunnels, constituting all together a length of about 1350 to 1400 feet, besides open cuts. 4 of the tunnels follows the veins of ore, and in these we have opened up veins of ore 3 to 14 feet wide, consisting of rich ore, which yields up to 32 per cent copper ($80.00), up to $7.00 of gold, and from a few cents up to $5.00 of silver per ton.

In the two cross cut tunnels we have in one of them cut across a vein of 4 feet, and in the other a vein of 8 feet of ore..



BUILDINGS AT THE LOWER CAMP

A large amount of additional work, consisting of open cuts and strippings, has been performed.

ORE.

The ore values are principally copper, gold and silver. Numerous assays have been taken from the various veins, and they have shown values ranging as high as $90.00 per ton. A test shipment of 500 pounds of ore taken from the No. 10 vein yielded $70.00 per ton at the Tacoma smelter.

Some of the different assays that have been taken:

GOLD		SILVER		COPPER	
Oz. per ton	Value per ton	Oz. per ton	Value per ton	% per ton	Value per ton
35 100	$7.00	1 20 100	.60	32 40 100	$81.00
34 100	$6.80	1 20 100	.60	28 76 100	$71.90
41 100	$8.20	2 40 100	$1.44	31 96 100	$95.88

IMPROVEMENTS.

At the upper camp the company has built a substantial log house, size fifteen feet by thirty feet. Also a power house and a blacksmith shop.

At the lower camp it has a lodging house, size fourteen feet by twenty-two feet, and a barn with a loft, size twenty feet by twenty-five feet.

A sawmill driven by water power has been installed below the lower camp to

Figure 3.14b. 1914 Mount Rainier Mining Company Prospectus, Panels 3-5

saw the timber needed for timbering in the mine and for other uses. An electric 40 horse power generating plant has been transported to the mine to be installed for the purpose of producing electricity to drive the air drills and for illuminating purposes.

About seventy-five thousand dollars has been expended in putting the mine in its present state of development, and in building a wagon road up to the mine — up to the beginning of the year 1914.

Road Constructions:

The distance from the mine to the nearest R. R. shipping point, at White River Saw-mill, 4 miles above Enumclaw, is 44 miles. From Enumclaw, 48 miles from the mine, the County and State have built a first class wagon road up along the White River Valley. This road is going to be built through to Yakima, and will pass by our mine at a distance of 8 miles. Twenty miles of this State Road is now finished, and of the 28 miles from thence and up to the mine the Mount Rainier Mining Co. have now built 23¾ miles, so there are only 4¼ miles left to be built in order to have a wagon road clear from the Rail Road up to the mine.

The freighting of ore to the Smelter will begin about the middle of this month, October, with about 4 tons a day. From the mine and 14 miles down the hauling will be done with horses and wagon; across the 4¼ miles the ore will be packed on horses, and the rest of the way, 26 miles, on Caterpillar Motor Truck, which can haul a load of 20 tons on train (trailers).

The packing on horses will be carried on for about two months while we are building the 4¼ miles. After the finishing of the road the shipping of ore from the mine to the R. R. will be carried on with Caterpillar Motor Trucks, both day and night, and with as many trucks as there can be blasted out ore enough for.

The work on the road and mining of ore has been going on steadily with a working force of up to 40 men; at present we have between 40 and 50 men, 3 horse teams and a few pack horses at steady work.

The difference in the cost of transportation of ore by Motor Truck instead of by Rail Way, a distance of 44 miles, will be from $1.50 to $2.00 per ton.

There are only a few thousand shares left to be sold at 50 cents per share. When these have been sold, if we should need to sell a few more shares after we begin to ship ore to the smelter the price will be advanced to $1.00 per share.

PROFITS FROM COPPER MINES.

The average person does not know or realize the tremendous profits derived from the operation of copper mines. The capitalization and dividend record of a few prominent copper mines are given below.

Name	Capitalization	Dividends paid to date.
Amalgamated	$153,887,900	$ 68,965,398
Anaconda	30,000,00	65,658,750
Arizona	$ 3,421,364	$ 16,419,759
Boston & Montana	2,500,000	63,225,000
Calumet & Arizona	2,000,000	13,757,024
Calumet & Hecla	2,500,000	117,660,000
Champion	2,500,000	7,100,000
Copper Range	38,418,500	12,864,197
North Butte	6,150,000	10,030,000
Osceola	2,403,750	10,977,300
Parrot	2,298,500	7,198,000
Phelps Dodge Co.	45,000,000	19,343,584
Quincy	2,750,000	20,127,500
United Verde	3,000,000	30,322,000
Utah	2,500,000	14,451,263
Utah Consolidated	1,500,000	7,200,000
Wolverine	1,500,000	7,140,000

Send subscriptions for stock and remittances by Postal Money Order, Bank Draft or by Registered Letter to the

MOUNT RAINIER MINING COMPANY,
14 DRAVUS STREET,
Seattle, Washington.

Notice:

In the column for Copper in the printed diagram of assays it is printed: Oz. per ton; it should be: Per cent. Also a cipher is omitted in the second line in the list of Copper mines.

Figure 3.14c. 1914 Mount Rainier Mining Company Prospectus, Panels 6-8

By 1915, the White River access road into Glacier Basin had improved sufficiently to allow heavy motorized trucks to haul ore from the mines to rail lines and on to smelters outside of the park –especially the American Smelting and Refining Company of Tacoma. Supervisor Reaburn's 1915 report on MRMC stated that "The ore is said to carry gold, silver and copper, principally copper, assaying from $80 to $125 from *handpicked* samples.[112]

Over the next few years, MRMC sent out shipments of hand-sorted ores, as summarized in Table 3.3 below. Although the size of the ore shipments and percentage of copper in each shipment varied during these years, the results apparently held enough promise to attract investors. Reaburn's 1916 annual report stated that "The Mount Rainier Mining Co. has made several shipments of ore, which assays about $60 per ton…"

Table 3.3. Production from Storbo Mine by Mount Rainier Mining Company

Date of Shipment	Ounces Per Ton			
	Ore, tons	Gold	Silver	Percent Copper
Nov 1915	4.983	0.08	4.79	14.27
Jun 1916	10.039	0.05	4.4	12.77
Oct 1916	34.374	0.05	3.76	11.37
Oct 1917	18	--	2.61	8.56
Oct 1926	7	--	0.71	6.2
Oct 1927	47.374	0.03	2.38	13.5
Oct 1928	5	--	2	9.4

Source: *Report On The Examination Of The Mount Rainier Mining Company Claims, Mount Rainier National Park*, E.A. Magill, 1966 (NARA Archives L3023 Files Fiche 67-68).

The future looked particularly bright in 1917, less from assayed and smelted ore *per se* (little was shipped that year), than from the favorable tenor of a mining engineer's report on Snowflake and Stronghold No.1 claims. Mining engineer, A.E. Bryan, who apparently had been involved in earlier Glacier Basin assessments, submitted his report on August 10, 1917. We include his report in its entirety because it 1) effectively describes the state of Glacier Basin mining operations at the time; 2) discusses the geological features upon which he based his optimistic assessment; 3) presents assayed valuation of samples from each mine; 4) describes favorably the state of MRMC's Glacier Basin facilities; and importantly 5) helps us understand how Peter Storbo and his company could be so vigorously enthusiastic in promoting the value of Glacier Basin operations to present and future stockholders.

[112] Handpicking samples for transport to the smelters was common practice, since the difficulty and cost of transmitting lower grade ores was substantial. The problem prompted MRMC officials to consider installing heavy ore concentrating machinery in the basin to elevate the copper fraction of the shipped ores.

REPORT OF THE MINING PROPERTIES OF THE
MOUNT RAINIER MINING COMPANY [113]

Mr. P.T. Storbo, President,

Dear Sir:- Complying with your request for my opinion of your mineral claims, which you are now developing adjacent to Mt. Rainier, and which I visited and examined several years ago, I submit the following:

ACCESS TO PROPERTY:

These mining claims are reached from Enumclaw, a station on the Northern Pacific Railroad, and thence by automobile 47 miles to the property. Since my former visit to your property, which I accomplished on pack mule, over rather indifferent trail, I was very agreeably surprised to find a magnificent roadway, (completed with the exception of some surfacing on the upper end) which the Federal Government, with a large force of men, is finishing at the present time.

GENERAL DESCRIPTION OF PROPERTY:

The property consists of nine mineral claims, which are held by location and possessory title. Also a mill site, power site and camp site of 70 acres on lease from the Government. I found the development work to be principally performed on the Snowflake, the Peach and the Stronghold No.1, therefore I confined my attention chiefly to them. All the above mentioned mineral claims are located on the Western slope of the Cascade Mountain Range, Glacier Basin mining district, Pierce County, Washington, at an altitude ranging from 5920 ft. at Lake Camp, to 8000 ft. on Stronghold No.2.

GEOLOGICAL FEATURES:

The prevailing country rocks are ryolite [rhyolite], diovite [diorite], porphyry and phonolites. The main ore body, and the largest exposures of ore are found to exist in what I would term a heavily stained and well mineralized zone of porphyry, having a trend or course of North-easterly and Southwesterly, with a dip to the South, and is easily traceable the entire length of four claims, and can be readily observed from Headquarters or Lake Camp. There are numerous stringers or veins, carrying copper, gold and silver values, varying in width from 2 in. to 40 ft., running through and with the body of porphyry. I wish to call your attention to the strong resemblance I found to exist between this porphyry and that of Bingham, Utah, where those famous copper mines are now producing such vast amounts of the metal. I might also mention that the ores of Butte, Mont. are closely associated with porphyry. I find that the said zone of porphyry, when reaching the Westerly end of your property, to be divided by an eruptive dike of ryolite, thus separating it into two distinctive parts. The Southerly part, on which are located the Peach, Snowflake and Stronghold No.2, I consider the most promising of all your claims, and I recommend that you concentrate your energies on the above named claims.

DEVELOPMENT

The development on the Snowflake consists of two tunnels, designated as the Upper and Lower. The Upper tunnel has been driven a distance of 264 ft., following a seam of high grade ore, from 2 in. to 3 ft. in width, carrying values up to $65.00 per ton. At a point about 210 ft. in, a cross vein was encountered, from which I procured an average sample of 10 ft., which I had assayed by Falkenburg & Laucks, of Seattle, Wash., the result of which you will observe on the attached assay

[113] *Report of the Mining Properties of the Mount Rainier Mining Company,* A.E. Bryan. August 10, 1917. Original copy courtesy Paul Stangeland. Copy on file at MORA Archives.

certificate, and marked No.2, total value per ton $35.30. I consider this result very encouraging, as it certainly proves beyond doubt that as depth is attained on the porphyry zone, the values increase. Since my former visit, your company has driven a *second tunnel* 130 ft. lower down the mountain, a distance of 556 ft., and following the same vein as occurs in the Upper tunnel. There has been considerable cross-cutting and stopes opened up in this tunnel, from which your company has made three shipments to the Tacoma Smelter, of 49 tons, which netted $60.00 per ton. An average sample of 3 ft., which I took in the stope, and marked No.1, gave $90.60 per ton. The general character of the ore is chalcopyrite, but at a point 355 ft. in Lower tunnel, I observed a change from the lower grade chalcopyrites to a higher grade sulphide [sulfide], commonly known as copper glance, carrying $144.70 per ton, and designated No.6 on certificate. There has been such a large volume of water encountered in the tunnel, which your management has utilized for power in furnishing fresh air to the workmen. Of course, these shipments represent the higher grade ores, and the lower grades are being kept in reserve at the mine, awaiting the erection of a concentrating plant, the machinery for which is already purchased and on the ground, but not erected. In examining the Lower tunnel, I detected the presence of several dikes of phonolite, similar to the formation of Cripple Creek, Colo., where they contain very high values in gold. Wishing to ascertain if these carried any values, I procured several pieces from the various characters, with a result of merely 30 cents per ton. However, it is possible that in your future exploration work, you may encounter a rich pay shoot on these phonolites, and I would advise assaying them occasionally.

The development of the Stronghold No.1 consists of several open cuts, and a tunnel driven 65 ft. on one of the veins. One sample of selected ore (No.5), which I sampled from the face of said tunnel, gave the highest value of any on the list, $163.70 per ton. There are 10 parallel veins outcropping on this claim. A sample from the outcrop of No.2 vein gave $44.40 per ton.

HOUSES, TIMBER AND WATER:

There has been erected on the camp-site one of the most substantial, commodious and thoroughly modern two-story frame buildings, with a full basement and granite foundation, 36x70 ft., for the accommodation of the men, and for office purposes, every part electric lighted and water piped. There yet remains to be completed some inside finishing. This building is certainly a credit to the ability of the management. There are several cabins, one barn, blacksmith shop, also a saw mill with a capacity of from 6,000 to 10,000ft. per day. Machinery for 100 ton concentrator is on the ground. A complete lighting and power plant, with two Pelton wheels, and Turbine wheels for domestic and power purposes, installed and in operation. A tramway from the tunnel to the roadway is already constructed, and it is the intention of the company to construct an aerial tramway from the mine to the concentrator. There is an abundance of timber in neighborhood of the saw mill for all purposes, and of a good quality. There is plenty of water for all power, concentrating and other uses.

RECOMMENDATIONS:

Taking into consideration that the work performed in your two Upper tunnels, has proved beyond any doubt that the values and the continuity of the ore bodies are permanent, I would advise starting your main working tunnel at a point I specified to your manager, when on the ground. Dimension of tunnel to be 6 by 7 ft. in the clear. My reasons for this are: 500 ft. greater depth attained than at present. Less danger from snow or rock slides. Cross-cutting all the parallel veins. Lessening the cost of gauge to concentrator, and nearness to camp, also the great possibility of encountering any blind veins that may exist but do not outcrop on the surface.

OPINION

In summing up my conclusions, I wish to call your attention to the increased values in your ores as depth is attained, and proved by the attached assay certificate; to the ideal character of the ore from a concentrating standpoint for the lower grades; and above all, to the honesty and integrity of your officials, as amply proved by the high grade nature of the vast improvements visible at every point, I must conclude that your property, in my estimation, has a wonderful future, and you are fully justified in further development.

Respectfully submitted,
ARTHUR E. BRYAN, M. E.

Seattle, Wash.
August 10, 1917

It is interesting to note the extent of the improvements made to MRMC's operation in the three years that passed since the 1914 prospectus. Notably, the hotel is built, the power plant is done, electrical power and water is widely available in the lower camp, machinery for the ore concentrator is in place (if unassembled), and a partially completed aerial tramway is in place to transport ore from Snowflake Lode mines to the road. The overall positive tenor of the report undoubtedly was encouraging to MRMC officials. References to similarities with exceptionally productive copper mines in Bingham, Utah and Butte, Montana, and reference to increasing ore values with depth may have played a key role in encouraging the company to push-on even as the predicted values failed to appear. Echoes of these statements seem to resonate in the company's *Mountain of Copper* letter discussed in Chapter 4 –a letter with fateful consequences for the company and its president Peter Storbo and his uncle Bernt Korssjoen. But for the time, the future did indeed seem bright for mining Glacier Basin and for the Mount Rainier Mining Company.

Mount Rainier Mining Company; Stocks, Officers, Facilities, and Finances

Stockholders and Officers

Peter Storbo was able to convince friends and relatives in the Midwest and Northwestern United States that Mount Rainier Mining Company was an unbelievably fine investment. He was thus able to raise money for development of the mines by selling MRMC stock. In some cases, relatives and friends invested their life savings. The November 1915 report from Supervisor Reaburn to the Secretary of the Interior[114] stated that the MRMC was trying to sell two million shares of stock at 50 cents per share. B.P. Korssjoen and P.T. Storbo each owned a one-fourth interest in the company. Ole E. Olson, the company's General Manager, was paid a salary that was part cash and part MRMC stock.

With park permits and leases in place and promising assay reports in hand, stock sales from March 31, 1915 to March 31, 1916 amounted to $44,620.67. MRMC reported that a total of $43,756.48 was spent on development of the property during that same period.[115] The 1916 annual stockholders meeting report simply states that "The president expressed himself with pleasing remarks concerning our progress

[114] Letter from Supervisor Reaburn to the Secretary of the Interior, November 3, 1915 (NARA Archives L3023 Files, Fiche 58)

[115] *Report On The Examination Of The Mount Rainier Mining Company Claims, Mount Rainier National Park*, E.A. Magill, 1966. (NARA Archives L3023 Files, Fiche 67-68) This information is also available in the MRMC *Annual Stockholders Meeting* report of April 11, 1916.

during the last twelve months, and emphasized promising outlook for the coming year." MRMC officers in 1916 (the year prior to Bryan's glowing mining report) were B.P. Korssjoen, President; P.T. Storbo, Secretary; G. Torrison, Treasurer; and O.E. Olson. These men, plus P.L. Stangeland from Astoria, Oregon were elected to the board of Trustees. Photo Figure 3.15 was taken later that summer of Mr. Stangeland with some of the MRMC officials and stockholders in Glacier Basin.

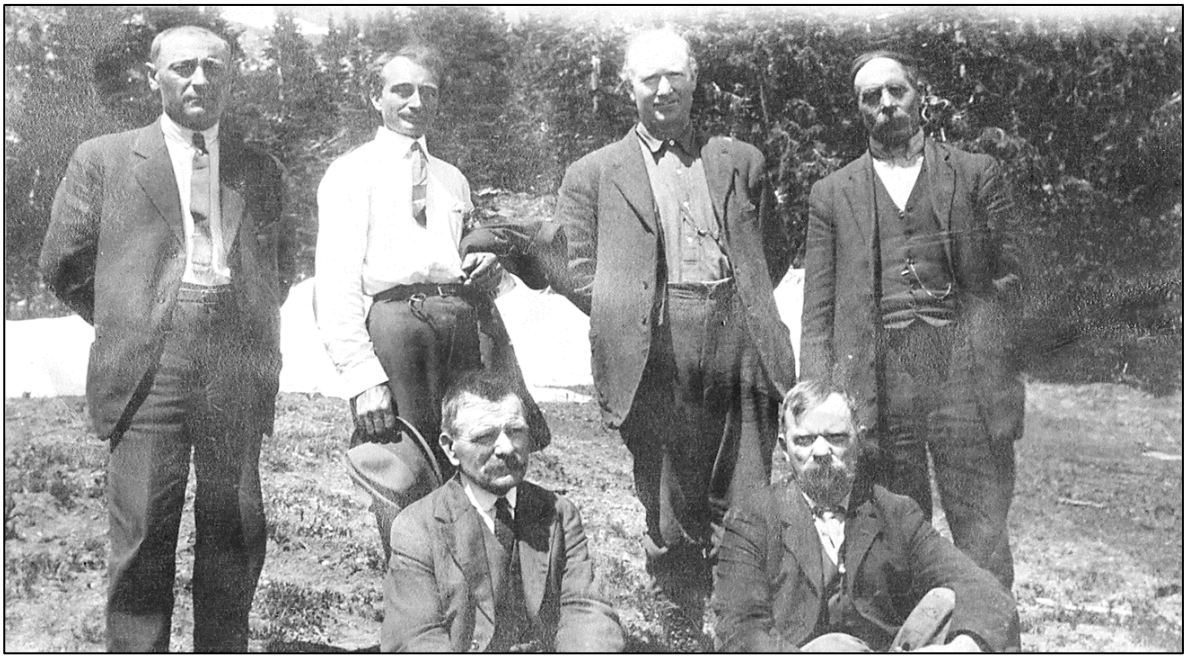


Figure 3.15. MRMC Officers and Stockholders. Glacier Basin 1916.
Standing left to right: Unknown (possibly O.E. Olson), Thomas Englehorn, Unknown (possibly lower camp foreman Gunderson, or G. Torrison), Paul L. Stangeland. *Seated:* Bernt Korssjoen, Peter Storbo.
(Courtesy Paul T. Stangeland)

Throughout this period, Mount Rainer Mining Company relied primarily on stock sales for development and operating funds. While waiting for funds from investors, the company depended on financial loans backed by stock shares. In these early years, Thomas Englehorn, of Churches Ferry, North Dakota sold stock for the company in the upper Midwest. He also loaned the company $1,000 to $2,000 at a time at 8% interest. In 1919 and 1920, Englehorn lent $3,000 and bought $5,500 of notes from other lenders "for some purpose" –which turned out to be an attempt to gain controlling interest in the company.[116]

Mount Rainier Mining Company Facilities and Financial Status

The rapid progress in development of MRMC Glacier Basin facilities and financial worth between 1914 and 1920 can be seen in annual park superintendents' reports, and in company reports to the park. The 1915 Annual Report by Park Supervisor Reaburn described the Mount Rainier Mining Company's improvements at Glacier Basin at the time.

[116] R. D. Waterhouse reported October 20, 1932 to Superintendent Tomlinson on "Status of Alienated Land" in the park. Information he furnished concerning the Mount Rainier Mining Co. (NARA Archives L1425 Files, Fiche 14)

> In addition to the old cabin 16' by 38' and the old barn 18' by 32' located on the relinquished claim, Lake City, and now used by the company under their permit, they have a power plant and saw mill located on the relinquished claim, 'Turtle,' a 700 foot tunnel on the five claim group, two tunnels of 240 feet and 300 feet depth on the four claim group, and an aerial tram about 800 feet long leading from a point near the wagon road up to one of the tunnels on the four claim group.[117]

In 1915, the total stock value of the company was 1,500,000 shares at 25 cents; totaling $375,000. The stock was sold at 50 cents a share with a bonus of one share from Storbo and Korssjoen which brought the stock cost to 25 cents a share. Sater, Englehorn, Limpright, Charles Studness (of Churches Ferry, North Dakota), Torrison, and several others were reported to be "financially responsible, with several hundred thousand [shares] each."

By October 1916, the company had made some substantial developments at Glacier Basin as summarized in a report by Supervisor Reaburn.

> The Mount Rainier Mining Company has been operating for several years under permit from the Department, on the development of their claims in Glacier Basin. During the past three seasons they have constructed a wagon road up the White River Valley to Glacier Basin, 23 miles long, 11½ miles being within the park and 11½ miles in the forest reserve. The total cost of this work to date is $69,965.00, of which $38,500 has been expended within the park.
>
> They have also driven 1,860 feet of working tunnel at a total approximate cost of $37,200 or $20 per foot, of which 1,060 feet is on the upper five claims and 800 feet on the lower four claims.
>
> The company has also constructed the following: An electric light and power plant 2,400 volts with 4,000 feet of transmission line at an approximate cost of $8,860. A blacksmith shop and horse barn at an approximate cost of $1,530. A hotel and boarding house, with full stone basement, electric light, sewer and water system, ground area 36 by 70, dining room capacity of 120 people, upstairs rooming capacity 40 people, approximate cost $11,000.00. A saw mill of 6,000 feet daily capacity at an approximate cost of mill and machinery connected with it of $5,000. Tunnels and snow sheds in front of working tunnel at a cost of $900. Water and sewer systems at a cost of $1,200. The company also has on hand machinery for a 100-ton concentrator and water power wheels connected with same, the cost of which was $7,960.[118]

Figure 3.16 is a photograph taken in 1916 in front of the barn and cabin in Lower (Storbo) Camp's meadow. It shows MRMC workers and families, and the company's recently purchased Jeffrey quad-truck. Peter Storbo and other company officials hoped that the truck would successfully negotiate Glacier Basin's rough roads loaded with 50-pound sacks of copper ore. Reliable ore shipment from the mines to Tacoma for smelter was, of course, vital to the anticipated success of mining Glacier Basin.

[117] NARA Archives L3023 File Fiche 58. The tram extends from the road to the tunnels because an ore concentrator is not yet in place.

[118] Supervisor Reaburn to Superintendent of National Parks, Report on Mining Claims, October 2, 1916. (NARA Archives L3023 Files, Fiche 61) These essentially are the improvements seen and reported by A.E. Bryan in his 1917 mining report.

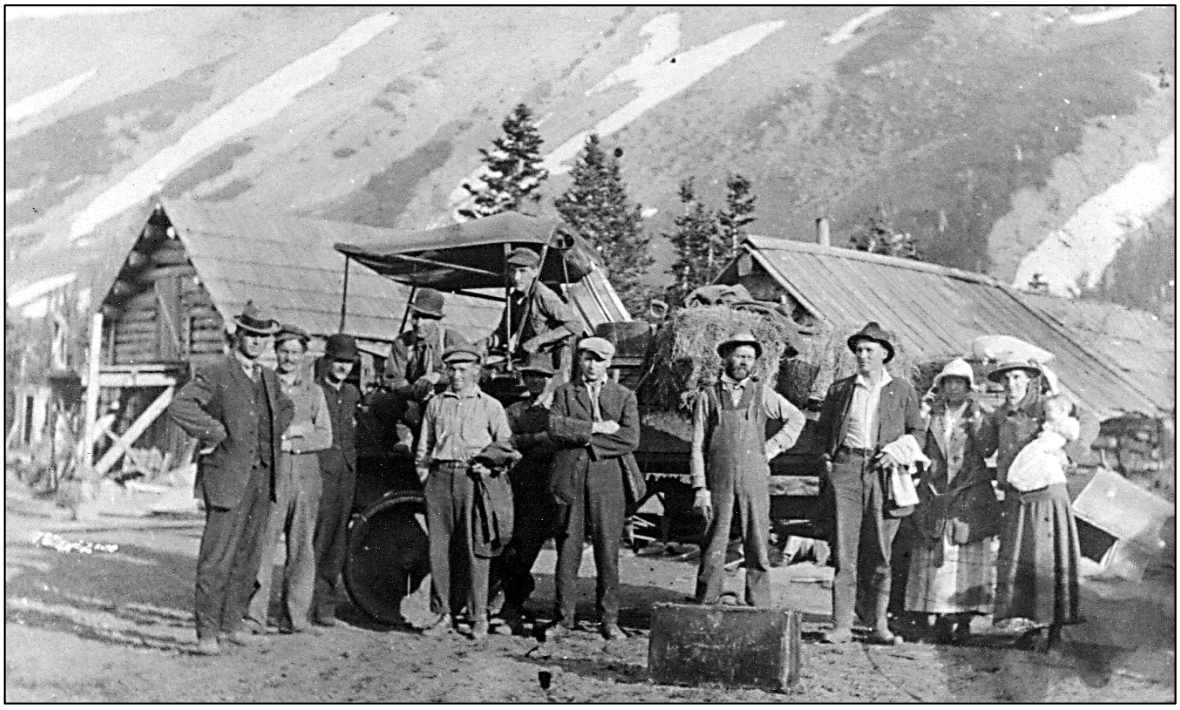


Figure 3.16. MRMC Crew, Crew Families, and Jeffrey Quad-truck; Lower Camp Meadow, 1916.
(Courtesy Arthur L. Storbo)

Three years later, Peter Storbo provided information to the Park regarding the status of the company on September 6, 1919;[119] summarizing the stock value, assay results, progress on road work, size and type of structures and development and mining costs. The Mount Rainier Mining Company officers were listed as President Charles Limpright of Marysville, Washington; Vice President: L. Sater from Starkweather, North Dakota; and Secretary/Treasurer: G. Torrison of Seattle, Washington. Stockholders were P.T. Storbo of Enumclaw, Washington at 150,000 shares; B.P. Korssjoen of Enumclaw, Washington at 150,000 shares; Tom Englehorn of Churches Ferry, North Dakota at 80,000 shares; and "Various" from North Dakota at an unstated share rate.

In 1919, the MRMC held nine Glacier Basin claims, each about 20 acres in size. The claims were surveyed in 1918, but had not been patented. Storbo planned to apply for patents in 1920 at a cost of $150 per claim. The assessment work on each claim met the minimum yearly requirement of $100 of work per claim. A total of $373,000 was reportedly spent prior to 1919.

Peter Storbo reported that the hand-picked ore that had been previously shipped out totaled $5,000 to $6,000; one of the shipments from 1916 netted $46 to $52 per ton. He reported that "The best ore vein is about 2.5% copper,[120] with enough gold ($.40 to $1.60/ton) and silver to pay freight and milling." He estimated that if the copper was valued at 15 cents/lb, the ore would be valued at $60 a ton. The ore was trucked a total of 47 miles: 19 miles to The Dalles, then 28 miles from The Dalles to Enumclaw, from where it was shipped by rail to Tacoma. The mining, shipping and milling costs were listed as follows:

[119] NARA Archives L3023 Files, Fiche 61.
[120] This seems to conflict with the 1916 assay report of 12.77% copper.

Cost of mining: $ .40 to 1.60 per ton.	Say $1.00.
Cost of milling: $ .20 to .60 per ton.	Say .50.
Cost of trucking : $35/day, 10 tons per truck.	5.00.
Cost of freight	.30.
Total	$10.00 approx.

Storbo also listed other expenditures. Machinery on site included a 50-ton concentrating plant (varies from the 100 ton concentrator machinery reported by Reaburn in 1916), sawmill, transformers and generator:

2 story house 36'x70' Boarding & bunk house	$4,700-5,000
28 miles of road	$73,000
Machinery	$3,000
All 3,000 ft, of tunnel at $23/ft.	$69,000

In 1921, MRMC began applying for patents for the eight Glacier Basin claims: Orinda Lode, Peach Lode, Snowflake Lode, Washington No.1 and No.2 Lodes, Stronghold No.1 and No.2 Lodes, and Mary Lode. The Park Service, opposed to patenting the claims, immediately filed "forms of protest" to the General Land Office alleging that the MRMC claims could not demonstrate there was "valid mineral discovery."[121] The challenge ultimately was unsuccessful, and the MRMC patents were approved in 1924. In the meantime, MRMC did not pay for mining permits from 1920-1921. Later, in 1925, the park attempted to collect retroactive permit fees for the preceding years.

MRMC Patents Eight Glacier Basin Claims

As the 1920s began, Mount Rainier Mining Company continued to expend time and financial resources toward building Storbo Road, expanding tunnels, building structures for crew housing, and processing ore and timber. The company also wanted more control over the property on which they had invested so much. In 1920, MRMC President Charles B. Limpright began planning to patent company claims; notifying Park Superintendent Roger Toll of his intentions. Toll, in turn, notified NPS Director Stephan T. Mather. A plat map of the claims was prepared by Robert. F. Scott, U.S. Mineral Surveyor depicting the Peach, Reven, Snowflake, Orinda, Washington No.1, Washington No.2, Stronghold No.1, Stronghold No.2, and Mary Lodes. The plats were approved by the Surveyor General Office in Olympia.[122] At the time of the survey, Scott estimated that the value of the improvements made by MRMC was $27,582.50.[123] In June 1921, MRMC officially applied for two patents at the U.S. Land Office in Seattle –*Serial No. 04734, survey No. 1148* for the Peach, Orinda, and Snowflake Lodes; and *Serial No. 04735, survey No. 1149* for the Washington, Stronghold and Mary Lodes. The Reven Lode was not patented. These patents are shown on Figures 3.17 and 3.18.

[121] Letter from Superintendent Peters to G.A.C. Rochester, Register, U.S. Land Office, June 27, 1921. (NARA Archives L3023 Files, Fiche 60)
[122] NARA Archives L3023 Files, Fiche 60.
[123] Mineral Survey Plat Maps No.1148 and 1149, surveyed by Robert F. Scott, approved by U. S. Surveyor General E. A. FitzHenry. (NARA Archives L3023 Files)

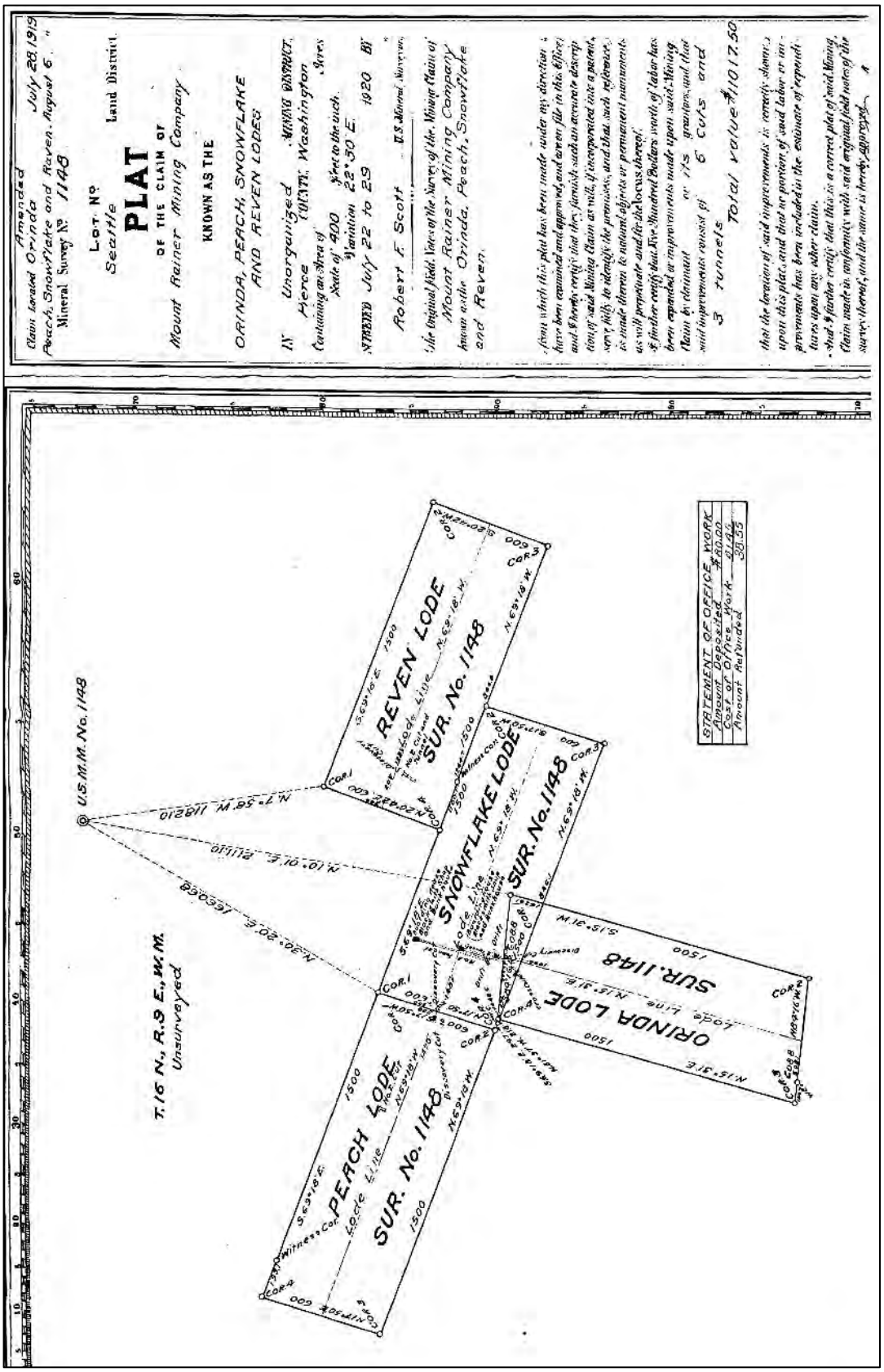


Figure 3.17. 1920 Mineral Survey Plat Map Showing Orinda, Peach, Snowflake, and Reven Lodes.
This is the *Four Claim Group (Lower Camp Area)*. Only Reven was not patented. (MORA Archives)

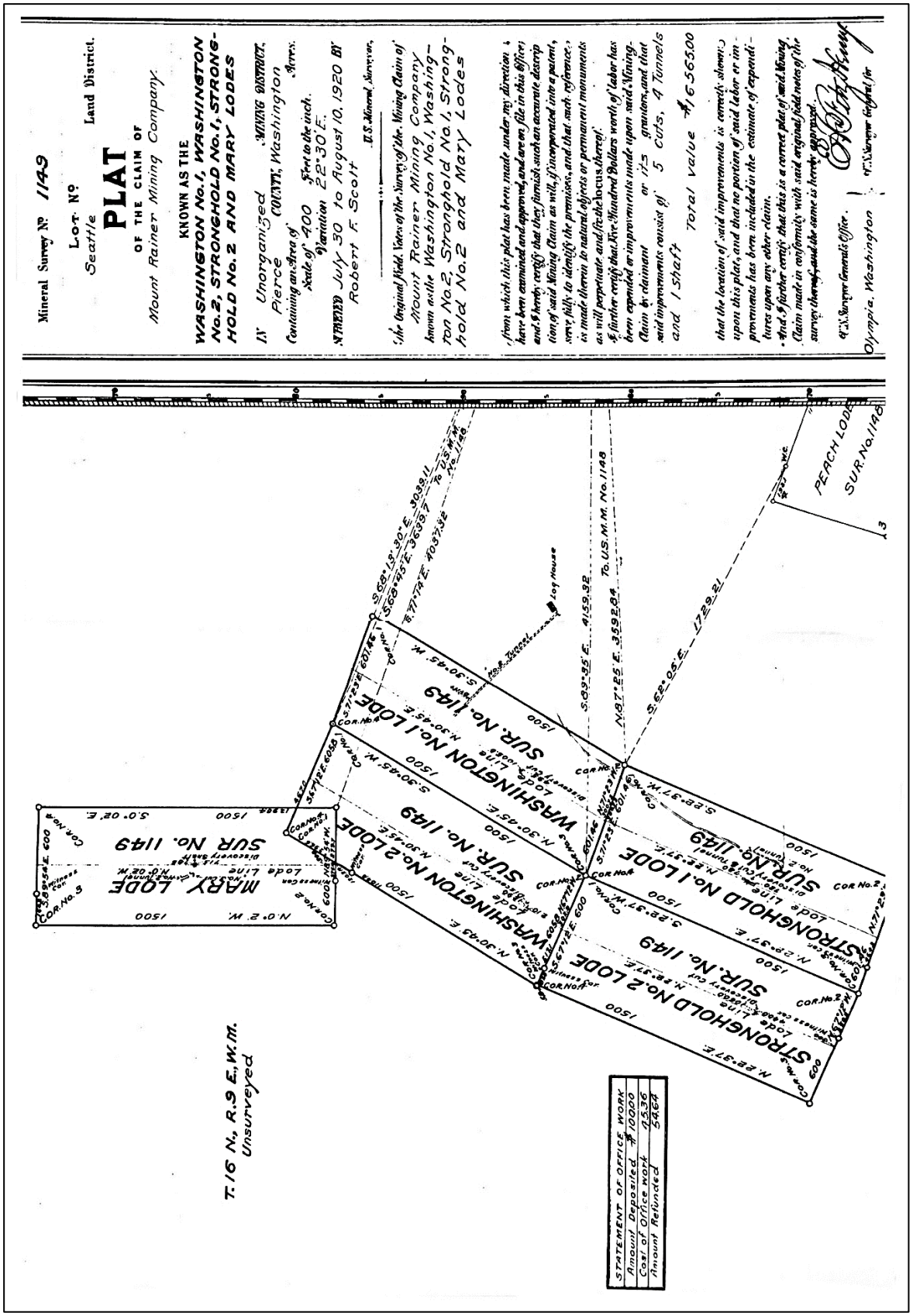


Figure 3.18. 1920 Mineral Survey Plat Map Showing Stronghold, Washington, and Mary Lodes.
This is the *Five Claim Group (Upper Camp Area)*. Notice the Tunnel and Log House south of the Washington No. 1 Lode. (MORA Archives)

The U.S. Land Office in Seattle posted a notice of the patent applications and described the claims as "…veins, deposits and mines bearing gold, silver, copper and other valuable minerals, all constituting one group of claims and situated in the unorganized Mining District on Mount Rainier in unsurveyed Township 16, North, Range 9 E. W. M., Pierce County, State of Washington…" Each lode was listed and described in detail referenced to a physical location –a marked U.S. Mineral Monument or a chiseled stone. Each plat map of the lodes was referenced to the same inscribed granite boulder mineral monument at the west end of the Glacier Basin meadow. That datum mark survives in Glacier Basin to the present on the boulder shown in Figure 3.19.

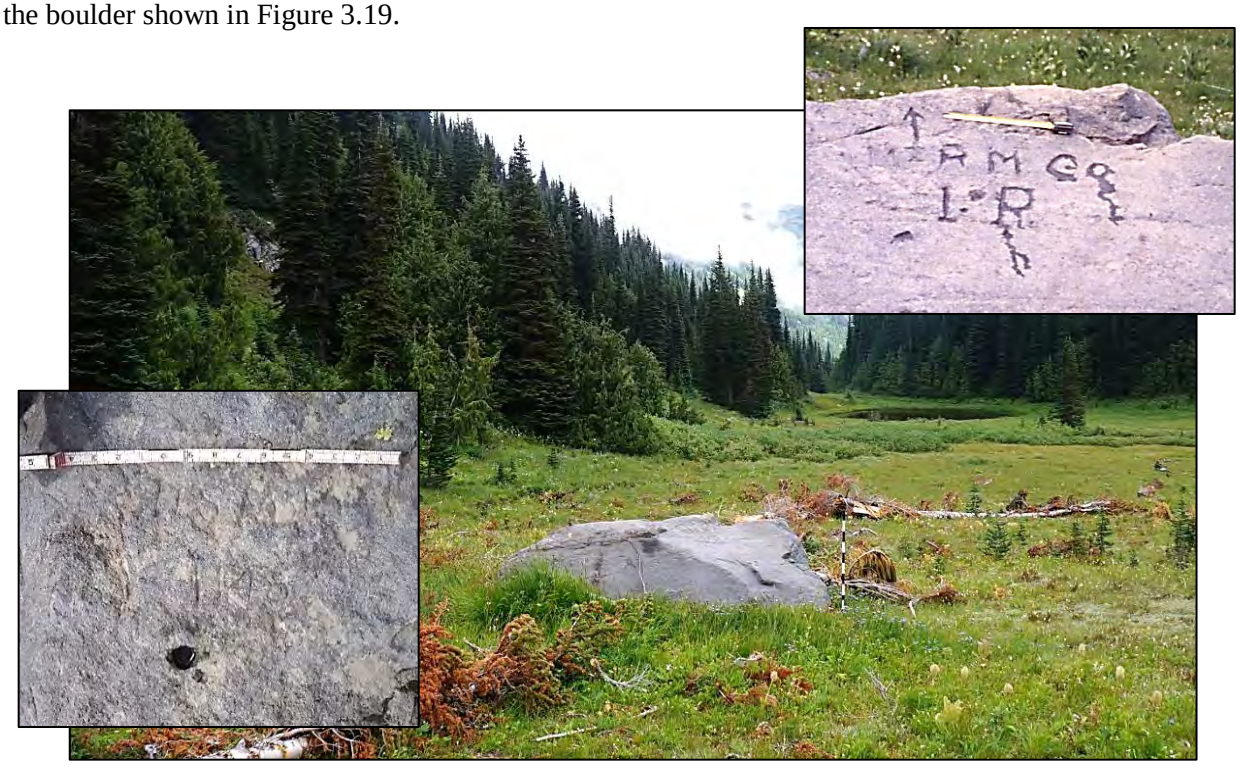


Figure 3.19. MRMC Mineral Monument Datum in Glacier Basin Facing East.
Inscriptions read: "Mt. R M Co/ I. P." (*upper right)* and "US MM/1148" *(lower left)*.

The National Park Service acted quickly to file an adverse claim to the patents within the allotted 60-day time period.[124] The park was opposed to patenting, because patented claims would provide the MRMC with clear title; making the properties essentially private inholdings within the National Park. Letters and telegrams were exchanged between Park Superintendent Peters and the Director and Assistant Director of the National Park Service in Washington D.C.. Claim maps and files were gathered and reviewed. Assistant Director Arno B. Cammerer, advised Peters to "file adverse claims with the Register and Receiver General Land Office in Seattle, and with Harry E. Laughlin, Chief Field Division Portland, Oregon basing claim [on] no valid mineral discoveries made." Peters wrote "It is recommended that prompt action be taken to defeat the application for patent." [125] Peters' use of telegrams indicates that he regarded this as an urgent matter, and that he did indeed take prompt action.

[124] U.S. Land Office Notice July 11, 1921. (NARA Archives L3023 Files, Fiche 60)
[125] Correspondence between Assistant Director Cammerer to Superintendent Peters, June, 1921. (NARA Archives, L3023 Files, Fiche 60)

Superintendent Peters submitted the following protests to the Register and Receiver, U.S. General Land Office, on Department form 6-2521:

> Sirs:
>
> It has been represented to me that there is good and sufficient reason why the Mineral Application to Patent Serial No.04734, of the Mount Rainier Mining Company of 816 White Building, Seattle, Wash., made on June 11, 1921 embracing the Orinda, Peach and Snow flake lode mining claims, Mineral Survey No. 1148, Section Unsurveyed, Township 16 N. Ranger 9 E. Willamette Meridian, should not be permitted to proceed to patent until the validity, invalidity, thereof has been carefully investigated and determined, it being alleged that said entry has not been initiated, or maintained, in accordance with the law authorizing such entries. You are, therefore, hereby advised that it is my purpose promptly to proceed to such an investigation; and I do now and hereby protest against the acceptancy of any proof which may be submitted in support of said entry, or the issuance and delivery to said entry and of any evidence of right or title to the lands covered thereby, requesting that my said protest may be by you duly noted upon the records of your office, to the end that the same may become and be known to all persons who may in anywise be interested in said entry, and that, thereafter, it may by you be duly forwarded to the Commissioner of the General Land Office, at Washington, D. C., for his information in the premises.[126]

The General Land Office did not have a mineral examiner available to investigate the MRMC claims until June 1922. At that time, however, lingering snow in Glacier Basin prevented a visit. Although field investigations were not completed until 1923, GLO Mineral Examiner W.R. Cox began by looking at the Pierce county mining records for the MRMC. While the status of the patents remained uncertain, MRMC took out no permits for timber or improvement work on their active or relinquished claims. The company did only the minimum annual assessment work required to maintain their claims. Eventually, the GLO examination favored MRMC; and on January 12, 1924 the company secured patents for eight claims in Glacier Basin –a total of 162.54 acres. Reven Lode was never patented, although it was often treated as one of the patented claims. Please see Appendix B for the legal descriptions of the claims.

Attaining the patents was a significant benefit for MRMC, as can be seen in the 1966 Magill appraisal report.

> When a mining claim is patented the patentee receives full title to the land, including surface, timber, and minerals; the patented claim is real estate and private property. Patentee may sell or dispose of the timber (in this case there is none) as he pleases, and may use the claim for any lawful purpose, whether mineral or nonmineral. Boundaries of the claim upon patent are surveyed and fixed permanently and assessment work is no longer required. The owner is required, however, to pay county real estate taxes.[127]

[126] NARA Archives L3023 Files, Fiche 60.

[127] *Report On The Examination Of The Mount Rainier Mining Company Claims, Mount Rainier National Park,* E. A. Magill, 1966. (NARA Archives L3023 Files, Fiche 67-68)

Mine Tunnels[128] in Glacier Basin

The Mineral Survey Plat Maps prepared by Robert F. Scott in 1920 (Figures 3.14 and 3.15) provide some information about the scope of work carried out at each claim. At least one discovery cut had been excavated at each of the lodes, and tunnels had been developed on several lodes. The plat for Mineral Survey No. 1148 for the *Four Claim* lower group of Peach, Orinda, Snowflake, and Reven Lodes lists the improvements as "6 Cuts and 3 tunnels, Total value $11,017.50."

The plat for Mineral Survey No. 1149 for *Five Claim* upper group of Washington No.1 and 2, Stronghold No.1 and 2, and Mary Lodes lists the improvements as "5 cuts, 4 Tunnels and 1 Shaft, Total value $16,565.00."[129]

Additional information about the tunnels can be gleaned from MRMC and NPS reports, correspondence, and special use permits. In 1913, when MRMC officers began applying for permits to use the relinquished claims, they described existing tunnels and those they wanted to build. On the upper, five claim group the company requested that

> We also desire a tunnel site or permit to maintain a tunnel on said claim, which serves to develop the following claims now being held and developed by the Company, to wit:- Washington No. One, Washington No. Two, Stronghold No. One, Stronghold No. Two and Mary. The present tunnel, which is over 800 feet long, was built on said claim called Gate before we relinquished it to the government. It starts on said relinquished claim and continues on into the above named claims now held by us…

On the lower, four claim group,

> …We also desire a tunnel site or permit to build a tunnel on said relinquished claim, Lake City, to be located on the South side of the River. This tunnel we plan to carry onward to and into, to develop the following claims held and being developed by us, to wit: Reven, Snowflake, Peach and Orinda.[130]

In 1914, Ranger O'Farrell observed men working on the relinquished Gate Claim tunnel in the upper group area north of the Inter Fork. The crew was in the process of shoring it up with timber cut from the roadside near the sawmill downslope.[131] The 800 ft. Gate Claim tunnel was still present in 1920 and depicted on the Mineral Survey 1149 Plat Map (Figure 3.18). That map shows a "Log House" at the mouth of the tunnel with the tunnel extending northwest into the Washington No.1 Lode. This appears be the cabin in the *upper camp* area built to replace the original cabin destroyed in the 1906-1907 avalanche, and described in the 1916 prospectus. It is likely that the cabin was rebuilt using logs from the 1906 cabin.

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[128] We use the terms *tunnel,* or simply *mine,* to encompass a variety of features perhaps more appropriately described as *adits, shafts, crosscuts, drifts,* etc. We retain *tunnel* because of its common usage, and because MRMC liberally used it to describe its mines which were predominantly (but not always) horizontally excavated *adits. Tunnel* also conforms to the terminology of park issued special use permits for mining in Glacier Basin.

[129] Mineral Survey Plat Maps No.1148 and 1149, surveyed by Robert F. Scott, approved by U. S. Surveyor General E.A. FitzHenry. (NARA Archives, L3023 Files)

[130] Letter from B. P. Korssjoen, President; and W. C. Berg, Secretary of Mount Rainier Mining Co. to Superintendent Hall, June 18, 1913. (NARA Archives, L3023 Files, Fiche 59)

[131] Letter from Ranger O'Farrell to Superintendent Allen, August 16, 1914. (NARA Archives, L3023 Files, Fiche 59)

In 1927, this portion of Gate Claim constituted a 3.9 acre parcel (see orange rectangle on Figure 3.4) where the MRMC proposed to construct a new power plant.[132]

Expanding on O'Farrell's report, in 1915, Supervisor Reaburn reported a 700 foot tunnel on the upper "five claim group" (probably *Mine 1* beginning in unpatented Gate Claim and extending into Washington No.1); plus two tunnels 240 feet long and 300 feet deep on the lower "four claim group" (probably *Mines 2 and 3* in Snowflake Claim). An aerial tramway about 800 feet long led from the wagon road up to one of the Snowflake tunnels in the lower "four claim group."[133]

Superintendent Reaburn's 1916 "Mining Claims" report summarized the costs and total lengths of the tunnels in Glacier Basin using information provided by Ole E. Olson, MRMC general manager. "They have also driven 1,860 feet of working tunnel at a total approximate cost of $37,200 or $20 per foot, of which 1,060 feet is on the upper five claims and 800 feet on the lower four claims. …Tunnels and snow sheds in front of working tunnel at a cost of $900."[134] Looking ahead to Figure 3.29, the reader can just make out snow sheds at the two Snowflake tunnel sites (*Mine 2* and *Mine 3*) in the "four claim group," and the aerial tramway leading from these tunnels downslope toward the road.

The 1926 MRMC prospectus sent to investors also provides some details about tunnel developments and mining facilities. Although veins being developed at the time are referred to by number, we have limited information to associate individual vein and tunnel numbers to a particular location or claim. The "big tunnel" described in the prospectus is likely the tunnel on the Stronghold No.1 Lode in the upper claim group used to access the No. 10 vein.

> This tunnel was driven in the prospecting days and is in a distance of 900 feet now and is 6 by 7 feet. This being a very desirable size for a working tunnel, as an electric motor can be used for haulage. Most of the timbering is in good shape and safe. The end of this tunnel is about 500 feet from the ore body that we have struck with the upper workings. Now this 500 feet of tunnel is what we should like to drive at once, for that would put this company in shape for a big daily tonnage…"[135]

Much later, in 1950, tunnels and discovery cuts were still visible on the lower group's Snowflake, Peach, and Reven Lodes; and on the upper group's Stronghold No.1, and Stronghold No.2 Lodes. By that time, the tunnel entrance on upper group's Washington No.2 Lode was covered by cave-in debris.[136] Several tunnels were mapped by mineral appraisers in 1951 and 1966. These can be seen in Figure 5.1 in Chapter 5.

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[132] Letter from P.T. Storbo to Superintendent Tomlinson, June 29, 1927. (NARA Archives L3023 Files Box 50 Folder 56) Due to its proximity with Reven, it was later referred to as part of that claim or part of another 7.3 acre adjacent parcel—see Eastman 1951.

[133] Report from Supervisor Reaburn to the Secretary of the Interior, November 3, 1915. (NARA Archives, L3023 Files, Fiche 58)

[134] Report from Supervisor Reaburn to the Superintendent of National Parks, October 2, 1916; Letter from Ole Olson to Supervisor Reaburn, September 29, 1916. (NARA Archives, L3023 Files, Fiche 61)

[135] Prospectus: Mount Rainier Mining Company, Enumclaw, Washington, October 1, 1926; page 6. (MORA Archives)

[136] *Appraisal for United States Department of Interior, National Park Service, Longmire, Washington; Mt. Rainier Mining Company Properties*, L.W. Eastman, April 1951. (NARA Archives L3023, Files Box 51, Folder 59, Fiche 66)

Table 3.4. Mount Rainier Mining Company Tunnels by Tunnel Number

Tunnel/Adit*	Claim	Description
Mine 1	Gate (Leased) Washington No.1 Lode (Patented)	*Upper, Five Claim Group*; tunnel begun before claims were relinquished in 1912; ca. 800-900 ft. long; extending west into Washington No.1 Lode. 1920 Plat map listed as Washington No.2 Tunnel
Mine 2	Snowflake Lode (Patented)	*Lower, Four Claim Group;* upper tunnel of Snowflake Lode ca. 240 ft. long; protected by snow shed; tunnel mapped and ore samples taken for 1950-1953 appraisals
Mine 3	Snowflake Lode (Patented)	*Lower, Four Claim Group*; lower tunnel of Snowflake Lode ca. 300 ft. long, or reportedly 690 ft. by some accounts; protected by snow shed; living quarters inside portal; tunnel mapped and ore samples taken in 1950-1953 appraisals
Mine 4	Stronghold No.1 Lode (Patented)	*Upper, Five Claim Group*; tunnel 600 ft. long as reported by Eastman in 1951; cribbing and rail line installed. Plat map listed as Stronghold No.2 tunnel
Mine 5	Leased parcel north of Reven Lode	*Lower, Four Claim Group*; tunnel driven to access ore veins under Snowflake Lode; 650 ft. long by 1948
Mine X	Mary Lode (Patented)	1920 Plat Maps show two molybdenum discovery cuts and a short tunnel listed as Mary No.2 tunnel; not mined commercially; Weissenborn and Hosterman did not relocate the tunnel in 1950 but mapped location with an "X"

*Please note that italicized mine numbers are used by authors to eliminate redundancy. They do not necessarily reflect designations shown on plat maps.

Mount Rainier Mining Company Workers and Working Conditions

At MRMC, as with most entities of this sort, worker salaries constituted one of the largest draws on company finances. MRMC strove to minimize labor costs by hiring workers at the lowest possible pay rate; supplementing salaries with company stock shares –a system that created a remarkably loyal workforce at a reduced cost to the company. Miners were paid $4.50 per day. Road workers were paid $3.15 per day. In both cases, $1.00 per day was deducted for board. An allowance of 15 cents per day was allowed in cash or commissary, the balance being stock in the company at 30 cents per share.[137]

Working conditions during these formative years of the mining operation at Glacier Basin are described in annual reports by Supervisor Reaburn to the Secretary of the Interior and in a series of letters written by William McDermott to Reaburn in 1917. In 1915, Reaburn's annual report stated that 38 men worked on the crew, most doing road work. By 1917, the crew size, we assume for both mining and road work, had increased to 40 to 50 men; some employed year-round.

> The outfit is composed entirely of Swedes and Norwegians, religiously inclined – no swearing or bad language is to be heard in the camp. The recruiting office is in Seattle, but a large

[137]Letter from Reaburn to the Secretary of the Interior, November 3, 1915 (NARA Archives L3023 Files, Fiche 58)

> percentage of the men come from the wheat growing sections of Dakota. The men apparently have the utmost faith in the enterprise.[138]

Figure 3.20 shows four of MRMC's Glacier Basin miners ready for work in August, 1919. They are standing in Lower Camp; possibly working in Snowflake Lode mines just across the Inter Fork. Note the lunch pails and shovel. A shovel identical to that shown here was discovered in the lower, Four Claim Group area, and turned in to the park for curation in 2016.

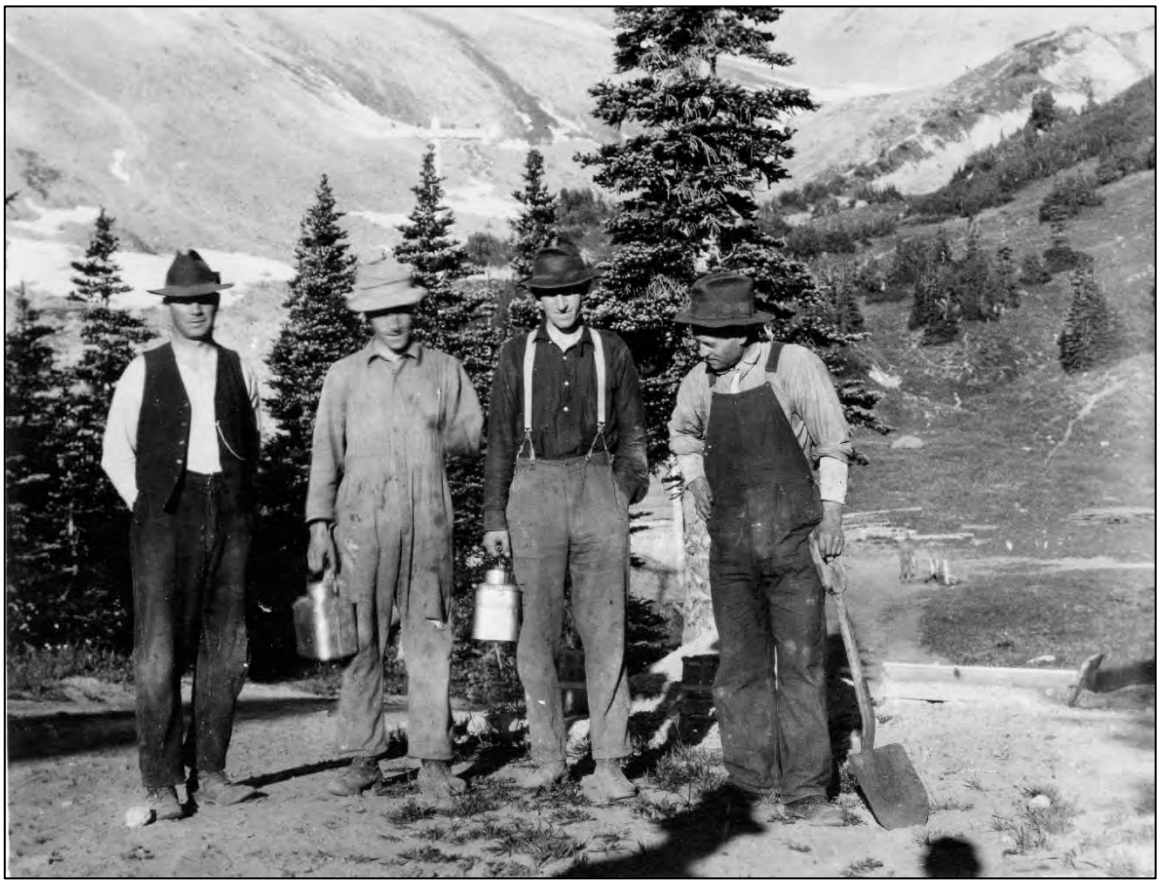


Figure 3.20. Glacier Basin Miners Ready for Work.
Caption on the reverse reads "Anderson, Brivik, Gove, Ugliend, Mt. Rainier Mining Co. Aug. '19"
(MORA Archives TWC-1582 836. Photographer Unknown.)

The McDermott Complaint 1917

Former employee M.W. McDermott was not among workers with faith in the company. Rather, McDermott wrote a series of letters to Supervisor Reaburn in 1917 criticizing MRMC business practices; describing instances of unsafe working conditions; and claiming misrepresentations of assays, and irregularities in stock sales and valuations. He stated, for example, that "I am of a strong opinion that there is some crooked work going on in there [sic] managing the business."[139] Although the Park Service and

[138] Letter from Reaburn to the Secretary of the Interior, November 3, 1915. (NARA Archives L3023 Files, Fiche 58)
[139] January 20, 1917 letter from Mr. M. W. McDermott of Seattle to "Mr. Rayborn" [Reaburn] Ashford. (NARA Archives L3023 File, Fiche 61)

Bureau of Mines expressed concern about the business practices and safety of the mining operation, the park was unable to act on these complaints. The Park Service was "without authority to regulate the mining operations of this Company, unless they interfere with the administration and development of the Mt. Rainier National Park. The record does not show that the management has shown any disposition other than to cooperate with the park authorities."[140]

In the 14 months McDermott worked for the mining company, he had borrowed $500 to invest in company stock. McDermott, suspicious of assay reports, took a lump of ore to Seattle for which he got assay results of 30 cents a ton –much at odds with values of $4.00 to $7.00 a ton which a mine foreman reported for three assays from MRMC samples. McDermott admitted that he did not know if his sample and the company's samples were from the same vein in that the values reported by McDermott do not concur with MRMC or park reports. Even so, McDermott wrote "I'll enclose some assayers copies, this looks to me as if it might be a swindle."

McDermott complained of and described differences in stock prices and pay rates: "… the stocks are 12½ [cents] in one brokers and 13 cents in the other and we give 30 for ours. Some of the men got 50 cents per day in cash and one $15.00 per week and one $5 a day in cash, he was a mine boss…" McDermott alleged that Storbo "payed [sic] his farm land off with the Company's moneys" and suspected that income from company stock sales would also be used for Storbo's personal needs rather than road or mine improvements.

McDermott also described several instances of unsafe or unsatisfactory work conditions. These included an unguarded blade at the sawmill; tunnel sheds too flimsy to withstand snow loads; a water wheel to supply fresh air to a tunnel was installed too high to be effective; a track into the mine that had to be raised so high that workers had to stoop to go into or out of the tunnel; and work on a high tension power line that literally broke a man's back.[141]

In response, Supervisor Reaburn wrote McDermott that

> The Park Service has no control over the Mt. Rainier Mining Co. except with regard to the observance of the park rules and regulations and to compliance to terms of permit authorizing this company to construct flume, high tension power line, tramway, etc., on the park lands, and the use of certain relinquished claims as camp site. It is probable that an inspector will be detailed to go over this work as soon as weather conditions permit. The Park Service has no control over the expenditure of the company's moneys or the sale of stock by the company.[142]

Although Reaburn forwarded McDermott's letter to Acting Superintendent Joseph J. Cotter, who in turn notified Van H. Manning, Director of the Bureau of Mines about the safety issues, Manning was unable to act on the safety complaints. Manning wrote:

> I am very much interested in the information forwarded with your letter of March 23, but unfortunately the Bureau of Mines cannot enforce safety regulations in the various States. There is no metal mine inspector in Washington, but according to the laws of that State all mining companies are compelled to carry compensation insurance, and it might be worthwhile, therefore,

[140] March 23, 1917 letter from Supervisor Reaburn to M. W. McDermott. (NARA Archives L3023 File, Fiche 61)
[141] This almost certainly was MRMC trustee Paul L. Stangeland.
[142] February 21, 1917 Reaburn reply to McDermott's February 17th letter. (NARA Archives L3023 File Fiche 61)

for Mr. McDermott to refer his complaint to the State Industrial Insurance Department, Olympia, Washington.[143]

Essentially, neither the park nor the Bureau of Mines could effectively address complaints about fraud, or unsafe working conditions at the mine. The matter was dropped.

Glacier Basin's Constructed Facilities

In 1916, as the MRMC was enthusiastically and steadily expanding; its mining operations in the lower *Four Claim* area of Glacier Basin included a cabin, hotel/boarding house, barn and blacksmith shop, power plant, sawmill, three tunnels, an aerial tramway, and ancillary smaller structures. The upper *Five Claim* area, at a minimum, had one log house, a power plant or generator, and two tunnels. Permits, leases, plat maps (Figures 3.17 and 3.18), and yearly inspections and ranger reports provide much of the information about the facilities constructed and used during the mining operations. Many of these structures remained standing and in use for the next 15 to 20 years.

By 1940, after years of disuse and the ravages of winter weather, many of the wooden structures had deteriorated and collapsed. In 1951, Superintendent John Preston hired Leslie W. Eastman to appraise the MRMC properties. Eastman's report provides details of the remaining mining facilities in the final days of the company. Here, we provide descriptions of the primary structures associated with the Mount Rainier Mining Company operations in Glacier Basin during its most productive years –1914 to 1921. Table 3.5 summarizes most of these improvements, including mine tunnels (by claim) and the basin's more visible surface constructed features.

Table 3.5. Mount Rainier Mining Company Claims and Associated Improvements

Upper *Five Claim* Group	Status	Mine Tunnels, Adits, Cuts	Other Improvements
Stronghold No. 1	Patented	Discovery Cut and Tunnel (1920 plat); *Mine 4* into #9 and #10 vein	Road, Rail line
Stronghold No. 2	Patented	Discovery Cut (1920 plat)	
Washington No. 1	Patented	Discovery Cut, Tunnel and Drift (1920 plat), western end of *Mine 1* beginning in Gate Claim	
Washington No. 2	Patented	Discovery Cut (1920 plat);	
Mary	Patented	Molybdenum Discovery Cut and short Tunnel (1920 plat); *Mine X*	
Gate/O.I.C., 2. 5 acres *(Upper Camp Area)*	Leased	Tunnel and Storage (1920 plat), eastern end of *Mine 1*	Log House (1920 plat), Power house, Black-smith shop, second cabin on OIC (date UK)

[143] April 12, 1917 letter from Acting Superintendent of National Parks Jos. J. Cotter to Supervisor Reaburn concerning M. W. McDermott complaint. Cotter referenced an undated reply from Director Manning of the Bureau of Mines [not in file] to his March 23 inquiry. (NARA Archives L3023 File, Fiche 61)

Lower *Four Claim* Group	Status	Mine Tunnels, Adits, Cuts	Other Improvements
Peach	Patented	1 Discovery Cut, 1 Cut (1920 plat)	
Orinda	Patented	1 Discovery Cut, 1 Crosscut (1920 plat)	
Snowflake	Patented	Tunnels and Drifts (1920); *Mine 2* (upper). *Mine 3* (lower) includes living quarters	Boarding House, Blacksmith Shop and Bunkhouse (1920 plat); Snowsheds, Water Wheel, Aerial Tram (1916)
Reven	Not Patented	Discovery Cut, Tunnel and Cut (1920 plat); *Mine 5*	
Reven Area (West) 7.3 acres	Leased	Leased for Tunnel and Stockpile (1949)	
*Reven Area (North) 3.9 acres	Leased	Leased for Tunnel and Power Plant, Tunnel (1913)	Cabin, Compressor and engine,
Other Leased Claims	**Status**	**Mine Tunnels, Adits, Cuts**	**Other Improvements**
Lake City *(Lower Camp, Lake Camp, Storbo Camp*)	Leased	Mineral Marker	Cabin, Barn, Hotel-Boarding House (1916), Cabin 12' by 14' (1947), Poss. Blacksmith Shop
Turtle (Lower Camp Area)	Leased	None	Sawmill and Power Plant, Safety Breaker, Flume, Generator building, Storage Shed

*Described in 1913 as part of the Lake City Claim, but later treated as part of the Reven claim.

Glacier Basin's Lower Camp Area (Four Claim Group) Facilities

Mount Rainier Mining Company established its Lower Camp operational headquarters, originally known as Lake Camp, then more commonly as Storbo Camp, in Glacier Basin's subalpine meadow. The relatively flat open meadow adjacent to the Inter Fork provided an ideal setting for the camp. Here was ample space for constructing housing and shop buildings, adequate grass for pasturing horses, and a small clear-water lake. Mine tunnels and adits were dug into the exposed rocky ridges surrounding the meadow; all readily accessed from camp by roads, trails and bridges. Peter Storbo and his uncle, Bernt Korssjoen, established the camp in 1902 on the Lake City Claim as listed in Table 3.5 above, and shown on Figure 3.18 below. During peak seasons, 30 to 50 workers occupied the camp; although numbers varied by season and year depending on weather, funding, and permit issues. Many of the camp structures were built before MRMC relinquished the Lake City Claim. Even so, MRMC was able to lease the claim from the park, and continue to use and develop it for mining operations and crew housing. Figure 3.21 is Glacier Basin's central meadow in 1912. The MRMC mineral monument is just visible at right photo-center.



Figure 3.21. Lower (Storbo) Camp in Glacier Basin in 1912 Facing West. (MORA Archives).

In 1909, Acting Superintendent G.F. Allen's Annual Report lists four structures at Glacier Basin, "Two cabins 14 by 22 feet and 15 by 30 feet, a barn 18 by 25 feet, and a blacksmith shop, 16 by 18 feet …."[144] When Ranger Thomas O'Farrell visited the area in the late summer of 1913, he reported that men were occupying cabins on the relinquished claims without permission. O'Farrell stated that "…the company has three men occupying the [probably lower camp] cabin, that these men are using fuel from the park lands and in every way proceeding the same as before the claims were relinquished… Upon my arrival at the cabin I caught one of the men throwing stones at a marmot and I told him to let the animals in the reservation alone which he promised to do in future."[145] Available evidence suggests that two of the buildings mentioned by G.F. Allen (the 14 by 22 ft. cabin, and 18 by 25 ft. barn) were located in *Lower Camp*. The other two buildings (the 15 by 30 ft. cabin, and the blacksmith shop) were located nearer the "Five Claim Group" in *Upper Camp.* The cabin where O'Farrell saved the marmot probably is the one in Lower Camp.

In the summers of 1912 and 1915, the Mountaineers organization used the meadow and buildings at Storbo Camp while preparing for successful climbs of Mount Rainier. Their photographs (Figure 3.22) provide early images of the layout and structures in the camp. By 1916, after MRMC completed road improvements which made the camp accessible to automobiles, the company constructed the more substantial Glacier Basin Hotel/Boarding House described below.

[144] Superintendent's Annual Report by G. F. Allen, September 28, 1909. (NARA Archives H2621 Files)
[145] Letter from Ranger O'Farrell to Superintendent Allen, August 30, 1913. (MORA & NARA Archives, Fiche 59)

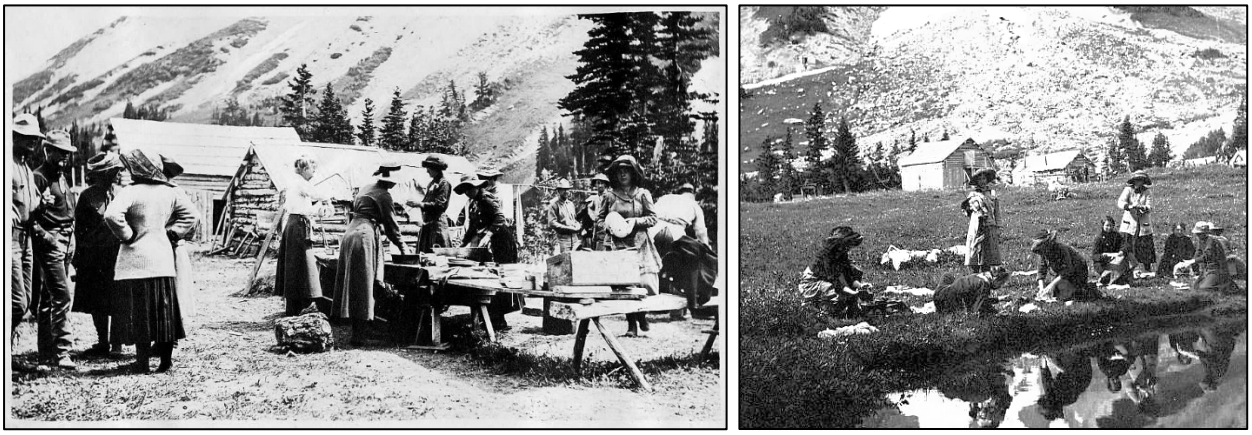


Figure 3.22. Mountaineers Occupying Lower Camp in Glacier Basin 1912.
Photo at *left* shows a closer view of the buildings. Photo at *right* shows a bit of the basin's small lake.
(Photo from 1912 Mountaineers album from Tacoma Public Library, copyright 2002.)

Lower Camp Cabin/Lodging House

A photograph from1912 labels the cabin in Glacier Basin as "TarPelle Cabin" (the smaller, log structure shown above). The origin and use of this name is unknown. It is not used in park ranger or superintendent reports, nor labeled as such on historic maps. In any case, this is certainly the 14 by 22 ft. cabin mentioned in Allen's 1909 superintendent's report, the cabin in O'Farrell's 1913 letter, and the lodging house mentioned in MRMC's 1914 prospectus. It is the smaller log structure shown to the right of the barn in Figure 3.21 above and 3.23 below. By 1918, electric power had been installed as can be seen by power poles and lines visible in Figure 3.20. The building may have been built in two phases since the northern half was constructed of horizontal logs and has a roof sheathed with long boards. The southern half of the building had vertical siding and a wood shake roof with an opening for a stove pipe.

Lower Camp Barn

The taller building in these photographs is the 18-20 by 25 ft. barn with loft noted in Allen's 1909 annual report, and the 1914 MRMC prospectus. The 1912 photograph (Figure 3.21) shows the barn with its loft door open. We assume that the small building at the far left of the photo was a privy. By 1918, a right-angle addition had been attached to the barn, and electrical power had been installed (Figure 3.23). The 1918 photograph also shows a mound that has formed outside an opening on the barn's east side. This pile would seem to be barn cleaning remains. However, iron debris and coal slag waste are present today at the site of the building; suggesting that blacksmith facilities may have been added in later years.



Figure 3.23. 1918 Photograph of Lower Camp's Barn (*left)* and Cabin (*right*).
Barn with rear addition on the left with mound of manure and/or coal slag at side opening. Across the Inter Fork, the aerial ore tram is visible extending diagonally upslope behind the barn to Snowflake Lode. (MORA Archives)

Seasonal Tent Camps

The resident population at Storbo Camp increased during the summer peak mining seasons in Glacier Basin. Storbo camp residents not only included paid mine workers; but stockholders who apparently kept in touch with their investments, perhaps added stock, and enjoyed Mount Rainier's outdoor beauty by spending part of their summers in Glacier Basin. Summer residents set up platform tents as shown in the Stangeland family photo below (Figure 3.24). We believe the tents shown here were erected east of the basin's small lake just visible in the background of mineral marker boulder Figure 3.19, and in the right-hand photo of Figure 3.22. Paul L. Stangeland, who arranged for this and several other photographs included in this chapter to be taken, was an MRMC trustee and stockholder in 1916 when the picture was made. Later that summer-fall, Mr. Stangeland's back was broken while helping to install power poles and lines in Glacier Basin. He was transported to his home in Astoria, Oregon where he died the following year.



Figure 3.24. Seasonal Tent Camp in Glacier Basin 1916.
Left to right: Anna L., Paul A., and Paul L. Stangeland; Swen (Anna's brother) and Inga Larson.
(Courtesy Paul T. Stangeland)

Glacier Basin-Storbo Hotel and Boardinghouse

Although MRMC lease and construction permits were for land and structures essential for mining operations, the company also hoped to attract tourists driving into the area via the improved White River state and mining roads. In 1915, Peter Storbo, wrote to Ranger Thomas O'Farrell asking how to gain approval for a permit to construct a hotel and boarding house in Glacier Basin. Storbo wrote, "Will you kindly ascertain for my information, whether or not it will be necessary for the Mt. Rainier Mining Co. to secure an additional permit from the Interior Department should the said company desire to conduct a hotel business on the claims leased from the Department, and now occupied as a camp site for mining purposes?"[146] Construction required obtaining a timber permit for purchasing 25,000 feet of timber across from the mill site.[147] Both permits were granted, and construction began on the hotel structure in the summer of 1916. Figure 3.25 shows the nearly completed building a year or two later. Figure 3.26 is page one of the original construction plans drawn by for MRMC by Ole Olson. Note that the entrance porch on the south and the stone fireplace on the west were not finished as shown on the plan. Most of the building, however, was complete, and quite imposing by Glacier Basin standards.

[146] Letter from Peter Storbo to Ranger O'Farrell, February 17, 1915. (MORA & NARA Archives Fiche 58)
[147] Letter from Peter Storbo to Ranger O'Farrell, November 22, 1915. (MORA & NARA Archives Fiche 58)



Figure 3.25. The Glacier Basin Hotel about 1918.
Photograph titled "Home of the Miners" in the 1926 MRMC Prospectus. (MORA Archives)

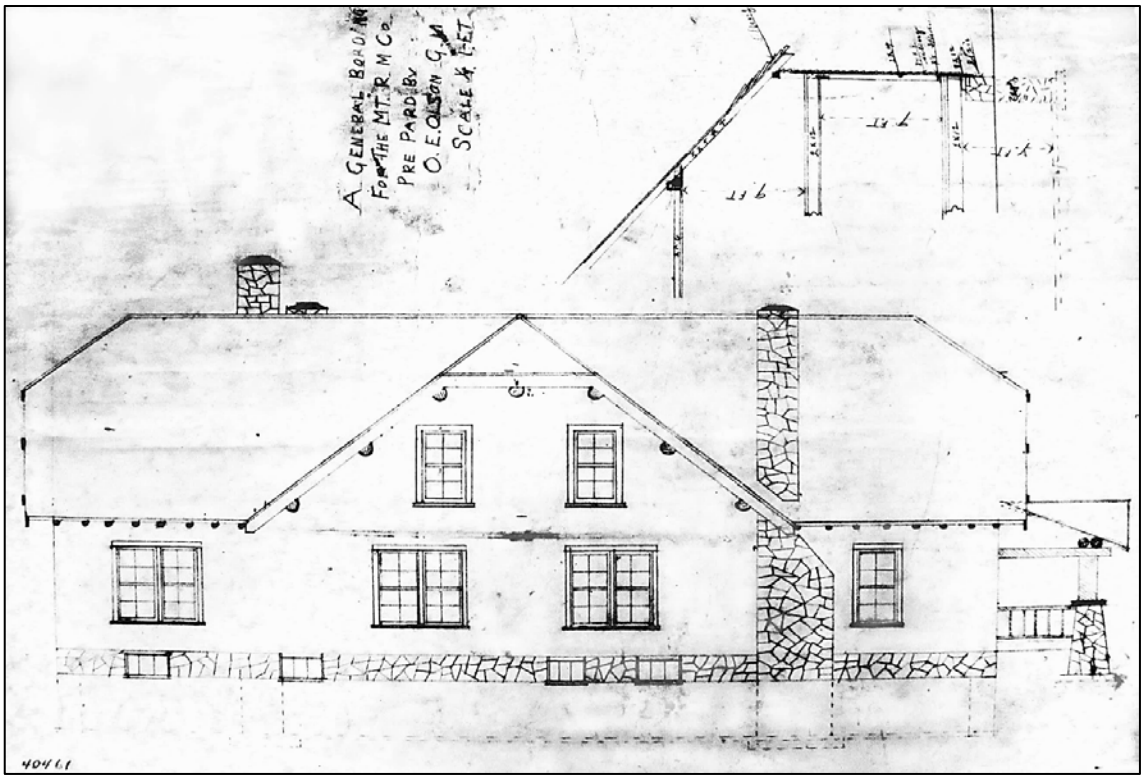


Figure 3.26. Plan Detail for the Glacier Basin Hotel.
Submitted by Ole E. Olson, General Manager of the Mount Rainier Mining Company.
(NARA Archives L3023 Files, Box 50, Folder 55)

The Glacier Basin Hotel/Boarding house was constructed circa 1916 as a 36 by 70 ft., two-story building with a full basement and granite fireplace, at a cost of $11,000. Ole Olson, the MRMC general manager, drew up the plan, a portion of which is shown as Figure 3.26. The hotel had room upstairs to sleep 40 people, and a downstairs dining room capable of seating 120 people. The hotel boasted a sewer and water system, and electric lights powered by the MRMC generator.[148] It also had toilets and a bathtub in the basement.

Despite good intentions, the Glacier Basin Hotel was never completely finished. Nor was it used as a combined mining, dining, and tourist facility as planned. Steep difficult-to-maintain roads, short summers, and repeated damage from heavy winter snows frustrated development and contributed to its lack of commercial success. Imposing as the structure was, it was used mostly as a boarding house for workers during its relatively brief life span.[149]

MRMC Power Plant and Sawmill

While not technically part of Lower Camp *per se*, the generator and adjacent sawmill were associated spatially with the Lower Camp-Four Claim Group. MRMC built these facilities a short distance below Storbo Camp on Turtle Claim –one of the relinquished claims later leased from the park. These structures were located on the north side of the Inter Fork and on the south side of Storbo-Glacier Basin Road at an elevation of 5600 ft.. This placed the facilities approximately one-half mile from, and 400-1000 ft. below, the mining camp and mine tunnels. Both the sawmill and power plant were run by water diverted from the Inter Fork and a tributary creek into a raised flume. The flume dropped water to a 100-horsepower turbine waterwheel. While the sawmill appears to have been operating as early as 1907 to 1909,[150] MRMC did not request permits for constructing the power plant and cutting trees for the transmission poles to Storbo Camp until 1910 and 1911.[151]

In 1915, this location included the sawmill, a storage cabin and an electrical power plant. In 1916, MRMC general manager Ole Olson, reported that the company had installed a (presumably larger) 2,400 volt generator connected to 4,000 feet of pole line for transmission of power and light to mines and Lower Camp facilities at an approximate cost of $8,850.00.[152] The lines were operational by 1917.

A 1918 photograph (Figure 3.27) shows these structures during their operational period. Two substantial wooden delivery flumes fed river and creek water into a tall cribbed structure of milled timbers. The structure created head-volume to increase water pressure on the turbine.[153] The wooden structure at the front of the safety breaker is likely an overflow outlet. The sawmill facility is visible behind and left of the safety breaker. The generator is contained in the gabled building in the left foreground.

[148] Superintendent's Annual Report Reaburn 1916; Letter from Ole Olson to Superintendent Reaburn, September 29, 1916. (NARA Archives L3023 Files, Fiche 61)
[149] Also see Catton 1996:154
[150] Catton (1996:152) and Gee and Raflo (1997:4). According to Arthur L. Storbo, family lore has it that Peter Storbo's cousin Nels Storbo used the mill to cut timber for cabins and mine shoring materials in 1907.
[151] Report from Ranger O'Farrell to Superintendent August 25, 1911. (NARA Archives H2621 Files)
[152] Letter from Ole Olson, General Manager of Mount Rainier Mining Company to Supervisor Reaburn, September 29, 1916. (NARA Archives, L3023 Files, Fiche 61)
[153] Also see Frizzel 1905



Figure 3.27. The Sawmill, Generator, Safety Breaker and Delivery Flumes Operating in 1918. (MORA Archives).

The sawmill, well situated within the forested portion of the claims, was critical to the development of mining operations in Glacier Basin. In fact, when MRMC was negotiating to retain fifteen of their original claims in 1911, Ranger O'Farrell noted that "Only one of these fifteen locations is situated in the timber and is occupied by their mill and proposed power-house."[154] Timber was a key resource for mine development in that it was used for constructing camp and shop buildings, road bridges, and mine support structures.

The sawmill reportedly could mill 6,000-10,000 board feet a day.[155] The power plant had a 2400 volt electric generator that not only supplied power for the adjacent sawmill, but also to the hotel/boarding house, and tunnel sites –connected by 4,000 feet of transmission line.[156] Transmission poles are visible in Figure 3.20 photographs of Storbo Camp next to the cabin and Blacksmith Shop/Barn. Some of these poles were still present at the time of writing.

In 1917, The safety of the power plant and sawmill was called into question when M.W. McDermott reported that the saw blade was not properly guarded, and that "one of the generators is so set

[154] Report from O'Farrell to Superintendent, August 25, 1911. (NARA Archives H2621 Files).
[155] Supervisor Reaburn reports 6,000 board feet to Superintendent of National Parks, Report on Mining Claims, October 2, 1916. MORA & NARA Archives Fiche 61*;* Thompson 1981:126 states 10,000 board feet.
[156]Supervisor Reaburn to Superintendent of National Parks, Report on Mining Claims, October 2, 1916. (MORA & NARA Archives Fiche 61; Gee and Raflo 1997:4, 22)

that the man who tends to it in going around to oil some parts, is compelled almost to put his hand on the generator, and should the generator be leaking and get the frame charged it would be sure death…"[157] The park referred the matter to the Bureau of Mines, but that bureau did not have an inspector to investigate. There are no additional documents regarding the operational safety of the mill and power plant.

Other Lower Camp Area (Four Claim Group) Facilities

Mount Rainier Mining Company planned several major construction projects in 1918; submitting proposals to the Park Service to construct an aerial tramway, a transmission line, another power plant and a flume. These facilities would provide power for mine machinery and for transportation and ore processing. The 1918 special use permit provides detailed descriptions of these proposed projects; descriptions that can be used to relocate existing remnants of some of these facilities. In support of the permit proposal MRMC prepared a plan map showing existing and proposed facilities (Figure 3.28). The map is useful in discriminating between facilities already in place, versus those that were proposed but in most instances, never constructed. For example, part of the permit requested "To occupy ten (10) acres of land located in the N.E. corner of Sec. 9, T. 16 N., R. 9 E., shown on the attached map [Figure 3.28] as leased claim No.4, and to construct thereon a power and concentrating plant."

Few of the projects were completed as proposed. For example, in 1919, Superintendent Reaburn later noted that "The project authorized by permit No.1, granted to the Mount Rainier Mining Co. for the year 1918, has been abandoned, and renewal for this will not be requested by the company."[158] Later permits make no mention of leasing the lower elevation claim. The previous and following excerpts describing these proposals are all drawn from 1918 special use permit No.1.[159]

Aerial Tramway

A short aerial ore-tram was in place in Glacier Basin by 1916.[160] MRMC built the tram to transport copper-bearing rock from the mine tunnel in the "four claim" group to the wagon road on Reven Claim south of the Inter Fork (see Figure 3.29 photo panels). The 1918 permit proposal called for building a substantial extension to the company's proposed concentrator plant further downslope. In the permit request, MRMC proposed

> …To construct an aerial tramway for the purpose of conveying ore from the tunnel workings of the licensee to its proposed concentrator plant; the location of said tramway to be as follows: Beginning at the mouth of the upper tunnel, located on mineral claim No. 2 in Sec. 8, T. 16 N., R. 9 E., and running thence N. 3 degrees 30 minutes E., 780 feet to the proposed loading terminal on mineral claim No. 1; thence N. 57 degrees 10 minutes E., 7,125 feet to the proposed power house and concentrating plant on leased claim[161]

Had it been built, the new tram would have extended a total distance of over 7,000 ft. from Snowflake Lode mines where the ore was extracted to the new ore crusher-concentrator downslope.

[157] Letter from M.W. McDermott to Supervisor Reaburn, January 20, 1917. (MORA & NARA Archives Fiche 61)
[158] Letter from Supt. Reaburn to NPS Director, March 5, 1919. (NARA Archives L3023 Files, Fiche 61)
[159] NARA Archives, L3023 Files, Fiche 61.
[160] "MINING CLAIMS" Report from Supervisor Reaburn sent the "to Superintendent of National Parks, October 2, 1916. (NARA Archives L3023 Files, Fiche 61)
[161] Permit No. 1 – Mount Rainier National Park, January 25, 1918. (NARA Archives L3023 Files, Fiche 61)

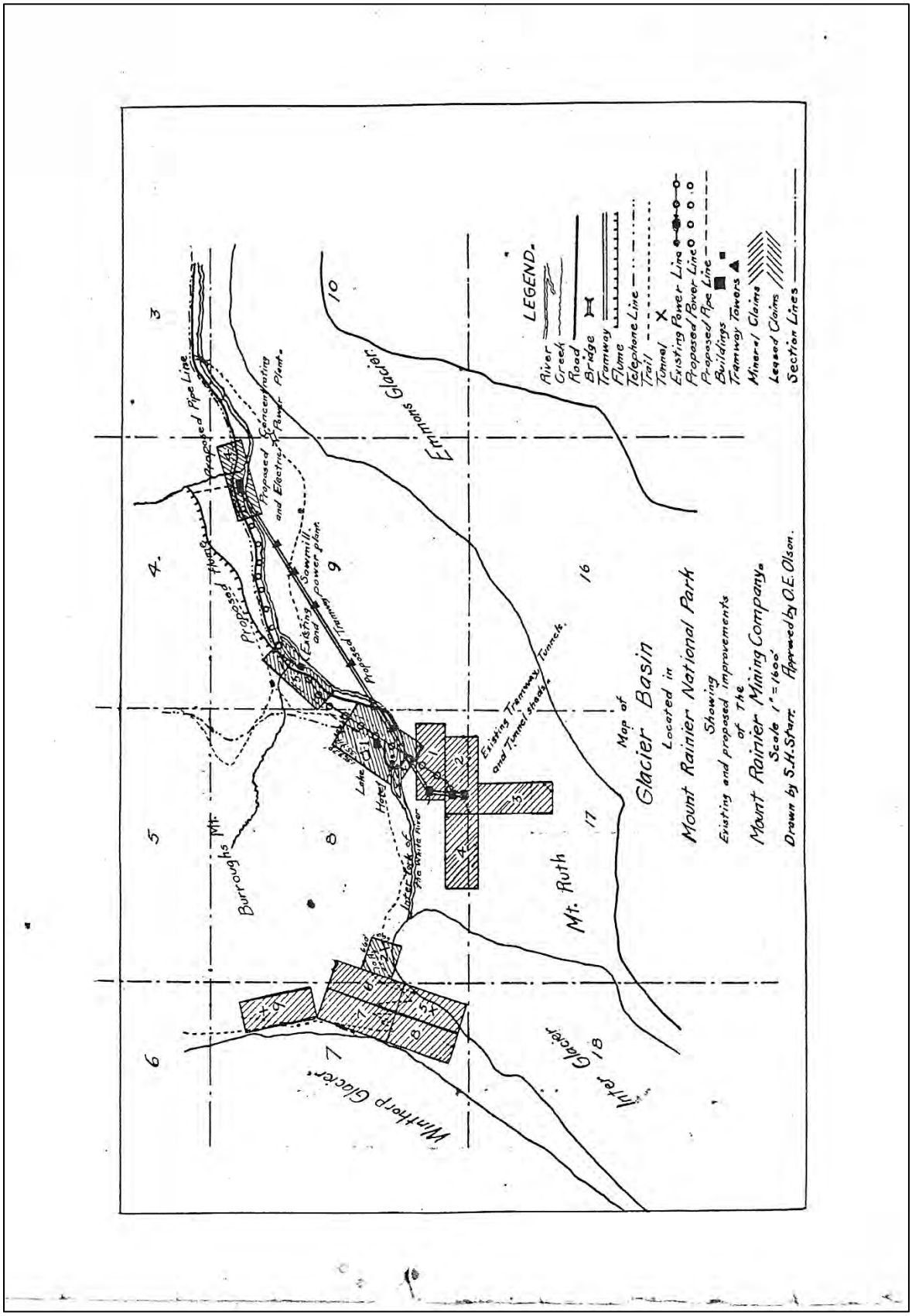


Figure 3.28. Plan-map of MRMC Facilities and Proposed Expansions ca. 1918. (Courtesy Arthur L. Storbo)

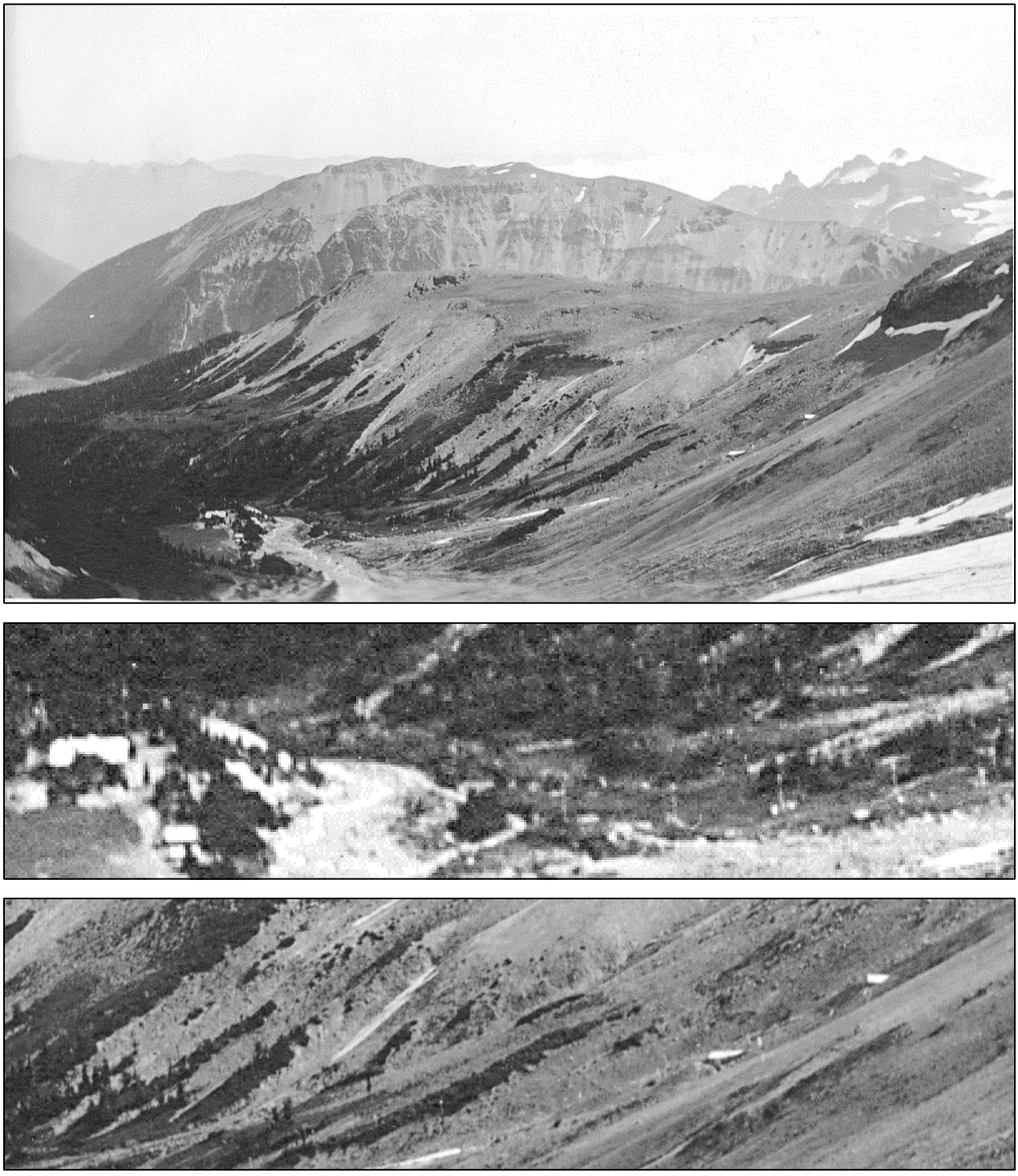


Figure 3.29. East Facing Views of Glacier Basin and the Aerial Tramway on its Northern Slope. *Upper Panel* shows the basin with Glacier Basin Hotel visible in the meadow, and Snowflake Lode tunnel entrances at center photo-right. *Middle Panel* shows the hotel and other Storbo Camp buildings at photo-left, and the aerial tramway extending downslope from Snowflake Lode tunnels –visible by their white slide-roofs in the *Lower Panel.* Photo dates circa 1917-1920. (MORA Archives IS-3114)

The extended tram line was never finished to the 5,000 foot elevation of the proposed (and also never built) concentrator plant. MRMC, however, retained the idea of expanding its facilities for some time. A 1927 letter from Peter Storbo to a potential investor describes the company's plan to complete the tramway in the near future.[162] As will be seen, the company's robust expansion plans were not to be realized. Nonetheless, the shorter upper section of the aerial tram was indeed in service during 1916 to 1921 period as shown in the plan-map and photo panels above. Remnants of the tramway on Snowflake and Reven Claims could still be seen as late as 1996.

Boarding House, Blacksmith Shop and Bunk House

The 1920 Plat Map of the Mount Rainier Mining Claims indicates presence of two structures located along the *Mine 3* Tunnel (lower) on Snowflake Lode labeled as "Boarding House, Blacksmith Shop and Bunkhouse" (Figure 3.17). These structures are not mentioned in any other MRMC correspondence or NPS documents. The building label implies that these were multipurpose structures with an area set aside for blacksmithing, and facilities for feeding and housing workers. Snowflake Lode is located across the Inter Fork south of Storbo Camp; so a shop building and crew housing at the tunnel site probably improved operational efficiency. A later tunnel map from 1952 depicts an area labeled as "living quarters" just inside the portal of the lower, *Mine 3* adit.[163] The living quarters inside the facility was probably more durable and less likely to collapse from snowloads or slides. It is not clear whether this subterranean *in-adit* facility was present in the 1920s, or was added in a later attempt to renew mine activities in the basin.

Power Plant Flume

The proposed power house and concentrating plant mentioned in MRMC's 1918 permit were planned to be built adjacent to Storbo's Glacier Basin Road at the 5000 ft. elevation (i.e., 600 ft. lower than the present power plant and sawmill shown in Figure 3.27). Had it been built, water to drive the generator would be conveyed in a new flume extending down from the present sawmill site shown in Figure 3.24. The location of the proposed flume can be seen on Figure 3.28. MRMC's permit request proposed to build

> … a flume 18" wide by 14" deep, inside measurement, together with a pressure pipe, and to use sufficient water for developing one hundred and fifty (150) horse power of electric energy under an effective head of four hundred and seventy feet. Said flume to be located as follows: Beginning at the intake, a point on the left bank of Inter Fork of White River in elevation 5,580 feet, in Sec. 9, T. 16 N., R. 9 E., at the present existing saw mill and power plant, and following thence on a descending 5% grade along the north side of the valley for a distance of 4,500 feet from the intake and running south 19 degrees 30 minutes E. at horizontal distance of 960 feet to the proposed power house on the left bank of Inter Fork in elevation 5007½ feet, on leased claim No. 4.

Electrical Transmission Line and Concentrator Plant

The electrical transmission line was to extend from the "lower tunnel" of "Claim no. 2" (i.e., *Mine* 3 on Snowflake Lode) to the existing sawmill and power plant on Turtle Claim; continuing on to the proposed lower 5000 ft. elevation power plant on the newly leased claim. MRMC said that the company would provide free electricity to the park; promoting this as a development that would benefit both the

[162] Letter from P.T. Storbo to Ed Erickson, Astoria Oregon, April 15 1927. (MORA Archives)
[163] 1952-53 map in *Report On The Examination Of The Mount Rainier Mining Company Claims, Mount Rainier National Park*, E. A. Magill, 1966. (NARA Archives L3023 Files, Fiche 67-68)

company and the park even though the park did not yet have a building in the vicinity that would need electric lights or power. Nonetheless, MRMC proposed

> …To construct an electric transmission line for the purpose of conveying electric energy from the proposed power house …to its tunnel workings. The location of said transmission line being as follows: Beginning at the mouth of the lower tunnel, located on mineral claim No.2 in Sec. 8, T. 16 N., R. 9 E., and running thence N. 76 degrees 00 minutes E., 260 feet; thence N. 30 degrees 00 minutes E., 3,000 feet; thence N. 57 degrees 00 minutes E., 840 feet, to the present saw mill and power plant; thence following down the left bank of Inter Fork between the creek and present wagon road for a distance of approximately 3,775 feet to the proposed power house and concentrating plant on leased claim No.4. In consideration of the privileges herein granted the licensee agrees to furnish electric light free of charge to the National Park Service for use in any buildings which may hereafter be constructed in the vicinity of Glacier Basin…

MRMC also planned to install a concentrator for processing ore at the lower elevation leased claim. Doubts lingered about the cost, capacity, and the company's capacity to complete the concentrator. In 1916, Ole Olson reported that "The company also has on hand machinery for a hundred ton concentrator, also water-powered wheels in connection with same. The cost of this machinery …is $7,960.00."[164] We know, however, that the machine was not in operation by the following year because a snow slide swept through the ravine where it was to be installed.[165] Furthermore, Bryan's 1917 mining report notes that machinery for a 100 ton ore concentrator were on hand; implying that it had not yet been assembled as proposed.

In 1919, Peter Storbo reported that the company had spent $3,000 on machinery that included a 50 ton concentrating plant.[166] That year, Supervisor Reaburn reported that "The company has in mind another scheme to construct a concentrating plant at some point further down the river, for which they intend to ask for permits when the State highway is completed to the Park Entrance, at Boundary Post 62."[167] Ten years later, in 1927, promotional literature sent to investors continued to describe plans for a yet-to-be installed concentrator.

Unfortunately for Peter Storbo, Bernt Korssjoen, and other Mount Rainier Mining Company officials and stockholders, proposed expansion plans were not to be realized. Rather, these dreams were swept away by fraud allegations associated with the company's 1927 stock promotion campaign alluded to above; and by the Great Depression that descended soon thereafter. The extended flume, lower elevation power plant, and concentrator unit described above and shown on the 3.28 map were never built. All that remains of these plans are sheet metal and parts for the ore concentrator a rock crusher that had been delivered to Glacier Basin a decade earlier. These remains still can be seen adjacent to the modern-day Glacier Basin Trail in the general area described in 1918 permit. Figure 3.30 shows remains of the ore concentrator (aka rock crusher) gear as they appeared in the 1950s.

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[164] Letter from Ole Olson, General Manager of Mount Rainier Mining Company to Supervisor Reaburn, September 29, 1916. (NARA Archives, L3023 Files, Fiche 61)

[165] Letter from M. W. McDermott to Supervisor Reaburn, May 19, 1917. (NARA Archives L3023 Files, Fiche 61)

[166] Information regarding Mount Rainier Mining Co. from P. T. Storbo, September 6, 1919. (NARA Archives L3023 Files, Fiche 61)

[167] Letter from Superintendent Reaburn to The Director, National Park Service, March 5, 1919. (NARA Archives L3023 Files, Fiche 61)



Figure 3.30. Ore Concentrator Parts beside Remains of the Storbo-Glacier Basin Road.
(Photograph taken in 1952 by Douglas Evans. In NARA Archives L3023 Files Box 50 Folder 60)

Glacier Basin's Upper Camp Area (Five Claim Group) Facilities

Situated higher on the basin's western slope, further from water, and with less flat ground to build on, Upper Camp held fewer mine-related facilities than Lower Camp discussed above. Even so, it made sense to site some support facilities in this location because of the importance of mine tunnels in Stronghold and Washington claims, coupled with the inconvenient up-slope distance from Lower Camp. Figures 3.4 and 3.31 show the general Upper Camp location in relation to the Five Claim Group.

Mount Rainier Mining Company's 1914 prospectus lists three Upper Camp facilities –a 15 by 30 ft. log house, a power house, and a blacksmith shop. The log house built on Gate Claim can be seen clearly beside the entrance to the *Mine 1* tunnel extending from Gate into Washington No.1 Claim on the 1920 plat map Figure 3.18, and less clearly as a small black rectangle on Figure 3.31 below. This is the same cabin mentioned in 1913 NPS correspondence regarding the MRMC use of the relinquished claim.[168] It also almost certainly is the cabin rebuilt in 1907 to replace the original Upper Camp cabin destroyed by an avalanche the preceding winter. Other features reportedly present on Gate Claim were a storage building, and of course, the lower part of the Washington No. 1 Lode (*Mine 1*) tunnel.

Immediately east of the cabin site described above is a leveled area with a rectangular stone footing. Located on O.I.C. Claim, the 33 by 20 ft. stone footing is the site of the original Upper Camp cabin shown in Figure 3.3 and destroyed by avalanche in the winter of 1906-1907; killing three mine

[168] Letter from Chief Clerk to Superintendent Hall, March 18, 1913. (NARA Archives, L3023 Files, Fiche 59)

workers. MRMC's 1907 prospectus (Figure 3.2) describes the loss of the original cabin, and construction of its replacement nearby.

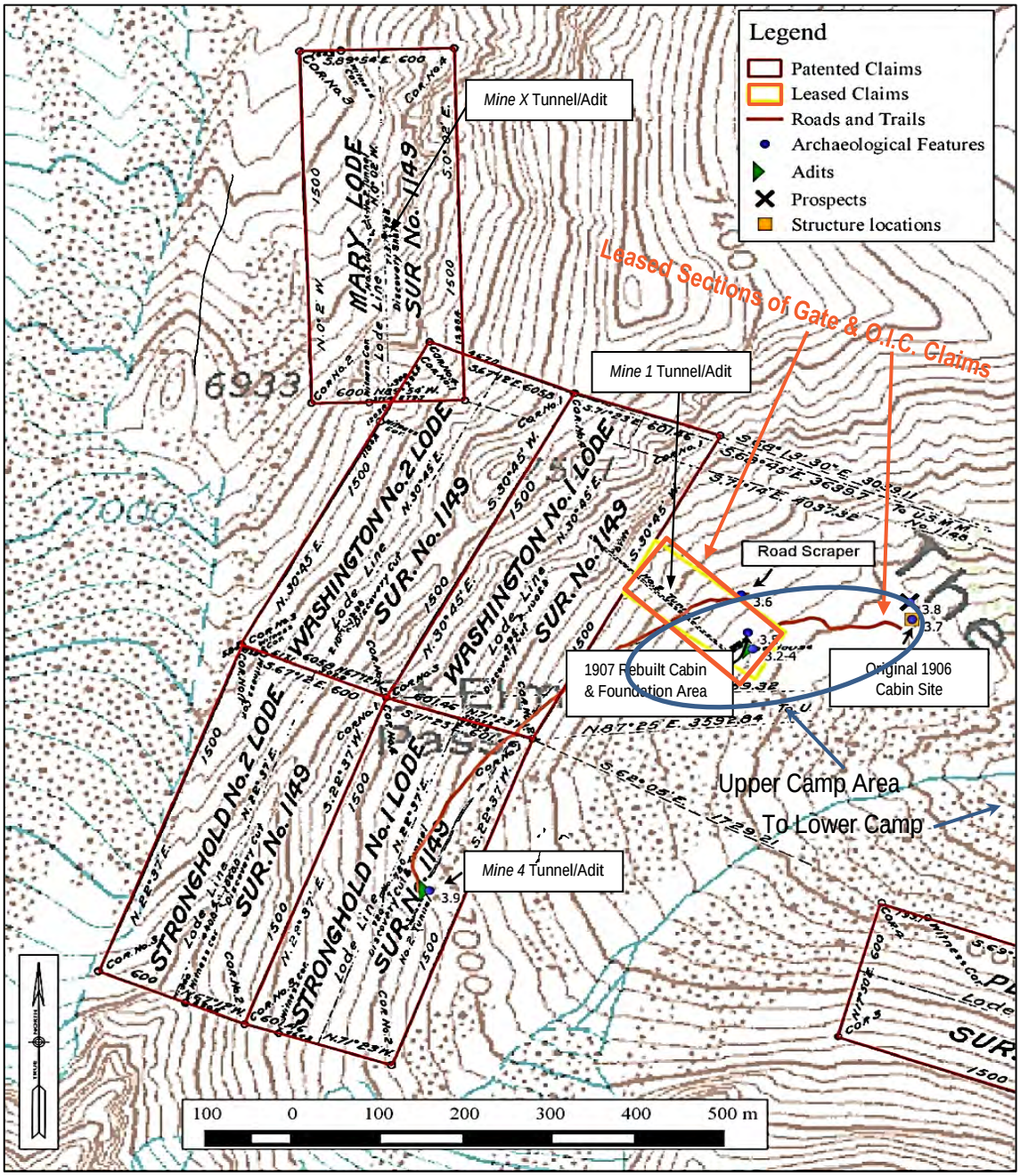


Figure 3.31. Five Claim Group-Upper Camp Area. (Map by Eric Gleason)

Remaining Upper Camp features include a short tunnel on relinquished O.I.C. Claim; ore car rails in, and in front of, the Stronghold No.1 mine (*Mine 4* above); and a road extending from the Stronghold Claim to the original 1906 Upper Camp cabin footing on O.I.C. Claim.

The Stronghold No.1 *Mine 4* tunnel complex was one of the deepest and most complex of the MRMC ventures. At the time of writing, it was the only mine with an open, safety-gated, entrance. Timber shoring, ladders, and rail lines are clearly evident inside. Ore car rails also are present in front of the tunnel; suggesting that ore was transported some distance beyond the entrance for unloading –perhaps to an extension of the road shown on Figure 3.27, or more likely, simply to dump non-copper bearing rock debris from the mine.

Finally, the road section shown on map Figure 3.31, is the feature that links the Five-Claim Group and Upper Camp together. The road tread was still evident at the time of writing despite talus slope slides common to the upper Glacier Basin setting. Road connections to Lower Camp, however, were not evident. Possibly, ore was animal transported, but given the size of the Stronghold and Washington/Gate tunnels, it is more likely that ore was transported by a road long-lost to erosion.

Glacier Basin Mining at its Peak: A Brief Summary

Peter Storbo and Bernt Korssjoen, co-founders of the Mount Rainier Mining Company, were convinced they could make a profit mining copper in Glacier Basin; and, at least in the early days, were enthusiastic in their efforts to do so. Incorporating their mining company in 1904, they promoted the venture and sold stock to raise funds to buy equipment, construct facilities, hire workers, dig tunnels, and haul ore to Tacoma for assay. By 1919, the value placed on their 1,500,000 shares was $375,000 –in that day, a substantial amount of money.

However, mining Glacier Basin was not as easy a way to realize a dream of riches as they had hoped. In fact, the task of constructing the road into such a remote, high-elevation place proved to be a major challenge; indeed one of the most significant, and continuous, expenses associated with the enterprise. When the government stiffened mining regulations in 1908, MRMC was forced to relinquish 32 of their original 41 mining claims; retaining only nine. To continue using their campsite, sawmill and power plant, the company negotiated with the park to lease three of the relinquished claims.

In the early days, timber needed to construct the road, build bridges, shore mine adits, and build structures was available essentially without restriction. However, to strengthen its capacity to protect park resources, the young Mount Rainier National Park soon began requiring annual permits and fees to cut timber and conduct other potentially environmentally disturbing activities. The park's permit system began in 1914. Even so, by 1919, MRMC had constructed roughly 12 miles of access road from the park's (then) northeastern entrance to Glacier Basin (the White River Road\Storbo Road), complete with numerous bridges, at a cost of about $70,000. In Glacier Basin itself, the company began several mine operations served by electrical transmission lines, an aerial ore tram, a hotel/boarding house, and variety of other facilities. The road was improved to permit passage of trucks to haul ore and heavy machinery; as well as, the company hoped, for use by visitors travelling by automobile.

During peak operation, 30 to 50 men lived and worked in Glacier Basin. By the time MRMC patented eight of its nine claims in 1921, the company reportedly had spent nearly $400,000 to develop Glacier Basin mining operations.

The value of the ore recovered from Glacier Basin was another matter. MRMC promotional literature assured investors that the richest ore veins lay just a few hundred feet beyond the reach of their existing 3,000 feet of tunnels. It is possible, and we believe probable, that Peter Storbo, Bernt Korssjoen and other MRMC officials believed these hopeful statements. The company certainly invested heavily in the effort to reach productive ore veins. However, it is hard to overlook the fact that the ore selected for assay was not representative of the bulk of the ore extracted from the mines. Rather, it was chosen for copper content; resulting in artificially high assay values of about $60 per ton. In their defense, had the planned ore concentrator been completed and operative, ore-value near this level may have been reached before it was transported to smelter. It is not clear, however, that the value gained by concentrating the ore was worth the effort and costs involved in mining and transporting the low-grade ore for even the short-distance transport to the concentrator.

Ultimately, MRMC profited more from the sale of stock, than from the value of the copper-bearing ore itself. Despite the nagging lack of real mining success, MRMC managed to remain in business for the next 30 years. But not without problems. Continuing development, new equipment needs, and constant road repairs were costly. After 1920, the company began to put projects on hold; failed to renew leases and permits; and performed only minimal work on their claims. The next chapter addresses these issues further.

Chapter 4: Mount Rainier Mining Company, The Declining Years – 1922 to 1945

Surviving the exuberant, if turbulent, first two decades of existence; Mount Rainier Mining Company entered a period of troubled operation in which the problems of extracting marginal-value copper ore in a difficult setting became increasingly apparent. Following successful patenting of eight of its Glacier Basin claims in 1920, MRMC settled into the business of operating an extractive enterprise in the midst of a National Park concerned with protecting its scenic natural values from the impacts such operations necessarily entailed. A number of natural, regulatory, personal, and fiscal difficulties continued to plague the process of mining Glacier Basin. These included General Land Office (GLO) challenges to the validity of the Glacier Basin mining operation; constant financial difficulties; poor condition of the mining road, and repeated problems with its maintenance; trial, conviction and sentencing of Peter Storbo and MRMC consultant Orton Goodwin for stock misrepresentation; irregular mining production and ore transport to smelters; resistance within the company to selling the mines to Federal Government; a Sheriff's Sale leading to unstable management; and repeated conflicts between MRMC and National Park Service interests.

This chapter offers an historical review of efforts to maintain, reopen, and expand the mining capability of Glacier Basin from the 1920s through World War II. We believe that understanding the issues affecting Glacier Basin mining during these *mid-life* days will help to explain why mining operations in the basin ultimately came to a close.

Glacier Basin Mining in the Roaring 20s

A Lapse in Permits - Permit Fees Reduced

Between 1921 and 1925, while MRMC applied for and obtained patents to eight of their nine mining claims, the company performed only the minimum assessment work on the claims; allowing permits and leases for their mill and camp claims to lapse.[169] The lapse in permits caught the attention of National Park Service, and acting Director Arno Cammerer, who wrote to inquire about the status of MRMC mining operations. At the bottom of Cammerer's letter, a handwritten, unsigned note stated that "These permits must be thoroughly scrutinized from year to year."[170] After receiving patents in 1924, MRMC began to plan additional work, and renewal of their permits, but balked at paying the requested permit fees for the lapsed years.

[169] Letter from Acting Supt. C. L. Nelson to The Director, NPS, May 30, 1923 (MORA & NARA Archives Fiche 44).
[170] Letter from Acting Director Arno Cammerer to Superintendent Nelson, December 16, 1922 (NARA Archives, L3023 Files, Fiche 60).

The company argued for reduced fees; submitting a "Statement of Present Conditions and Prospects of Mount Rainier Mining Company."[171] This document summarized the company's developments to date, and outlined its 1925 financial status. MRMC highlighted improvements; emphasizing the $70,000 reportedly spent on White River/Storbo road improvements. The company complained about the government fees and regulations which they considered to be unduly high. MRMC negotiated for a reduced fee; arguing that "the development of this mine, if it shall ultimately prove to be on a paying basis, will be of great value, not only to the immediate community but to the nation at large and is a thing that should be encouraged."

> This property has no value to any one on the face of the earth other than the Mount Rainier Mining Company, and to it only for a camp site in the operation of its mine…
>
> The use of all or any of these properties by this company does not interfere with any use to which they could be put for any other purpose.
>
> At that time [presumably the time the patents were pending] the company was endeavoring to develop the claims which have subsequently gone to patent and for years after that, in order to be able to go upon their property at all, were compelled to pay the Government whatever it asked, notwithstanding that they were simply coerced into paying $300.00 per year for a time for the use of said site, but it never was a reasonable charge and is not now.
>
> There has been spent on said mining claim approximately $240,000. All of the money thus far expended in the development of these mines has been raised by sale of stock in these mines, except about $5,000 which was procured from the sale of ore from the mine, but by reason of the way in which it was necessary to pack it out, there was no net profit made in the operation, so that it can safely be said that all of the money which has gone into this property has come from stock sales. Of the above amount there has been more than $70,000 expended on building roads and trails into this mine…
>
> The company has not the money with which to pay the claim of $300.00 per year for these back years, now amounting, as is claimed, to $1,500, and enforcement of such payment would simply break the company…
>
> We would suggest that $10.00 per year would be an ample charge to be made and that amount we are willing to pay…

Following up on the letter, MRMC submitted a payment $50 ($10 per year) for use of the leased claims. The amount was far less than the ostensibly required $300 per year; suggesting that the company was low on funds. The park suggested a reduced fee of $100 per year,[172] but eventually accepted Storbo's $10 proposal for the 1921 through 1925 mining permits. MRMC resumed work in 1926 according to the prospectus sent out that year. However, we could find no permits for the 1926-1927 period.

For the next few years, the park enforced the permit process; sending out copies of the special use permit (SUP) to MRMC requesting signatures and a $100 fee. The permits were effective for a year beginning in July and ending in June. The language of the permits was similar to those of the previous years. These SUPs included provisions for road work; and use of the Lower Camp Lake City and Turtle

[171] Transcribed, unsigned letter dated September 3, 1925. (MORA & NARA Archives Fiche 60)

[172] A "Summary of Important Points In the Mount Rainier Mining Co. Case" was made for a Mount Rainier National Park mining file near the end of October 1932 and states "1926 paid – 1921 to 1925 – Been reduced." (MORA & NARA Archives Fiche 60)

Claims, and the Upper Camp Gate Claim for tunnels, camp, mill, and water power sites. MRMC's permits and fees were submitted on schedule; the company apparently flush with invested money after its successful 1926 prospectus and stock sales letters written by recently hired promoter Charles S. Cresser. By 1927, Storbo was considering expansion; requesting lease of an additional 3.9 acres near Reven Claim for a tunnel, diesel engine, and timber storage as shown on Figure 4.1.[173]

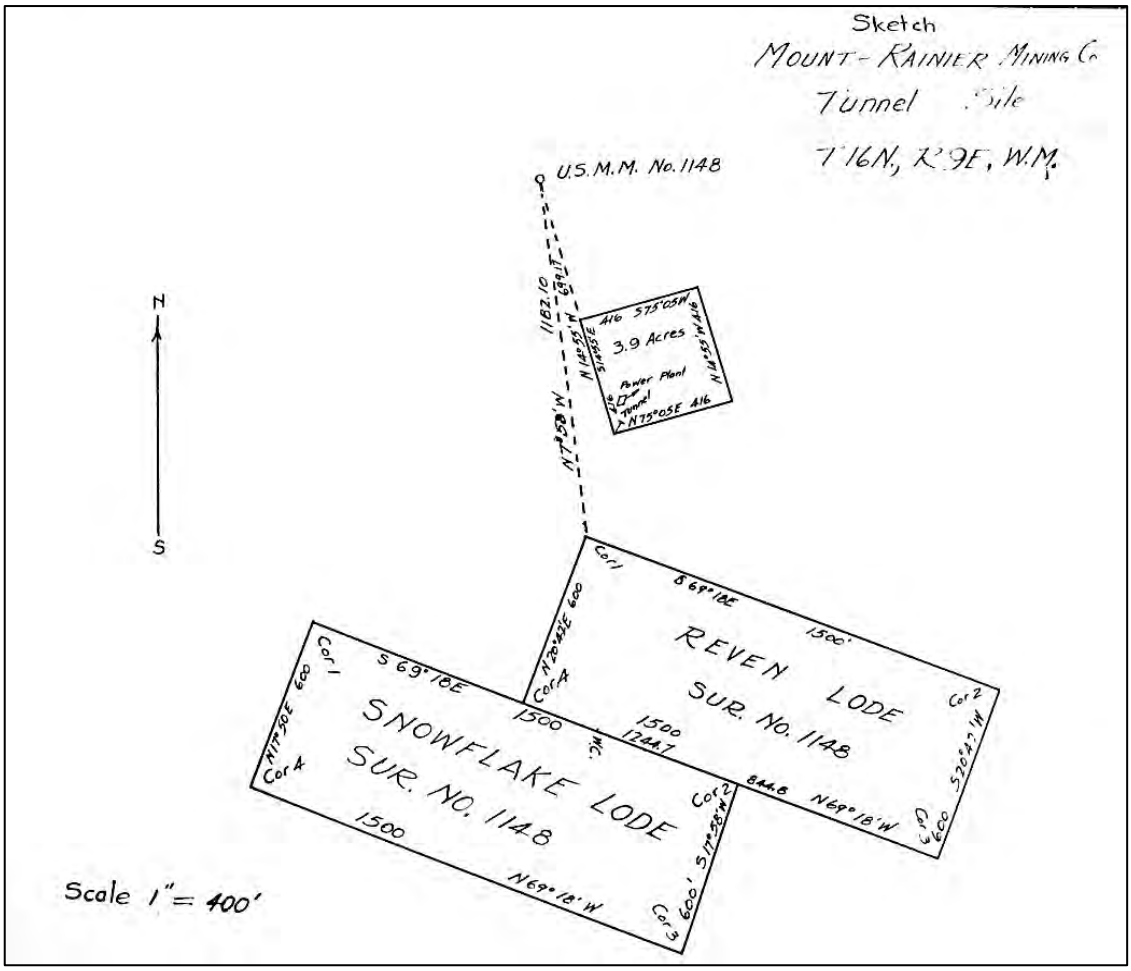


Figure 4.1. Map Showing the 3.9 Acre Parcel for a Tunnel and Facilities North of Reven Claim
(NARA Archives L3023 Files Box 50 folder 56)

Plans for expansion in Glacier Basin soon evaporated with the filing of fraud charges against MRMC President Peter Storbo and others as discussed below, and the onset of the Great Depression. The last fully accepted special use permit (now $125) was in effect July 1, 1929 to June 30, 1930. No extensive mining activity took place on the property after expiration of that permit on June 30, 1930.

[173] Letter from P.T. Storbo to Superintendent Tomlinson, June 29, 1927. (NARA Archives, L3023 Files, Fiche 60)

Production: An Ideal Summer, But Early Fall Rains

The Mount Rainier Mining Company Prospectus of October 1, 1926 describes major developments in the basin.[174] The prospectus touted ambitious plans and promised a bright future. It apparently succeeded in raising funds that allowed work to resume at Glacier Basin; at least for a short while. The upper two miles of the Glacier Basin (Storbo) Road were improved, and Lower Camp was once again made accessible by automobile. Storbo Hotel was boarding miners and taking in guests (Figure 4.2) , and mine activity continued with renewed hope of expansion. The prospectus included the Figure 3.25 photograph of two automobiles parked in front of the boarding house/hotel, as well as a photo of a large compressor in the process of being pulled up a Glacier Basin snowfield as shown in Figure 4.3.

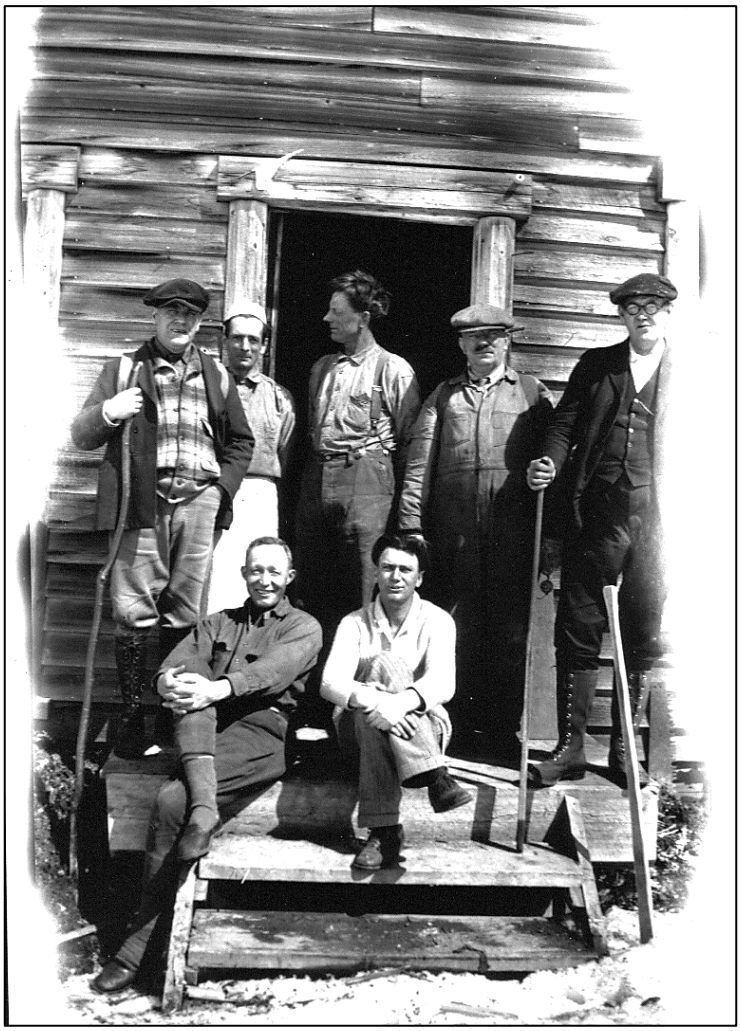


Figure 4.2. Storbo Hotel's Front Door with Guests in the 1920s.
Hotel Chef left of door, Alfred Storbo in the center, Peter Storbo photo-right of Alfred. Others, assumed to be hikers and guests, are unknown.
(Courtesy Arthur L. Storbo)

[174] Copy donated to MORA Archives, by former NPS Western Region Archaeologist Jim Thomson.

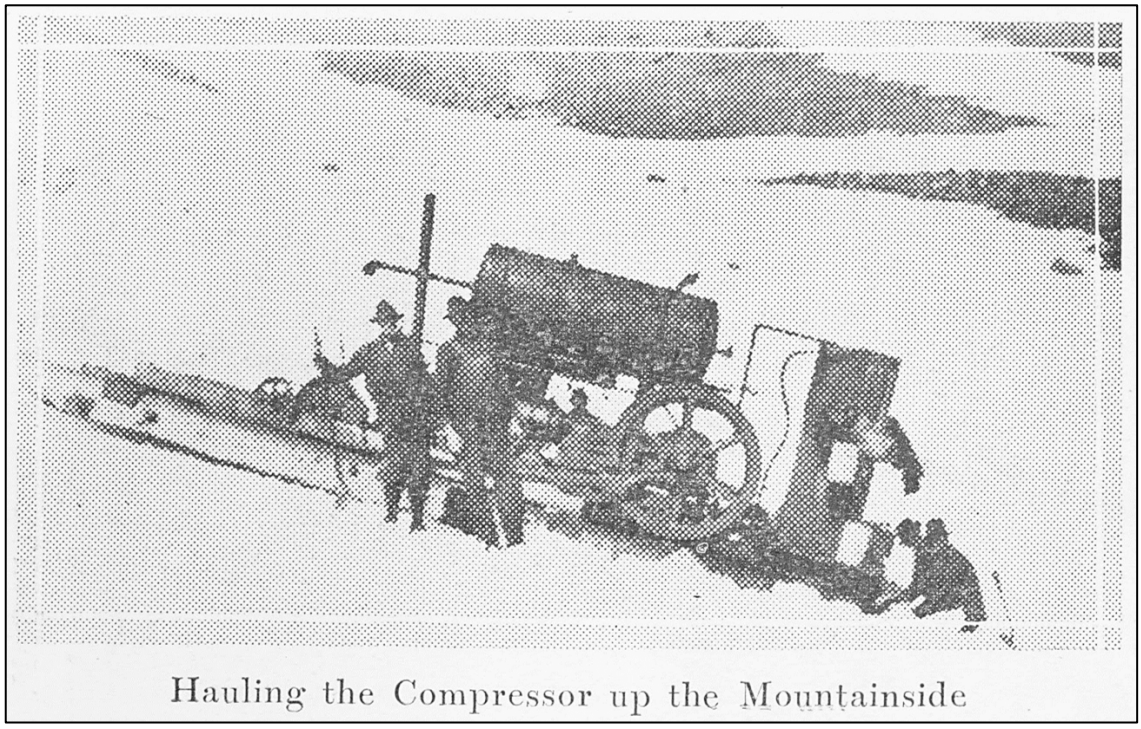


Figure 4.3. 1926 MRMC Prospectus Image of a Compressor being Hauled to Glacier Basin.
(MORA Archives)

New machinery purchased with the company's new money included the air compressor shown above and "Chicago Pneumatic Tool Company's Two-Drill unit of the semi-diesel type." Mining seemed to progress well, at least as suggested in text from MRMC's 1926 prospectus.

> We did not get started as early in the spring as expected, but we had the Air Compressor installed and working in full blast the first of July. Through July and August we drove in about one hundred feet of tunnel per month. During this time we crosscut several veins of ore…
> The latter part of August we crosscut the No. 9 vein and it was about 6 feet wide and it runs up to $87.80 per ton in gold, silver and copper. After crosscutting the No. 9 vein we had to timber quite extensively, as the ore is full of talc free from the walls and will cave very rapidly. We are now past this No. 9 vein about 30 feet. This distance has been very heavily mineralized and at the present writing we are breaking into the No. 10 vein. The width of it is not yet known, nor the richness of it. We have some two hundred sacks of ore sacked up and ready for shipping.
> We are now widening the road below our sawmill so that it will be safe to run loads down that grade. We then expect to start shipping ore in earnest. This has been an ideal summer, but early rains this fall have hindered us to some extent.

The prospectus was, not surprisingly, also an appeal for money to drive MRMC tunnels ever deeper into promising veins, and to ship out more ore. "We need your help now to get this started and when it is started it will soon double your money," the company declared. The prospectus reported that ore sent out that year was valued at $51 to $87 per ton; containing 20 to 30% copper. and small amounts of gold and silver. Ore from the deeper vein was supposed to be even richer.

The next two years were very productive for the Mount Rainier Mining Company. During the late 1920s, there were about 40 men working in Glacier Basin –a high percentage of their wages being paid in company stock. The men worked four to five tunnels at that time.[175] Ranger Hall reported in 1927 that 50 tons of ore were hauled by truck from Glacier Basin to Tacoma in the month of September. In the same month, 40 tons of lumber, gas, oil and machinery were hauled in.[176] Sometime in 1927, as ore was being hauled from the mines in a White Signal truck, the truck tipped over and sank in the White River. This was last ore taken from the mines. The fate of the truck remains a mystery.[177]

During this time, MRMC planned a reservoir site north of the hotel, and cutting more timber in the basin for tunnel supports. The reservoir was approved by the park, but never developed. Timber cutting, however, was not allowed, hence the need to haul in wood. The proposed timber cutting project was denied because of the park's increasing concern with preserving the basin's scenic value. MRMC wanted to cut timber from slopes where in the park's opinion it "would be visible for a long way and would mar the beauty of this stretch of scenery very much."[178]

The Park Service also was concerned about heavy traffic on the somewhat fragile White River Road. "Owing to the lack of proper surfacing the White River Road will not stand up under the heavy hauling to which it is being subjected by the Mount Rainier Mining Co." The Park Service felt that MRMC was responsible for maintaining both the public portion of the road as well as the upper section above White River Camp now used primarily by MRMC.[179]

As mining activity increased in Glacier Basin, the Park Service also increased inspection visits. Ranger H.W. Hall and Resident Engineer R.D. Waterhouse monitored the work and reported concerns to Superintendent Tomlinson. Such oversight infuriated Storbo to the point that he became "insane with rage" during one of Waterhouse's inspection visits in September 1927. Waterhouse met with Storbo to remind him that MRMC was responsible for maintaining White River Road. Storbo went on a tirade; claiming that the park was "sore at his being there and that the Service was making it as hard for him as it could." He claimed that since MRMC built the road, they could treat it as they wished. Storbo also objected to park rules concerning timber cutting; complaining "...that he had fed the Park Rangers and that they were forever doing mean things to him and he had taken all the (----) that he was going to take …"[180]

There was undoubtedly a lack of trust toward MRMC on the part of park officials due to the previous years' intermittent activity and lapsed permits. As for the MRMC, it is likely that the company was experiencing financial problems. Storbo recognized that road maintenance was critical to his project, but also a substantial drain on resources. He probably was impatient and eager to drill, and was frustrated

[175] Paul Shorrock Letters, 1969 and 1975. (NARA Archives L3023 Files, Fiche 67).
[176] Letter from H.W. Hall to Asst. Supt. Carlson, September 30, 1927. (NARA Archives, L3023 Files, Fiche 60).
[177] Bart Ripp "Mount Rainier Mining Company: Lots of Rock, Less Copper", *The News Tribune*, Tacoma Washington, May 31, 1999. Modified by Arthur L. Storbo, personal communication 2017.
[178] Report from R.D. Waterhouse to Supt. Tomlinson July 8, 1927. (NARA Archives L3023 Files, Fiche 60).
[179] Letter from Supt. Tomlinson to Director, NPS, September 20, 1927. (NARA Archives L3023 Files, Fiche 60).
[180] Report from Engineer R.D. Waterhouse to Supt. Tomlinson September 16, 1927. (NARA Archives L3023 Files, Fiche 60)

by required maintenance and Park Service regulations. Storbo may truly have believed that the Glacier Basin claims contained rich veins of ore, but was frustrated by the sense that they always remained just out of reach.

New White River Roads

Tourism in Mount Rainier National Park increased in the 1920s; many visitors arriving and touring in their own cars. The park reported that cars tried unsuccessfully to drive into Glacier Basin using the "rock strewn wagon tracks beyond our surfacing."[181] In 1923, the Director of the National Park Service called attention to the poor condition of the road and recommended improvements for visitors.

> A wide, surfaced road into the White River district is one of the most urgent needs of the park. The completion of the Naches Pass Highway to the White River entrance has brought visitors to this side of the park in numbers we are unable to handle. Over 25,000 people came into the park at this entrance this season. These people came into the park over 4 miles of extremely poor wagon road, with no other provisions made for their comfort. A surfaced road into the park, parking space, and a few simple comforts for camping should be provided next season.[182]

One description of the White River Road and park's northeastern entrance station reinforces the sense of poor road condition in this part of the park. It states that "the location [where] the old Starbo [Storbo] road crossed the White River [was] on a rickety log stringer bridge into Rainier National Park on the west side, where the Park entrance and the Park Ranger's headquarters were located."[183] Indeed, it may be this bridge that collapsed under the weight of a loaded ore-truck in 1927; dropping the truck and the final ore-load from Glacier Basin into the White River.[184] Figure 4.4 shows the bridge as it appeared shortly after construction in 1914. After 13 years of withstanding White River's capricious, and often destructive, flood patterns, the bridge was bound to have been challenged structurally.

Reflecting increasing importance of the park's northeastern quadrant, the park spent $1,100 in 1923 to construct a free public camp ground 6.7 miles inside the White River entrance. The campground offered running water, temporary comfort stations, 18 camp stoves, and 12 camp tables. By 1925, the Rainier National Park Company also operated a 500 person tent camp, store, and lunch counter at a location nearer the entrance.[185] While the private campground is long gone, the public White River Campground continues to be one of the park's favorite camping locations; offering trail access to Glacier Basin, much of which lies atop what remains of the original Storbo Road. Figure 4.5 shows the park's road and trail network as it appeared in 1928; essentially the same as described by these early accounts.

[181] Report of the Director of the National Park Service, 1922:126-127.
[182] Report of the Director of the National Park Service, 1923:61-63, 138-140. (MORA Archives)
[183] Nevan McCullough account of White River road within the Park, provided by Jim Ellis.
[184] Personal communication Arthur L. Storbo 2017, and personal journal Peter T. Storbo October 21, 1926 regarding unsafe bridge conditions; courtesy Arthur L. Storbo.
[185] Report of the Director of the National Park Service, 1923:61-63, 138-140. (MORA Archives).



Figure 4.4. White River Bridge in 1914.
Note presence of hefty log bridge-support structures build on unstable mid-river gravel bars. (Courtesy Arthur L. Storbo)

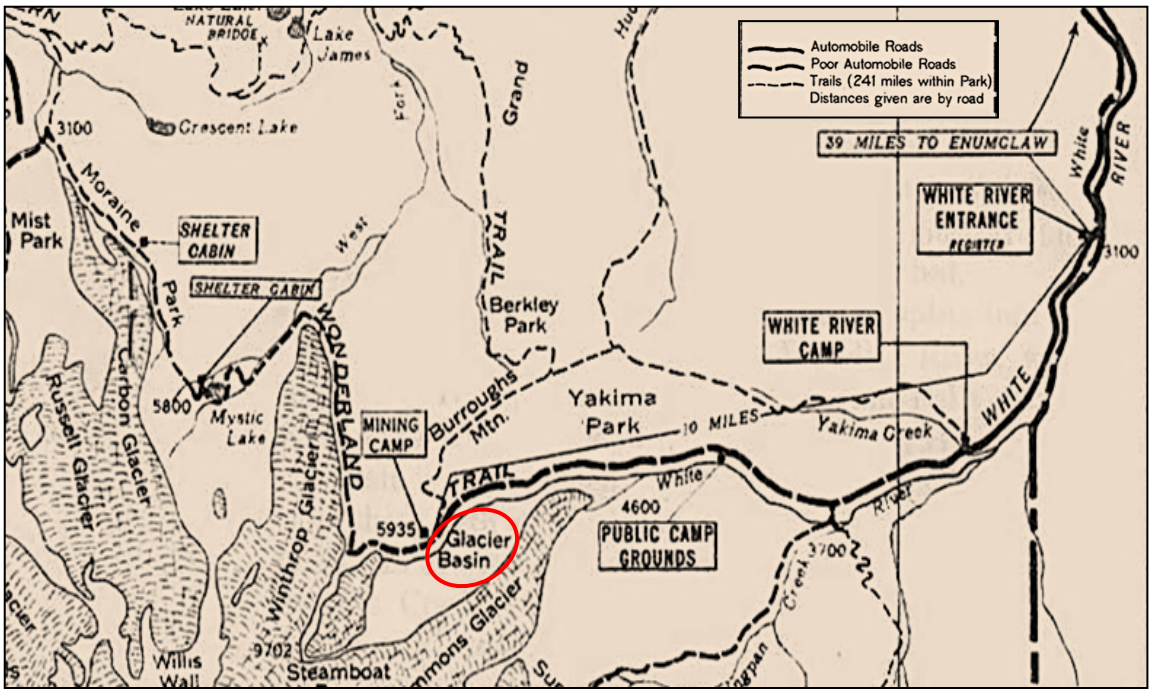


Figure 4.5. 1928 Map of Roads and Trails in Mount Rainier's Northeastern Quadrant.
White River/Storbo Road, first Park Entrance and White River Camp, Public Campground, and Glacier Basin Mining Camp. (http://glaciers.us/glaciers-washington)



Figure 4.6. Flooded White River Road North of the Park; July 19, 1919.
(Photo by Asahel Curtis courtesy Washington State Historical Society)

Then, as now, the White River and its floodplain was unstable; as were slopes the road crossed nearer Glacier Basin. Figure 4.6 shows the roadbed north of the park awash with receding flood water in mid-July, 1919. Repairs could not permanently solve the problem. Another severe storm in 1923, flooded the White River Road completely and blocked several cars behind a road-covering slide above White River Camp. Flood repair cost the park $3,000.[186]

Constructed, as it was, across unstable Mount Rainier slopes, and adjacent to the flood-prone White River, the road and its bridges were exposed to repeated slide and high water events; eventually requiring the park to relocate the lower elevation portion of the route to the somewhat higher upslope location in use today. The park was able to repair the flood damage, but could not make major road improvements that would be sustainable over the long-term.

By 1926, when MRMC resumed mining, it improved the upper 2½ miles of Storbo's road above White River Campground; improving automobile (and truck) traffic into Glacier Basin. But increased traffic along the fuller extent of White River Road also increased contention as to who was responsible for road maintenance. When Waterhouse spoke to Storbo in September 1927 about road maintenance, he stated that the park could close the road if the heavy truck traffic caused too much damage. That year, MRMC was building a new road on the north side of the White River above the campground.[187]

[186] Superintendent Tomlinson Annual Report 1923, 1924. (NARA Archives H2621 Files)
[187] Letter from R.D. Waterhouse to Superintendent Tomlinson, July 7, 1927. (MORA Archives)

Waterhouse instructed Ranger Hall to make sure the section of road further downstream, between the entrance and the White River Camp, was resurfaced as part of the project.[188]

By 1929, construction of a new White River entry to the park was under way. It followed the river on the side opposite the old road before crossing the river and climbing to 6,400 ft., the highest elevation achievable by autos in the park. Still in use, this road to Sunrise, with a spur road to White River Campground, replaced all but the last three miles of the old Storbo/White River mining road within the park. The park's 1940 guide map (Figure 4.7) shows the road that was under construction in 1929. While miners continued to use the upper sections of Storbo's Glacier Basin Road, most visitors, other than a few climbers and mountaineers, bypassed Glacier Basin altogether once the new road system was complete.

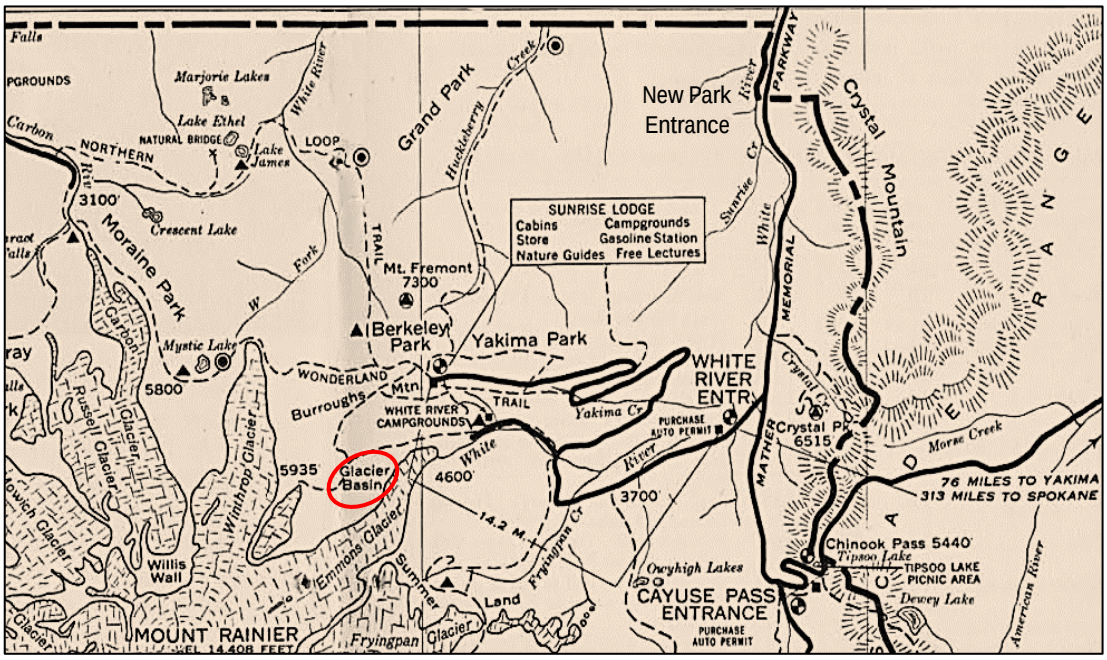


Figure 4.7. 1940 Guide Map Showing Roads and Trails in Mount Rainier National Park.
(https://www.nps.gov/parkhistory/online_books/brochures/1940/mora/sec1.htm)

Extravagant Claims - A Mountain of Copper

Mount Rainier Mining Company was not only mining Glacier Basin, but also tapping into financial resources in the Northwest and Midwest –primarily small farmers in Oregon and Washington, and in North and South Dakota. These investors, mostly of Scandinavian background like Storbo and Korssjoen,[189] were convinced that buying MRMC shares would be a sound investment, and eventually return substantial profit. MRMC reports and letters mailed regularly to stockholders described the progress of mining operations in Glacier Basin. Mineral wealth, they emphasized, was close; it was just a matter of raising more funds to buy equipment, tunnel deeper, and transport more ore to smelter.

[188] Letter from R.D. Waterhouse to Superintendent Tomlinson, September 16, 1927. (MORA Archives)
[189] Enumclaw farmer, Andrew Strom, named on the 1927 Figure 4.8 stock certificate, for example, had childhood ties to Peter Storbo in Sweden. The Strom and Storbo families remained friends into the 1950s. (Arthur L. Storbo, personal communication July, 2017)

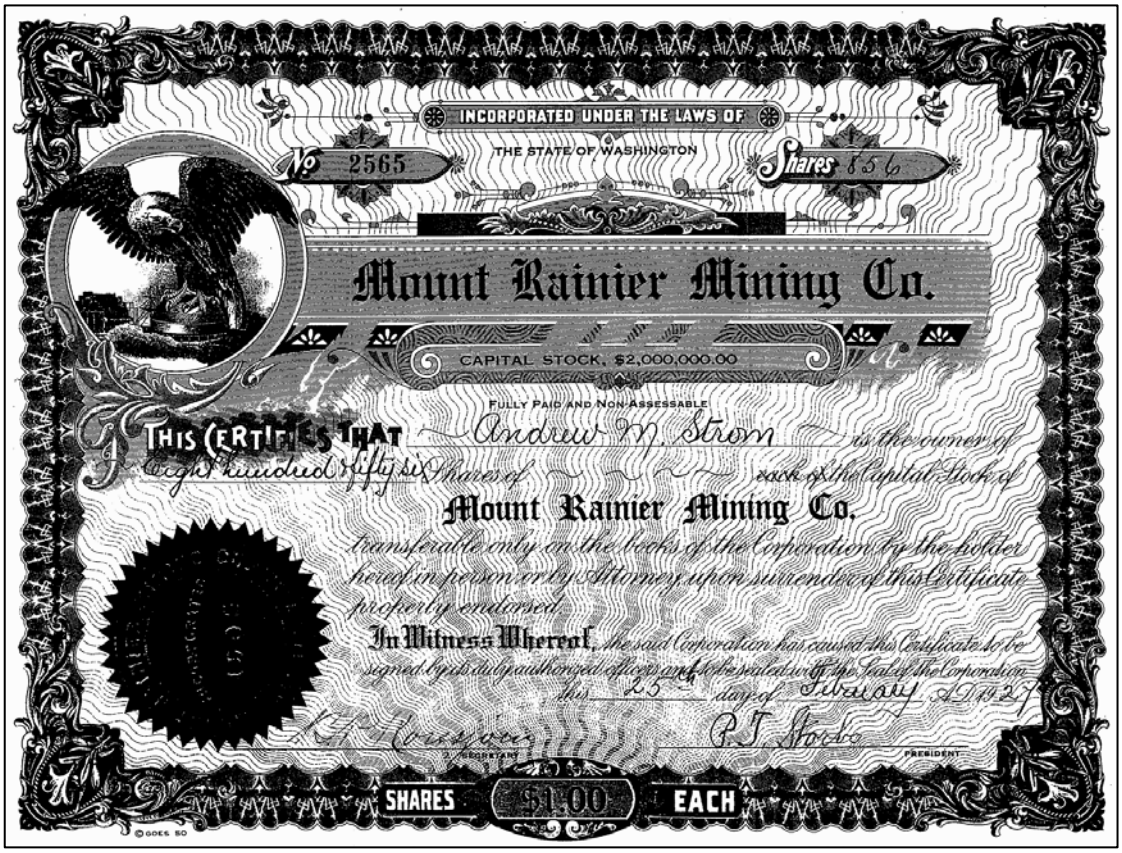


Figure 4.8. 1927 Mount Rainier Mining Company Stock Certificate.
(Courtesy Arthur L. Storbo)

One such letter, dated April 15, 1927 to Ed Erickson of Astoria, Oregon illustrates the point.[190] The letter and others like it were mailed widely to MRMC stockholders; ultimately proving to be *critically important* to the company, and to the fate of its mining operations in Glacier Basin. Hoping to generate cash for expanded Glacier Basin operations, the letter was a key component in a promotional campaign orchestrated by MRMC consultants Charles Cresser and Orton E. Goodwin in the early months of 1927. Bearing P.T. Storbo's signature, it urged stockholders to buy stock immediately, as the prices of the shares would soon double. By acting quickly, stockholders had a chance to buy additional shares, for a short time only, at the current price of fifty cents each.

In a sense, the 1927 promotional campaign was a success. As hoped, it succeeded in raising substantial funds to continue mining operations in the basin. That year, MRMC was able to extract and deliver a number of truckloads of ore to smelter. As a key component of that short-lived success, we offer the full text of the letter below to show the promotional tactics used by the company, and the lucrative future envisioned for the Glacier Basin mines. As will be seen, the letter and the language used, soon came under scrutiny by the U.S. Post Office Department with dire longer-term consequences. The letter reads:

[190] Letter transcribed by Robert McIntyre, Jr., MORA Microfiche regarding MORA Mining-Glacier Basin.

In view of the fact that we shall be compelled to cancel all stockholders' rights to purchase Mount Rainier stock at 50 cents a share, on May 15, I shall be obliged if you will answer this letter at ONCE.

Subscriptions can only be accepted at 50 cents, if envelope bears postmark not later than midnight of May 15, 1927. The minimum price on all subscriptions received after that dating will be one dollar a share, with brokers indicating that the market may be higher.

Up until that time, you have the right to mail in your own subscription, with those of your friends at that price, but thereafter the special rights which I insisted our stockholders must have, will be at an end. I demand that our stockholders and their friends, in appreciation of the many years many of them have been with us, must be considered FIRST, before the contract for the disposition of the balance of our stock at prices from $1 upwards became effective.

You will find subscription blanks, which provide for either cash or partial payments enclosed. Many of our stockholders have asked for the privilege of subscriptions on partial payments, and this request we are happy to grant.

Twenty-five years ago when I first discovered the Mount Rainier mine, which now seems destined to be one of the greatest copper mines in America, I little thought that in the office in my home here – I kept the office here to save rent – I would have auditors and stenographers checking everything.

Our stock records have been kept in a stock ledger, which different people have kept. Possibly there are some discrepancies, with similar names and initials, among 1,300 stockholders. But so as to clear up every record, the auditors have asked me to check every stockholder. [Information asked of stockholder left blank] … shares. Is that right? If it is right, please let me know AT ONCE in the enclosed envelope. If it is not right, please also let me know at once and give me your certificate numbers and the number of shares of each certificate, as well as the total, so we can check up and adjust the records. And be sure to see that your own address is correct, as shown on the envelope bringing this letter.

And here is another favor. In the years we have lost contact with hundreds of stockholders. I sent you a list of them some little time ago. Many of our friends have sent me in correct addresses, but if you know the correct addresses, and their names, if names have changed by marriage, please let me have the information. We don't want a single old stockholder of Mount Rainier to fail to get his dividends. You see we are looking a year ahead, when our directors expect Mount Rainier to be paying huge dividends.

I have given my life, my money and strength to Mount Rainier.

Once when the mine needed money, I took a road contract. Another time I got a contract to cut railroad ties, and every penny, save the barest living expenses, went into Mount Rainier. If it was good enough for YOU, it was good enough for ME.

And this is what kept me up: One day, Mr. Korssjoen mentioned to a smelter man the copper mine at Roros, Norway, where he had worked, and which we both knew. 'That's only a small property', said the smelter man. 'Well not so small', said Friend Korssjoen. 'That mine has paid profits and dividends for 300 years, and supports 2,400 people.' That is the kind of property Mount Rainier will be!

In less than 5 years, Mount Rainier should develop into a 'caving', steam shovel proposition, with steam shovels scooping out a *mountain of copper* – thousands of tons a day. It may require capitalists to build a special smelter for us. And I think the railroad will build a short branch line to our property (although the truck rate to Tacoma for ore or concentrates is only around $5 a ton).

But what have we to show for the years that have gone? Development that could not be duplicated for $500,000 -- $700,000 some engineers say. We did it when costs were less, and because we HAD TO. We had no money to squander.

Our road has cost us $80,000. Now most of that road is part of our state highway program, and we shall probably get back from the state a part of our cost. Part of the road is maintained by Uncle Sam – we have only to keep up about four miles. But we built it all – 28 miles of it – grades, bridges, culverts, everything. We had to watch the pennies. The state recently let a contract to widen 6 feet of nine miles of that road for $160,000. And we built 28 miles of road for $80,000!

We have an electric power plant, and fine buildings for our men, all electrically wired.

We have tunneled, drifted and made open cuts all over the eight claims we own patented, so that we could tell EXACTLY where the ore was and how much it was worth.

Thus our main ore body is proven for 4,500 feet long, 2000 feet wide, and about 175 feet deep, containing (approximately) 12,100,000 tons of ore. If we suppose that averages net only $10 a ton, that amounts to more than $60 for each share of stock.

That is not all. We know the ore gets richer as it gets deeper. Anaconda is now working thousands of feet deep. We may finally go down 7,600 feet (to sea level), and every 10 feet of added depth should mean an extra $10,000,000 in ore reserves. We are now forcing through a tunnel 600 feet deeper, which should multiply by five the tonnage figures and values given, unless Mount Rainier is different from every other copper mine in the world. And only rarely have we EVER found ore as low as $10 a ton.

We have one vein of rich 'peacock ore,' about five feet wide, 4,500 feet long, 175 feet deep – it also may go thousands of feet deep, and our big tunnel should prove it to be 775 feet deep. That peacock assays from $60 to $80 a ton – jewelry, the engineers call it. Just taking that out should mean in time to the mine $75,000,000, and probably much more, as we go deeper.

And we expect to start shipping 100 tons a day of that high grade, just as soon as our big aerial tramway is completed, this summer. The tramway will be built for the future and will have a capacity of 100 tons an HOUR.

These results and this proof have been obtained by 20 years of hard, consistent work, aided by your money.

About 100 tons a day will be our limit this year, but we shall build towards 1,000 tons a day, or more. This year we shall complete the tramway, complete our PRESENT tunneling requirements – remember that a mine must always tunnel, always stope – and we shall start on and perhaps finish the first units of our concentrator, to handle our lower grade ores, which run around $14 to the ton. A concentrator to handle 1,000 tons a day is not far off.

As to dividends: We may be in shape to pay this year. It may not be good business to do it, for next year we feel that the dividends for the year should be far more than the total of money invested in the property for 20 years. I know one great copper mine that paid no dividends for 24 years, and now pays EVERY THREE MONTHS more than the total investments for 24 years.

I am not writing this letter to tell you of the money we should begin to realize from Mount Rainier. But I wanted you to realize and know that your children and their children's children for untold years should draw profits from Mount Rainier. We have a whole mountain of copper to draw on. Only a banker could realize the figures.

In the past we had to supervise everything ourselves. Now I am to have trained engineers to help and guide us. It is different from the days when we almost starved that the mine might go on. Once we were out of food and gnawed bacon rinds!

Another time, Knute Stene – poor fellow, he is dead now – and I were taking supplies to the camp over the snow with a pack train. The men were almost out of food. We came to a river where our bridge was washed away. The only tools we had were a saw, an ax, 12 80-penny spikes and a wedge. In four days we bridged a river 65 feet from bank to bank and got food to the men. We had to fell the trees to do it. Another day my hat blew off and I jumped into an icy stream after it for hats cost money. That time I nearly drowned, and would have, but for my friend.

Those days are over, and things will be easier now. But I never forget and I never shall forget that Mount Rainier was made possible by the dollar bills, the $100 bills and the $1,000 savings of our friends and their friends. I intend to see that they get their monetary rewards. The other reward – the knowledge that they have helped carry on a great enterprise – they now have.

In this room there is a great boulder. It is the discovery rock. I found it at the grass roots, and even that rock assayed $80 to the ton. I have promised in another year to send that rock to some great museum, probably the Smithsonian Institute, at Washington, D. C. But that rock was the milepost that led us to the great mine we have today, just as the discovery of our famous PEACOCK ORE told us we had no ordinary copper mine, but one that may be of fabulous wealth.

A famous mining engineer was here the other day. He went over the samples from the different levels, tunnels and depths. 'Peter Storbo,' he said, 'you have one of the greatest copper mines in the world. Indications are that ore will hold out till you get below sea level.' (We are now up 7,600 feet.)

Now we could sell out the property for a fortune. Only four years ago – and remember I am now a poor man, save for my stock in Mount Rainier – I was offered $75,000 cash, just to FORGET to do some assessment work, so the mine could lapse. That was before our patents were issued.

But the stockholders of Mount Rainier have never been sold out. Now they never CAN be sold out. They own the property for all time. They can never be 'frozen out.' And I want everyone to obtain the rightful benefit.

So that is why I am sending this letter, asking you to answer concerning your shares, and let me know about the 'missing friends'; also to let you know this is the LAST CHANCE you and your friends can have. Please act at once. Remember this is a great partnership. Let us carry on Mount Rainier until it is the greatest copper mine in America. Let us be as we have been in the past, not stockholders, but partners and friends.

And I am happy to sign this letter,
Your friend, *P. T. Storbo*

P.S. If you possibly can, visit the mine this summer and see for YOURSELF. [191]

[191] It should be noted that it is unlikely that Peter Storbo wrote this letter personally, or at least not without substantial editorial assistance. The length, content and style are not consistent with his limited education in pioneer Minnesota and Dakota Territory, nor with other letters and journals. Consultants Charles Cresser and O.E. Goodwin had been hired in February 1927 to promote MRMC's mining ventures in Glacier Basin. It is likely that they wrote the letter, or substantially assisted Peter Storbo in its production. Storbo's grandson, and family historian, Arthur L. Storbo believes that Cresser, or his wife Millie, may even have copied P.T. Storbo's signature onto the letter. That said, we believe it unlikely that the letter campaign could have been carried out without Storbo's and other MRMC officials' knowledge and tacit approval.

Mail Fraud; The 1927 MRMC Stock Campaign and its Consequences

The *Mountain of Copper* letter sent to Mr. Erickson and other stockholders was related directly to MRMC's need to raise funds to support road maintenance and proposed expanded mining in Glacier Basin. To provide promotional expertise, the company contracted the services of Charles E. Cresser and Orton E. Goodwin in February 1927.[192] As part of their promotional campaign, it is likely that Cresser and Goodwin produced the letter on behalf of MRMC and its president, Peter Storbo. The promotion continued for several months; succeeding in raising a substantial sum of money –about $100,000. In the process, however, the letters raised shareholder concerns regarding the legitimacy of the company's claims. Stockholders filed complaints against MRMC; alleging the company was using the mail to defraud investors by using exaggerated promises and the threat of imminent price increases to solicit investment. After initially dismissing the allegations, the Post Office Department later came to agree with these claims. In 1928, United States Post Office Inspector, J.S. Swenson brought mail fraud charges against Peter Storbo, Bernt Korssjoen, Charles Cresser, and Orton Goodwin. Directly related to these charges, the United States Post Office Department hired Milnor Roberts "to examine the property of the Mt. Rainier Mining Company in Glacier Basin, in connection with [the mail fraud] litigation."[193]

In conjunction with the case, Mount Rainier Superintendent Tomlinson wrote to Stephen Mather, the Director of the National Park Service (fourth from the left in Figure 3.6); enclosing a related newspaper article from the August 6, 1928 *Seattle Post-Intelligencer*. Tomlinson added his own view that "This action on the part of the Post Office Inspector bears out my personal opinion which I have frequently expressed that the whole affair is nothing but a stock selling scheme because there is not sufficient ore of value to warrant mining operations on any such scale the officials have led prospective buyers of shares to believe were feasible."[194]

A jury trial to resolve the issue was held in November 1930, and was reported in the *Seattle Times* and *Tacoma Daily Ledger*. Tragically, prior to the trial Bern Korssjoen died; probably of mental anguish related to the stress of the affair.[195] Charles Cresser was excused from trial by reason of illness supported by a doctor's letter. He died of cancer shortly after the trial.[196] Bereft of supporting witnesses, the remaining two defendants Peter T. Storbo and Orton E. Goodwin were found guilty of fraud, sentenced to 18 months in the McNeil Island Penitentiary in Washington, and fined $1,000 each. Ole Oakland, one of the stockholders, who tried to resume mining in the 1940s, later claimed that the "money involved in the judgment [i.e., the fine] was paid for by shares."[197]

In Storbo's defense, it should be noted that Charles Cresser appears to have had a history of fraud related to earlier undertakings in other places which he may not have revealed before he was hired to

[192] Arthur L. Storbo, personal communication March 2017. Peter T. Storbo, personal expense logs 1927.
[193] Letter from Milnor Roberts to Paul H. Sceva Mount Rainier National Park Company, December 2, 1930. This letter was mistakenly sent to the concession company rather than the National Park, but eventually made its way to Superintendent Tomlinson. (NARA Archives L3023 Files, Fiche 63)
[194] NARA Archives L3023 Files, Fiche 64.
[195] Arthur L. Storbo, personal communication March, 2017.
[196] Ibid.
[197] Letter from Ole Oakland to NPS Director N.B. Drury, April 29, 1942. (NARA Archives, L3023 Files, Fiche 63)

implement the 1927 promotional campaign.[198] Furthermore, in the same month as the MRMC trial, Orton Goodwin was among five others charged with mail fraud in association with a Seattle brokerage firm, the Thomas Allen Company. The *Seattle Times* reported that "O.E. Goodwin, publicity director, given an 18 months sentence last week in the Mount Rainier Mining fraud case, was sentenced to a year and a day, to be served concurrently with the previous sentence, and fined $1,000."[199] At a minimum, it is clear that MRMC, either knowingly or unwittingly, received poor counsel from its promotional contractors.

In any case, the *Mountain of Copper*, and other "hard sell," letters were mailed widely to stockholders over an extended period of time. To our knowledge, none of these were withdrawn or corrected by MRMC. At the trial, the boastful circulars were read to the jury.[200] In response, Federal Judge George M. Bourquin stated that "You have plundered profits from many poor people. The circular letters which you mailed throughout the country seduced them with false promises and luring prospects."[201] Even so, Goodwin and Storbo maintained their innocence, as reported by the *Seattle Times*:

> Storbo, who took the witness stand in his own defense yesterday, said he acted in good faith. He said he signed most of the letters mailed to stockholders, but denied writing them. He said he had received no compensation for the mine company for more than nineteen years.
>
> When asked if he believed there were 'two billions of dollars worth of ore in the mountain, as one of the company's letters stated, Storbo said he did. Goodwin also said that his statements to stockholders were made in good faith.[202]

A 1999 article about the Mount Rainier Mining Company in the *Tacoma News Tribune* adds a bit of additional information.

> He [Peter Storbo] was released after one year and three days. A petition of 1200 signatures from just about everyone in Enumclaw had requested Storbo's freedom. There was a law that immigrants who served more than one year in prison lost their citizenship. U.S. Sen. Homer T. Bone persuaded President Franklin Roosevelt in 1934 to grant executive clemency, restore Storbo's citizenship and return the $1000 fine, plus $232.60 in court costs. Goodwin and an ex-con named Chester [*sic*] Cresser, who was selling Mount Rainier Mining stock, later admitted that they had forged Storbo's signature on stock certificates. He'd been framed.[203]

Even if Storbo, Korssjoen and others were not completely blind to the extravagant claims contained in the *Mountain of Copper* letter, it seems likely Cresser and Goodwin took advantage of their limited backgrounds in legal matters of this sort. But whatever extent of their personal complicity, the letters and the mail fraud convictions that they engendered effectively ended the heady days of mining in Glacier Basin. After this point, MRMC found it exceedingly difficult to raise funds through stock sales; and all the while, road maintenance and mining costs remained high. Glacier Basin copper ore values simply were not high enough to cover costs, or return profits to the company and its stockholders. Mining operations slowed, only to be battered further by the onset of the Great Depression of the 1930s.

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[198] Arthur L. Storbo, personal communication March 2017.

[199] Three November 1930 newspaper articles regarding fraud charges in NARA Archives L3023 Files, Fiche 63.

[200] *Seattle Times*, November 23, 1930. (NARA Archives L3023 Files, Fiche 63)

[201] *Tacoma Daily Ledger*, November 29, 1930. (NARA Archives L3023 Files, Fiche 63)

[202] *Seattle Times*, November 23, 1930, L3023 Files, Fiche 63.

[203]Bart Ripp "Mount Rainier Mining Company: Lots of rock, less copper," *The News Tribune, May 31, 1999.* (*http://archiver.rootsweb.ancestry.com/th/read/NORWAY/1999-06/0928362749*)

Glacier Basin During the Depression Years

The 1930s brought major changes to Mount Rainier National Park. Aside from Storbo and Goodwin's trial and incarceration, a 1931 boundary change expanded the park's eastern boundary from White River to the Cascade Crest. The boundary expansion allowed plans for the new Eastside Road to proceed; removing traffic from much of the flood-prone Storbo road on the White River floodplain. During the depression years, a number of Civilian Conservation Corps (CCC) camps were established throughout the park; bringing crews of men to build roads, campgrounds, trails, and buildings; an undertaking that dramatically improved the park's thirty-some year old infrastructure.

Mount Rainier Mining Company, however, benefited little from these events. The last 3½ miles of Storbo Road to Glacier Basin remained unpaved, and Civilian Conservation Corps activities were not directed at private in-holdings. Visitors who traveled to the park during this time largely bypassed Glacier Basin in favor of the superior amenities at nearby Yakima Park (now known as Sunrise Ridge) accessed by the new road network shown on Figure 4.7.

Glacier Basin Mining Operations Wind Down

Mount Rainier Mining Company was just one of many companies that faced financial woes during the Great Depression. The government offered special use permits to MRMC for fiscal years 1930 and 1931, but no fees were submitted for those years. The last fully accepted special use permit was in effect July 1, 1929 to June 30, 1930. There was no extensive mining activity on the property after expiration of that permit. Figure 4.9 shows the effects of inactivity and natural deterioration at Lower (Storbo) Camp in the 1930s. The cabin stands in ruins, the barn has burned down, and the hotel roof is beginning to fail.



Figure 4.9. Deteriorating Lower Camp Structures in the 1930s.
(Courtesy Arthur L. Storbo)

When the park finally received a response to repeated inquiries, the reason for the inactivity became clear. An April 26, 1932 letter written by stockholder, J.H. Starr of the Shell Oil Company in Tacoma stated that "The company is entirely without funds and will not have any until after September 26 [1932]."[204] The search for adequate funding, however, failed to improve as hoped.

The issue of MRMC mining permits and fees remained in limbo from 1931 through 1934. Although the park required fees for lease of claims on park lands, mining had halted and the company was non-responsive to the park's requests. Superintendent Tomlinson wrote several letters to MRMC regarding the issue; and Arno B. Cammerer, Director of the National Park Service, notified the Chief Auditor.[205] Even so, nothing was resolved during this period. In October 1934, when Ranger Boyer asked Tomlinson "What will be done about the Mt. Rainier Mining Co. at Glacier Basin????" Tomlinson, apparently giving up on the problem, replied "Let Mt. Rainier Mining Co. lease permits go as they are not operating [in Glacier Basin]."[206]

Mining Claims For Sale

As early as the1920s, the National Park Service had begun planning to acquire privately owned lands in the National Park system. By1926, Congress had started appropriating yearly funds to acquire private land with the condition that matching funds from non-government sources also were available. This funding condition was commonly known as the "50/50 land purchase appropriation." The NPS was responsible for identifying private land in-holdings, gathering information about the properties, establishing priorities, and encouraging donations of lands and money.

Initially, privately owned land with standing timber rated as higher priority for purchase than mining claims. In 1929, however, NPS Director Horace Albright (seated sixth from the left in Figure 3.6) asked Superintendent Tomlinson to investigate the mineral claims as well.[207] The funds available from Congress for land acquisition was dependent on donations that varied from year to year. Furthermore, the entire National Park Service system competed for these funds. At Mount Rainier National Park, the resulting lack of acquisitions money meant that the park could not follow through on negotiations to purchase the Glacier Basin mining claims. Over the years, several negotiations and purchase opportunities would stall for this reason.

Arno B. Cammerer, Acting NPS Director in 1930, when notified of the results of the MRMC stock fraud case, reflected on the impact of the convictions to the status of the Glacier Basin claims. On December 5, 1930, he wrote to Tomlinson:

> As far as the mineral laws are concerned a claim can be patented with but very little showing of mineral, and since the General Land Office found that they contained some mineral it is considered impossible to secure the cancellation of these claims on the grounds of fraud. In other

[204]Letter from J.H. Starr to Superintendent Tomlinson, April 26, 1932. (NARA Archives L3023 Files, Fiche 63).
[205] NARA Archives L3023 Files, Fiche 63.
[206] NARA Archives L3023 Files, Fiche 47, 50, 63.
[207] Preceding paragraph summarizes information from "Effect of Mining on Public Lands" a draft manuscript by Robert McIntyre, Jr., March 27, 2004.

> words, the fraud perpetrated by the sale of stock is separate and distinct from fraud in securing patents to the claims.
>
> While it appears that we cannot secure the cancellation of these patents on the ground of fraud, do you not think that the claims could be purchased at a very reasonable sum especially now immediately following those criminal proceedings? Therefore, it is suggested that you take the matter up with the company and see what you can work out with them in the way of a proposal of sale.[208]

Tomlinson, however, had already made a proposal. He had written to Mount Rainier Mining Company a few weeks earlier; stating that "The National Park Service is desirous of eliminating all privately owned land from within the national parks and monuments, and as opportunities present themselves, negotiations looking toward the purchase of such privately owned lands as are desired by the Government, are undertaken... it was my thought that in view of the recent developments in your organization you would appreciate being given the opportunity of filling out the Government form 10-302 Proposal for Sale of Land. " Tomlinson considerately enclosed the proper form with his letter.[209]

Mount Rainier Mining Company officers discussed the park's proposal at a director's meeting in 1931. John N. Excell, the new MRMC president, maintained an interest in keeping the company going. In the early 1920s, Excell had backed several loans to ensure its survival. Although he hoped to resume mining, financial problems forced delays in submitting required special use permits. In March of 1931, Thomas Nelson, MRMC treasurer, wrote Tomlinson explaining the company's position. Nelson explained that the stockholders had invested too much money –nearly half a million dollars– to consider selling at a nominal price. He did, however, inquire "…if the Park board could suggest some idea as to the price they were having in mind for the Mount Rainier Mining Company…."[210] MRMC, in other words, did not reject the government's proposal outright. They wanted to know how much the park was willing to pay for the claims.

Mount Rainier National Park staff discussed the claim purchasing issue among themselves. Assistant Superintendent Oscar W. Carlson stated that "On the basis of information now available, believe the Park Service could well afford to pay anywhere from $50,000 to $75,000 for title to these lands. Believe they would accept an offer of $25,000. In later years we may of necessity, or be bluffed into paying a much greater amount." Park Engineer R.D. Waterhouse did not think the property was worth more than $50,000.[211] There is no record of whether either MRMC or the park proposed an asking price at this time, and the issue remained unresolved.

While MRMC refused to sell the claims, facing bankruptcy MRMC was forced to sell assets. On September 26, 1932, Thomas Englehorn, of Churches Ferry, North Dakota acquired the Glacier Basin mining claims in a Pierce County sheriff's sale. Earlier, during the 1920s, Englehorn had helped sell

[208] Letter from Arno B. Cammerer to Superintendent Tomlinson, December 5, 1930. (NARA Archives, L3023 Files, Fiche 63)
[209] Letter from Superintendent Tomlinson to John N. Excell November 25, 1930. (NARA Archives L3023 Files, Fiche 63) Tomlinson sent a similar letter to Longmire Mineral Springs Company earlier that month.
[210] Letter Thomas Nelson to Superintendent Tomlinson, March 20, 1931. (NARA Archives, L3023 Files, Fiche 63)
[211] Comment by Assistant Superintendent Carlson, March 29, 1931, and Park Engineer Waterhouse , April 1931. (NARA Archives L3023 Files, Fiche 63)

company stock in North Dakota. He also had loaned money to the company in exchange for stocks, and bought the notes of other lenders. In 1925, shortly after MRMC patented its eight mining claims, Englehorn filed a claim *against* MRMC to recover the principle of several notes; a sum amounting to $9,500. The case was decided in favor of Englehorn.[212] It was not until 1932, however, that the writ of execution on the judgment was issued to the Pierce County Sheriff, and the real property (i.e., the claims) were acquired by Englehorn. Park Service documents list the sale price as $14,253 or $20,000. However, a 1966 report states that Englehorn acquired the claims for $500 when the MRMC filed for bankruptcy in 1931.[213] Adding to its woes, the company was disenfranchised in 1932 for failing to pay its corporate taxes.

Whatever the cost, Englehorn now owned the Glacier Basin mining claims. In 1933, and again in 1937, he offered to sell those claims to the Federal Government. His attorney, W.M. Anderson, initially offered to sell for $100 an acre; but Englehorn felt the claims were worth $200,000. Both times, NPS director Arno Cammerer responded; stating that the government did not have funds available for the purchase. During the 1933 offering, Cammerer tried to negotiate a reduced price for the government.

> …The small balance of Federal funds which we had available for the purchase of privately owned lands must be matched by private donation either at the time of the purchase or at some later period. Therefore, if Mr. Englehorn is willing to donate half of the value of these claims, which can be done by selling them to the Government at half price, we are willing to recommend to the Secretary that impounded Federal funds be released for that purpose. Of course we can not promise that this recommendation will be approved so as to make Federal funds available even for half of the purchase price. If Mr. Englehorn is willing to consider this proposition, we will be glad to hear from you further and will see what we can do in the way of having Federal funds released.[214]

Englehorn and Oakland: New Owner, New Directions

Englehorn tried again in 1939 to make back some money on his Glacier Basin claims. His new attorney, W.W. Felger, wrote to park Superintendent Tomlinson and National Park Director Cammerer to inquire about resuming operation of the mines.

> A few years ago a fine, paved highway was completed across the mountains by Naches Pass, and this road runs about 3½ miles from the mining property, *and the holder of the sheriff's deed, either himself, or an assignee - possibly a new corporation* – would like to operate the [Glacier Basin] mine [emphasis added].[215]

A December,1939 memorandum by Superintendent Tomlinson, however, suggests that the park was not eager to encourage renewed mining in the basin.[216] In it, he summarizes the state of Storbo Camp

[212] Case 179781, Superior Court of King County on file in the Court House in Seattle.
[213] Letter from Waterhouse to Superintendent Tomlinson on "Status of Alienated Land", October 20, 1932. (Fiche 14) Note: Catton (1996) and other written accounts that reference Catton, state that Englehorn paid $500 for the property at the sale. Later, the MRMC got the claims from the Englehorn estate for $500. Without examining the primary sources, it is unknown if the reported $20,000 is more accurate than $500.
[214] Letter from A.B. Cammerer to W.M. Anderson, September 28, 1933. (NARA Archives L3023 Files, Fiche 63).
[215] Letter from W. W. Felger to Arno B. Cammerer, November 25, 1939. (NARA Archives L3023 Files, Fiche 63)
[216]Memorandum dated December 27,1939. (NARA Archives L3023 Files, Fiche 63)

and his opinions as to how the area should be used in the future. As can be seen, Tomlinson clearly valued the beauty of the location and worried that new mining and/or recreational developments would destroy it.

> Memorandum on Glacier Basin Mining property:
>
> The old campsite, on which were erected 3 or 4 small buildings; such as, stables, tool shed et cetera, and also a so-called hardly completed hotel of about 14 rooms patent to which was denied by the General Land Office, should not be leased for camp and equipment storage purposes if the new owners of the property undertake development activities. This former campsite is an exceptionally attractive alpine meadow surrounded by alpine-like trees. The natural beauty of this site would be destroyed by ordinary mining camp activities. For this reason the new owners should be granted the site for camp purposes across the small stream, known as Inter Creek [and away from the present Storbo Camp location], at the base of the slope where the 8 patented claims are located.
>
> The lease for the campsite should prohibit any other activities than those directly connected with the mining operation (this is especially necessary in order to avoid attempts to operate facilities for visitors, skiers, and others). Also, the campsite permit should specify that it will be in force only under the condition that mining operations shall proceed continuously. In case operations are suspended, then the full control of the land involved will revert to the Government.

Englehorn and the still existing Mount Rainier Mining Company also were a bit at odds. MRMC continued to hold stock in the Glacier Basin mining operation even though the mines themselves were now owned by Englehorn. As stated in his letter, Englehorn considered resuming operation by establishing a new separate corporation. By March 1940, however, Englehorn had abandoned his plans due to lack of funds.[217]

Ole Oakland, who resided in Sarles, North Dakota (and an MRMC stockholder, and member of its board of directors) was exploring ways to recover company investments. In 1937, Oakland contacted all of the former stockholders; obtaining contributions in the amount of $6,866.00. These funds were held in trust by him for the purpose of paying the costs and operations of a new corporation to be formed to further explore and develop the properties. The former Mount Rainier Mining Company had been disfranchised, according to Oakland, through "dispayment of its corporate tax in July 1932."[218] Even so, he wanted the company to resume mining.

Oakland began questioning the validity of Englehorn's title to the Glacier Basin claims. In the same year (1937), he wrote to his House Representative Usher L. Burdick about the matter. He also appears to have made other inquiries over the years that followed. Oakland believed that "The law conveying the area that constitutes the Rainier Park clearly states that the Park and its Government is to be conducted by this Department. Therefore a Deputy local Sheriff has no jurisdiction to levy and convey mining claims inside the park to anyone (i.e., Englehorn)."[219] Given the special status accorded to patented claims, Oakland eventually set aside his challenge, and instead began to forge an agreement with Englehorn. In effect, MRMC now had money, but not the claims. Englehorn had the claims, but no money. It was in this ambiguous state, that Glacier Basin mining operations entered the 1940s and the World War II era that was looming on the horizon.

[217] Letter from W.W. Felger to Arno B. Cammerer, March 9, 1940. (NARA Archives L3023 Files, Fiche 63)
[218] Prospectus of the Mount Rainier Mining Company, August 1948. (NARA Archives L3023 Files, Fiche 65)
[219] Letter Ole Oakland to NPS Director Newton B. Drury, April 29, 1942. (NARA Archives L3023 Files, Fiche 63)

Glacier Basin and the War Years

It Begins with a Bang

At a Board of Directors Meeting in Seattle on October 5, 1940, Ole Oakland became president of Mount Rainier Mining Company; taking over from John Excell. The directors tasked their new president with applying for a loan from the Reconstruction Finance Corporation (RFC) –a government corporation established during the Great Depression to boost the economy of state and local governments, and to lend money to private businesses. Hoping to secure a loan to fund renewed mining efforts, Oakland informed the park that MRMC wanted to resume mining; beginning with a request to do some blasting in Glacier Basin.

The MRMC attorney, L.A. Michelson, and the park exchanged a series of letters regarding the company's plans; both aware that $1375 in permit fees was due for period of 1930 through 1941 before work could resume.[220] Superintendent Tomlinson stated that the Park Service required "adequate proof from the present owners of the mining claims in question or their successors that the venture is financed adequately to insure actual development and they are responsible for complying with Departmental regulations" and "proof of ownership of the property and responsibility for compliance with Dept. of Interior regulations."[221]

Mount Rainier Mining Company proceeded to get their affairs in order both to satisfy Park Service requirements and, more importantly, to justify their request for a federal loan. In support of the loan, the company hired a mining engineer to assess the Glacier Basin claims. They also requested a permit from the park to do some blasting to obtain ore samples. Finally, they paid income taxes and state corporation fees; and began to make arrangements with Englehorn to resume Glacier Basin operations.

In 1941, Englehorn granted MRMC permission to prospect the claims, but could not provide any funding for the work; encouraging instead that the company apply for the RFC loan.[222] On May 11, 1941, Oakland and MRMC obtained rights to the claims from Englehorn who stated

> …That he [Englehorn] would put a deed in escrow, made out to the Mount Rainier Mining Company, for a reasonable length of time, provided the company would pay the taxes which he has paid, about $50.00 – 100.00, attorney fees to his attorney, and the escrow fee, and would deliver the deed for $500.00 as previously stated, plus the above items.[223]

George Westby, the mining engineer hired by the MRMC, submitted his preliminary report on October 24, 1940.[224] He concluded the report with an only marginally hopeful note that veins possibly would be discovered warranting "a modest expenditure in a development program." The excerpts

[220] Note written at bottom of letter from L.A. Michelson to Ass. O. W. Carlson, October 17, 1940. (NARA Archives L3023 Files, Fiche 63)
[221] Letter from Supt. Tomlinson to L.A. Michelson, October 22, 1940. (NARA Archives L3023 Files, Fiche 63)
[222] Correspondence. (NARA Archives L3023 Files, Fiche 63)
[223] Letter from L.A. Michelson to Ole Oakland, May 9, 1941. (NARA Archives L3023 Files, Fiche 63).
[224] "Preliminary Report on the Mount Rainier Mining Co. Property," by George Westby, Mining Engineer, October 24, 1940. (NARA Archives L3023 Files, Fiche 63)

presented below are from this report. They not only describe the mines and veins, but also the condition of Glacier Basin facilities following the ten-year lapse in operations. The luke-warm appraisal of the probability for marketable mineral output is clear. Westby states that

> …Copper and molybdenum are the principal commercial metals found on the property. Most of the development has been connected with the opening up of copper leads; although on the 'Mary' lode, molybdenum ore of commercial value has been disclosed….
>
> The Camp:
>
> The camp-site is an excellent one, but the buildings once forming a comfortable and convenient camp, have disappeared through disintegrating action of many stormy winters, but portions of the old hotel remains intact, and the expenditure of $500 - $600 would make the old buildings habitable for 10 or 12 men. Kitchen and other equipment are still in good repair.
>
> Available also are 2 (a 22 hp & a 26 horsepower) Diesel Engines, a drill sharpener, jack hammer, mine car, air receivers, and other pieces of useful mining equipment, buried under collapsed buildings. There is also several hundred feet of 12 – 16 # rails.
>
> There is ample supply of camp necessities such as timber for fuel and potable water. Good trails make accessible the different workings of the mine property…
>
> The Veins:
>
> The copper veins are closely associated with the granitic rocks of the property, and usually occur as replacement deposits in sheeted zones. Ore bodies in this form of deposit are generally irregular in shape and irregularly spaced, both horizontally and vertically. The mineralization values at one point may be concentrated and the values high; at another place, the mineral constituents of the ore may be sprinkled through a mass of vein matter, and the values sparse.
>
> Relatively large ore deposits sometime occur as replacement veins in granite; but it is not invariably true that commercial deposits are found in all such sheeted zones in granite. Only systematic testing of the ground can prove the value of the Mt. Rainier Mining Co.'s property.
>
> Regarding the occurrence of molybdenum on the property of the company – Specks and flakes of molybdenite (MO S2) were observed in the granite underlying the lavas. Undoubtedly local concentrations of the mineral will be found, either in the granite itself, or along joints and fractures in the rocks. The size and degree of such concentrations of molybdenum mineral will determine the commercial importance of the molybdenum deposits. Here again, only systematic prospecting can determine the true facts.
>
> Recommendations:
>
> (1) It is recommended that the old hotel building be reconditioned, using such material as it is possible to salvage to construct habitable quarters for miners.
>
> (2) The machinery and mining equipment now rusting and useless, should be reconditioned, painted and housed, to preserve it ready for contemplated operations.
>
> (3) The working tunnels of the property, now inaccessible on account of cave-ins, should be cleaned. Later, a careful examination should be made of the veins disclosed and their potentialities appraised. If necessary doors should be placed at tunnel portals to prevent entry of unauthorized persons.
>
> (4) In opening up the property, particular attention should be given to clearance of workings from which ore has been shipped.
>
> (5) The molybdenum tunnel discovery cuts and shaft of the 'Mary Lode' should be cleared, and made accessible for examination and sampling. The float along the hill should be traced to its source.
>
> (6) All pertinent data referring to past operations should be assembled – particularly assay maps, working maps, assay reports and shipping statements.

Conclusion, Reconsideration of Data:

No justification is disclosed for purpose of milling equipment or expenditure of any sort, except for prospecting purposes and necessary camp facilities.

It is not believed that the data given, warrants the statement that no commercial ore bodies will be found on or in the property of the Mt. Rainier Mining Co., but on the other hand, there is no promise of possible ore shipments in the near future.

The conclusion arrived at in the writer's examination of the property are necessarily based on the characteristics of the veins disclosed at the surface workings, the general geology of the ore occurrences.

The chance of discovery of ore of commercial grade by systematic prospecting is believed to be good, but it is not thought that any lenses or shoot discovered will be large enough to warrant anything but a modest expenditure in a development program.

MRMC Fails to Acquire Government Loans

In June 1941 Ole Oakland applied for an RFC loan of $200,000 to cover the anticipated cost of re-opening mining in Glacier Basin. The Reconstruction Finance Corporation (RFC), under Section 14 appeared to make this possible in that it was authorized

> …to make loans "upon adequate security" to organizations engaged in the business of mining, milling, or smelting of ores. In January of 1935, this was amended to read "upon sufficient security," and the authority was extended to the making of loans for the development of a lode, ledge, or vein *when it was believed that an amount of ore would be developed sufficient to pay a profit upon the mining operations* [emphasis added]. In September of 1940, this section was amended to cover the development of any critical or strategic mineral which in the opinion of the Corporation would be of value to the country in time of war.[225]

In its application, Mount Rainier Mining Company emphasized that the molybdenum deposits described in Westby's report (presumably from the *Mine X* area in Mary Lode) were a strategic metal for national defense. Funds were needed not only to extract the ore, but to pay for electric smelters and flotation plants to process it.[226]

Oakland wrote Senator Monrad C. Wallgren to ask for his support which, to some degree, was provided. The senator's efforts, however, were opposed by others who did not favor assisting such small mining ventures. After his first loan request was denied, Oakland made plans to submit another application in 1942. He renewed his letter writing campaign for support; enlisting stockholders in California, Washington, Minnesota and the Dakotas to write their senators. Oakland also expressed his frustration with the Park Service in his renewed appeal to Wallgren. Oakland complained specifically about how much money MRMC had spent on roads in the park; urging the Senator to support repealing the Act of May 1908 that restricted mining in Mount Rainier National Park "at least for the duration of the war."[227]

Over the next months, letters were exchanged between Wallgren, NPS director Newton Drury, and Oakland. The tone of Oakland's letters express the stress and frustration he was experiencing.

[225] Secretary of the Treasury 1959:11.
[226] Letter from Ole Oakland to Senator Mon Wallgren, March 30, 1942. (NARA Archives L3023 Files, Fiche 63)
[227] Ibid.

Despite Oakland's efforts, MRMC never received an RFC loan, and mining did not resume during the duration of the war. Newton Drury's letter to Senator Wallgren on behalf of MRMC summarizes the history of Mount Rainier Mining Company and its relationship with the Park Service. [228] This letter (excerpted below) provides a good overview of the status of the MRMC at this time. The Park Service often referred to Drury's summary in its later dealings with MRMC.

> …The Mount Rainier Mining Company had a long, and apparently discouraging history from the standpoint of the stockholders. Although Mr. Oakland mentions other metals in his letter to you, copper appears to have been the objective. We have no knowledge at this time of the mine's production record.
>
> Lands totaling 164.837 acres were patented to the Mount Rainier Mining Company on January 12, 1924, by the Federal Government. Claims located nearby, totaling some 36 acres, were relinquished by the company years prior to the issuance of the patents in 1924. From the fiscal years 1914 to 1930, inclusive, the Federal Government issued a special-use permit, renewable annually, for the use of the camp, mill, tunnel entrances, saw mill, water power and flume sites on the relinquished claims. At first the annual permit fee was $500. Later it was reduced to $300 and finally to $125. Before the National Park Service constructed the highway to Yakima Park the company was granted permission by the Federal government to build and maintain a road up White River to the mine. After the Yakima Park road was built, permission was granted by the Park Service for the company to maintain a 3½-mile section of road between the highway and the mine. Several buildings, including a sort of hotel or boarding house, with accommodations for about 40 people, and barns, shops, storehouses, etc., were located on the relinquished claims. Most of these improvements have long since been destroyed by snow or have fallen to pieces from disuse and decay. The framework of the hotel was still standing a year or so ago, but was of little or no value because of the inroads of decay.
>
> Following issuance of the special-use permit (as described in the third paragraph above) for the year ending June 30, 1930, the company did not make application for renewal and could not give the Service any satisfaction as to their plans for the future. In November, 1930, President P.T. Storbo and Publicity Agent Orton E. Goodwin of the company were fined $1,000 each and sentenced to 18 months each in the Federal penitentiary at McNeil Island, for fraudulent use of the mails and circulating false literature concerning mining claims.
>
> On September 26, 1931[1932 in other documents], Mr. Thomas Engelhorn [Englehorn], of Churches Ferry, North Dakota, who appears to have been a stockholder, acquired the property of the company at a sheriff's sale in Pierce County. The record of this transaction was made about October 20, 1932, in Tacoma. Thus we came to understand that the Mount Rainier Mining Company, if still in existence, was not longer in possession of any of the holdings in the park operated under that name in previous years.
>
> A Mr. W.M. Anderson of Devils Lake, North Dakota, representing himself as Mr. Engelhorn's agent, wrote in 1933 suggesting that the land might be purchased for $100 per acre. Later on Mr. Anderson wrote again saying that Mr. Engelhorn was not in agreement with this figure, which he felt was too low. Under date of January 25, 1939, Mr. W.W. Felger, an attorney located in the Hoge Building, Seattle, wrote to us indicating that the holder of the sheriff's deed, either himself or through an assignee, might try to operate the mine, and was inquiring as to the procedures for obtaining a lease or permit for the Federal land (relinquished claims) formerly used in this connection under annual permit. There were no subsequent developments.

[228] Letter from Newton B. Drury to Senator Mon C. Wallgren, April 20, 1942. (NARA Archives L3023 Files, Fiche 63)

> Mr. Ole Oakland comes into our records in February, 1937, as a resident of Sarles, North Dakota. He also appears to have been a stockholder in the old Mount Rainier Mining Company. He was writing Representative Burdick of North Dakota at that time concerning the mine. In 1940 the Department heard from Mr. Oakland direct, to the effect that he was representing the stockholders of the Mount Rainier Mining Company and was interested in resuming operations.
>
> Also in 1940 we had some additional correspondence with Attorney W.W. Felger, (presumably still acting for Mr. Engelhorn, and apparently without any connection with Mr. Oakland) further to his question of a permit for use of the relinquished claims, road, etc. We were able to assist Messrs. Oakland and Felger by explaining the position of the Federal Government in relation to their activities; but, again, nothing materialized.

No Mining and a Degraded Infrastructure

The war years were not kind to the Mount Rainier Mining Company. In 1940, with war looming and the need for metals rising, it looked as though MRMC might successfully renew its attempts to mine Glacier Basin. However, the company had no money with which to reopen mines, or to salvage the mining equipment and facilities necessary to do so. While it was reasonable to hire a mining engineer to reinspect the basin in regard to its mining potential, Westby's luke-warm appraisal of the value of the basin's ore deposits, coupled with MRMC's fraud-conviction history, probably contributed to the company's failure to procure the necessary federal loans. With little maintenance for the previous 15 years or more, MRMC's mining infrastructure degraded substantially. Buildings were in poor condition, or collapsed altogether, and many of the mine entrances were covered by slides or cave-ins. The poor state of Storbo Camp and the MRMC sawmill and power generating plant illustrate the decline.

Glacier Basin Hotel and Storbo Camp

Photographer Asahel Curtis visited Glacier Basin in the early 1920s and described the hotel in a letter to the president of the Rainier National Park Company. Curtis noted that the building was unfinished with temporary partitions erected inside, rather than finished rooms. He noted also that the planned front porch was not yet built.[229] Nonetheless, the hotel was nearly done, and when complete, clearly would be the most elegant building involved with the mining operation.

In 1924, Ranger Paul Schorrock was informed that "Major Tomlinson's mother stayed at the Starbo [Storbo] Hotel …, and drove all the way to the hotel in an old Dodge. In 1924-25 there were 25 or 30 men year round in the old hotel."[230] While the front porch was absent, it is reasonable to assume that the hotel's interior rooms and fittings were in place and in good repair as can be seen in Figure 3.25 in Chapter 3.

The hotel was still standing at the beginning of the Depression. In 1930, when Harland Eastwood worked as a ranger in the White river District. He recalled that "…the building (Hotel) was in good shape, and the kitchen was all there. The bunks were still in the bunkhouse."[231] However, as the depression

[229] Letter from Asahel Curtis to D. Whitcomb ca. 1920, Curtis Papers, Library Archives, University of Washington , Seattle. (as referenced in Thompson 1981:131)

[230] Letter from Paul Shorrock to Jerry Sable, October 21, 1975. (NARA Archives L3023 Files, Fiche 67) Paul Schorrock was a ranger stationed at the White River Campground who wrote down information he heard from "old timers". Major Tomlinson is likely Superintendent Owen Tomlinson who served from 1923 to 1941.

[231] Harland Eastwood, Sr. interviewed by Tim Ingalsbee [sp?] July 9, 1989 and September 28, 1990.

deepened, and MRMC fortunes faltered, the structure gave way to the ravages of harsh winters and deferred maintenance; the beginnings of which can be seen in Figure 4.9. Eventually (circa 1939), the south end of the building collapsed as shown in Figure 4.10 below; exposing the hotel to rapid deterioration.

In his 1942 letter to Senator Wallgren, NPS Director Newton Drury notes the hotel and most of the Storbo Camp buildings had "…long since been destroyed by snow or …fallen to pieces from disuse and decay." The framework of the hotel still stood, but was badly decayed.[232] In 1946, lumber from the ruins of the hotel were used to build a 12 by 14 ft. cabin in the camp (see Figure 5.5 in Chapter 5). For all practical purposes, the nearly half-century history of Storbo Camp (i.e., Glacier Basin's Lower Camp) ends with the demise of Peter Storbo's name-sake hotel.



Figure 4.10. 1940-1942 Photograph of Glacier Basin Hotel after Partial Collapse in 1939.
(MORA Archives)

Saw Mill and Power Generator

Without use or regular repairs, the power generating heart of Glacier Basin mining activity succumbed to Mount Rainier's harsh winter weather.

By 1930, the power plant and mill were already in poor condition.[233] While we have no report on precise conditions in 1945, a 1951 appraisal report and photograph by Leslie Eastman provides an

[232] Letter from NPS Director Newton B. Drury to Senator Mon C. Wallgren, April 20, 1942. (NARA Archives L3023 Files, Fiche 46, 63)
[233] Harland Eastwood, Sr. interviewed by Tim Ingalsbee [sp?] July 9, 1989 and September 28, 1990.

approximation. Eastman states that the generator building, cribbed lumber safety breaker, and water wheel are "badly rotted and covered with sand and rocks."[234] Eastman's photograph shows the condition of the facilities (Figure 4.11). Note that the sawmill and water delivery flumes have collapsed altogether.



Figure 4.11. Glacier Basin Generator and Saw Mill ca. 1951.
Generator building to left. Safety breaker and ruins of water wheel/turbine structure at right.
(MORA Archives)

Glacier Basin's Decline; Closing Thoughts

Glacier Basin mining began with anticipation of substantial wealth; a belief arguably borne of general enthusiasm associated with the Klondike gold rush. In the early 1900s, a number of Glacier Basin mining claims were recorded, eight patented, and four leased in the hope of extracting marketable quantities of copper. While less alluring than gold or silver, copper nonetheless was of value due to its abundance relative to the more exotic metals, its malleability and slow oxidation properties (suitable for roofs, gutters, and pipes), and its excellent conductive properties at a time when the nation was rapidly expanding its electrical and communication networks. With Peter Storbo in charge, Mount Rainier Mining Company was formed in 1902 to provide a corporate foundation for selling shares to support Glacier Basin

[234] *Appraisal for United States Department of Interior, National Park Service, Longmire, Washington; Mt. Rainier Mining Company Properties*, by Leslie W. Eastman, April 1951. (NARA Archives L3023 Files, Box 51, Folder 59, Fiche 66)

operations; ramping up an infrastructure capable of extracting and transporting ore out of the basin; and for dealing with stipulations imposed by the young Mount Rainier National Park.

Mining enthusiasm continued into the early 1920s. But as the decade wore on, the hoped for rich blue *peacock* veins failed to materialize. In 1927, perhaps truly believing that the big strikes lay just beyond the reach of its tunnels, MRMC mailed an extravagant prospectus and letters to investors in the attempt to generate additional funds. The claims included in these materials substantially exceeded rational expectations of success; ultimately leading to mail-fraud convictions for Peter Storbo and Orton E. Goodwin in 1930.

Mount Rainier Mining Company never truly recovered from the setback, and in 1932 sold its Glacier Basin claims to former stockholder Thomas Englehorn. Perhaps due to the dual effects of the depression and poor mining results, however, Glacier Basin mining operations did not resume for the remainder of the 1930s.

From 1940 to 1942, hope for renewed operations rose with the end of the depression and the war-generated increase in demand for industrial metals. MRMC hoped to benefit from the depression era's Reconstruction Finance Corporation (RFC) loan program that had been developed to assist local and state governments, and private businesses –including mining operations. Working with the new owner, MRMC applied for RFC loans; hoping that the war value of copper and not yet mined molybdenum found on the upper basin's Mary Lode would enhance their chances of success.

RFC loans to Mount Rainier Mining Company, however, were not forthcoming, and mining operations were not renewed. At end of the war in 1945, the mines remained quiet; many plugged by landslides common to Glacier Basin's slopes. Storbo Camp was gone; MRMC generator and sawmill facilities had fallen into disrepair; and the last 3½ miles of Storbo Road, not replaced by newer park roads, were eroded and barely passable.

While perhaps not understood by Peter Storbo and other MRMC mining enthusiasts in the early days, the chances of success for mining Glacier Basin were never very great. MRMC's contracted mining engineer, George Westby, inspecting the area in 1940 as part of the company's hoped for post-depression resurgence, wrote a lukewarm appraisal of the ore-bearing properties of the basin's underlying geological structure. In part, and as cited earlier, he notes that

> The copper veins are closely associated with the granitic rocks of the property, and usually occur as replacement deposits in sheeted zones. *Ore bodies in this form of deposit are generally irregular in shape and irregularly spaced, both horizontally and vertically.* The mineralization values at one point may be concentrated and the values high; at another place, the mineral constituents of the ore may be sprinkled through a mass of vein matter, and the values sparse. Relatively large ore deposits sometime occur as replacement veins in granite; but *it is not invariably true that commercial deposits are found in all such sheeted zones in granite*…
>
> … The chance of discovery of ore of commercial grade by systematic prospecting is believed to be good, but *it is not thought that any lenses or shoot discovered will be large enough to warrant anything but a modest expenditure in a development program.*[235] [Emphasis added]

[235] Excerpts from "Preliminary Report on the Mount Rainier Mining Co. Property," by George Westby, Mining Engineer, October 24, 1940. (NARA Archives L3023 Files, Fiche 63)

In the end, the hoped-for dream of riches to be extracted from a *mountain of copper*, and accessed through Glacier Basin's mining portals, ground to a halt; a result due more to the geological realities of Mount Rainier's granitic substrate than to the park's restrictive regulations, poor MRMC management, or the effects of the Great Depression. These observations notwithstanding, in the next chapter we address the final attempts to mine Glacier Basin; beginning again in 1946, and ending with final purchase of the claims by the National Park Service in 1984.

Chapter 5: The New (and Last) Mount Rainier Mining Company – 1946 to 1984

In a sense, active mining operations in Glacier Basin came to end with Peter Storbo's incarceration for mail-fraud in 1930. Subsequent attempts to reorganize Mount Rainier Mining Company, apply for loans, and renew mining in the basin through the mid-1940s failed as discussed in Chapter 4. Even so, the dream of mining riches did not die out altogether. Mount Rainier Mining Company reorganized again in 1946 after obtaining Thomas Englehorn's deeds to the patented claims following his death in 1944. Even though reorganized, the *new* MRMC remained much the same as the old for the next 40 years; continuing to pursue funding from stockholders and federal loan programs, making plans, and obtaining permits to re-open Glacier Basin mines. Although actual work in the basin was intermittent, negotiations with the Park Service were continuous regarding such issues as permits, rules, site visits, water rights, the possible sale of their inholdings, and so on. In this chapter, we consider MRMC's continuing attempt to wrest profit from their ventures until Glacier Basin finally became an official part of Mount Rainier National Park in 1984.

The National Park Service Begins to Acquire Private Land In-holdings

From the start, Mount Rainier Mining Company consistently set a high dollar value on its claims; reflecting what the company felt they had invested in money, effort, and materials. Stockholders had invested a great deal of money and physical effort into the company, and were averse to letting it all go for the amount the Park Service was willing to offer –amounts that MRMC dismissed as "nominal." This unwillingness to lose their long-term investment was a primary factor in the company's long-standing attempt to keep the mining interest afloat.

The National Park Service, and specifically Mount Rainier National Park, was troubled by the presence of mining in the park; and by MRMC in particular because it owned patented claims in Glacier Basin which reduced park authority over them. Although the park wanted to acquire the private inholdings, they were hampered by a lack of government funds sufficient to do so. Over the years, the Park Service worked to assemble the information necessary for an acquisition; employing experienced mine inspectors and property appraisers to do so. During the process, the park regularly inventoried and reported on the private inholdings in the basin.

Nationwide, purchase of private and commercial inholdings in National Parks became more complex as research confirmed that more property existed than could be afforded. As part of the purchase program, the Western Region of the Park Service inventoried and appraised all the private inholdings, and ranked them in priority for acquisition. Each year, Mount Rainier National Park requested congressional funding for acquisitions. Each year the acquisition was deferred.

Even though the government repeatedly deferred acquisition funding, it was required to update property and mineral appraisals periodically. The numerous appraisals ordered for MRMC properties indicate just how protracted the process was for purchase of the Glacier Basin claims. MRMC claims were appraised in 1950, 1966, 1969, 1976, and again in 1982. In 1967, the Bureau of Mines Office of Land and Water Rights took responsibility of acquiring private lands in the National Parks and Monuments. Regional Park Service and Bureau of Land Management departments oversaw the acquisition process.[236]

The question of potential park acquisition of the Glacier Basin mining claims influenced subsequent management agreements with MRMC; particularly the formally constructed special use permits issued by the park. These agreements often bordered on disagreement. The process became so involved that the *yearly* permits sometimes took longer than a year to be approved. Complications arose repeatedly as the park required more detailed plans and permit revisions from MRMC; and stipulated new conditions and protocols to restrict or guide planned work. Although the Park Service admitted to introducing the delays, the issues they brought up were not trivial. Issues such as water rights, timber cutting protocols, and the need for detailed maps and work plans were essential to protecting the park's natural and scenic resources.

The *New* Mount Rainier Mining Company

The Mount Rainier Mining Company reorganized on July 5, 1946. The "new" company incorporated; correcting its 1932 disenfranchisement for failure to pay its state corporate tax. Ole Oakland was appointed MRMC director and general manager. Oakland also was the administrator of the Thomas Englehorn Estate, following Englehorn's death in 1944. Perhaps benefitting from Oakland's dual role, the new company was able to acquire the eight patented Glacier Basin mining claims for $500 in addition to a quit claim deed that cleared ownership ambiguity.[237] The new company could resume business with a clean slate, and in possession of its real property once again.

The new MRMC, however, was still made up of many of its old stockholders or their family members; including Peter Storbo, Ole and Thor Oakland, and A.B. Korssjoen. Even so, the company did indeed seem to start afresh. A 1946 letter to Park Superintendent Donnelly[238] notes that, in MRMC's reorganization, 1) Mr. Oakland, as trustee for stockholders of the old company, would be awarded 135,000 shares of the capital stock of the new capitalization of 300,000 shares; 2) the rights of the former parties would be protected by the new company; and 3) the founders of the new company furnished an excess of $5,000.00 in cash which the company retained in its treasury.

[236] McIntyre n.d.:25-29

[237] Deed No. 1419624, filed in Vol. 831, page 347, in Tacoma. Filed July 30, 1946 at 11:06 am. In "Memorandum for Superintendent" by Louis A. Boyer Acting Superintendent., October 8, 1946 (NARA Archives L3023 Files, Fiche 62)

[238] Letter to Park superintendent from E.P. Donnelly, October 22, 1946 (NARA Archives L3023 Files, Fiche 62)

The MRMC prospectus of 1948 states the company's claimed common stock value and distribution.

> The new corporation was organized July 5, 1946, and incorporated under the laws of the State of Washington, its capitalization being 300,000 shares of Common Stock at a par value of 30 cents per share. At the present time there is outstanding 118,316 shares which were either sold for cash to the former stockholder[s] of the old corporation or given in exchange for work and services rendered in the new corporation. There are 10,800 shares of stock being held in escrow as required by the Director of Licenses of the State of Washington.[239]

Plans to Resume Mining Glacier Basin

A few months after the company reorganized, Oakland met with Acting Superintendent Louis A. Boyer to discuss MRMC's intention to resume mining in Glacier Basin. The company wanted to clarify the process and fees required for obtaining the necessary special use permits and lease agreements. In a memorandum, acting superintendent L.A. Boyer writes that

> They [MRMC] wish to repair the road from the White River campground to their former camp. It [is] their intent to salvage all materials possible and build a small camp. Hope to salvage what they can of the machinery on the ground and put a shed over it. Also will put a locked door on tunnel. The tunnel must first be drained, after which they intend to carry on mining operations – from this tunnel.[240]

John C. Preston was Park Superintendent from 1941 to 1951 during much of the time MRMC was trying to resume work. He kept well informed about conditions in Glacier Basin. For example, he knew that the MRMC would need to improve the upper 3½ miles of road above the White River Campground, a road that would need substantial, and expensive, work before it could be used by heavy equipment. So when MRMC began to plan work there, Preston made sure the company was aware of permit requirements and park regulations; and was particular that all the proper paperwork and fees were in place before work began.

For initial work, Preston had informed MRMC that "no formal permit is necessary as long as your company confines its activities to its own property and merely passes over Park lands occasionally."[241] However, during the first season of 1947, the crew constructed a 12 by 18 ft. temporary bunkhouse from the salvaged remains of the collapsed Storbo Hotel (Figure 4.10).[242] The bunkhouse was built in the relinquished, and leased, Lake City claim, which, because it was not patented, required a special use permit from the park. Fewer lapses occurred after that, primarily because the Park Service closely scrutinized the work, and made it clear that MRMC needed permits and plans before their work commenced.

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[239] Prospectus on Mount Rainier Mining Company, August 1948. (NARA Archives L3023 Files, Fiche 62)
[240] "Memorandum for Superintendent" by Louis A. Boyer Acting Superintendent., October 8, 1946. (NARA Archives L3023 Files, Fiche 62) The tunnel in question is not mentioned, but most likely it was the Stronghold No.1 Claim, Tunnel No.2 on plat maps –or Tunnel No. IV in our system.
[241] Letter from Superintendent Preston to Thor Oakland, August 1, 1947. (NARA Archives L3023 Files, Fiche 62)
[242] Letter from Mining Engineer Stephen H. Green to Superintendent Preston, November 28, 1947; Report from H.G. Bender, White River District Ranger to Superintendent Preston, September 1, 1947. (NARA Archives L3023 Files, Fiche 62). Photograph of the new structure from 1951 states that it is 12' x 14'.

Proposed Mining Plans; MRMC's 1948 Prospectus

The MRMC prospectus of 1948 described some of the company's long-term goals (and also offered to sell 100,000 shares at $1.00 each to help finance their projects). The tone of the prospectus is noticeably more restrained than the *Mountain of Copper* promotional letter that caused so many problems for Storbo, Korssjoen, Cresser, Goodwin, and MRMC generally in 1927.

> Contemplated Operations
>
> The company has obtained the services of Mr. George C. Westby, Mining Engineer and geologist, and his report dated October 10, 1947, states partly as follows: 'It is suggested that installation of suitable pneumatic equipment and two shift operations would be under the conditions obtaining on the property, the greatest long way economy the company should consider in way of preparation.'
>
> As to the recommendations made by Mr. Westby he specifically recommends that the following work be done:
>
> (1) The management has taken definite steps to economically cut the vein at depth – at about elevation 6000 ft.
> (2) Most of the work has centered at the crosscut tunnel #5.[243] A working operation now 650 ft. in from the portal.
> (3) The ground about the portal of #5 tunnel has been cleared, the tunnel is drained and rock removed up to a 'cave-in' about 215 ft. from the portal. Essential replacement of rotting sets are being made. Well constructed quarters for the working force, near the portal of #5 'working' tunnel is in use, and are at this juncture, very convenient and economical of time, money and working energy.
> (4) An important fact is that #5 tunnel is at this time probably the most valuable asset of the development work. The decision of the management to avoid haphazard diversion of funds and labor in different directions and center every effort on #5 crosscut tunnel, is justifiable. First, because proof of the ore at depth is essential to all future planning. Second, because drifting on the vein when reached, is necessary to determination of the probable scope of all future operations. No useful design for power development, milling or smelting, can be made before the indicated work is done. No.5 tunnel is now in 650 feet in direction of the objective and the speed with which the rest of the distance is made will certainly have much to do with the fortunes of the Company…
> The net proceeds from the offering will be used for exploration, development and allied work on certain mining claims owned in fee by this Company. It is the intention of the directors of the corporation to drive the No.5 Crosscut Tunnel at the lower level to the ore body as the immediate work to be done. The tunnel is now in operation and about 650 ft. in and was cleaned out in 1947 up to 215 ft.
>
> It would require 1,000 more feet of tunnel to reach the center vein of the lode by passing directly under the No.2 and No.3 Tunnel[244] in which the ore has been contacted. It will be realized that many thousands of dollars were spent in the past to establish the known value of the ore in these tunnels and the directors believe it to be the expedient plan to capitalize so far as possible upon the money expended and the work done by the former corporation.[245]

[243] Tunnel #5 (*Mine* 5) was located on a leased claim north of Reven Lode.
[244] *Mine 2* and *Mine 3* in Snowflake Lode
[245](NARA Archives L3023 Files, Fiche 65) The prospectus includes an assay report for ore hauled out in 1927. Some later documents such as Parsegan 1966 erroneously state that the last load of ore was hauled out in 1948, the date of the prospectus, not the date of the assay.

The Park Service Response – Delay and Protect Park Values

The Park Service carefully scrutinized MRMC's new mining plans; focusing on road improvements, lease claims, and new camp site construction. By this time, the park had become reluctant to issue permits for extractive operations such as those in Glacier Basin. To this end, NPS staff –the NPS director, regional director, and park superintendent– all worked to delay the permits; effectively placing regulatory obstructions in MRMC's path. They hoped that during the delay, the government would be able to free up funds to acquire the claims. They were aware that the short summer season in the basin worked in their favor, and hoped that short delays in permits could result in longer delay of actual mining.

From 1946 through 1948, Superintendent Preston, Regional Director Tomlinson (who had been Park Superintendent from 1923 to 1941), NPS Director Drury, and/or their staff corresponded about mutual concerns regarding renewed mining in Glacier Basin. They also sought to formulate conditions, regulations and terms for the special use permits to be required of MRMC to resume mining. Their concerns focused on how proposed work would affect park values.

Superintendent Preston's 1949 Memorandum to the NPS Regional Director Tomlinson emphasizes his wish to forestall mining resumption in Glacier Basin. It includes statements that reflect concern about negative effects to park values; and the need for action to purchase MRMC's eight patented claims.

> As stated in our telegram we wish to forestall this proposal. It is believed that insistence upon detailed information will preclude any moves this season for soon the area will be subject to snow storms. However, the group will probably seek to secure the permit to begin next season. They will need to be watched. Last year after being told specifically to attempt no construction there were materials salvaged from the old buildings which were practically demolished by snow loads and a temporary building placed on park land.
>
> We believe that should permission be granted to rehabilitate the road and for use of the land near the claims that there will be considerable injury to park values. Furthermore, White River Campground will not be improved as a public use area by the moving back and forth of heavy equipment, trucks, etc. during the 1950 travel season. The understanding of what is valuable for park purposes and respect for these values cannot be expected without very strict supervision. Of course, we do not have sufficient personnel to assign a man to watch the work. It is still believed that the acquisition of the patented claims should be accomplished as soon as practicable.[246]

When special use permit I-26np-225 was finalized in 1950, it contained rules and conditions lacking in the previous permits –conditions that were intended to better protect the park (see Appendix B for full text). For example, the permit required that MRMC provide *proof of adequate funds* to carry out proposed development work. MRMC also was made responsible for obtaining *water rights.* NPS Director Drury stated "…that since the mining and water development would not be in the best interests of the Park, if permitted, we believe that water right condition No. (4) (ii) should be modified to require that the Company prepare all applications, file maps, proofs, and other instruments, and pay all fees for the perfection of necessary water rights, and submit them to this Office for filing in accordance with instructions to be provided if the basic permit is granted."[247]

[246] Air Mail Memorandum from Superintendent Preston to Regional Director Tomlinson, September 19, 1949. (NARA Archives L3023 Files, Fiche 65)

[247] "Memorandum for the Regional Director, Region Four" by NPS Director Newton B. Drury November 28, 1947. (NARA Archives L3023 Files)

In addition, *timber cutting* was no longer allowed on park lands except when specifically inspected, marked, and approved by the NPS for road clearing and restoration. Timber could no longer be cut for construction, and MRMC was not allowed to rebuild and operate the sawmill. This stricter stance regarding timber cutting meant that MRMC would have to cut or purchase timber outside the park and haul it in for most of their construction work; meaning restoration of the road was a critical first step to resume mining Glacier Basin.

The permit also included specific requirements for the manner in which *road construction* was to be carried out –such as the width of the road bed, and disposal of cleared brush. In addition, it stipulated strict rules regarding the load and speed limits for trucks and equipment using park roads for ingress and egress. These issues became more complex after the permits were issued in 1950 when the newly hired park engineer realized that the roadbed needed realignment –a process that required professional survey work; further delaying opening for another season.

To be fair, the Park Service also recognized that a longer permit term was needed for MRMC to effectively plan and execute the work in the manner dictated by the new permit. In the end, the park agreed on a five-year term for Glacier Basin special use permits. The park also agreed to a relatively modest fee of $5.00 per acre to lease park lands for camp, tunnel and dump sites; payable in advance, of course.[248] Any structures built on the leased lands would revert to NPS property when permits were terminated. MRMC was required to post a bond to restore the land and remove unwanted structures when the permit ended.

Glacier Basin Special Use Permit Issued

The final permit authorizing renewed mining in Glacier Basin was signed in July and issued in October 1950 following much correspondence between the park and MRMC; involving detailed mining plans, maps, and multiple revisions. Mount Rainier Superintendent Preston Macy reluctantly accepted and signed the permit in July; alerting the NPS director that the "[Park] Service will regret this action years to come as damage values will be great. Property should be condemned now as Company plans to build road immediately."[249] The permit was sent on to the Regional Director and Director for approval, which delayed final approval until October, when work in Glacier Basin became impractical due to the onset of winter weather. The delay was deliberate as indicated by park correspondence:

> In accordance with our telephone conversation of July 24, I understand you will suggest to Regional Director Tomlinson that the special use permit be forwarded to the Director for action – this because of the values involved. Sending the permit on to the Washington Office will also forestall immediate action; thus, our appraisers may be able to complete an official appraisal of the property before it is necessary to take action on the permit. I understand you will make arrangements with the Geological survey and with Mr. Leslie W. Eastman for the appraisal work about mid-August.[250]

[248] The permit and accompanying maps indicate that the area leased for the camp was now 6.8 acres, a much smaller area than the 12.3 acres leased in the 1920s; however the permit included a 7.3 acre parcel on the west side of Reven Lode. (NARA Archives L3023 Files, Box 50 Folder 55, Folder Box 51, Folder 58)

[249] Letter from Supt. Preston to NPS Director, July 26, 1950. (NARA Archives L3023 Files, Fiche 64)

[250] Memorandum from Superintendent Preston to Fred J. Overly, Chief NPS Real Estate Branch, July 25, 1950. (NARA Archives L3023 Files, Fiche 62)

MRMC was well aware of the delay tactics. The company enlisted Senator William Langer to send an inquiry on its behalf to Secretary of the Interior Oscar Chapman. Ole Oakland also directly asked Superintendent Preston "If on the other hand this great investigation and geological survey and appraisements are made for the purpose of discouraging or purchasing the property, then why not present a reasonable bid to the Board?... It's now or never the time for deciding. Purchase… Private property in [the] Park, or change rules so Park rules and mining operations in Parks [can] harmonize as of 1905."[251]

Negotiations for purchasing the patented claim did indeed begin again. In the meantime, however, plans for roadwork and Glacier Basin mining operations moved forward slowly. Final plans were approved in October 1951; a full year after the permit had been signed. Anecdotally, Superintendent Preston Macy noted wryly that "Since they have paid the special use permit fee for two years without being able to take advantage of the time for work, there is some impatience now to begin."[252] Ultimately, weather and other matters delayed resumption of work until 1952.

The Park Service Attempts to Purchase Glacier Basin Claims

Appraisals and Mine Values

Negotiations between the Park Service and MRMC were bound to be difficult. There were seemingly irreconcilable differences between park values and perceived investment and mineral values. The federal government valued Glacier Basin for its scenery and unique natural features –a value that was priceless, and protection of which was mandated in the NPS mission. The park was required to obtain dollar value estimates of assayed ores, structures, and improvements from mineral and real estate appraisers. These values were deemed relatively low in Glacier Basin. MRMC, however, in its self-appraisal, included its past investments and expenditures, plus its optimistic expectations of mineral quality, into the value of their holdings. MRMC considered these values to be quite high. Stockholders believed that the costs of mining and transport were covered by the worth of the claims.

Superintendent Preston met with some of the MRMC directors in March, 1951. At the meeting, Preston noticed the directors' apparently genuine belief in the value of their Glacier Basin mines; a belief that he felt affected their willingness to negotiate sale of their patented claims at a reasonable price.

> One of the interesting observations made during the conference at Seattle was that Ole Oakland in his desire to rebuild the road to the mines and open them up was not developing a background for a stock selling venture. Rather he and others believe there is mineral of value in the mines and in the interest of investors of years standing something should be done to make it possible to recover the investments. This belief that mineral values of considerable importance dictated their fantastic ideas of the value of the property and the unwillingness of the officers to enter into any negotiations for sale to the United States.[253]

[251] Letter from Ole Oakland to Superintendent Preston, October 9, 1950. (NARA Archives L3023 Files, Fiche 64)
[252] Memorandum from Superintendent Preston P. Macy to Regional Director, Region Four, September 14, 1951. (NARA Archives L3023 Files, Fiche 67)
[253] Memorandum from Superintendent Preston to Regional Director, Region Four, March 8, 1951. (NARA Archives L3023 Files, Fiche 67)

Identification and appraisal of privately owned lands was an important first step in the acquisition of private lands within park boundaries. In 1946, just after WWII, Regional Director Tomlinson requested park superintendents to identify in-park private lands, and assign priority for acquisition.[254] By this time, MRMC had reorganized and was planning new mining work. In 1948, the NPS developed a guide for land acquisition procedures (Departmental Order No. 2402); specifying that "we should make every effort to obtain appraisal by competent, qualified appraisers in order that the price paid for the land may be fully justified." The guidelines stated that "In cases where there seems to be compelling reasons for accepting options of offers to sell which exceed the appraised value by more than 5%, the matter is to be referred to the Secretary with an appropriate explanation before action is taken under the delegated authority."[255]

An earlier appraisal had been completed in 1944 when GLO mining engineer J.F. O'Neill inspected MRMC claims, and gathered ore samples at the request of Superintendent Preston.[256] The Park Service also hired appraisers in 1950 to assess the mineral and the real estate value of the claims.

In 1950, A.E. Weissenborn and J.W. Hosterman of the USGS Regional Office in Spokane inspected Glacier Basin. They were accompanied by Assistant Chief Ranger William Butler, and MRMC president Ole Oakland and Ed Batterman, the road contractor hired by MRMC. From September 11 to 14, they examined and sampled ores, evaluated previous assay reports, and assessed the potential yield of the tunnels based on local geology. Their report includes a detailed map of the tunnel in the Stronghold No.1 Lode, referred to by MRMC as the No. 4 Tunnel (i.e., *Mine 4*).[257] The other tunnels were not accessible due to cave-ins. They took seven samples for assay –two from *Mine 4* in Stronghold No.1 Lode, two from dump piles near *Mine 2* in Snowflake Lode, and samples of rocks near *Mine 2*. The adit that reportedly contained molybdenum was not relocated (*Mine X* in Mary Lode), and the team did not see ore of this kind in the vicinity. Table 5.1 lists the ore sample assay results. Figure 5.1 is a map showing the spatial relationship of MRMC claims and the basic geological substrate exposed in Glacier Basin.

Only andesite and related pyroclastic debris were found in dump piles around the *Mine 5* location north of Reven Lode. Ole Oakland confirmed the observation implying "…that the adit had not been driven far enough to reach its objective." After examining the tunnels and area near Snowflake (*Mines 2 & 3*) and Peach Lodes, Weissenborn and Hosterman concluded that iron staining and disseminated pyrite in the area contained very little copper. Hand sorted ore from the dump piles representing the best grades from that area, assayed at 8.0% (MR 3) to 10.6% (MR 4) copper. They also observed chalcopyrite and pyrite (containing copper) intruding into tourmaline seams, but the seams they examined were only a few inches wide and a few feet long. A sample from a copper stained outcrop assayed at 3.92% copper.

[254] Letter from Tomlinson to Region Four Superintendents, Sept., 27, 1946 (NARA Archives H14 Files, Fiche 13)
[255] Memorandum from Acting Regional Director Herbert Maier to all Region Four Field Areas, November 19, 1948 (NARA Archives H14 Files, Fiche 13; and McIntyre n.d.:19).
[256] Letter from Supt. Preston to Regional Director Tomlinson, Oct. 18, 1944 (NARA Archives L3023 Files, Fiche 46)
[257] *Report on the Property of the Mount Rainier Mining Company, Mount Rainier, Washington*, A.E. Weissenborn and J. W. Hosterman, February 1951 (NARA Archives L3023 Files, Box 51, Folder 59, Fiche 66). By this time MRMC had abandoned the original, redundant, tunnel numbers shown on 1920s plat maps in favor of the scheme used in this report

Table 5.1. Ore Samples Collected by Weissenborn and Hosterman, 1951[258]

Sample No.	Gold (ozs/ton)	Silver (ozs/ton)	Copper (%)	Description
MR 1	0.03	0.6	3.54	Channel sample in stope of *Mine 4* tunnel
MR 2	0.08	3.2	14.80	Hand-sorted ore in drift of *Mine 4* tunnel
MR 3	0.04	1.8	8.00	Small pile of ore on dump, *Mine 2* tunnel
MR 4	0.08	2.5	10.60	Selected specimens from small pile of ore on dump, *Mine 2* tunnel
MR 5	0.005	<0.05	<0.05	Iron-stain granite east of *Mine 2* and on Peach Lode
MR 6	0.04	0.8	3.62	Copper-stained outcrop 100 feet east of *Mine 2* tunnel
MR 7	0.12	5.2	7.95	Bladed tourmaline with chalcopyrite 100 feet south of *Mine 2* tunnel

Weissenborn and Hosterman were able to enter the *Mine 4* Tunnel of Stronghold No.1 Lode, to examine the exposed ore veins –the only exposed veins they were able to assess during the inspection (other than the tourmaline seams). They mapped the mine, its drifts, crosscuts, stopes, winze, and vein exposures (Figure 5.2). Within the northern drift of the tunnel, the vein had been stoped to a height of 25 ft. A sample taken from the stope assayed at 3.54% copper (MR 1), but samples from sacks of hand-picked ores below the stope contained 14.8% copper (MR 2). They believed this "probably represents the highest grade ore that can be hand-sorted from the vein." They summed up their findings as follows:

> A length of less than 100 feet of vein has been explored, and of this only a short distance has been stoped; the vein is narrow, and the ore minerals appear to be mostly in thin streaks in the vein. Ore of fairly good grade has been hand-sorted from the vein as indicated by the three or four sacks of ore in the drift, but the grade of the rock in place is low…It is reasonable to suppose, however that the stoping was done on the best grade ore; therefore it may be assumed that sample MR 1 is fairly typical of the better grade ore. In a locality as difficultly accessible as this, with short operating seasons and with narrow veins containing only a small amount of valuable minerals, it is unlikely that this deposit could be mined profitably.

Weissenborn and Hosterman concluded that

> …there is little evidence…to indicate the presence of an appreciable tonnage of minable grade rock. Furthermore, there is little evidence from the dumps or from the company's production records to indicate that a significant quantity of ore was found in the now inaccessible workings. The 47 odd tons of ore shipped in 1927 is a very slim return for 45 years of operation and the expenditure of what must have been a considerable sum of money for exploration. There is little evidence to indicate that additional prospecting would be any more fruitful than it has been in the past.
>
> With the above facts in mind, one is forced to the conclusion that the value of the property of the Mount Rainier Mining Company as mineral land is purely nominal.

[258] Ibid. The *Description* column has been edited to remove unnecessary reference to Locality number.

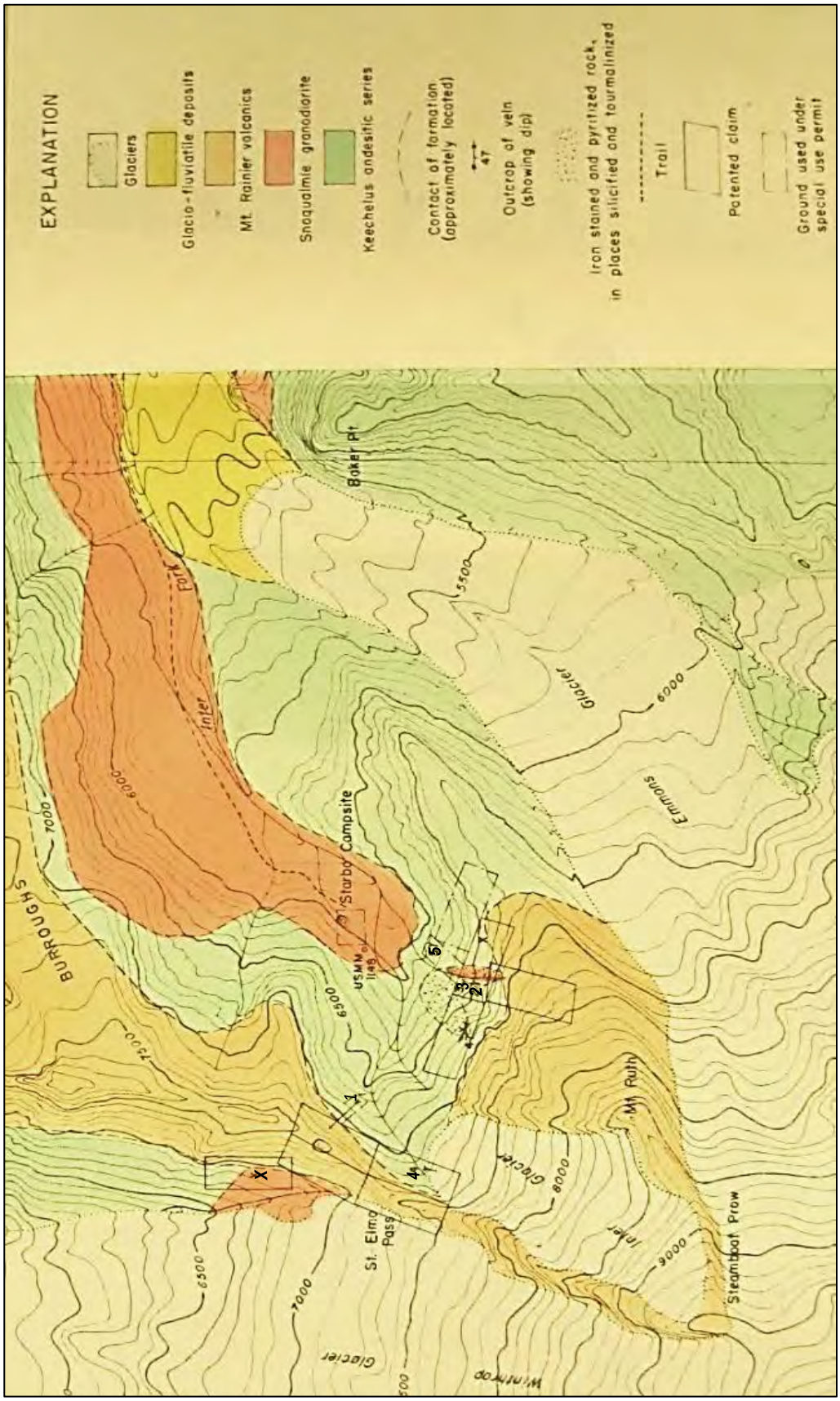


Figure 5.1. Geologic Map of Glacier Basin Area Showing MRMC Claims, and Mines.
Map included in the 1950 Weissenborn and Hosterman mineral appraisal.
(NARA Archives L3023 Files, Box 51, Folder 59)

In the end, the appraisal crew valued the property at no more than $6,000, which was also the same value estimated for the Paradise Mining and Milling Company property, acquired by the park in January 1950. [259]

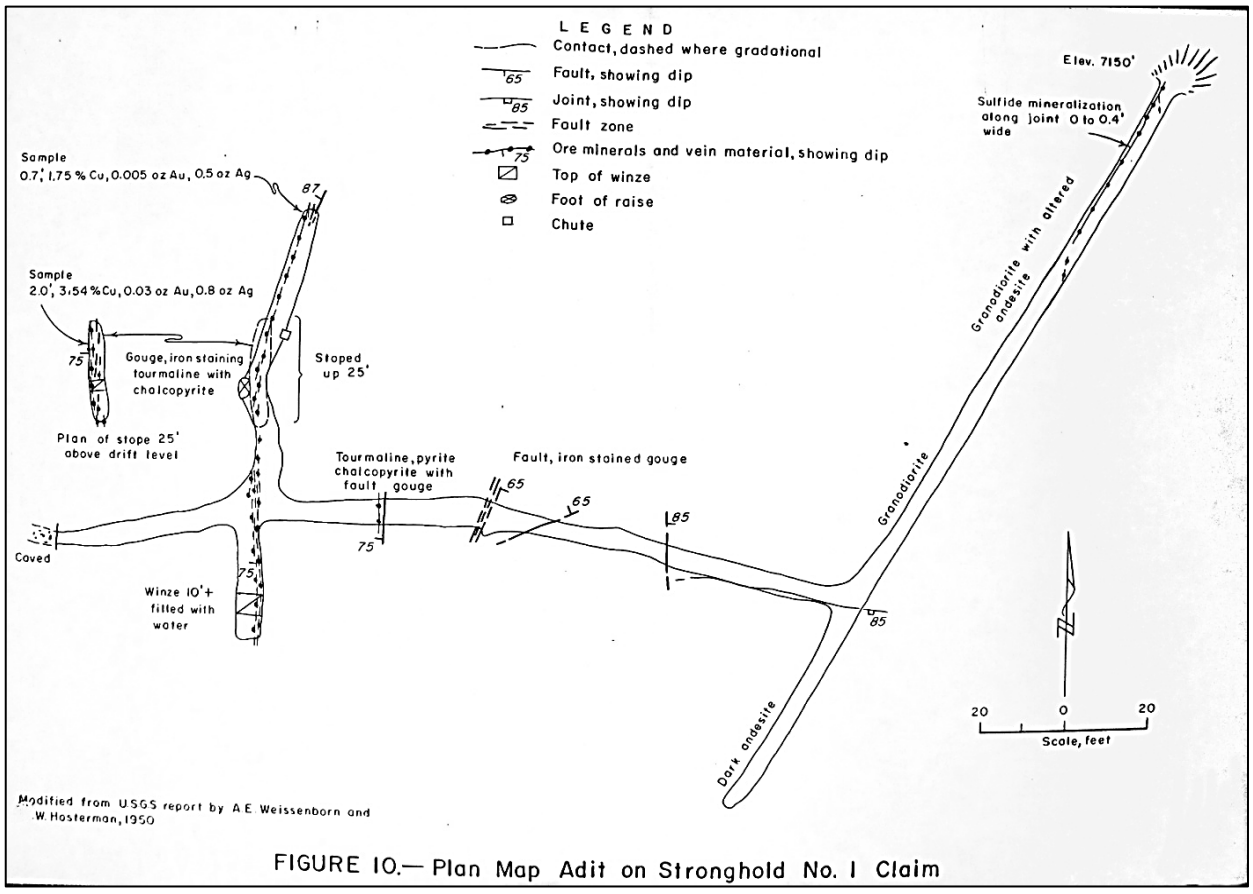


Figure 5.2. *Mine 4* Tunnel Map on Stronghold No. 1 Claim.
Weissenborn and Hosterman map modified by Magill in 1966. (NARA Archives L3023 Files Fiche 67-68)

Leslie Eastman prepared the 1951 real estate appraisal[260] after personally visiting Glacier Basin accompanied by MRMC's Ole Oakland and Ed Batterman (road contractor and stockholder), and Chief Ranger William Butler. Eastman noted that the company had "operated spasmodically for over 20 years with no financial success to its stockholders." After "a detailed examination of the land was made and all factors affecting value investigated and weighed," he "formed the opinion that the total value of the eight patented mining claims together with improvements on October 20th, 1950 was the sum of Ten Thousand Dollars ($10,000.00)." When itemized, the improvements totaled $1,700. The 12 x14 ft. cabin built in 1948 on Lake city claim was worth $500; the 10 x16 ft. cabin between Snowflake and Reven Lodes was worth $400; the 14 x16 ft. generator building on the Mill site was worth $700; and the Safety Breaker and

[259] Memorandum from NPS Associate Director Conrad L. Wirth to Regional Director, Region Four. (NARA Archives L3023 Files, Fiche 67), and Hugh Rumball-Petre (2002:38)
[260] *Appraisal for United States Department of Interior, National Park Service, Longmire, Washington; Mt. Rainier Mining Company Properties*, by Leslie W. Eastman, April 1951. (NARA Archives L3023 Files, Box 51, Folder 59, Fiche 66)

water wheel were worth $100. The hotel/boarding house, which originally cost $11,000 to build in 1916, was not worth anything. The land was valued at $50 per acre, a total of $8,280 for the 165.6 acres.

Eastman's appraisal included a comment about the general value of mineral claims in the area. "Sales of mining claims in the area west of the Cascade Mountains of recent years have been based on speculation only. Large sums of money have been expended in mining development with a sum total score of nearly 100 per cent loss to the investor." Eastman also stated that

> It is my opinion that the fair cash market value of the Mount Rainier Mining Company claims have an added value accruing from accessibility by trail not enjoyed by many mountain top mining claims, possibility of commercial usage for summer resort site and nuisance value of being located within a National Park…[261]
>
> Due to the property being located within the boundaries of Mt. Rainier National Park it is my opinion that a speculative value exists. It is my further opinion that an owner operator might develop the level portion of the claims with hotel and cabins catering to summer hikers, tourists and mountain climbers and run a string of saddle horses for transportation from the end of the road.
>
> There is continuing danger of mining stock promotion with sale of shares to innocent purchasers. This could conceivably extend mining development work within the park for many years to come, with resultant damage to park values through loss of complete control of operations within the area.
>
> It is my further opinion that subject mining claims could fall under the control of unscrupulous promoters and enough actual development work be done to cause the Park Service untold problems in supervision of the surrounding lands and access roads leading into the Basin. There is no doubt in my mind that it is within the realm of possibility to find a buyer of speculative property who might, without knowledge of all the facts and past history of the claims, pay many thousands of dollars more than the true value for them.

Negotiations for Federal Acquisition; Disagreement over Glacier Basin Mine Values Continue

The National Park Service director gave Mount Rainier National Park Superintendent Preston the authority and responsibility to negotiate a purchase price for Mount Rainier Mining Company's patented claims in Glacier Basin. Negotiations began in 1946, just after the company reorganized and after a 16-year hiatus in mining work. Initially, Superintendent Preston corresponded with E.P. Donnelly, the MRMC attorney.[262] The company was willing to sell, but its stockholders could not agree on a price. According to Donnelly,

> While the company would be willing to sell its property at a reasonable valuation, the various stockholders will have a little difficulty agreeing on that valuation.
>
> The Company is willing to initiate steps to secure an appropriation. I believe it would be a good idea to have a value fixed, which would meet with the approval of the department as well as the Company, if that is possible.

Preston expressed his concern to E.P. Donnelly, the MRMC attorney "I certainly hope the directors and stockholders do not place an inflated valuation on their property although as I indicated to

[261] Eastman included the leased Lake City claim in his appraisal, apparently unaware of the special use permit condition that did not allow resort development of the claim.

[262] Correspondence between E.P. Donnelly and Superintendent Preston, November-December 1946. (NARA Archives L3023 Files, Fiche 62)

you, I know hard rock miners, and more often than not they have an exaggerated value of their claims."[263] Donnelly reported back that the directors valued the claims at up to $270,000, despite the fact that the Englehorn estate appraised the value at $500. Ole Oakland, who handled the estate, likely used a low appraisal to enable the MRMC to acquire the claims for that price.

The NPS, however, had an appraisal in hand (perhaps the 1944 GLO appraisal by O'Neill) that valued the holdings at only $40,000. Preston asked the Regional Director if he should tell the MRMC the appraisal value, since the MRMC was willing to sponsor a bill in Congress for the appropriation. There is no record of a response to this question, the funds were not appropriated, and MRMC soon hired a new attorney.[264]

NPS Director Newton Drury's 1947 letter to Ole Oakland explains the National Park System's position regarding purchase of MRMC's Glacier Basin claims.

> With respect to private holdings generally within the National Park System, this service has repeatedly urged upon the Congress the need for appropriations with which to acquire patented mining claims, such as those held by the Mount Rainier Mining Company and other private land holdings, to effect better administration and to eliminate non-conforming land uses within the areas comprising the System. The appropriations in the past have been meager but a substantial beginning has now been made by the appropriation of $200,000 in the Interior Department Appropriation Act, 1948 (Public Law 247, 80th Cong.), which authorizes the use of these funds for the acquisition of privately owned lands. This amount is wholly inadequate to our paramount needs for land acquisition, but it is a step in the right direction. It is hoped that future appropriations of a similar nature can be enabled to eliminate a very substantial portion of the private holdings within the parks.[265]

Because MRMC disagreed with the park about the value of its mining claims, the park explored condemnation as an alternative option. Condemnation, while potentially less expensive than purchase, still required that the government compensate the landowner for the appraised value. The 1948 land acquisition guidelines (Departmental Order No. 2402) stated that

> It is the policy of the Service to acquire lands by purchase without resort to condemnation proceedings if it is at all possible…
>
> Occasionally an owner, for various reason, refuses to sell at all or demands a price which cannot be justified. In such instances the Service, of necessity, must resort to condemnation. From the public relations angle alone it is desirable to avoid condemnation…[266]

On April 13, 1948, Regional Director Tomlinson notified Superintendent Preston, lamenting that "Funds for land purchases are exceedingly meager at the present time, yet it is necessary to have the

[263] Letter from Superintendent Preston to E.P. Donnelly, MRMC Attorney, December 9, 1946. (NARA Archives L3023 Files, Fiche 62)
[264] Superintendent Preston "Memorandum for the Regional Director, Region Four" December 18, 1946. (NARA Archives L3023 Files, Fiche 62)
[265]Letter from NPS Director Newton B. Drury to Mr. Ole Oakland, November 28, 1947. (NARA Archives L3023 Files, Fiche 62)
[266] Memorandum from Acting Regional Herbert Maier to all Region Four Field Areas, November 19, 1948. (NARA Archives H14 Files, Fiche 13; and McIntyre n.d.:19)

money in hand before filing condemnation proceedings."[267] Funds were not available the following year either; being earmarked for other parks than Mount Rainier, and other regions than the Pacific Northwest.

By 1951, the MRMC had their special use permit authorizing Glacier Basin mining activities, and were consequently in a stronger bargaining position. Sensing an unusual opportunity, the stockholders elevated the value of their claims to $2,000,000.[268] By this time, the company had sold additional stocks, and mining engineer George Westby had inspected the claims; offering encouraging recommendations to the MRMC on how to develop them. On the other hand, appraisers hired by the NPS valued the property as no more than $10,000. This vast difference in values was a difficult starting point for the negotiations. Nonetheless, the NPS was willing to try.

In May, Superintendent Preston was asked to make an offer for the lower appraised value.

> In view of these two excellent appraisals, it is our feeling that condemnation should be requested. However, before this is done, it is believed that you should have Superintendent Preston offer the Company $10,000 for its property, including quit-claims to any unpatented claims adjacent to the patented claims. If a condemnation proceeding is requested, please advise us if you would recommend that a declaration of taking also be filed.
>
> "Should the Company refuse, and it is assumed that it will do so, please furnish us with a certificate of title covering the patented claims. Please also furnish the customary reports on possessory rights.[269]

As expected, the MRMC rejected the offer. Preston was negotiating with Ole Oakland, who in turn replied that

> …In answer [I] will say only that the real purchase price lies between the price you offer and the price asked by the group of stockholders that met with you in Seattle, [in] 1950. It cannot be either one but it is a start in the proper direction to arrive at a reasonable price. We do insist on the mineral values as stated by Mr. Weissenborn could not be determined by viewing the territory; the tunnels have been closed up, that ore has been contacted in the values as they are disclosed herewith showing the real returns from smelters on volumes up to 94 ton is proof better than assays because of the average on tons or ore. Each shipment was out of a different tunnel, the old way of exploring was by tunnel contact, it was done that way.
>
> The destruction of buildings, tunnels and entrances and so on during the dormant time and during litigations will now require approximately $25,680 (for exploring and opening and cleaning tunnels No. 1, 2, 3, Mary Lode by diamond drill tests) for which sum we have application for a loan to the D.M.A. [Defense Minerals Administration] setup – although I personally believe the proper thing to do is for this company and the Park Department is to get together on a price; the price named for surface could not be complained of. The additional considerations would be money expended and mineral values disclosed based on a liberal estimate…

Preston agreed to meeting with MRMC to discuss the offer, although he told the regional director "I believe there is little likelihood that such a meeting would produce a figure agreeable to all. Even so,

[267] (NARA Archives L3023 Files, Fiche 46)
[268] Memorandum from Superintendent Preston to Regional Director, Region Four, May 31, 1951. (NARA Archives L3023 Files, Fiche 67)
[269] Memorandum from NPS Associate Director Conrad L. Wirth to Regional Director, Region Four, May 17, 1951. (NARA Archives L3023 Files, Fiche 67)

we shall make the effort and inform you of the results."[270] Oakland's letter clearly indicates that MRMC based their values in part on the amount of money previously spent, and used more "liberal" speculative criteria to value the minerals. Oakland seems to acknowledge that their estimated costs for resuming mining are beyond their means, so government purchase would be considered –for the right price.

After the June 28 meeting, Preston reported that "There was some talk of a figure of about $250,000…" Later, the MRMC board of directors met separately to arrive at an asking price of $252,000 which they believed was "much too low to recover monies spent previously on this property."[271] Meanwhile, Preston reported that the MRMC had applied to Defense Minerals Administration for a loan (File No. DMA1608). The loan would require matching funds and the MRMC was asking its stockholders to buy more shares. Preston also wrote:

> I am sure you are aware that this office has considered it most desirable to avoid the reconstruction of the old road and development of the mines; therefore, prompt favorable consideration of the acquisition of the property should be given to preclude damage to natural values by the road building and other activities. Of course, the officials of the company and their attorney are entirely aware that should condemnation be filed prior to the time they are able to secure the exploration loan, rebuild the road and open the tunnels and shafts to the ore body, it will be impossible for them to go into court and prove the values are there which they claim. For this reason they have a great interest in filing a counter offer for the property and in holding discussions regarding price and meanwhile, reconstruct the road and open the mines. It is obvious they want to avoid condemnation in the immediate future. It seems to us that by taking this action soon with Declaration of Taking, the position of the government might be stronger than that of the mining company in court.
>
> There is some doubt in our minds that very much can be accomplished unless the loan is secured from D.M.A.; however, mining ventures seem to have considerable appeal to some people and the funds may be raised for the work. There are hard working people involved and they could accomplish a great deal.[272]

By July 1951, Mount Rainier Mining Company and Mount Rainier National Park faced a dilemma. The company was reluctant to sell its patented claims while the possibility of a DMA loan was still alive. MRMC needed the funds to do road work to be able to access and reopen the tunnels, and to have the ores properly evaluated. They felt certain that the resulting mineral appraisal would be higher than the previous Park Service estimates. If so, the company could sell for a higher price, or make a profit directly from mining. The park was eager to buy the property *before* roadwork began, because roadwork and mining would "destroy park values." Nonetheless, land acquisition funds remained unavailable through 1951. [273]

In 1952, USGS Geologist Weissenborn, who had appraised the claims for the Park Service, offered a suggestion that seemed to suit both parties. Weissenborn, an Executive Officer of the DMA

[270] Memorandum from Superintendent Preston to Regional Director, Region Four, June 6, 1951. (NARA Archives L3023 Files, Fiche 67)
[271] Letter from Ole Oakland to Superintendent Preston, July 7, 1951. (NARA Archives L3023 Files, Fiche 67)
[272] Air Mail Memo from Superintendent Preston to Regional Director, Region Four, July 2, 1951. (NARA Archives L3023 Files, Fiche 67)
[273] Memorandum from B. F. Manbey, Regional Chief of Lands, NPS Region Four to Assistant Regional Director Hill, January 22, 1952. (NARA Archives L3023 Files, Fiche 67)

Field Team, called Superintendent Macy to say that the DMA was planning to approve a $3,000 loan to the MRMC for mine development. He told Macy that "This might enable opening some of the tunnels to provide a better idea of what mineral values are present. Should these values be negligible, as is suspected, the problem of the acquisition might be reduced."[274] NPS Assistant Director Tollson approved, "We are inclined to agree with Mr. Macy that further exploratory work might be to the advantage of the United States in attempting to acquire the property. Therefore, we feel it is best to let the proposed loan transaction take its natural course."[275]

Mining Returns to Glacier Basin

Condition of Glacier Basin Mines, Roads, and Facilities in 1950

The 1951 Eastman Appraisal Report[276] describes the condition of the Glacier Basin claims and structures at the time Mount Rainier Mining Company resumed work. All of the structures in the leased Lake City claim, including the hotel, had collapsed between 1930 and 1946. In 1947, wood from the remains of the hotel was used to construct a 12 by 14 ft. cabin on the site. Buildings on the patented Snowflake Lode also had collapsed. Still standing was a cabin on the tunnel site next to Snowflake and Reven Lodes. On Turtle Claim, the generator building, water wheel and safety breaker were still standing.

Eastman described the No.10 vein tunnel on the Stronghold No.1 Lode (*Mine 4*).

> The main shaft of former company workings is on this claim. A narrow gauge rail track runs into the mountain approximately 600'. The tunnel is partly cribbed with timbers and was entered by this appraiser for a distance of 450'. Sacked ore of low quality was stacked in the tunnel.

The entrance to the No.1 tunnel on Washington No.1 Lode (*Mine 1*) had caved in and blocked entry. The tunnel was reportedly 900 ft. long. Still remaining was a tunnel and several cuts on the Mary Lode (*Mine X*), and a tunnel site adjacent to the Washington No.1 Lode.[277]

The condition of the uppermost 3½ miles of the Glacier Basin Road (Storbo Road) were not good. Eastman included his opinion; stating that

> The construction of a road into Glacier Basin from the end of the existing road at White River Campground poses a difficult and costly problem of road building… The location of this road is along a steep brushy hillside posing many construction problems of rock blasting, bulldozing, bridging cracks and ravines, drainage and slides caused by winter snow and rain.

[274] Memorandum from Superintendent Macy to Reg. Director, Region Four, February 12, 1952. (NARA Archives L3023 Files, Fiche 67)
[275] Memorandum from. Assistant Director Hillory A. Tolson to Regional Director, Region Four, March 4, 1952. (NARA Archives L3023 Files, Fiche 67)
[276] *Appraisal for United States Department of Interior, National Park Service, Longmire, Washington; Mt. Rainier Mining Company Properties*, by Leslie W. Eastman, April 1951. (NARA Archives L3023 Files, Box 51, Folder 59, Fiche 66)
[277] This may have been the eastern extension of *Mine 1* onto unpatented Gate Claim.

> It is my opinion that a road built to withstand the rigors of such a location would cost nearly $50,000 per mile and expensive maintenance repair thereafter. The road, of course, could only be used during the summer months after the snows had thawed…
>
> …It is my opinion from contact with Mr. Oakland and Mr. Batterman of the Mt. Rainier Mining Company that they consider road access to be of minor importance and not too costly to construct. This is probably sales talk on their part… Mr. Batterman is a bulldozer operator from Enumclaw with a reported contract to rebuild the road into the Basin. He is also a stockholder, I believe, which might account for his opinion.

While not mentioned by Eastman, Reven Lode's *Mine 5* facilities remained essentially intact, if non-functional, as late as 1950 (Figure 5.3)



Figure 5.3 Reven Lode *Mine Five* Entrance with Snowshed circa 1949-1950.
(Courtesy Arthur L. Storbo)

Work Resumes in 1952

Despite degraded conditions of the road and facilities in the basin, MRMC was eager to resume mining Glacier Basin. The company was encouraged by success in obtaining the Defense Minerals Exploration Administration (DMEA) loan, and wanted to proceed as soon as possible.

In 1952, MRMC roughed out the road to allow the company to haul in equipment; intending to continue road improvements as needed. They graded, constructed cribbing from salvaged downed logs, and constructed and installed culverts. The culverts were made of old water tanks with the ends cut out

and bolted together.[278] On June 28, 1952, Ranger Douglas Evans inspected and reported on the work. He also took photos. Evans reported that the roadwork did minimal damage. He also noted that the work crew had driven a bulldozer into the remains of the hotel, and stated that "The only habitable building was located at the mine tunnel on the south side of Inter Fork. The mine tunnel is also badly caved in a few feet in from the entrance."[279] Figures 5.4 through 5.6 show some of the remaining Glacier Basin facilities as they appeared at the resumption of limited mining in the basin.

Ranger Bill Butler visited Glacier Basin in October, 1952, and noted the work that was going on at the time. He reported that

> There were four men working the claims. Ole Oakland, Thor Oakland, another old fellow and an Eskimo. They have opened up No.2 Snowflake tunnel which runs back 240 ft., I believe they said. At the present time there is a lot of water in the tunnel and boots would be needed to go back in the passageway. On September 8, 1952, a mining engineer, Mr. Gill [likely Magill] and a geologist, Mr. [Willard] Puffet, inspected the tunnel for the Defense Mineral Exploration Association in connection with a government loan. They will return again as soon as Snowflake tunnel No.3 is open. There is a cave-in approximately 200 ft. back from the face, which they are attempting to timber up and muck out and as soon as this is accomplished, will notify the above personnel from the U. S. Geological Survey Office in Spokane, Washington, to come and inspect the tunnel. This bore extends 690 feet back into the hill. Both of these openings are in the Glacier Basin side of Mount Ruth.[280]
>
> They hope that sufficient mineral value will be exposed so that they can obtain a loan to carry on further exploration.

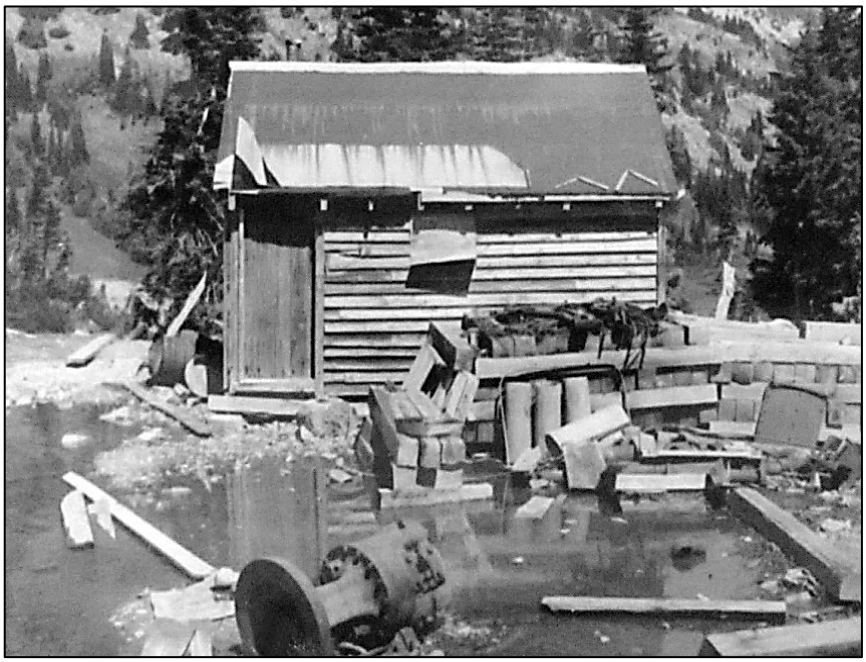


Figure 5.4. Cabin and Drill Sharpening Gear near Reven Lode. (NARA Archives L3023 Files)

[278] Report from District Ranger Patterson to Longmire Headquarters, July 9, 1952. (NARA Archives L3023 Files, Fiche 67). Some of these culvert features are still visible on the modern Glacier Basin trail.
[279] Memorandum from Douglas B. Evans to Supt. Macy, July 28, 1952. (NARA Archives L3023 Files, Fiche 67)
[280] Memo from W.J. [Bill] Butler to Chief Ranger, October 3, 1952. (NARA Archives L3023 Files, Fiche 67)



Figure 5.5. 12 by 14 ft. Shack Built in 1948 on the Storbo Hotel Site. Hotel ruins in background. 1951 Eastman report. (NARA Archives L3023 Files Box 51 Folder 59).



Figure 5.6. Remains of Storbo Hotel in 1952. (NARA Archives L3023 Files Fiche 67)

In 1952 and 1953, MRMC opened up *Mine 2* and *Mine 3* on Snowflake Lode. Mining engineers E.A. Magill, Willard Puffet (USGS) and Webster Anderson (Bureau of Mines) were sent from the DMEA to inspect the mines and evaluate the ores. The report was disappointing to the company.

> On August 4, 1952, the company was granted a Government exploration contract through the Defense Minerals Exploration Administration (Docket No. DMEA 1608, Contract No. Idm-E-383) in the amount of $3,000 to determine if commercial quantities of copper ore were exposed in Adits 2 and 3 on the Snowflake claim... Work was to consist of rehabilitating these two adits sufficiently to make them safe for access and examination. No.2 adit was examined on September 8, 1952; however, it was not until October 23, 1953, that No.3 adit was available for examination. It was necessary to install an exhaust fan to provide sufficient oxygen so the No.3 adit could be examined. The two adits did not contain ore in sufficient quantity to be minable.[281]

Magill reported that samples taken from the No.2 (*Mine* 2) adit ranged widely from 0.15 to 11.84 % copper, but that by hand sorting samples, MRMC had been able to get results similar to those reported from earlier shipments. The ores between the No.2 and No.3 (*Mine* 3) adits, contained 1.85-7.05% copper, .01-.03% gold and 0.8-2.8 % silver, but that "the width and extent of the mineralized areas is too limited to justify consideration as ore." In addition, samples from the No.2 adit dump and No.3 adit cave-in contained only 0.15% copper, which Magill believed was "representative of the copper content of the country rock." Magill's findings agreed with the previous appraisal by Weissenborn and Hosterman.

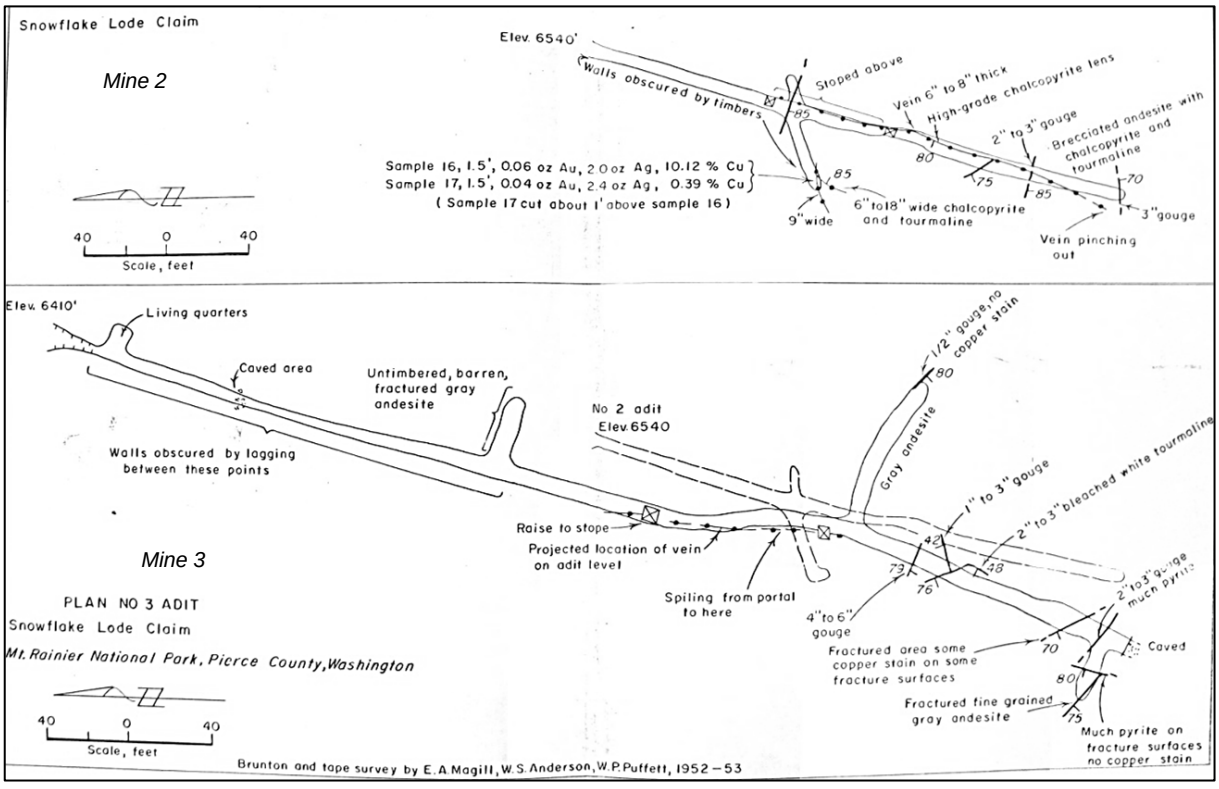


Figure 5.7. Snowflake Lode Adits in Plan-view. Mapped by E.A. Magill, et al. in 1952-53. Notice living quarters inside portal of the No. 3 lower adit. (NARA Archives L3023 Files, Magill 1966)

[281] *Report On The Examination Of The Mount Rainier Mining Company Claims, Mount Rainier National Park*, E. A. Magill, 1966. (NARA Archives L3023 Files, Fiche 67-68)

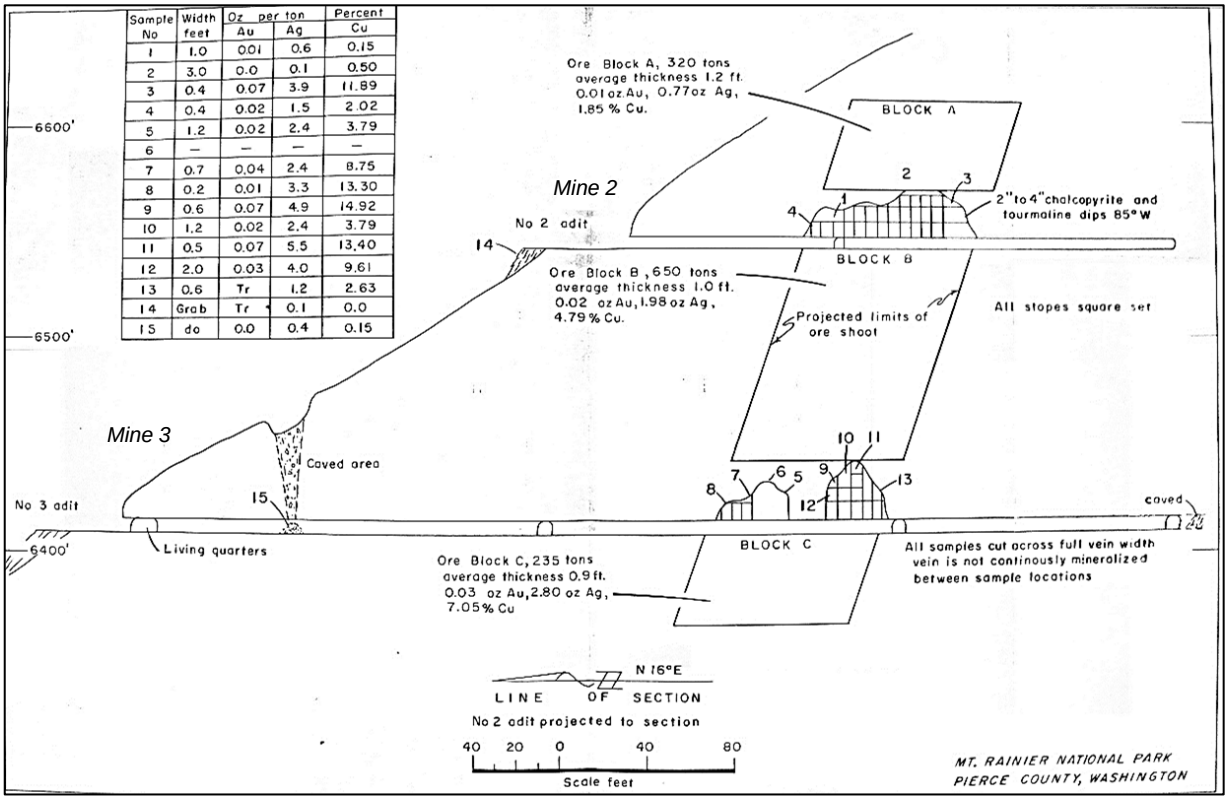


Figure 5.8. Snowflake Lode Adits Longitudinal Section. Mapped by E.A. Magill, et al. in 1952-53. (NARA Archives L3023 Files, Magill 1966)



Figure 5.9. Stock Pile and Old Ruins of Buildings on Snowflake Lode.
Photo from 1951 Eastman Report. Some debris may be remains of the snowsheds visible in Figure 3.29. (NARA Archives L3023 Files)

Following the DMEA evaluation, MRMC funds dwindled, and work slowed. The company balked at paying the $95 yearly permit fees required to keep its special use permit active; paying only when the park threatened to take legal action.[282] MRMC also failed to maintain Glacier Basin structures, and deferred improvements on their leased claims. When the special use permit expired in 1955, the park issued a new, similar permit on a 10-year term (1955-1965); renewable on a year-to-year basis. During the next ten years, mining work continued sporadically. Most work, when it occurred, focused only on seasonal maintenance to repair over-winter damage rather than ore extraction. As can be seen in Figure 5.10, MRMC's infrastructure continued to crumble under the pressure of frequent floods, avalanches, and rock-slides associated with Glacier Basin's unstable geological structure and severe winters.



Figure 5.10. P.T. Storbo's Son, Albert, Surveys Reven Mine Remains in 1956.
(Courtesy Arthur L. Storbo)

MRMC President Ole Oakland passed away in the spring of 1957. His wife assumed his position, and his son Thorwald served as vice president. Thor Oakland wrote to inform Superintendent Macy of his father's death. His letter, and Macy's reply, suggest that they had a friendly relationship despite the frequent friction between park and mining interests. Thor Oakland wrote: "As you probably know Dad passed away April 13, 1957, and is walking slowly so as not to run away but that we may catch up. We try to think that he is only on a trip, and will be back. Mother is 75 years young, too, but it makes her proud to be president in Dad's Place."[283] Macy replied "I am sorry to hear of your father's death but there is solace

[282] Letter from Superintendent Macy to Ole Oakland, Mount Rainier Mining, September 24, 1954. (NARA Archives L3023 Files, Fiche 67)
[283] Letter from Thor Oakland, Vice President, Mount Rainier Mining Co., Inc. to Preston F. Macy, Superintendent, February 28,1958. (NARA Archives L3023 Files, Fiche 66)

in the fact he lived a full and honorable life. It is fine that your Mother can carry on as President and we wish her health and happiness."[284] The previous fall, Peter Storbo had passed away on October 4, 1956.[285] Mount Rainier Mining Company had survived the loss of its defining generation.

In 1956, MRMC began working with E.J. McDonell & Associates of Seattle; a company that reportedly leased the Glacier Basin claims from MRMC[286] In 1957, McDonell's crew reported on the season's work under "a tight money situation." The crew had to blast through a massive rock slide, to access Glacier Basin, then continue clearing the area all season simply to maintain access. They even had to repair their cabin after bears raided it, which "…made the cabin, both inside and outside, look like a Dakota cyclone had hit it." They expanded the cabin and placed metal grills on the windows to protect it from future raids.

The McDonell crew also salvaged lumber from the now completely flattened hotel (see Figure 5.6) and hauled it to areas where they would need to bridge the Inter Fork. They extended the road to the lower No.3 tunnel on the Snowflake Lode, and cleaned out several other Glacier Basin tunnels.

For the first time in years, the McDonell group spent time relocating the unattended molybdenum vein in upper basin's Mary Lode. The Mary Lode tunnel (*Mine X* in Table 3.4) had caved in, but the crew intended to resume work the next season and did their "…best to uncover that vein as we have people that will finance and are badly in need of the Molybdenum. We feel this is important to Mt. Rainier Mining Company as it would be an immediate source of finances to bolster your Company's status, which of course we are interested in doing." [287]

Neither McDonell nor MRMC submitted a work report the following year, but MRMC inquired as to the possible use of a helicopter to fly in supplies. It is likely that road conditions once again had deteriorated over the winter, and the company was looking to bypass roadwork. The park, however, declined helicopter landings on either park or leased park property for that purpose. No work was reported after 1957. The brief period of 1950s renewed mining in Glacier Basin had come to a close; Ole Oakland and MRMC's founder Peter T. Storbo had passed away; and the likelihood of yet another start was dim.

The End of a Long Process; Mount Rainier National Park Acquires Glacier Basin Claims

Renewed Appraisals and Mine Acquisition Priorities

From 1963 to 1984, the park continued attempts to acquire the mining claims patented by Mount Rainier Mining Company in Glacier Basin, as well as unpatented claims held by Eagle Peak Copper Mining Company (EPCMC) located on the opposite side of the mountain between Longmire and Paradise.

[284] Letter from Preston F. Macy to Thor Oakland, Vice President, Mount Rainier Mining Co., Inc., Superintendent, March 6, 1958. (NARA Archives L3023 Files, Fiche 66)
[285] Bart Ripp "Mount Rainier Mining Company: Lots of Rock, Less Copper", *The News Tribune*, Tacoma Washington, May 31, 1999.
[286] According to the 1963 title report by Transamerica Title Insurance Company, there is no record of this corporation. (NARA Archives L3023 Files, Fiche 48, 68)
[287] Letter E.J. McDonell & Associates to MRMC, November 14, 1957. (NARA Archives L3023 Files, Fiche 66)

Claims belonging to these two mining companies amounted to three tracts of land –EMCMC Tracts 3 and 4 totaling 46.09 acres, and MRMC Tract 7 totaling 164.84 acres. During these years, successive park superintendents, regional and national directors, and several land managers continued to inventory, prioritize, appraise, strategize, and seek funding for the acquisitions.

The properties were appraised in 1966, 1969, 1976, and 1982. In 1966, the Bureau of Mines, Office of Land and Water Rights took responsibility. In 1970, the National Park Service teamed up with the Bureau of Land Management (BLM) to inspect Eagle Peak Copper Mining Company claims. Ultimately, the BLM invalidated the unpatented EPCMC claims which, in 1974, reverted to government ownership.[288] The acquisition of the patented MRMC claims in Glacier Basin, however, took longer and was more expensive than anticipated. We summarize this process below.

Acquisition Attempts in the 1960s

In 1963, the Park Service once again sought appraisals to prepare for federal acquisition of the park's two remaining mining districts –the Mount Rainier Mining Company claims, and Eagle Peak Copper Mining Company claims. The appraiser, K. Smith, an engineer trainee at Mount Rainier, updated the 1951 Eastman report at this time. Smith reported that, in 1963, Glacier Basin's "…approach road is largely destroyed by washouts and slides, the mine tunnels are nearly all blocked by cave-ins, and buildings are practically all ruined by weather damage and decay." Since the cabin on the Lake City claim was gone and the others deteriorating, Smith reduced the values of the improvements from Eastman's earlier estimate. Accordingly, the improvements Eastman had valued at $1700 dropped to $800.

Even though acquiring Glacier Basin claims was important to the park, initial priority was given to the Eagle Peak area. While recognizing that renewed mining, if it occurred, would damage scenic values in Glacier Basin –a popular hiking route to Camp Schurman and the Mount Rainier summit, "Priority is placed second behind that for acquiring the Eagle Peak Copper Mining Co. holdings, because the Glacier Basin acreage is less endangered by imminent misuse."[289]

The Western Regional Office supported the purchase of the Glacier Basin and Eagle Peak Copper Mining Company claims in 1965, even though neither company had done much development work in the past few years. Superintendent Rutter believed "Both corporations appear to be marginal and we do not believe that either could undertake any significant development without outside financing." Development at Glacier Basin seemed less likely because of poor road access. Rutter also reported that "The few structures that did exist for several years past have since been leveled by snow loads."[290] The park was

[288] McIntyre n.d.:25-29.

[289] Tract Record and Valuation Data of Land to be Acquired, September 25, 1963, inspected/reviewed by K. Smith on July 20, 1963 Form NPS-L-3, United States Department of the Interior, National Park Service. (NARA Archives L3023 Files, Fiche 66, L1421 Files, Fiche 22)

[290] Memorandum from Superintendent Rutter to NPS Director, March 4, 1965. (NARA Archives L1425 Files, Fiche 22, 49)

concerned with any possibility of development, however slight. By 1966, the park estimated $16,000 to acquire the MRMC claims and $5,000 to acquire the Eagle Peak Mining claims.[291]

The 1966 Appraisal Report

In 1966, when the Office of Land and Water Rights took over the acquisition process, they obtained an updated appraisal of the MRMC mining claims. The 1966 *Report On The Examination Of The Mount Rainier Mining Company Claims, Mount Rainier National Park* by E.A. Magill, a representative of Area VII Mineral Resource Office, Bureau of Mines,[292] outlines the history of the company and its claims. It also provides good descriptions of the physical conditions of the MRMC claims, and summarizes the company's financial status. At the time of the appraisal, MRMC was two years delinquent on corporate taxes, and four years delinquent on property taxes –both required because of the claims' patented status. The company would pay its property tax just before the deadline to avoid foreclosure by the county for nonpayment. Magill reported that the road was deteriorated and not drivable; and that the buildings had collapsed, and all but the Stronghold No.1 adit (*Mine 4*) had caved in. He summarized his evaluation of the mineral values from his 1952 and 1966 inspections; concluding that the claims *could not be profitably mined*.

> The property has produced some 30,000 pounds of copper, 4 ounces of gold, and 375 ounces of silver. There is estimated to be 1,205 tons of protore [metalliferous material before it becomes ore] reserves on the property with an average grade of 4.45 percent copper, 0.019 ounce per ton gold, and 1.78 ounces per ton silver. This material cannot be classified as ore because it is only one foot in average width and cannot be mined at a profit. It is very probable that the direct mining costs and transportation on the material shipped were much more than was received from the smelter when the mine and facilities were in operating condition, completely discounting access and exploration costs.
>
> Mineralization on the property consists of small relatively rich lenses of chalcopyrite and associated copper minerals. This material cannot be mined at a profit at present or in the foreseeable future; consequently the mineral potential of the Mount Rainier Mining Company claims can be considered nil. However, to determine this, considerable sums of money were spent and at least part of this expenditure was warranted.

Magill also was skeptical about the value, or even presence, of molybdenum in Mary Lode, which MRMC had hoped would attract investors or federal mining loans. Magill and Ole Oakland had tried unsuccessfully to relocate the adit (*Mine X*) in 1953. Magill reported that "…no molybdenum mineralization was noted although altered granodiorite was observed. The terrain in the area is extremely precipitous and difficult to climb because of slide rock. It would take an extraordinarily rich deposit to offset the natural obstacles due to terrain in this area and there is no reason to believe that such a deposit exists."

Ranger D.F. Jones accompanied Magill during the 1966 inspection, reported on the open adits and shafts in *Mine 4* as public hazards, and rephrased Magill's conclusions as to why the claims were not profitable.

[291] Memorandum from Bruce J. Miller, Acting Chief, Office of Land and Water Rights, SSC, NPS, San Francisco Planning and Service Center, to Superintendent Rutter, July 1, 1966. (NARA Archives L1425 Files, Fiche 21)
[292] NARA Archives L3023 Files, Fiche 67-68.

> The main problems appeared to be twofold: (1) The type of terrain (steep hillsides and generally unstable ground) made mining costly, and (2) even though the ore was of high enough quality, the veins themselves were neither thick enough (10-12 inches at the widest and usually narrower) nor continuous enough (often pinching out completely) to produce any real quantity of ore. These problems coupled with the long distance to market combined to make (in Mr. Magill's words) 'a very poor piece of real-estate as far as mine properties go.'[293]

Acquisition Fails, but Attempts Continue

Even with Magill's report in hand, government acquisition was once again deferred due to lack of federal funds. The park considered acquiring funding from an intermediary conservation organization such as the National Park Foundation (established in 1968) until federal funds became available.[294] In 1968 Edward Kippes, negotiator for the Division of Land Acquisition, discussed acquisition with Ossie Oakland, who was then manager of MRMC. From this discussion, Kippes speculated that the company might sell for the 1966 appraisal value of $10,000.[295] Again, funds were not available. An emphasis on eventual purchase of the claims remained, however, and Glacier Basin was placed on a five-year land acquisition program for fiscal years 1969 through 1973.

In 1969 the park obtained another mineral appraisal from the Bureau of Mines. The report also included information on MRMC's tax status.

> The Mount Rainier Mining Company which owns the eight patented mining claims is always four years delinquent in its payment of their real property tax. They have just paid the 1964 tax, thereby giving it another year's grace before county foreclosure for non payment of taxes which are about $30.00 per year. This procedure has been going on for years and will probably continue to do so for many more years. Even if the property is foreclosed for nonpayment of taxes, it would appear that it is questionable whether the county could sell the property to the United States without the regular bidding procedure. The privilege of redemption is extended to the former owner, or his successor in interest, so long as title to the property vests in the state.[296]

Acquisition Attempts Continue through the 1970s

Because the company was delinquent on its corporate tax, there was some discussion about whether the company needed to reorganize before it could even legally sell the claims. At this time, too, the park considered acquisition through condemnation proceedings. In 1970, Negotiator Edward Kippes offered $10,000 to MRMC on behalf of the U.S. Department of the Interior. Ossie Oakland rejected the offer for MRMC; stating that the company had leased the property for a two-year term to a Tacoma

[293] Memorandum from Ranger D.F. Jones to District Ranger James Valder, August 20, 1966. (NARA Archives L3023 Files, Fiche 66)

[294]Letter from D.A. Richie, Acting Superintendent, Mount Rainier to Regional Director, Western Region, January 26, 1967. (NARA Archives L1421 Files, Fiche 21) Memorandum from Charles R. Rinaldi, Regional Director, Western Region to Superintendents, Western Region, October 25, 1968. (NARA Archives L3023 Files, Fiche 68,69)

[295] Edward H. Kippes, United States Department of the Interior, National Park Service Negotiator's Progress Record, Form 10-125, November 25, 1968. (NARA Archives L3023 Files, Fiche 49 and 68)

[296]Letter from Willis P. Kriz, Land Liaison Officer, Western Region to Chief, Division of Land Acquisition, October 3, 1969. (NARA Archives L3023 Files, Fiche 48)

company that believed it could open and operate the mine (probably *Mine 4* in Stronghold No.1, or *Mine 5* north of Reven) by a new, less expensive method.[297] But mining did not resume –it simply would not pay.

In 1973, the U. S. Department of the Interior made yet another offer of $10,000 to MRMC. By this time, Ossie Oakland had passed away and Jacob Strandness, a stockholder living in a veterans' hospital in Fargo, North Dakota, was the company's new spokesman. He again rejected the government's offer. During the same year, park officials concluded that, in the future, "Park policy will be to refuse special use permits [for mining Glacier Basin]." [298] For the next 11 years, Strandness, continued paying the property taxes just in time to avoid foreclosure.

In 1976, Jacob Strandness, then living in Glenwood, Minnesota, again expressed his interest in selling the claims; seeking help from Senator Walter Mondale. He explained his situation as follows:

> In 1907, my father, Jorgen Strandness purchased stock in the Mt. Rainier Mining company. I have continued to be a stockholder in this venture up to the present time.
>
> Recently the taxes on the mining rights have been raised exorbitantly, to the point where it is impossible for older people like myself to hold onto it.
>
> Many of us suspect that someone is trying to swindle us out of our property. Rather than let this happen, we contacted Mr. Keith Watkins of the National Park Service, 4th and Pike, Bldg. Rm. 531, Seattle, Washington 98101. In 1973, he made us an offer of $10,000 on behalf of the National Park Service. Unfortunately we did not accept his offer.
>
> Now I would like to find someone connected with the Park Service who would give us a fair price. We do not want private speculators to take advantage of us.
>
> Can you please help me resolve this matter?[299]

The chairman of the local county Democratic party, also wrote Senator Mondale on behalf of Strandness. "Mr. Strandness is eighty-two years old, a World War I veteran and a Democrat even during those tough years… Please do what you can for this fine, honest old farmer who at the moment is quite discouraged and confused."[300]

Once again, the Park Service renewed negotiations. Another appraisal of the Glacier Basin claims was completed a few months later. Since the mine tunnels were inaccessible, this mineral appraisal relied heavily on, and agreed with, the findings in the 1966 Magill report. L.S. Zentner, Chief Division of Mining and Minerals, NPS Western Region inspected the surface geology and examined the ore visible in the rock dumps. Based on these observations, he concluded that

> …The description of the vein material, vein width, assay returns for samples cut from the veins, and assays from sacked copper-bearing-rock that had been hand cobbed do not indicate the presence of an ore deposit.

[297] NARA Archives L3023 Files, Fiche 48, 68.
[298] Patrick R. Brito, United States Department of the Interior, National Park Service Negotiator's Progress Record, Form 10-125, January 31, 1973. (NARA Archives L3023 Files, Fiche 68)
[299] Letter from Jacob Strandness to Senator Mondale, June 8, 1976. (NARA Archives L3023 Files Box 51 Folder 61)
[300] Letter from James Gremmels to Senator Walter Mondale, June 8, 1976. (NARA Archives L3023 Files Box 51 Folder 61)

> Finally, exploration costs in remote areas have increased due to the rise in the price of fuel, and there has not been a corresponding rise in the price of copper, the principle element for which the mine was promoted over the years.
>
> In conclusion the property did not attract exploration capital in the early 60's and it will not attract exploration capital today… In my opinion, the mineral estate within the tracts 01-109 and 01-110, the eight patented mining claims identified by Mineral Survey Number 1148 and 1149, approved by the U. S. surveyor general for Washington, on September 30, 1920, has no monetary value.[301]

Ownership Uncertainty and a Bit of Chicanery

Jacob Strandness' concern about private speculators taking advantage of remaining MRMC investors may not have been unfounded. In the latter part of 1976, Strandness and his sister Elizabeth filed suit on behalf of the Mount Rainier Mining Company ("a dissolved Washington corporation") against parties that were making claims on the Glacier Basin mining properties. In the suit, they named one individual and two private companies, as well as creditors and the Washington State Department of Revenue.[302]

Meanwhile, the Park Service continued its interest in obtaining Glacier Basin's patented claims by either purchase or condemnation. The process, however, was not clear. After years of mining and corporate inactivity, ownership of Glacier Basin's patented claims had become muddled. Apparently, Strandness and his sister did not have clear title, which stalled the Park Service acquisition process. In November 1977, Keith Watkins of the Regional Lands Office noted that we "…Can't do a thing until they do something to give us a basis for condemnation. We will have to eventually condemn –because no one has clear title to it…"[303]

In 1980, the Park Service requested deeds for the property in response to an issue regarding Glacier Basin timber rights. The result produced two names –Christian Palzer of Marvel Mobile Homes, and the Washington Park and Recreation Development Corporation. Interestingly, these were the names of the individual and private companies cited in the 1976 Strandness suit. Apparently Palzer owned both companies; subsequently conveying the title to the mobile home company.[304] But neither the Strandness's, Palzer, nor Palzer's companies had anything to do with the timber rights issue. Others seemed to be taking advantage of the uncertainty surrounding Glacier Basin's mining claims.

Timber cutting had been disallowed on the Glacier Basin claims since the 1950s. Accordingly, concern was raised in 1980 when the park became aware that an individual wanted to purchase timber rights to those claims. Apparently, a Mr. Thiel was negotiating to sell the property, or the timber rights, to Mr. Greg Rogers. Thiel had told Rogers that he owned a half-interest in the property, which he claimed

[301] Mineral Appraisal of the Mineral Estates for Tracts 01-109 and 01-110, Mt. Rainier National Park, Washington. L.S. Zentner, Chief, division of Mining and Minerals, August 27, 1976. (NARA Archives L3023 Files, Fiche 67, 68)
[302] Information about this document in the file of Gretchen Luxenberg, former NPS historian, NPS Columbia Cascades Support Office, Seattle.
[303] Telephone message from Keith Watkins recorded by Harry Wills, MORA, November 18, 1977. (NARA Archives L3023 Files, Fiche 68)
[304] Memorandum by Harlan Hobbs, NPS Realty Specialist, Pacific Northwest Region, June 30, 1980. Hobbs summarizes the phone calls he made and received in April 1980 about ownership of the claims. (NARA Archives L3023 Files, Fiche 67)

included six to seven million board feet of timber that he would sell for $550 per 1,000. Thiel named a title company and attorney that would complete the transaction. When contacted, however, the title company's representative did not know Thiel, or the property in question. Furthermore, the telephone company did not have a listing for the attorney.

Suspicious of the deal, Rogers made his own inquiries about Glacier Basin property ownership. In so doing, he alerted the Mining and Minerals office in Spokane, and in turn National Park Service Realty Specialist, Harlan Hobbs. Hobbs contacted Rogers, also informing him that there were no trees on the mining claims. Hobbs concluded "The 1966 mineral appraisal has photographs showing few, if any trees. Since it appears there is no threat to the property, there is no reason to pursue the matter any further."[305] The issue appears to have faded away without resolution, and with Glacier Basin's treeless claims intact.

And in this state of ownership uncertainty, another decade passed with neither Park Service claim acquisition, nor active mining in Glacier Basin –essentially a state of limbo that was soon to change.

Free and Clear in 1984

In 1981, an attorney representing remaining MRMC stockholders contacted the Park Service in regard to negotiating final sale of the Glacier Basin claims. The property was appraised yet again in 1982. Following the appraisal, the Park Service received a formal Offer to Sell and began the process of clearing the title.[306] The 1982 appraisal report by Stewart L. Clark saw no need to reassess the mineral values, but focused instead on other aspects of the property. Clearly, commercial value was affected negatively by the difficult road access to Glacier Basin. Clark noted that, while the claims had recreational value in principle, that value probably could not be realized "Since the subject is located within the Mount Rainier National Park boundary there would likely be major objections to significant development." The issue of recreational development had grown especially sensitive since state and county review was required under the State Environmental Protection Act. Nonetheless, Clark believed that the property could appeal to a church or outdoor recreation club. Interestingly, he also speculated that there might be "…a second but less likely alternative in that individual claims could be sold to individuals interested in their history."[307] Happily for the park, none of these alternative came to pass.

The issue was finally resolved in 1984 when the Department of the Interior completed the acquisition of the Mount Rainier Mining Company claims in Glacier Basin. Government funds finally were acquired, and agreement between MRMC and the park was reached to purchase the eight patented claims for $55,800. With the sale, the Park Service successfully acquired the last remaining private inholdings in Mount Rainier National Park. An article written to announce the purchase was titled "Mount Rainier, free and clear."[308] The article stated that "Mount Rainier National Park has become the first of the

[305] Ibid.
[306] Memorandum from Regional Director, Daniel J. Tobin, Jr., to National Park Service Director, February 3, 1983. (NARA Archives L14 Files, Fiche 1)
[307] Appraisal of Tract No. 01-109, Strandness Property; Also known as Mount Rainier Mining Co., Mount Rainier National Park by Stewart L. Clark, M.A.I.; Stewart Clark & Associates, Inc. (NARA Archives L14 Files Box 26, Folder 6)
[308] Margaret E. Ellis, Public Affairs Specialist, PNRO in *Courier: The National Park Service Newsletter.* Volume 29, No. 8, August 1984.

system's five original 'crown jewels' to be a *complete* national treasure [emphasis added]." The article also outlined the history of MRMC in its final years.

> …Court records show that when the last of the company officers died in 1973 the corporation was dissolved by law for failure to pay State corporate license fees. The claim was saved, however, by a descendant of a shareholder of the original Mount Rainier Mining Company. From his nursing home in Fargo, N. Dak., the descendant, a World War I veteran and farmer, paid the ever-increasing property taxes. On several occasions, he paid the delinquent taxes just in time to save the property from a sheriff's sale.[309]
>
> Today in his 90's the descendant decided to let go the dream of Mother Lode and recoup what he could of his investment by selling out, at last, to the Government for $55,000. He will be reimbursed out of the sale for his expenses and the property taxes before the remainder of the sale price is distributed to shareholders. His actual inheritance is worth only 5 cents a share. Some 692 shareholders, listed by name but not address on old, ruled notepaper in a fading, untidy longhand, will be notified of the sale by the court in published announcements in Pierce County newspapers. According to sketchy records, returns to investors will range from 30 cents to $46, depending on the number of shares owned. Unclaimed shares revert to the State of Washington…
>
> A sunny summer Saturday or Sunday draws between 100 and 150 hikers, backpackers and climbers to the vicinity. At Glacier Basin trailside camp, half a mile from the claims site, open mine shafts are clearly visible. The old mine has been not only an esthetic nuisance to the park but a serious safety hazard as well.
>
> Deserted and worthless as a mining venture, the claims now become invaluable as the final pieces which make Mount Rainier completely free of inholdings.

With final completion of the sale, National Park Service management of Glacier Basin entered a new phase; one that treated the remains of Mount Rainier Mining Company as an historic archaeological resource to be protected, interpreted, and enjoyed for generations to come.

Glacier Basin Mining History in Review

The history of mining in Glacier Basin, in a sense, reflects the early history of Mount Rainier National Park itself. Presence of mining operations in the park, and especially the relatively large-scale and long-term operation in Glacier Basin, challenged Mount Rainier and the Park Service at the national level to confront the inherent conflict between legally-sanctioned resource extraction and the NPS Organic Act's mandate to protect and preserve park resources and scenic values. A succession of park rangers, superintendents, regional directors, and NPS directors grappled with this issue over the 80 plus years of Mount Rainier Mining Company's presence in the park. In the attempt to resolve the conflict, Park Service staff worked to develop rules and regulations, a permit system, leases, timber cutting permits (or prohibitions) over the years. In the end, and after a number of failed attempts, the Park Service successfully negotiated purchase of the eight patented Glacier Basin claims.

The correspondence, and numerous documents referenced in this report not only detail the negotiations and compromises involved, but also reveal how administrative rules, and the often uneasy relationship between MRMC and the park, changed over the years. While the park could monitor timber cutting and collect permit fees, and could challenge the validity of the mines in terms of actual ore value; it

[309] This was almost certainly Jacob Strandness.

also recognized that its jurisdiction over mining operations was limited, especially after the Glacier Basin claims were patented in the 1920s.

Throughout its history, Mount Rainier Mining Company was surprisingly resilient. Despite the physical challenges of mining in the basin, financial setbacks, and a succession of disappointing mineral appraisals, the company managed to attract and maintain loyal investors. In the early days, Peter Storbo marketed his company to like-minded investors who bought shares and kept them for decades. In later days, one of these investors (Mr. Strandness) effectively preserved MRMC corporate status by paying years of delinquent taxes on the Glacier Basin claims to avoid foreclosure.

Over the years, MRMC shareholders clung to the hope that deeper tunnels would finally hit the payload that they all hoped and believed would be found. In their eyes, the time and money spent to develop the mines was part and parcel of the worth of the mining claims themselves. Ultimately, however, the value of the mines depended on the quality of the ore they contained, and the capacity of the company to extract and transport it to smelter at reasonable cost. While technological advances made better machinery available to extract and process ore, technology could not improve ore quality or make it profitable. In the end, the mines failed, and most of the machinery hauled to Glacier Basin with much effort was too costly to remove.

Transporting ore from Glacier Basin to Tacoma smelters also was critical to MRMC plans. Consequently, road construction and maintenance preoccupied the company throughout its history in the basin. In fact, in the 1930 census, Peter Storbo himself is listed as laborer and road worker.[310] We also know that other stockholders and officers, such as Paul Stangeland, spent time working on the roads as well as mine camp facilities –difficult work that, in the case of Mr. Stangeland, ultimately cost his life.

Some park officials, such as Ranger Thomas O'Farrell, believed that MRMC was more of a stock-selling, than mining, company. Even so, it is hard to overlook the scale and scope of the hard work undertaken by MRMC at the mines and on the road. We do not know how much money Storbo, Korssjoen, Englehorn, Oakland or the other major shareholders and MRMC managers took in personally, or invested back into the mining company, but we do know that their efforts on behalf of the company were substantial. There also is reason to believe that most mine workers and contractors, paid low cash wages supplemented by stock shares, remained loyal to the company for years. These are not the qualities of a willfully fraudulent organization.

Regardless of the lack of mining success, or ultimate value, the mining claims at Glacier Basin were the last and longest held of the private inholdings in Mount Rainier National Park. Records show that the sale of Mount Rainier Mining Company was first debated within the company circa 1930. MRMC was well aware that its Glacier Basin claims were of scenic value to the Park Service; existing as a private, extractive enterprise within an otherwise unified park. At some point, certainly by the end of the 1950s, the hoped for mining returns came to an end; replaced by the idea of recouping some of the previous costs through sale to the Park Service. It is possible that MRMC continued to work the claims, to a minimal extent, in order to boost the values and to negotiate a higher sale price. Lack of funding by the government to purchase the claims, however, contributed to a protracted process that delayed acquisition for decades.

[310] His son Albert, age 21, was also listed as a road laborer. "United States Census, 1930", database with images, FamilySearch (https://familysearch.org/ark:/61903/1:1:XCSB-DQ5: 8 December 2015), Peter T Storbo, 1930.

Well after active mining ended, stockholder and founder family interests in Glacier Basin continued. In 1973, Delbert Danielson organized what was described as "a first annual Storbo Mine Hike and Family Campout." Danielson's mother, Mary was Peter Storbo's sister. Storbo's daughter, Gunda Wierleski, hosted family members at her cabin near Silver Springs, and a total of 55 people gathered to walk the 3½ mile Glacier Basin trail to the old Storbo Camp. The group included the extended Danielson family, and generations of the Storbo family ranging in age from 5 to 68. The next generation was able to see the remains of the Storbo Hotel and abandoned mining machinery along the trail that Storbo, and other MRMC officials and laborers, built in the early 1900s.[311] These were the physical remains of what was to be the last mining claims in Mount Rainier National Park.

Glacier Basin's long mining history, and the archaeological record of that history, continue to remind us of the challenges faced not only by the miners, but also by generations of park staff who worked with them in the difficult effort to manage mining operations in Mount Rainier National Park. But by 1984, when the park finally assumed the sole role of protecting the basin, its mining history was already a fading memory. Park staff had come and gone, and Mount Rainier Mining Company's founding generation had passed away. With them, passed the dream of riches to be made by mining Glacier Basin.

[311] Article from the *Arlington Times* newspaper, August 22, 1973. (Accessed online at http://arl.stparchive.com/Archive/ARL/ARL08221973P06.php)

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This material includes correspondence, ranger reports and superintendent reports, geologists reports, real estate appraisal reports, permits, etc. and associated maps and photographs. This material forms the bulk of the information used in this report and was initially compiled and transcribed by Robert McIntyre, Jr. The material is available at Mount Rainier National Park (MORA) curation facility archives in Ashford, Washington; and on microfiche at the MORA library in Longmire, Washington. Fiche numbers are noted on most, but not all, of the compiled material.

Some of the material was gathered at the National Archives in Seattle (NARA). For these, footnote references include box and folder numbers. Please note that most of the microfiche documents attributed to the National Archives, where the original documents are held, also are available on microfiche at the MORA library in Longmire. Typically, these begin with the attribution “NARA

Archives L or H" (followed by file number) in the footnote citations included in this document. Researchers may wish to consult MORA microfiche sources first.

References listed below are excerpted from the National Archives Finding Aid originally compiled by Nancy M. Shader and Reid Coen in 1998. The finding aid is available at MORA curation facilities in Ashford, and at the MORA library in Longmire.

Many of the illustrations in the report were copied from the National Archives. Many of these have been altered to make them clearer or cleaner by cropping, adjusting color, and removing distracting spots.

National Archives References
Records of Mount Rainier National Park
Record Group 79

Artificial History Collection (1866-1979)
NPS File Code H
Box 3

Folder 19	1966	MORA History - Mining [chronology of claims: Mt. Rainier Mining Co.; Eagle Peak Copper Mining Co.]	Fiche 13

Artificial History Collection (1866-1979) Box 4

Superintendent's Annual Report Files, 1899-1988
NPS File Code: H2621

Superintendent's Monthly Reports, 1913-1967

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Park Central Files (old)
Lands, Water and Recreation Planning (1902-1986) Boxes 45, 46, 50, 51

L14 Acquisition of Lands Box 45

L1425 Holdings Box 46

Folder 17	1912-52	Holdings - general [incl. Mt. Rainier Mining Co.]	Fiche 13 - 14 & 13A

L1425 Holdings Box 47

Folder21	1954-68	Land Acquisitions - Inholding [*maps*]	Fiche 20 - 22

L3023 Land Use - Mining and Minerals
L3023 Land Use - Mining and Minerals Box 50

Folder 54	1906-15	Mining - Mt. Rainier Mining Co.	Fiche 58 - 60
Folder 55	1919	Mining - Mt. Rainier Mining Co. [*plats*; building *plans*]	Fiche 60 &60A
Folder 56	1916-27	Mining - Mt. Rainier Mining Co. [permits]	Fiche 60 - 62
Folder 57	1928-47	Mining - Mt. Rainier Mining Co. [quit claim deed; articles]	Fiche 62 - 64

L3023 Land Use - Mining and Minerals Box 51

Folder 58	1948-50	Mining - Mt. Rainier Mining Co. [*maps*]	Fiche 64 - 65
Folder 59	1951	Mining - Mt. Rainier Mining Co. [Weissenborn & Hosterman, buildings; appraisal by Eastman with *photos*]	Fiche 65 - 66
Folder 60	1951-66	Mining - Mt. Rainier Mining Co. [*photos*]	Fiche 66 - 67
Folder 61	1967-80	Mining - Mt. Rainier Mining Co. [claims]	Fiche 67 - 68
Folder 62	1954-81	Mining - Attempts at Acquisition [correspondence]	Fiche 68 - 69
Folder 63	1977	Land Use - Roads; Rights of Way	Fiche 69

Park Central Files (new), 1903-1993

H22 Cultural Resources Studies and Research Box 5

Folder 8	1978-81; 85	Historic Resource Study [Thompson]	Fiche 1-6

Lands, Water and Recreation Planning
date range 1972-1993
bulk dates 1979-1990

L14 Acquisition of Lands (Fiche title) Box 26

Folder 1	1982	Acquisitions of Land - Land Protection Planning	Fiche 1
Folder 2	1983	Acquisition of Lands	Fiche 1
Folder 3	1984	Acquisition of Lands [1909 survey *plat (R-4056)*]	Fiche 1 & 1A
Folder 4	1985	Acquisition of Lands [*photos*]	Fiche 1 - 2
Folder 5	1985-86	Carbon River Headquarters Site [*map*]	Fiche 2 & 2A
Folder 6	1988	Acquisition of Lands - General	Fiche

Appendix A: Glacier Basin Mining Timeline

1899	Mount Rainier National Park is created by Congress. Federal Mineral Laws allowed prospecting and mining claims
1902	Peter Storbo and Bernt Korssjoen purchase 41 mining claims in Glacier Basin
1904	Mount Rainier Mining Company (MRMC) is incorporated
1906	Storbo begins to improve the trail to Glacier Basin with permit from the Department of the Interior
	Ore sent out for appraisal to C.H. Voll in Tacoma, copper confirmed
1908	Legislation changed to prohibit new mining claims in National Parks and to regulate existing claims
1901-1911	General Land Office (GLO) investigates validity of the claims
1912	MRMC relinquishes 32 mining claims and retains 9.
1914	NPS issues special use permit to MRMC to lease claims for camp, sawmill and power plant, tunnel site, to cut timber and build road
1915	MRMC operations include: cabin, barn, power plant and sawmill, 700 ft. tunnel on "Five Claim Group" (west-side), two tunnels on "Four Claim Group" (south side), and an 800 ft. aerial tramway
	Ore shipped to Tacoma
1916	MRMC completes 23 to 28 miles [estimates vary] of road allowing vehicle access
	MRMC operations include: hotel/boarding house, horse barn, blacksmith shop, lighting and power plant, sawmill, snow sheds, water and sewer system, 1,860 ft. of tunnels
	Ore shipped to Tacoma
1917	M. W. McDermott writes to NPS complaining about conditions at the mines
	Ore shipped to Tacoma
1919	"Storbo Road" from White River Entrance to Glacier Basin is open to the public
1921	MRMC begins to apply for patents for their mining claims
1921-1925	Lapse in special use permits--permit fees reduced for these years when MRMC finally paid in 1926
1923	NPS establishes free public campground inside the White River entrance
1924	MRMC patents 8 claims--Orinda, Peach, Snowflake, Stronghold No.1 and No.2, Washington No. 1 and No. 2, and Mary. Reven retained but not patented
1926	MRMC resumes mining, ore shipped out
	MRMC Prospectus issued in October describes work
1927	MRMC hires Charles Cresser as promoter to solicit investments
	MRMC permit includes lease request for 3.9 acre tunnel and power plant site north of Reven Lode
	50 tons of ore shipped out

	NPS concerned about truck traffic on Storbo/ White River Road. MRMC and NPS clash on who should be responsible for road maintenance
	MRMC building new road on the north side of the White River
1928	Mail fraud charges are brought against Cresser and Storbo
1929	NPS begins construction of new White River Road
1930	Jury trial on mail fraud. Storbo and associate Orton Goodwin each sentenced to 18 months in the penitentiary and $1,000 fine.
	MORA Superintendent Tomlinson writes to MRMC about purchasing the claims
1931-1939	No mining work in Glacier Basin
1932	Thomas Englehorn, a shareholder from North Dakota, acquires the mining claims in a sheriff's sale
	MRMC disenfranchised for failing to pay corporate taxes
1933	Englehorn offers to sell claims to NPS for $200,000
1940	Ole Oakland becomes president of MRMC
	MRMC raising funds, paying back taxes and fees
	MRMC hires George Westby, mining engineer to evaluate the claims
	MRMC operations: camp buildings have deteriorated, tunnels have caved in, but machinery and timber still present
1941	MRMC and Oakland acquire rights to mining claims from Englehorn
	MRMC applied for $200,000 Reconstruction Finance Corporation Loan. Loan denied.
1941-1945	No mining work in Glacier Basin during WWII
1944	Englehorn passes away, MRMC acquires mining claims via a quit claim deed and $500
1946	MRMC reorganizes and incorporates with 300,000 shares of common stock
	Work resumes to repair the upper 3.5 miles of road to Glacier Basin
1946-1947	MRMC builds a cabin from the ruins of the hotel
	Westby issues report to MRMC with recommendations and improvements
1948	MRMC Prospectus states that tunnels have been cleared
1950	NPS issues 5-year special use permit to MRMC to lease claims for camp and tunnel sites, and road work. Timber cutting and sawmill prohibited
	NPS hires appraisers to evaluate minerals and real estate
	MRMC willing to sell their claims for $250,000-2,000,000
1951	A.E. Weissenborn and J.W. Hosterman Mineral Appraisal Report values property at $6,000 based on surface inspection of claims; tunnels are inaccessible.
	Leslie Eastman Appraisal Report values real property at $10,000
1952	MRMC resumes work after applying for and receiving $3,000 loan from Defense Minerals Exploration Administration (DMEA)
	MRMC installing culverts in road, opening up tunnels so ore and veins can be evaluated
1953	MRMC continue to open tunnels
1952-1953	E.A. Magill of USGS inspects and takes ore samples, reports that ore and veins have little value
1953-1955	MRMC paying permit fees to NPS, but doing very little work
1955-1965	NPS issues 10-year special use permit to MRMC renewable yearly
1956	Peter Storbo passes away
1957	Ole Oakland passes away, wife and son take management roles in MRMC

E.J. McDonnell and Associates of Seattle leased claims form the MRMC, repaired roads and cleared tunnels

1963 Appraisal report states that the road is washed out, all tunnels blocked by cave-ins and buildings in ruins

1966 Office of Land and Water Rights now overseeing federal acquisition of mining claims for the Park Service
E.A. Magill of USGS issues Mineral Appraisal Report
MRMC found delinquent on corporate taxes, paying property taxes only when threatened with foreclosure

1969 Appraisal report states MRMC always 4 years delinquent on property tax, but paying on time to avoid foreclosure. Appraised value $10,000

1970 NPS offers MRMC $10,000 to buy claims, offer rejected
Ossie Oakland of MRMC reports that claims have been leased for two years to a group intending to resume mining

1973 NPS offers MRMC $10,000 to buy claims, offer rejected by shareholder Jacob Strandness

1973-1984 Jacob Strandness pays property tax for mining claims

1981 MRMC attorney contacts NPS about selling the claims

1984 NPS acquires the claims for $55,800, thus acquiring last private inholding at Mount Rainier National Park

Appendix B: Legal Description of Patented Claims

These claim descriptions are from patent applications filed June 11, 1921 with the U.S. Land Office, Seattle by the Mount Rainier Mining Company.[312]

ORLINDA [ORINDA] LODE – Beginning at Corner No. 1, identical with the Northeast corner of Amended location, which is a Cross X near the top of the north face of a Schist boulder, 17 by 7 feet and six (6) feet above the ground, with a mound of stone chiseled 'Orinda No.1, 1148', this corner is 2,111.10 feet from U. S. Mineral Monument No.1148, which bears North 10 degrees .01' East; thence South 15 degrees 31' West to Corner No. 2, a distance of 1,500 feet; thence North 84 degrees 16' West 508.10 feet to Witness Corner No. 3 and then continuing in the same direction a total of 608.80 feet to Corner No. 3, not set as it falls in a bank of perpetual snow; thence North 15 degrees 31' East to Corner No. 4, a distance of 1,500 feet, not set as it falls in the pathway of a snow-slide thence South 84 degrees 16' East a distance of 608.80 feet to corner No. 1, the place of beginning."

PEACH LODE – Beginning at Corner No. 1, identical with the Northeast corner of Amended Location, a schist stone 24 by 8 by 8" set sixteen inches in the ground with a mound of stone chiseled 'Peach I – 1148', this corner is 1,660.68 feet from U. S. Mineral Monument 1148 which bears North 30 degrees 20' East; thence South 17 degrees 50' West, a distance of 600 feet to corner No. 2, not set as it falls in perpetual snow; thence North 69 degrees 18' West, a distance of 1,500 feet to corner No. 3, identical with the Southwest corner of Amended Location and being schist stone 36 by 10 by 10" set 24 inches in the ground chiseled 'Peach 3, 1148'; thence North 17 degrees 50' east a distance of 600 feet to corner No. 4, not set as it falls on the Moraine of Inter-glacier; thence South 69 degrees 18' east, a distance of 1,500 feet to corner No. 1, the place of beginning.

SNOWFLAKE LODE - Beginning at Corner No. 1, identical with the Northwest corner of Amended Location and with corner No. 1, of the Peach lode of this survey, previously described, and additionally chiseled 'S.F.1, 1148', this corner is 1,660.68 feet from U. S. Mineral Monument No.1148, which bears North 30 degrees 20' east; thence South 69 degrees 18' east a distance of 1,100.10 feet to the Witness corner for corner No. 2, and continuing in the same direction 1,500 feet to corner No. 2 which is not set as it falls on a steep slide rock slope and cannot be securely established; thence South 17 degrees 50' West 600 feet to Corner No. 3, identical with Corner No. 3 of the Amended Location which is a Schist stone 30 by 10 by 10" set 20 inches in the ground with a mound of stone chiseled 'S.F.3, 1148'; thence North 69 degrees 18' West 147.30 feet to Witness corner No. 4 and continuing a distance of 1,500 feet to corner No. 4, not set as it falls in perpetual snow; thence North 17 degrees 50' East a distance of 600 feet to corner No. 1, the place of beginning.

WASHINGTON NO. 1 LODE. - Beginning at corner No. 1, identical with the Northeast corner of Amended location, a schist stone 24 by 12 by 10", set 12 inches in the ground with a

[312] NARA Archives L3023 Files, Fiche 60

mound of stone chiseled 'W.11-1149', this corner is 3,039.11 feet from U. S. Mineral Monument No. 1148 which bears south 68 degrees 13' 30 seconds east; thence south thirty degrees 45' West 1,500 feet to corner No. 2; thence North 71 degrees 23' West 601.46 feet to corner No. 3; thence North 30 degrees 45' east a distance of 1,500 feet to corner No. 4; thence South 71 degrees 23' east a distance of 601.46 feet to corner No. 1, the place of beginning.

WASHINGTON NO. 2 LODE. - Beginning at corner No. 1, identical with the Northeast corner of Amended Location, also with corner No. 4 of Washington No. 1 Lode, a distance of 3,639.7 feet from U. S. Mineral Monument No. 1148, which bears south 68 degrees 45' east; thence south 30 degrees 45' West a distance of 1,500 feet to corner No. 2; thence North 67 degrees 12' West a distance of 605.08 feet to corner No. 3, not set as it falls on Moraine matter of Winthrop Glacier; thence North 30 degrees 45' east, a distance of 1,500 feet to corner No. 4, not set as it falls on slide rock too steep to establish securely; thence south 67 degrees 12' east, a distance of 605.08 feet to corner No. 1, the place of beginning.

STRONGHOLD NO. 1 LODE. - Beginning at corner No. 1, identical with the Northeast corner of Amended Location, also with corner No. 2 of Washington No. 1 Lode of this survey, being a distance of 3,592.84 feet from U. S. Mineral Monument No. 1148, which bears North 87 degrees 25' east; thence South 22 degrees 37' West a distance of 1,500 feet to point for corner No. 2, not set as it falls on Interglacier; thence No.71 degrees 23' West, a distance of 601.46 feet to corner No. 3, a phonolite stone 36 by 12 by 12" set 24 inches in the ground with a mound of stone chiseled 'S. 1-3 1149', thence North 22 degrees 37' east a distance of 1,500 feet to corner No. 4 identical with the Northwest corner of the Amended Location, also with corner No. 3 of Washington No. 1 lode and corner No. 2 of Washington
No. 2 lode; thence South 71 degrees 23' east a distance of 601.46 feet to corner No. 1, the place of beginning.

STRONGHOLD NO. 2 LODE. - Beginning at the corner No. 1, identical with the Northeast corner of Amended Location, also corner No. 3 of Washington No. 1 lode, corner No. 2 of Washington No. 2 lode, and corner No. 4 of Stronghold No. 1 lode, a distance of 4,159.32 feet from U. S. Mineral Monument No. 1148, which bears South 89 degrees 35' east; thence South 22 degrees 37' west a distance of 1,500 feet to corner No. 2, identical with corner No. 3 of Stronghold No. 1 lode; thence North 67 degrees 12' West a distance of 600 feet to point for corner No. 3, not set as it falls on Winthrop Glacier; thence North 22 degrees 37' east a distance of 1,500 feet to point for corner No. 4 not set as it falls in Moraine matter and could not be established securely; thence south 67 degrees 12' east a distance of 600 feet to corner No. 1, the place of beginning.

MARY LODE. - Beginning at point for corner No. 1, identical with the Southeast corner of Amended Location, not set as it falls on precipitous ground, a distance of 4,037.32 feet from U. S. Mineral Monument No. 1148, which bears South 71 degrees 14' east; thence North 89 degrees 54' West, a distance of 600 feet to corner No. 2, a granite stone 36 by 12 by 12" set 24 inches in the ground with a mound of stone chiseled 'M 2 1149'; thence North 0 degrees .02' West, a distance of 1,500 feet to corner No. 3, a phonolite stone 36 by 14 by 12" set 24 inches in the ground with a mound of stone chiseled 'M 3 1149'; thence South 89 degrees 54' east a distance of 600 feet to corner No. 4, not set as it falls on 45 degree slide rock slope and cannot be securely established; thence South 0 degrees, 02' East a distance of 1,500 feet to point for corner No. 1, the place of beginning.

Appendix C: NPS-Glacier Basin Special Use Permits

Special Use Permit No. 18 General Form 1-399 for 1914-1915[313]

Be it known that for and in consideration of the rents, covenants, and agreements hereinafter mentioned, to be paid, kept and performed by the Mount Rainier Mining Company, 14 Dravus Street, Seattle, Washington, permission is hereby granted said permittee, for the term of one (1) year from January 1, 1914, to January 1, 1915 to maintain, conduct, and carry on mining operations in Mount Rainier National Park, as follows:

I. To use a camp site on the relinquished claim known as 'Gate' and to use the tunnel mouth on that claim paying therefore the sum of One Hundred Dollars ($100) in advance each year, renewable annually on approval of the Secretary of the Interior.

II. To use the general camp site on the former claim known as 'Lake City' and to bore a tunnel through on the south side of the Interfork of the White River for the purpose of developing other mineral claims held by them paying therefore the sum of One Hundred Dollars ($100) annually in advance each year renewable annually on approval of the Secretary of the Interior.

III. To use a mill and water power site on the claim formally known as 'Turtle' paying therefor the sum of One Hundred Dollars ($100) annually in advance each year renewable annually on approval of the Secretary of the Interior.

IV. To cut ten thousand feet of timber under the immediate supervision of the Park Ranger on the south side of the Interfork of the White River, said timber to be paid for at the rate of Twenty Dollars ($20) per thousand, stumpage.

V. Permittee shall make reparation for the timber heretofore cut on relinquished claims paying therefor Ten Dollars ($10) for each alpine tree and Five Dollars ($5) for each mature tree cut, compensation herefor to be made on count of stumps made by the Park Ranger.

VI. A permit to build and improve the roads and trails in the park without charge to the Government is made in conjugation with the above mentioned items; said roads and trails to be located at points and places where they will be of use to the Mount Rainier Mining Company and the general public. All road improvement, trail improvement, timber cutting, brush piling and burning to be with the approval of the Superintendent of the Park and under the immediate supervision of the Park Ranger in the district of Mount Rainier National Park in which the mining claims herein mentioned are located. The permits herein granted are based on the distinct understanding that the use of the relinquished claims mentioned herein, the tunnels thereto and the camp sites are necessary incidents to the development of the unrelinquished claims held by the permittee, and with the understanding that the permits shall be paid for at the rates above mentioned annually in advance and that all permits are revocable at the discretion of the Secretary of the Interior.

VII. The right is reserved to the Secretary of the Interior to annually readjust the rates to be paid hereunder whenever in his judgment the circumstances of the case appear to warrant such action.

VIII. The said permittee, for and in consideration of such permission and its privileges in the premises, covenants and agrees to pay the Secretary of the Interior, or his duly authorized representative, the

[313] NARA Archives L3023 Files, Fiche 58

sum of Five Hundred ($500) dollars, in advance, and the remainder within thirty (30) days after statement shall be furnished said company by the Park Service.

IX. The said permittee hereby agrees and obligates itself to observe strictly the provisions of the act of congress approved March 2, 1899 (30 Stat., 993) creating the Mount Rainier National Park; to obey the rules and regulations for its government promulgated by the Secretary of the Interior, and to require strict observance thereof by all guests and employees; and also to assist the Secretary of the Interior, or his duly authorized representative in the park, to extinguish forest fires in the vicinity of the tract herein leased, and in the preservation of good order within the metes and bounds of the said national park. It further agrees to conduct said business in a proper, careful, and prudent manner, to the satisfaction of the Secretary of the Interior, and so as not to injure any part or portion of the said park; and of these matters, as of all others, the Secretary of the Interior shall be the sole judge.

X. Willful violation of the conditions hereof on the part of the said permittee, or by its employees will be sufficient cause for revocation of this license, and for any such violation this license shall be suspended by the superintendent of the park until action can be had thereon by the Secretary of the Interior.

XI. No Member of or Delegate to Congress, or Resident Commissioner, after his election or appointment, or either before or after he has qualified, and during his continuance in office, and no officer, agent, or employee of the Department of the Interior shall be admitted to any share or part of this contract, or agreement, or derive any benefit which may arise therefrom, and the provisions of section 3741 of the Revised Statutes of the United States, and sections 114, 115, and 116 of the Codification of the Penal Laws of the United States, approved March 4, 1909 (35 Stats., 1109), relating to contracts, enter into and form a part of this agreement, so far as the same may be applicable.

Changes to Special Use Permit in 1915 Include Section 5½

The language of the special use permit changed slightly in 1915 and included Section 5 ½. The following excerpt includes the changed sections emphasized in bold print. [314]

Permit No. 2 [for $300], General Form 1-399; Department of the Interior, Mount Rainier National Park," signed at Ashford by Supervisor John J. Sheehan, March 16, 1915, and Approved [later] by Stephen T. Mather, Assistant to the Secretary of the Interior. B.P. Korssjoen, President of The Mount Rainier Mining Co., 14 Dravus Street, Seattle, and P.T. Storbo, Secretary of The Mount Rainier Mining Co. signed the agreement.

….. 4. A permit to build and improve the roads and trails in the park without charge to the Government, such roads and trails when built or improved on park lands to be the property of the United States, is made in conjunction with the above mentioned items; said roads and trails to be located at points and places where they will be of use to the Mount Rainier Mining Company and the general public. All road improvement, trail improvement, timber cutting, brush piling and burning to be under the general supervision of the Supervisor of the Park and under the immediate supervision of the Park Ranger in the district of the Mount Rainier National Park in which the mining claims herein mentioned are located. The permits herein granted are based on the distinct understanding that the use of the relinquished claims mentioned herein, the tunnels thereto and the

[314] NARA Archives L3023 Files, Fiche 58

camp sites are necessary incidents to the development of the unrelinquished claims held by the permittee. This permit is revocable at the discretion of the Secretary of the Interior, and report should be submitted as to the roads and trails improved.

5. The right is reserved to the Secretary of the Interior to annually readjust the rates to be paid hereunder whenever in his judgment the circumstances of the case appear to warrant such action.

5½. No timber whatever is to be cut under this permit unless by specific authority from the Secretary of the Interior and an agreement reached as to the price to be paid for all timber cut; and for the purposes of such business to use…..

Timber Sale Permit for 1916

This permit is an example of the timber sale permits issued to the MRMC from 1915 to 1919 and the conditions attached to those permits.

The Mount Rainier Mining Company TIMBER SALE permit dated December 1, 1915, signed by B. P. Korssjoen, President of the Company, on January 10, 1916 and Supervisor Reaburn on January 12, 1916. Permit given final approval by Robert B. Marshall, Superintendent of National Parks, on January 20, 1916:[315]

We, the Mount Rainier Mining Company, a corporation organized and existing under the laws of the State of Washington, having an office and principal place of business at No. 14 Dravus Street of Seattle, State of Washington, hereby agree to purchase in accordance with our application of December 1, 1915, all of the timber marked for cutting by the supervisor of said park, or his duly authorized representative, all located on an area to be definitely designated by the Superintendent of the said Park, or his duly authorized representative, before cutting begins in Sec. 9., Tp. 16 N., Range 8 E., W. M. lying east of Storbo Camp and between Emmons Glacier and Inter Fork.

Estimated to be twenty-five thousand feet B.M. merchantable timber. If this sale is awarded to us, we do hereby, in consideration of the sale of this timber to us, promise to pay the Superintendent of the said Park Fifty Dollars ($50.00) payment to be made by money order, certified check or draft payable to the order of the Secretary of the Interior, for the timber at the rate of $2.00 per thousand feet, B.M., in advance payment of at least [blank] Dollars each when called for by the Superintendent of the said Park [blank]; credit being given for the sums, if any, hereto fore deposited with the said Superintendent in connection with this sale.

And we further promise and agree to cut and remove said timber in accordance with the following regulations governing timber sales and such others as may hereafter be prescribed:

1. Timber upon valid claims and all under contract is exempted from this sale.
2. No timber will be cut or removed until it has been paid for.
3. No timber will be removed until it has been scaled, measured, or counted by the Superintendent of the said Park or his duly authorized representative.
4. No timber will be cut except from the area authorized herein, and no live timber will be cut except that marked or otherwise designated by the Superintendent of the park or his duly authorized representative.
5. All merchantable timber used in buildings, skidways, bridges, dams, construction of roads, or other improvements will be paid for at the contract price.

[315] NARA Archives L3023 Files, Fiche 58

6. All cutting will be done with a saw when possible.

7. No unnecessary damage will be done to young growth or to trees left standing, and no trees shall be left lodged in the process of felling. Unmarked trees that are badly damaged during the process of logging will be cut if required by the Superintendent of the Park, and when such damage is due to carelessness the trees so injured will be paid for at twice the price fixed by this agreement.

8. The approximate minimum diameter limit at a point 4½ feet from the ground to which living trees are to be cut is no limit, but trees above these diameters may be reserved for seed or protection, and merchantable trees below these diameters may be marked at the discretion of the Superintendent of the Park.

9. Stumps will not be cut higher than 36 inches – lower when possible – and will be cut as to cause the least possible waste.

10. All trees will be utilized to a diameter of 18 inches in the tops –lower when possible – and the log lengths so varied as to make this possible.

11. Tops will be lopped and all brush piled compactly at a safe distance form living trees, or otherwise disposed of, as directed by the Superintendent of the Park.

12. Unless extension of time is granted, all timber will be cut and removed on or before August 1, 1916, and none later than August 1, 1916, and at least 25,000 feet, B.M. will be paid for, cut, and removed on or before August 1, 1916, and at least [blank] of the remainder of the estimated amount during each year of the remaining period.

13. Timber will be scaled by the Scribner rule, Decimal C, unless otherwise specifically provided herein, and , if required by the superintendent of the Park, or his duly authorized representative, will be piled or skidded for scaling [blank], as directed by him.

14. All marked trees and all dead timber sound enough for lumber of any merchantable grade or timbers or cordwood shall be cut. Unmarked living trees which are cut, marked trees or merchantable dead timber left uncut, timber wasted in tops, stumps, and partially sound logs, trees left lodged in the process of felling, and any timber merchantable, according to the terms of this contract, which is cut and not removed from any portion of the cutting area after logging on that portion of the cutting area is completed, or is left within the Park after the expiration of this agreement, shall be scaled and paid for at double the agreed contract price.

15. During the time that this agreement remains in force we and all our employees, subcontractors, and employees of subcontractors, will obey the rules and regulations for the government of the Park, promulgated by the Secretary of the Interior; and, also, assist in the extinguishing of forest fires within the vicinity of the tract of land herein authorized to be cut over, as well as in the preservation of good order within the metes and bounds of said National Park.

16. So far as is reasonable all branches of the logging shall keep pace with one another, and in no instance shall the brush disposal be allowed to fall behind the cutting, except when the depth of the snow or other adequate reason makes proper disposal impossible, when the disposal of brush may, with the written consent of the Superintendent of the Park, with the approval of the Secretary of the interior, be postponed until conditions are more favorable. [No special conditions added.]

The title to the timber included in this contract shall not pass to the purchaser until it has been paid for and scaled, counted, or measured as herein provided.

The decision of the Superintendent of the Park, subject to the approval of the Secretary of the Interior, shall be final in the interpretation of the regulations and provisions governing the sale, cutting, and removal of the timber covered by this contract.

Work may be suspended by the Superintendent of the Park if the regulations contained in this agreement are disregarded, and the violation of any one of said regulations, if persisted in, shall be sufficient cause for the Superintendent of the Park, subject to the approval of the Secretary of the Interior, to revoke this agreement and to cancel all permits for other privileges.

17. And as a further guarantee of a faithful performance of the conditions of this agreement, [blank], all moneys paid or promised under this agreement upon failure on [blank] part to fulfill, all and singular, the conditions and requirements herein set forth, or made a part hereof, shall become the property of the United States as liquidated damages and not as penalty.

This license is nonassignable. (See section 3737, Revised Statutes of the United States.)

The conditions of the sale are completely set forth in this agreement, and none of its terms can be varied or modified, except with the written consent of the Superintendent of the Park, subject to the approval of the Secretary of the Interior.

No person undergoing a sentence of imprisonment at hard labor can be employed in carrying out the terms of this agreement. (See Executive Order, May 18, 1905.)

No member of or Delegate to Congress, or Residential Commissioner, or officer or employee of the Department of the Interior, is, or shall be, admitted to any share or part in this agreement, or derive any benefit which may arise therefrom, and the provisions of section 3741 of the Revised Statutes of the United States, and sections 114, 115, and 116 of the Codification of the Penal Laws of the United States, approved March 4, 1907 (35 Stat., 1109), relating to contracts, enter into and form a part of this agreement, so far as the same may be applicable.
Signed by Robert B. Marshall 1/20/1916.

Changes to Special Use Permit for 1917 regarding Gate and Lake City Claims

The revised permit for the Glacier basin mining operation, signed off by O.E. Olson and P.T. Storbo, was approved by J.J. Cotter on March 21, 1917. The permit gave the following rights to the Mount Rainier Mining Company during calendar year 1917, and could be modified or extended by the Secretary of the Interior:[316]

1. To use the general camp site on the former claim known as 'Lake City' and to bore a tunnel through on the south side of the Interfork of the White River for the purpose developing other mineral claims held by the company, paying therefor the sum of One Hundred Dollars ($100) annually in advance, renewable each year on approval of the Secretary of the Interior.

2. To use as a camp site ten (10)acres of land immediately adjoining the former claim known as 'Lake City' and lying east of this claim, paying therefor the sum of fifty dollars ($50) annually in advance, renewable each year on approval of the Secretary of the Interior.

3. To use as a tunnel site ten (10) acres of the relinquished claim known as 'Gate' paying therefor the sum of fifty dollars ($50) annually in advance, renewable each year on approval of the Secretary of the Interior.

Permits for 1918

Permit No. 1 and Permit No. 2, both done on general form 1-399 authorized the Mount Rainier Mining Co. permission for their mining operation from January 1, 1917 to January 1, 1918. The two documents were signed by Superintendent Reaburn on January 25, 1918; forwarded to the Company, and signed by P.T. Storbo, President, B.P. Korssjoen, Secretary, and G. Torrison and C.F. Lund, witnesses.

[316] NARA Archives L3023 Files, Fiche 61

Both permits were Approved by F.W. Griffith, Assistant to the Secretary of the Interior Feb. 27, 1918. Excerpted below:[317]

Permit No. 1 – Mount Rainier National Park.

Be it known that for and in consideration of the rents, covenants, and agreements hereinafter mentioned, to be paid, kept, and performed by The Mount Rainier Mining Co, 404 Lyon building, Seattle, Washington, (hereinafter designated as licensee) permission is hereby granted said licensee, for the term of one (1) year from January 1, 1918, to December 31, 1918, to maintain, conduct, and carry on in connection with its mining operations in Glacier Basin, and in accordance with maps, plans and profiles attached and made a part of permit dated January 1, 1917, for similar service during 1917, the following:

1. To construct a flume 18" wide by 14" deep, inside measurement, together with a pressure pipe, and to use sufficient water for developing one hundred and fifty (150) horse power of electric energy under an effective head of four hundred and seventy feet. Said flume to be located as follows: Beginning at the intake, a point on the left bank of Inter Fork of White River in elevation 5,580 feet, in Sec. 9, T. 16 N., R. 9 E., at the present existing saw mill and power plant, and following thence on a descending 5% grade along the north side of the valley for a distance of 4,500 feet from the intake and running south 19 degrees 30 minutes E. a horizontal distance of 960 feet to the proposed power house on the left bank of Inter Fork in elevation 5007½ feet, on leased claim No. 4.
2. To construct an aerial tramway for the purpose of conveying ore from the tunnel workings of the licensee to its proposed concentrator plant; the location of said tramway to be as follows: Beginning at the mouth of the upper tunnel, located on mineral claim No. 2 in Sec. 8, T. 16 N., R. 9 E., and running thence N. 3 degrees 30 minutes E., 780 feet to the proposed loading terminal on mineral claim No. 1; thence N. 57 degrees 10 minutes E., 7,125 feet to the proposed power house and concentrating plant on leased claim No. 4. It is understood and agreed that the clearing for said tramway, where it passes through the timbered area in Sec. 9, shall be made to a width of ten feet only, except that all dangerous trees adjacent to the tramway may be cut for a width of one hundred (100) feet or more and that all merchantable timber cut from said right of way shall be scaled by a park ranger and be paid for by the licensee at the rate of two dollars ($2) per thousand feet b.m.; this in addition to the fee exacted for the privileges granted under this permit.
3. To construct an electric transmission line for the purpose of conveying electric energy form the proposed power house of the licensee to its tunnel workings. The location of said transmission line being as follows: Beginning at the mouth of the lower tunnel, located on mineral claim No. 2 in Sec. 8, T. 16 N., R. 9 E., and running thence No. 76 degrees 00 minutes E., 260 feet; thence No. 30 degrees 00 minutes E., 3,000 feet; thence N. 57 degrees 00 minutes E., 840 feet, to the present saw mill and power plant; thence following down the left bank of Inter Fork between the creek and present wagon road for a distance of approximately 3,775 feet to the proposed power house and concentrating plant on leased claim No. 4. In consideration of the privileges herein granted the licensee agrees to furnish electric light free of charge to the National Park Service for use in any buildings which may hereafter be constructed in the vicinity of Glacier Basin for use by the Park Service.
4. To occupy ten (10) acres of land located in the N. E. corner of Sec. 9, T. 16 N., R. 9 E., shown on the attached map [nif] as leased claim No. 4, and to construct thereon a power and concentrating plant…..

[317] NARA Archives L3023 Files, Fiche 61

Special Use Permit for 1920

This permit includes metes and bounds descriptions of the leased claims and is excerpted below:[318]

> Be it known that for and in consideration of the rents, covenants, and agreements hereinafter mentioned, to be paid, kept, and performed by The Mount Rainier Mining Co, 628 Lyon building, Seattle, Washington, (hereinafter designated as licensee) permission is hereby granted said licensee, for the term of one (1) year from January 1, 1920, to December 31, 1920, to maintain, conduct, and carry on mining operations in Glacier Basin, in Mount Rainier National Park, and to use certain tracts of land as per maps, attached to the permit for the year 1919, as follows:
>
> 1. To use as a camp site 12.343 acres of land on and adjacent to the former claim known as 'Lake City' and described as follows: Beginning at the Mount Rainier Mining Co.'s Initial Monument, in Lat. 46 degrees 52' N. Long. 121 degrees 42' W. a triangular shaped schist boulder 9 by 9 by 9 ft., standing three feet above the ground, with drill hole and plug in the top, which bears south 82 degrees 58' W. 570 ft. from the hotel building, and running thence S. 35 degrees 23' E. 62.1 feet; thence S 85 degrees 57' E. 750.8 feet; thence N 56 degrees 37' E. 458.9 feet; thence N. 13 degrees 34' E 96.0 feet; thence N 44 degrees 23' W. 639.63 feet; thence S 49 degrees 10' W. 992.6 feet; thence S 35 degrees 23' E. 62.0 feet to the point of beginning; paying therefor the sum of one hundred and fifty dollars ($150.00) annually in advance, renewable each year on approval of the Secretary of the Interior.
> 2. To use as a tunnel site 2.512 acres of land on the relinquished claim formerly known as 'Gate' described as follows: Beginning at a point which bears S. 30 degrees 45' W. 615 feet from the N.E. corner of the claim known as Washington No. 1, and running thence, S. 45 degrees 53' E. 750 feet; thence S. 30 degrees 45' W. 150 feet; thence N. 45 degrees 53' W. 750 feet; thence N. 30 degrees 45' E. 150 feet to the point of beginning, paying therefor the sum of fifty dollars ($50.00) annually in advance, renewable each year on approval of the Secretary of the Interior.
> 3. To use as a mill and water power site 1.078 acres of land on the claim formerly known as 'Turtle' described as follows: Beginning at a point which bears S. 57 degrees 11' W. 2,412.2 feet from the Mount Rainier Mining Co.'s Initial Monument and running thence N. 31 degrees 47' E. 420 feet; thence S. 68 degrees 09' E. 158.24 feet; thence S. 35 degrees 30' W. 496.3 feet; thence N. 37 degrees 22' W. 132.2 feet to the point of beginning; paying therefor the sum of one hundred dollars ($100.00) annually in advance renewable each year on approval of the Secretary of the Interior…

Special Use Permit I26np-225, Term July 1, 1950 to June 30, 1955[319]

Mt. Rainier National Park special use permit signed by Supt. Preston on August 1, 1950: United States, Department of the Interior, National Park Service, Mount Rainier National Park, special use permit, Form 10-114; No. I26 np-225; Year, 1950.

[318] NARA Archives L3023 Files, Fiche 61
[319] NARA Archives L3023 Files, Fiche 64

Mount Rainier Mining Company, of Washington, is hereby authorized during the term of five years from July 1, 1950, to June 30, 1955, to use the following- described land in the above-named park:

--- As described in Exhibit A, B, C and D attached, covering approximately 18.14 acres.

--- for the purpose of carrying on mining operations in Glacier Basin, In Mount Rainier National Park, and to use certain tracts of land as described under provisions of special condition 14 of this permit subject to the conditions on the reverse hereof and to the payment to the Government of the united States of the sum of Ninety-five and 00/100—dollars ($95.00), in advance, or as follows: [blank], payment to be made through the Superintendent of the Park by express or postal money order, certified check, or draft payable to treasurer, United States.

Signed at Longmire, Wash., this first day of August, 1950 [by] John C. Preston, Superintendent.

The undersigned hereby Accepts the above permit and the right to exercise the privileges granted, subject to the terms, covenants, obligations, and reservations, expressed or implied, therein:

Howard A. Peterson, Pres, Address 6726 – 14th N. W. Seattle 7; Thor Oakland, Sec. Tres., Address 4046 Arcade Bldg., Seattle 1, Wash.

Two witnesses to signatures: Alb. H. Bodelson, Address 330 W. 45th, Seattle Wash.; O. B. Korssjoen, Address 11707 – 5th N. E.

Approved: Aug. 29, 1950, Hillory A. Tolson, Acting Director, National Park Service."

Special Conditions of this Permit

1. Permittee shall exercise this privilege subject to the supervision of the Superintendent of the Park and shall comply with the regulations of the Secretary of the Interior governing the park.
2. Use by the permittee of the land covered hereby is subject to the right of the Director, National Park Service, to establish trails, roads, and other improvements and betterments over, upon, or through said premises, and further to the use by travelers and others of such roads and trails as well as of those already existing.
3. No building or other structure shall be erected under this permit except upon plans and specifications approved by the Director, National Park Service, and the premises and all appurtenances thereto shall be kept in a safe, sanitary, and sightly condition.
4. Permittee shall dispose of brush and other refuse as required by the Superintendent.
5. Permittee shall pay the United States for any damage resulting from this use.
6. Permittee and his employees shall take all reasonable precautions to prevent forest fires and also shall assist the Superintendent to extinguish forest fires in the vicinity of any tract which may be used hereunder, and in the preservation of good order within the metes and bounds of the park.
7. No Timber may be cut or destroyed without first obtaining permit therefor from the Director, National Park Service, in writing.
8. This permit may not be transferred or assigned without the consent of the Director, National Park Service, in writing.
9. This permit shall terminate upon the violation of any of the conditions hereof or of any Act of Congress or regulation of the Secretary of the Interior governing the park or anything in it, or at the discretion of the Director, National Park Service.
10. Neither Members of nor Delegates to Congress, or Resident Commissioners, officers, agents, or employees of the Government shall be admitted to any share or part of this permit or derive, either directly or indirectly, any pecuniary benefit to arise therefrom.
11. The Permit shall be issued for five years at the end of which time it will expire unless an application for renewal is received prior to the expiration date together with the advance payment of the annual fee of $5.00 per acre for each acre of Government land used or fraction thereof. Any

violation of the conditions of the permit or failure to utilize the privileges granted therein will be sufficient cause for cancellation without any refund of fees.

12. The grazing or pasturing of livestock by the company on government land will not be permitted.

13. Special use of roads. Speed limitations, load limits, rubber tires on all vehicles, and other requirements of the National Park Service must be observed on park highways traveled by the mine operators. Any reconstruction of the old road between White River Campground and the mining property must be done by the company, and it shall follow the old road alignment. Reconstruction must be under the supervision of and acceptable to the park superintendent or his authorized representative, and any trees, living or dead, to be removed must be marked for cutting by an authorized representative of the National Park Service. The road must be over 12 feet in width, shoulder to shoulder, and must be restricted to private use except that vehicles and saddle and pack stock owned and used by Federal agencies may travel at will over the road. A locked gate with duplicate keys for the superintendent must be maintained at White River campgrounds, its location to be determined by an authorized representative of the National Park Service. Any roads or trails built or approved under authority of the permit shall become the property of the United States and shall be subject to the general traffic regulations governing the park concept as otherwise provided in the permit.

14. The mining company must furnish a map and a written description of the Government land, its proposes to use, and the nature and extent of the structures and the development work proposed on said lands, and these plans must be approved by the authorized representative of the National Park Service before any work thereon is begun. Any buildings or structures located on Government land shall be removed by the permittee within six months after the termination or expiration of the permit, and the site must be restored to a condition satisfactory to the superintendent. The permittee shall post a bond of sufficient amount to insure the removal of the buildings and the restoration of the site within the six months' period.

15. The permittee shall comply with the regulations of the National Park Service governing the area, shall observe all sanitary laws and regulations applicable to the premises, and shall keep the premises in a neat and orderly condition and dispose of all refuse and locate out-houses and cesspools as required by the National Park Service representative.

16. No living trees may be felled by the mine operator or his representatives for any purpose whatsoever unless such felling is supervised by an authorized representative of the National Park Service. No timber sales are contemplated under the permit, and no sawmill may be erected. Dead and down trees may be used for fuel if obtained under direction of the park superintendent or his representative.

17. The lands to be used pursuant to the permit are to be used exclusively for the purpose of developing facilities necessary for the actual working of the mine, and if mining operations are not conducted in a workmanlike manner with reasonable diligence, or if the premises are put to any other use, the permit will be cancelled.

18. There are reserved to the United States any uranium, thorium or other material which are or may be peculiarly essential to the product of fissionable materials, whether or not of commercial value, together with the right through its authorized agents at any time to enter upon the land and prospect for, mine and remove the same.

19. The United States reserves the right to perfect title to all rights for water which may be developed or used in connection with this permit. The permittee is required to prepare all water right applications, file maps, proofs and other instruments and pay all fees for the perfection of the necessary water rights, and submit them to the Washington Office of the National Park Service for filling in accordance with instructions to be provided if the basic permit is granted.

20. The permittee shall take adequate measures, as directed and approved by the superintendent, to arrest and prevent soil erosion on the lands covered hereby and shall so utilize such lands as not to contribute to erosion on adjoining lands.
21. The location of water pipe lines for mine operations is not contemplated beyond the site covered by the permit. Should circumstances require the use of water pipe lines over lands not covered by this permit, the rights-of-way must be located as approved and directed by the superintendent.
22. It is expressly understood and agreed that this permit may be revoked at any time in the discretion of the Director of the National Park Service, and that no right of renewal is granted herein; it being further understood and agreed that in the event of a renewal of the contract such renewal will be issued for the period of one year only. It is also understood and agreed that should the basis of compensation, as indicated in article 11 above, be found by the Director of the National Park Service to be inadequate, said basis of compensation may, in the discretion of said Director, be changed and the fee increased for any renewal of such permit.

Exhibit A In Mount Rainier National Park
NO. I – RE: 6.8 Approximate Acres Proposed Storbo Camp Site.
Township 16 N.R. 9 E. W.M.
Starting at U.S. M.M. No.1148 and going So. 89 degrees 35' E 100' to point of beginning; thence No. 1 degree 25' E 450 feet; thence So. 89 degrees 35' E 660 feet; thence So. 1 degree 25' W 450 feet; thence No. 89 degrees 35' W 660 feet to point of beginning.
Included is hand-drawn map of "Approx. 6.8 acres proposed camp Storbo."

Exhibit B In Mount Rainier National Park
No. 2 – RE: Approximate 7.34 Acres Tunnel Site and Stock Pile Base.
Township 16 N.R. 9 E. W.M. starting at U.S. Mineral Monument 1148 point of beginning, thence So. 10 degrees 01' W 1075.1 feet to start of placing a legal description, commencing No. 47 degrees 31' E 150 feet; thence So. 69 degrees 18' E 400 feet; thence So. 47 degrees 31' W 800 feet: thence No. 69 degrees 18' W 400 feet; thence No. 47 degrees 31' E 650 feet to point of beginning.
Included is hand-drawn map of "Approx. 7.34 acres Tunnel Site and Stockpile" next to Snowflake Lode.

Exhibit C In Mount Rainier National Park
NO. 3 – RE: Approximate 3 Acres No. 2 Tunnel Site and Storage Washington No. 1 Lode Survey No. 1149. Township 16 N.R. 9 E. W.M.
Description of location by starting at U. S. Mineral Monument No. 1148 and commencing in a westerly direction North 89 degrees 35' W 2775 feet; thence No. 0 degrees 25' E 225 feet being point of beginning; thence No. 39 degrees 7' W 550 feet; thence So. 30 degrees 35' W 237.5 feet; thence So. 30 degrees 7' E. 550 feet; thence No. 30 degrees 45' E 237.5 feet to point of beginning.
Included is hand-drawn map of "Approx. 3 acres No. 2 Tunnels and Storage" next to Washington No.1 Lode.

Exhibit D In Mount Rainier National Park
Township 16 N.R. 9 E. W.M.
Starting U.S. M.M. 1148 and thence No. 57 degrees 20' E, 2,368.8 feet (to point of beginning of above mentioned 1 acre) thence commencing by going No. 1 degrees 0' E 217.8 feet; thence So. 89 degrees 0' E 200 feet: thence So. 1 degree 0' W 217.8; thence No. 89 degrees 0' W 200 feet to point of beginning.
Included is hand-drawn map of "Old Saw Mill Site."