United States Department of the Interior
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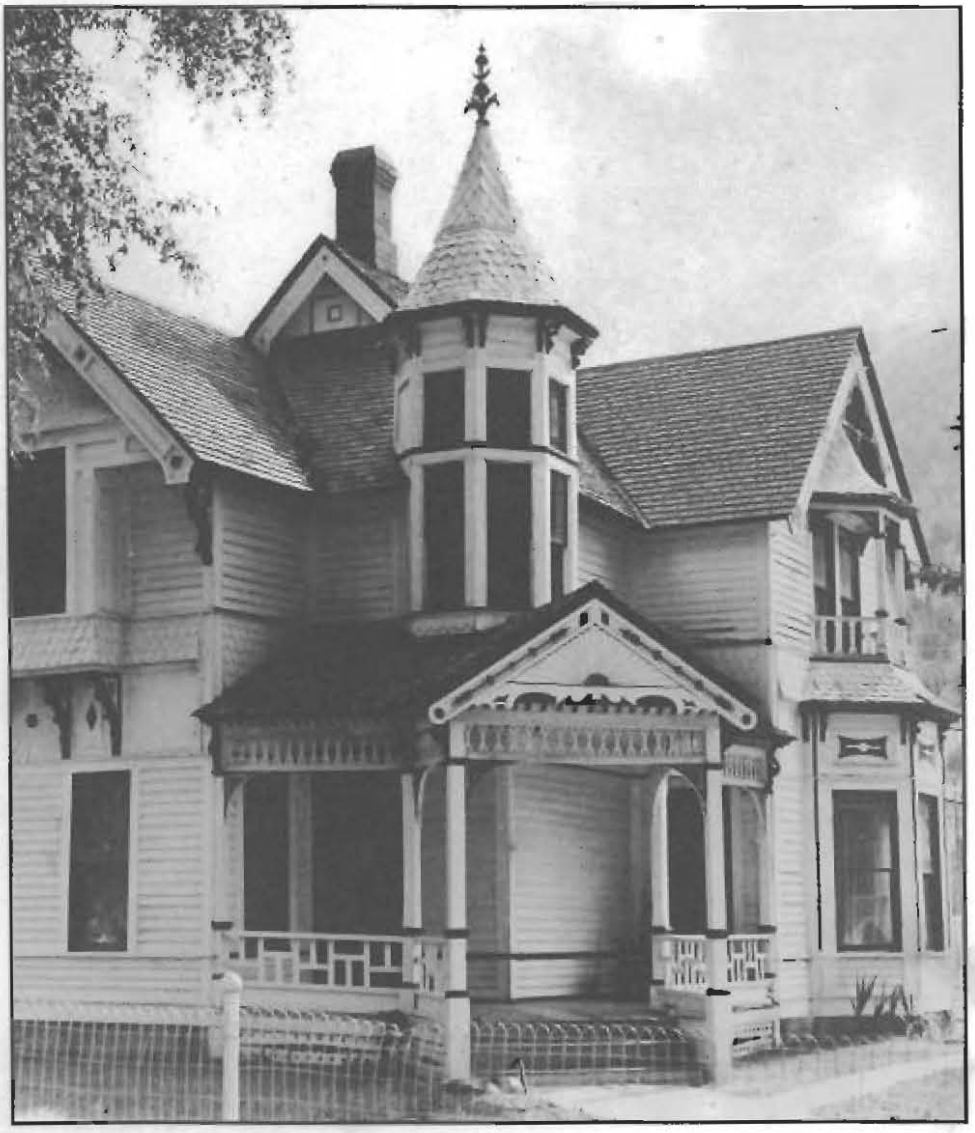
Colorado

FRONTIER IN TRANSITION

A History of Southwestern Colorado

Paul M. O'Rourke

CULTURAL RESOURCE SERIES **NUMBER 10**



Frontier In Transition

A History of Southwestern Colorado

By

Paul M. O'Rourke

Colorado State Office

Bureau of Land Management

Denver, Colorado

1992

Second Printing

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Cover Photograph: This Victorian residence in Lake City, Colorado is typical of the mining boom days in the San Juans. (Photo by Rick Athearn)

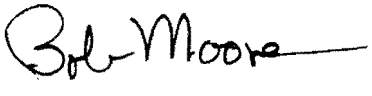
Series Production: Frederic J. Athearn

FOREWORD

This history of southwestern Colorado has been out of print for ten years. Due to considerable demand for it, the Bureau of Land Management has decided to reprint Paul O'Rourke's excellent study of this region of our state. The work is an overview history that takes the reader from prehistoric times to about 1940. The author explores the transition from a frontier society to modern times while discussing homesteading, ranching, mining, transportation and other important developments in the history of this area.

Frontier in Transition is also an award winning history in that it was one of a group of Colorado histories produced by the Bureau of Land Management that was awarded a *Certificate of Commendation* in 1983 by the American Association of State and Local History. The quality of this work is reflected in that honor.

I am pleased to make *Frontier in Transition* once again available to both the general public and to professionals interested in our past.



H. Robert Moore
State Director
Colorado

ACKNOWLEDGEMENTS

From the times of the earliest human inhabitation down to the present day, the history of southwestern Colorado has been shaped by various stages of resource development. Progressive phases of human occupation in this area of Colorado have also been characterized by a changing attitude toward how such resources as mountain areas, metals and minerals, water, and grasslands should be best used. *A Frontier in Transition: A History of Southwest Colorado* is a chronicle of such developments and progress on this Colorado frontier.

The fact that I have chosen to view the history of southwestern Colorado as a developing resource frontier came about through a gradual and, at times, a slow process. The many volumes of Colorado and Trans-Mississippi West history, to which I make numerous references within the text, actually laid the basis for such a perspective. To the countless historians who have recorded the events of southwestern Colorado's past, I owe my gratitude. The compilation and development of this history, however, would have been impossible without the assistance of many individuals who have pointed the way to such beneficial source material, and who have spent many hours of their free time reading, editing, and advising me on the various drafts of this manuscript.

Thanks are due to the staffs at the Western History Department of the Denver Public Library, the Colorado Historical Society, and the Western Historical Collection at the University of Colorado's Norlin Library. For offering data, a concerned and professional perspective along with friendly criticism, I give special thanks to Professor Howard L. Scamehorn of the University of Colorado and to John Albright of the National Park Service. To Don Rickey and Al Alpert of the Bureau of Land Management, who provided needed criticisms on the first draft of this narrative, I also wish to say thank you. To Dr. Frederic J. Athearn of the Colorado State Office, Bureau of Land Management, and to Dr. Douglas Scott of the Montrose District Office, Bureau of Land Management, who worked with me on all stages of this project, and who allowed me the time and space to pursue the work at hand, I am truly indebted. The direction, the friendly and scholarly concern and criticism offered by all of those people who directly or indirectly contributed to the completion of this manuscript is greatly appreciated.

Paul M. O'Rourke
Denver, Colorado
March, 1980

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INTRODUCTION

The history of southwestern Colorado is based on the use and development of minerals and, later, agricultural lands. Because the region was isolated by the Rockies, development by European settlers did not occur until late in Colorado's history. The first recorded European visitors were Spanish explorers of the Dominguez-Escalante expedition of 1776. The little group only passed through and failed to leave any physical evidence of themselves. Later, during the early nineteenth century, fur trappers criss-crossed the San Juans in search of the elusive beaver. Antoine Robidoux established the first fur fort on the western slope along the Gunnison River, but by 1840 it was gone.

The second thrust of European penetration was by U. S. Army explorers. First, John C. Fremont, "the Pathfinder", attempted to cross the San Juans in search of a rail route to the Pacific. These efforts were dismal failures. The next try at a Pacific rail route came in 1853 when John W. Gunnison surveyed over Cochetopa Pass, through the Black Canyon and on into Utah, where he lost his life in an Indian raid. The Gunnison route was discarded as impractical at the time, yet in 1880, the Denver and Rio Grande used the identical survey for its mainline to Salt Lakc City, Utah.

The first mineral seekers were "overflow" from the 1859 Gold Rush along the Front Range. In 1860, Charles Baker discovered gold along the Animas River in the San Juans and a modest rush occurred. However, due to a lack of minerals, the venture was abandoned. The Ute Indians, occupants of the lands in question, also discouraged miners. The question of the Utes was key to southwestern Colorado's development. As long as the Ute Indians controlled land and access to the area, Europeans were kept out. However, a series of treaties, culminating in the 1873 Brunot Treaty, eroded Ute hold while more and more settlers trespassed the San Juans. By 1873, the Utes under the leadership of Chief Ouray, had surrendered most of their lands. Nevertheless, Europeans along the Front Range wanted full access to the San Juans.

Their opportunity to displace the Utes came in 1879 when the White River Reservation Utes rose in rebellion and killed agent Nathan Meeker. The citizens of Denver cried "the Utes must go"; and by 1881 they were removed to reservations in Utah and far southwestern Colorado.

The removal of the Utes opened southwestern Colorado to European settlement and the region blossomed. Mining, of course, was the prime motivator. The mid-1870's had seen a renaissance of the mining industry in the San Juans. New techniques of ore recovery provided the stimulus for further development of the dormant mines of the 1860's.

The mining industry, among others, suffered from the lack of rail transportation. In the early 1880's, the first railroads reached the San Juans, the Gunnison Valley, and the Uncompahgre region. With cheap transportation available, the mineral industry boomed. Mills were erected to process the various ores that were pouring from the mines of the San Juans. Towns such as Lake City, Silverton, Ouray, Telluride, Durango and many others developed as supply centers for the mines.

With the advent of mining and rail transportation in southwestern Colorado, agriculture became an important facet for the region. Miners needed food and as the mines played out (or the many disappointed miners left the mountains for other places) farmers and settlers began to take up the bottom lands along the valleys. The Gunnison, the Uncompahgre, the Dolores, the San Miguel, and other valleys provided the fertile lands for farming. Farmers not only supplied the mining communities but also exported goods. The cattle industry, born of Indian agency days, propsered in lush mountain pastures. Conflicts arose over the use of public grazing lands by sheepmen, but both cattlemen and sheepmen eventually came to use the range together.

In addition to staple food production, specialized crops such as sugar beets, potatoes, fruits (apples, pears, etc.) were grown along the North Fork of the Gunnison and in the Uncompahgre Valley. These crops were enhanced in the early 1900's with the development of irrigation projects such as the Gunnison Tunnel Project.

In addition to agriculture and precious minerals, the area experienced a minerals boom in the Paradox Valley at the turn of the century when carnotite ore (uranium) was discovered. For several decades, this valley provided much of the world's uranium, radium, vanadium, and other semi-precious minerals.

In addition to this small mineral boom in far western Colorado, the creation of several national forests at the turn of the century greatly modified the developmental patterns of the area. Millions of acres of federal lands were "withdrawn" from unmanaged use and from 1900 on, the citizens of the southwest corner realized that the days of open homesteading and uncontrolled exploitation of natural resources were over. The conflicts that arose from these federal actions were never really resolved and remain a matter of debate today.

The history of southwestern Colorado, while short compared to other parts of the state, is nevertheless one that inspires tales of glory and inhumanity. Alfred Packer, the infamous cannibal, once performed his gory deeds in the snowy San Juans; General William J. Palmer built his railroads here; while Otto Mears constructed hundreds of miles of toll roads throughout the region. These, and thousands of others, lent their hands to the history of the San Juans and its development.

In this narrative, based on both primary and secondary materials carefully researched, Paul O'Rourke has, for the first time, provided the general reader as well as the professional historian, the story of southwestern Colorado. A comprehensive view of this area is now available. The trials and tribulations of the first pioneers are now well detailed.

Frederic J. Athearn
Denver, Colorado
1979

CHAPTER I.

THE NATURAL SETTING AND ITS RELATION TO HISTORIC DEVELOPMENT

History is concerned with the activities of people; it is the written record of human development within a given chronological period or geographical area. Important in the determination of a region's human activities are the influences of natural environment and resources. The effects of such factors as climate, geography, and geology on the development of human use and occupation find no better example than that of the history of southwestern Colorado. The opportunities offered in the land have formed the basis for social and economic growth in this region, yet have presented constraints and barriers to development as well. To chronicle the history of southwest Colorado, one must take the perspective of the geologist as well as the miner, the meteorologist and hydrologist as well as the farmer, the land-use expert as well as the rancher, and the topographer as well as the road engineer. The interpretation of southwestern Colorado's landscape has and continues to be a prerequisite for the region's development. The area's natural environment has been the foundation on which its inhabitants for many centuries have built a superstructure of human activities.[1] Over the period of prehistoric and recorded time, people of southwestern Colorado have valued different elements of their environment, and they have approached the natural resources of the area with changing ideas concerning the land's use.

The land formations of southwestern Colorado, its mountains, valleys, plateaus, and rivers, did not always look as they do today. During the many millions of years that have elapsed since the earth was formed, this area has undergone many geological changes. Great seas once covered the region, volcanoes poured forth shimmering streams of molten lava, glaciers formed and disappeared, and strange, fantastic plants and animals, never seen by man lived and died within its borders.[2]

The earliest rock formations of which we have knowledge are those called pre-Cambrian, produced perhaps as much as 2,000 million years ago. Some of these are igneous rocks, that is, rocks produced by volcanic action and deposited in a molten condition. Some are sedimentary rocks made up of material derived from wear and decay of already existing rocks and deposited elsewhere, usually by water. Over time, heat and pressure altered the character of these rocks and turned them into metamorphic rocks. In the most western zones of Colorado, these rocks are buried under thousands of feet of later deposits, but in the mountainous zone they have been forced up by the tremendous earth movements that created the Rocky Mountains.[3]

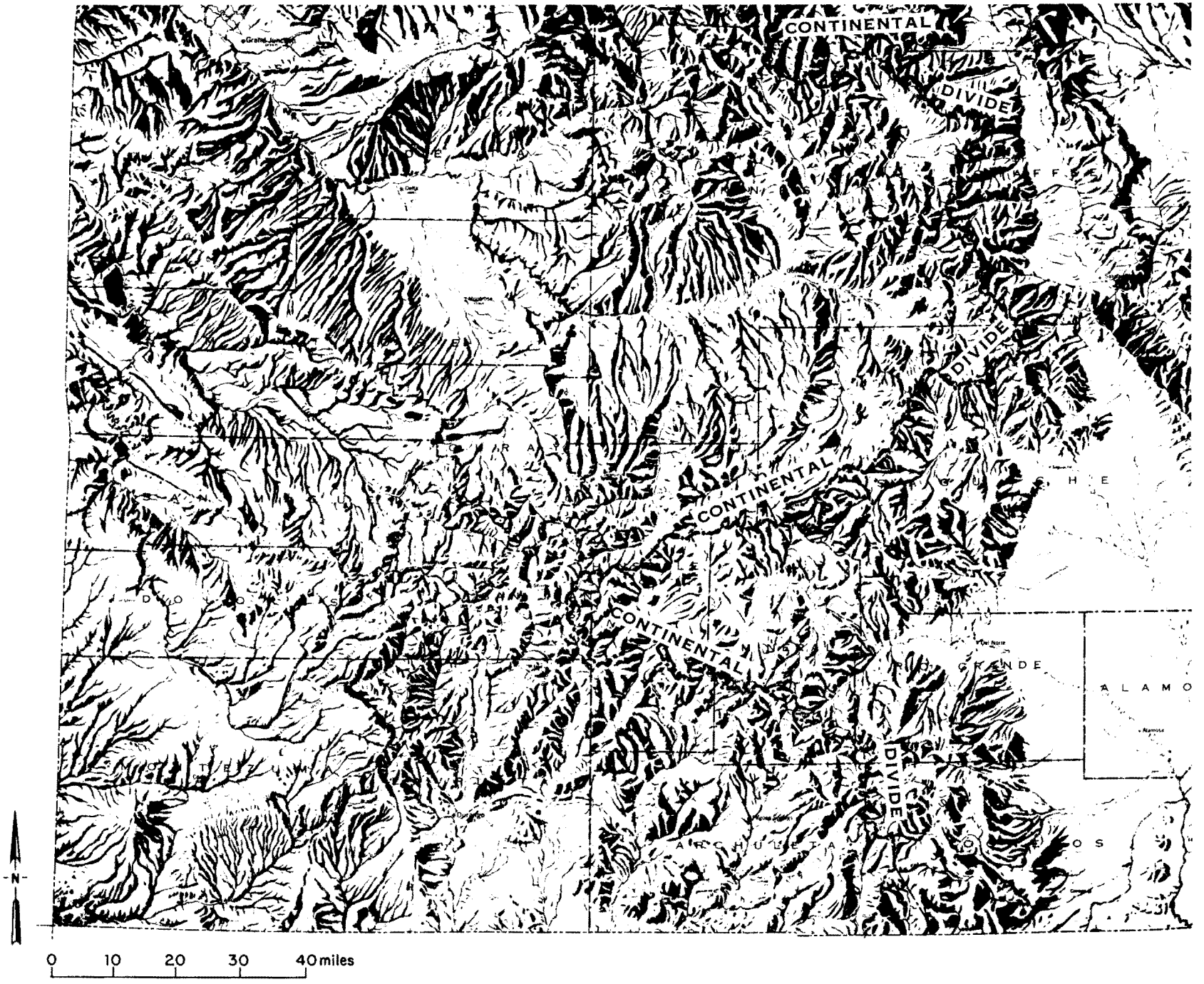
During the Cretaceous or Chalk period, with estimated dates extending from sixty to one hundred twenty-five million years ago, the area's most important geological changes took place. The events of this period formed much of the magnificent scenery that has made the region famous, many of the great natural resources that have provided its wealth, and the expansive natural barriers that slowed southwest Colorado's development. During the Cretaceous period, southwestern Colorado was covered with dense fern forests in which grew primitive uni-sexual flowers; some trees, ferns and club mosses attained heights of sixty to one hundred feet.[4] As this vegetation fell and decayed, thick layers of peat formed, and when covered and pressurized by layers of mud and sand, they were transformed and hardened over time into the rich coal beds now found in the three areas of southwestern Colorado known as the Uintah, the La Plata, and the Tongue Mesa Coal Beds.[5] Late in the Cretaceous period, a great mountain-making epoch began. It was a time of tremendous upheavals

and great disturbances of the earth's crust. Rocks stretched and folded as arching occurred and elevation increased. There was much volcanic action and streams of molten rock poured from the earth or were deposited in the veins and faults of surface rocks. During these volcanic eruptions and crustal warpings of the Tertiary period of the Cenozoic Era, the most recent sixty million years of geological history, the Rocky Mountains and the Colorado Plateau were formed.[6] This period also witnessed the formation of the precious mineral ore deposits that have brought wealth and industry to southwestern Colorado. During the final geologic era, the Pleistocene or Glacial period, primitive hunters, known for their finely chipped Folsom points, entered the region that now comprises southwest Colorado more than ten thousand years ago.

The significant events of geologic history have made Colorado the "Mountain State" of the United States. As the Rocky Mountains set off the Great Plains to the east, they also delineate a definite province in the western portion of the state.[7] The geographic character of southwestern Colorado is diverse, yet can be easily defined by two distinct land forms.

The mountainous zone, a complex of ranges where peaks reach elevations of between 10,000 and 14,000 feet, is the eastern boundary of the area along the Continental Divide. The large montane area of southwestern Colorado has no definite pattern or form. The character is of irregularly spaced and isolated groups. In the east central section of the district the San Juan Mountains, one of the most diverse ranges in Colorado, rise to form a rugged and spectacular system that has been the center of scenic and mining attraction for the last century of the region's history. To the north of the San Juan Mountains are the Elk Mountains and the West Elk Mountains. Although somewhat less rugged than the San Juans, the Elks and West Elks are similar to the San Juans in that the three systems were formed by the volcanic action of the Cenozoic Era. Smaller ranges such as the Uncompahgre, the San Miguel, La Plata, and La Sal are found in the west and central section of the region.

To the west of the mountainous zone lies a plateau zone where high mesas and tables are dissected by rivers which have carved deep, narrow canyons with steep walls. Only in the canyon bottoms do elevations reach much less than 5,000 feet, and some of the plateaus are as much as 11,000 feet above sea level.[8] The Colorado Plateau province is dominated by canyons, cliffs, plateaus and broad valleys. Because of the elevation in the area, the major Colorado River tributaries such as the Gunnison River and the Uncompahgre River, draining much of the southwest Colorado region, are cut deeply into the strata. This entrenchment has created hundreds of isolated canyons and mesas.[9] The major formations of this type are seen in the Uncompahgre Plateau and the Black Canyon of the Gunnison River. The Uncompahgre Plateau, an abrupt uplift of sedimentary rocks which lies at elevations of 8,000 to 10,000 feet, stretches in a northwest to southeast direction from the Colorado-Utah border into the San Juan Mountains.[10] The Black Canyon of the Gunnison River, with a length is fifty-five miles, begins near Sapinero and extends almost to the town site of Austin. The canyon measures from 1,725 to 2,240 feet in depth and 1,000 to 3,000 feet in width. The Black Canyon National Monument, created in 1933 by President Herbert Hoover, measures ten miles long. [11]

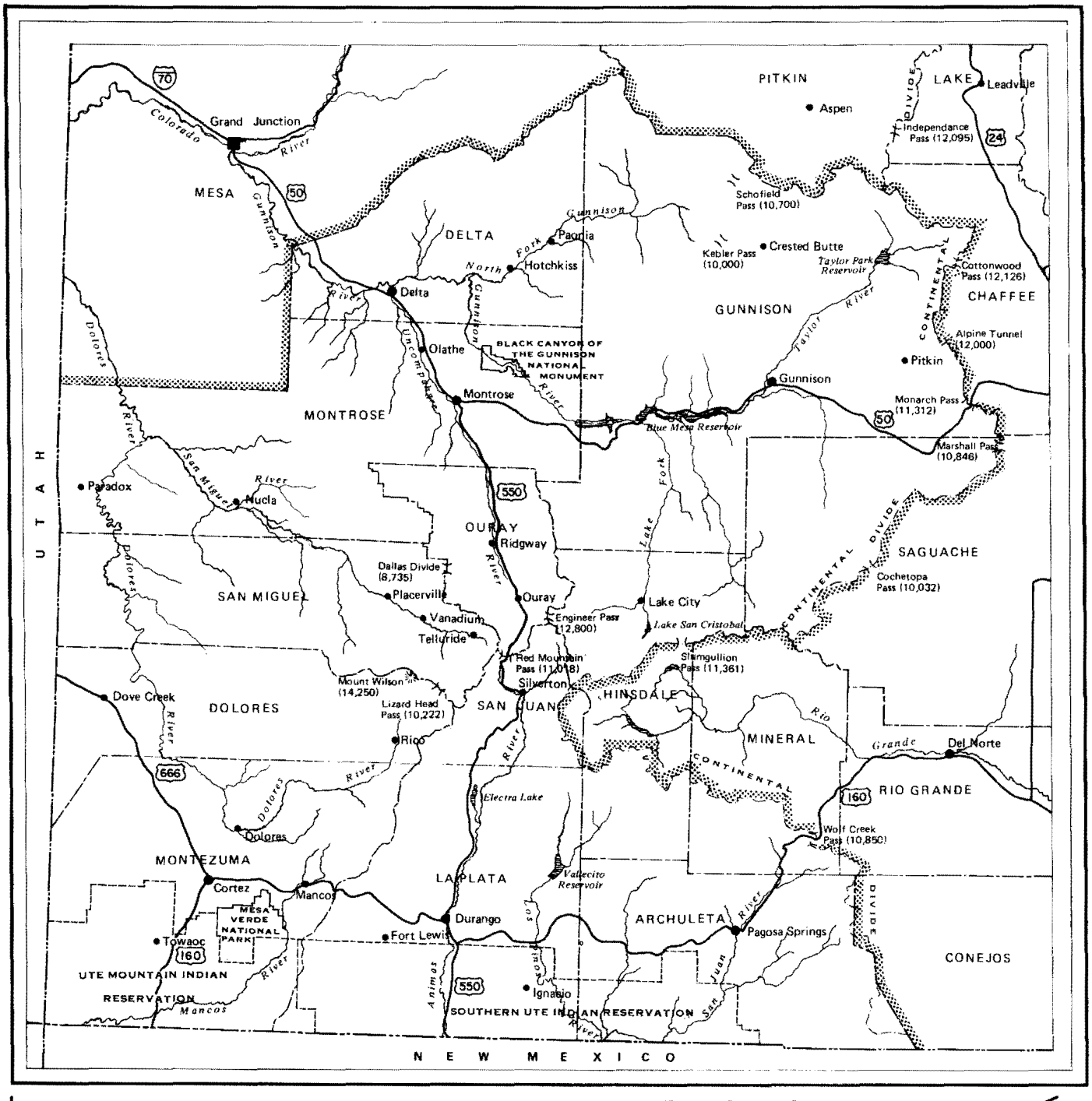


Topographic map of southwestern Colorado

The most extensive drainage in the entire southwestern part of Colorado is that of the combined Gunnison-Uncompahgre River Valleys. The total course of the Gunnison River is about 200 miles with an average rate of fall thirty feet per mile. Altogether it drains an area of approximately 2600 square miles. [12] The Gunnison River drainage has numerous tributary systems: Tomichi Creek, Ohio Creek, Willow Creek and Cochetopa Creek and the Taylor River on the east; the Lake Fork of the Gunnison River; and the North Fork of the Gunnison River. The Uncompahgre River rises between the head of the Lake Fork of the Gunnison River and Henson Creek to the east, near the head of the San Miguel River to the west and just opposite the Animas River on the south.

The river system, in combination with the Animas River, the San Miguel River, the Dolores River, and the San Juan River, although unnavigable, has determined the areas of irrigated agriculture, ranching, transportation, and the location of many cities and towns in southwestern Colorado. The San Miguel River, during most of its course flows through a deep canyon, and passes through or near gold and silver mining camps as well as new towns created by uranium discoveries. Among the former are such towns as Sawpit and Placerville, and among the latter are towns such as Vanadium and Uravan. The Dolores River rises in the San Juan Mountains on the border of Dolores and San Juan Counties near Lizard Head Pass. The main branch, the North Fork, begins in the San Miguel Mountains, and is joined in northern Montezuma County by another branch, the South Fork (or Bear Creek). The major valley of the San Miguel, the Paradox Valley is located in western Montrose County. In the region of such streams as Yellowjacket, Hovenweep, and Dove Creek, oil discoveries, uranium finds, and archaeological locations of ancient Indian civilizations have caused the Dolores River Valley to become one of the fastest developing centers in the region.[13] The Animas River has played a large part in the history of southwestern Colorado. Between Mineral Point and Silverton, it flows past Animas Forks, Eureka, and Howardsville, three major historic mining towns of the San Juan district. The chief tributary of the Animas from the north is Cement Creek which starts in the Red Mountain area just across the crest from the source of the northward flowing Uncompahgre River. Southward from Silverton, the Animas River flows through Durango, across the Southern Ute Indian Reservation, and into New Mexico.

Southwestern Colorado is an area of geographical complexity, and as a result climatic conditions vary widely within short distances. The mountains of the Continental Divide provide an effective barrier to moisture-laden air that reaches into the plains from the Gulf of Mexico. Winter temperatures are extremely cold at higher elevations and vary from cold to seasonably mild in the extreme southern and western sections of the region. Summer temperatures, except for the higher elevations, are warm. Precipitation falls from air of Pacific origin and occurs most frequently in the winter half of the year. There is a winter maximum of precipitation over the higher elevations in the region, with summer maximums at the lower elevations. From fall to spring, considerable snowfall accompanies low pressure storms.[15] Climatic conditions and geographical location determine the length of the growing season, the quality, type, and abundance and/or lack of ground cover. The Gunnison River Valley, with many sources of water from high elevation drainage and annual precipitation, has rich bottomland vegetation. In the Mancos River Valley, where these



Montrose District map illustrating reservations, counties, major cities, highways, and geographic features.

TABLE I

CLIMATOLOGICAL DATA
FOR SOUTHWESTERN COLORADO[14]

COUNTY	STATION	ELEVATION	MEAN ANN. TEMP.	AVG. ANN. PRECIP.
ARCHULETA	Pagosa Spgs.	7,238	42.2	18.77
DELTA	Cedaredge	6,180	49.2	11.92
	Delta	5,055	50.6	7.89
	Paonia	5,580	49.3*	13.72*
DOLORES	Northdale	6,680	45.1	12.67
	Rico	8,840	---	26.85
GUNNISON	Crested Butte	8,880	35.7	25.11
	Gunnison	7,664	37.7	11.24
	Sapinero	8,124*	37.5*	18.62*
	Taylor Park	9,206	32.9	16.48
HINSDALE	Hermit	9,483*	31.5*	---
LA PLATA	Durango	6,600	46.4	18.59
	Ft. Lewis	7,600	42.6	18.12
	Ignacio	6,424	45.9	14.17
MONTEZUMA	Cortez	6,177	49.1	12.90
	Dolores	6,445*	44.0*	10.83*
	Mancos	6,960*	44.8*	18.09*
	Mesa Verde	7,070	50.2	17.82
MINERAL	Wolf Creek Pass	10,642	---	42.38
MONTROSE	Crawford	6,600*	43.4*	6.55*
	Montrose	5,830	49.1	9.67
OURAY	Ouray	7,740	---	---
SAN JUAN	Silverton	9,522	35.7	29.16*
SAN MIGUEL	Ames	8,701	---	26.84
	Norwood	7,020	44.2	14.96
	Telluride	8,800	39.8	23.41

*These figures were obtained from the 1918 edition of the Colorado Yearbook, pp. 15-16.

conditions do not prevail to such an extent, only sparse vegetation occurs. Moisture in the mountainous areas encourages a heavy growth of aspens, pine, fir and spruce trees, and wildlife abounds in these favorable conditions.

Taken in the large, the topography, climate, resources, and general physical conditions of southwestern Colorado have made possible the development in the region. Yet the nature of its geography and a certain physical isolation that existed as a result, have controlled not only the extent of physical exploitation of the land, but cultural contacts as well. This isolation has had the effect not so much of removing the region from inter-cultural contacts in the early period of its development as of selectively focusing the nature and scope of those contacts. Geography then, is a key to much of the history of southwestern Colorado. Miners, ranchers, and railroad builders have been, like the Indians who preceded them, controlled by and pre-occupied with their geographic environment.

The earliest periods of use and occupation in southwestern Colorado can be characterized as ones of adaptation and transition to geographic and climatic conditions. The several prehistoric cultures, perceived and reacted to their environment in a variety of ways.

NOTES

1. See: Carl Abbott, *Colorado: A History of the Centennial State,* (Boulder: Colorado Associated University Press, 1976), p. 3.

2. Alfred M. Bailey, "The Natural History of Colorado", in *Colorado and Its People,* Vol. II, ed. LeRoy R. Hafen, (New York: Lewis Historical Publishing Co., Inc., 1948), p. 2.

3. *Ibid.,* p. 10.

4. Colorado Writers' Project, *Colorado: A Guide to the Highest State,* (New York: Hastings House, 1941), p. 10.

5. *Ibid.,* p. 10.

6. Bailey, *op. cit.,* p. 4.

7. James G. Rogers, "Geography and Natural Features", in *History of Colorado,* Vol. I, eds. James H. Baker and LeRoy R. Hafen (Denver: Linderman Co., 1927), p. 103.

8. Bailey, *op. cit.,* p. 2.

9. United States Department of the Interior, Bureau of Land Management, *Proposed Development of Coal: West Central Colorado Final Environmental Statement,* Vol. I (Denver: Bureau of Land Management, Colorado State Office, 1979), p. 79.

10. *Ibid.,* p. 69.

11. Mark T. Warner, "Black Canyon of the Gunnison National Monument", *Colorado Magazine,* (XI, No. 3, May, 1934), p. 69.

12. Densil H. Cummins, "Social and Economic History of Southwestern Colorado, 1860-1948" (Ph. D. Thesis: University of Texas, 1951), p. 28.

13. *Ibid.,* pp. 57 and 65.

14. Thomas G. Tyler, comp., *Statistical Abstract of Colorado,* (Denver: Transrep Bibliographers, 1977), pp. 110-112.

15. United States Department of the Interior, *op. cit.,* p. 39.

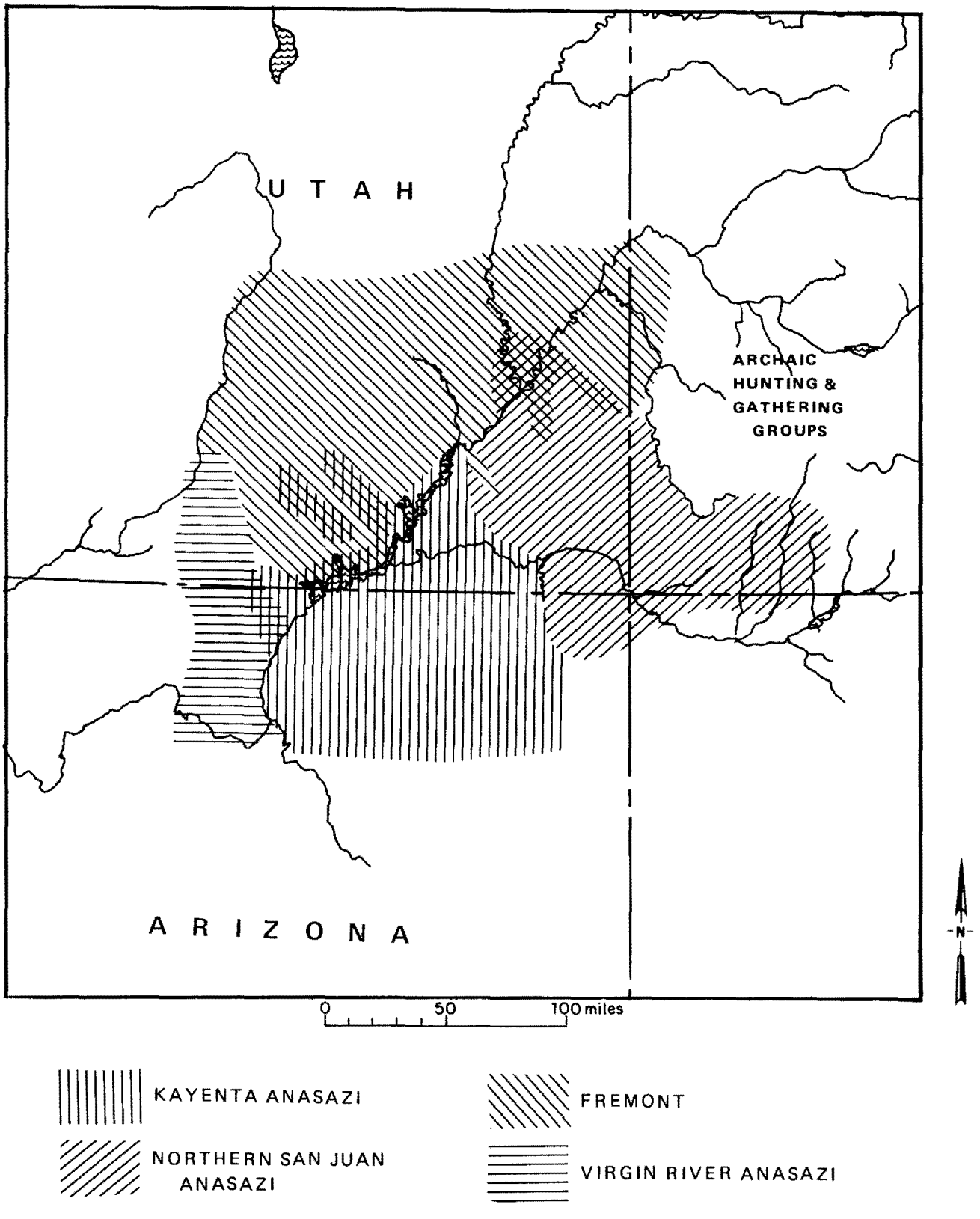
CHAPTER II.

THE ANCIENT ONES

The earliest known inhabitants of southwestern Colorado date from approximately 10,000 years, although there have been archaeological discoveries that identify Folsom-type hunters as using the area, pushing this date back even further. Believed to have been part of the earliest transcontinental migrations to North America from Asia, the Folsom culture has been traced to the southwestern Colorado region through the location of their distinctive weapons. Folsom Points, crude implements and other weapons have been discovered on the Uncompahgre Plateau; and judging from their craftmanship, these people were relatively skilled artisans. Their weapon points were typified by a longitudinal groove removed from either face, thus reducing resistance to penetration and improving hunting techniques.[1] There is no evidence to support the theory that Folsom man cultivated any plants, and while these prehistoric hunters depended on game for food, they no doubt ate roots, berries, and seeds. Living quarters consisted of caves, and crude shelters made of grass and hides. The Folsom culture displayed nothing in the way of arts or pottery; they made no use of metals, and did not domesticate animals.[2] A prehistoric people that appear to be older than the Folsom group, the Clovis hunters, are also distinguished by their weapon points, which are larger and not as well made as the Folsom variety. Whether continuous occupation of southwestern Colorado occurred from the time of the Clovis and Folsom groups through the years of other pre-Columbian habitations remains an area of speculation. Archaeological research has, however, lead to the theory that at least three other prehistoric cultures or complexes occupied the region prior to the earliest entrance of European explorers.

The Uncompahgre Complex, a group primarily dependent upon hunting and gathering, is said to have occupied the region of west-central Colorado along the Uncompahgre Plateau from approximately 8000 B. C. to A. D. 1881 (the end of the Ute occupation).[3] The societal organization of this prehistoric group has been defined as one which revolved around and adapted to the availability and/or lack of vegetation and wildlife in the region. Twelve different phases have been identified within the Uncompahgre Complex. They appear to reflect specific responses to outside influences and a changing environment.[4] The physical remains of this group illustrates such various patterns of use and adaptation on the Uncompahgre Plateau, a good example of which is the Christmas Rock Shelter. Artifacts recovered from this site illustrate that a variant of the Great Basin Desert Culture existed in southwestern Colorado. Examples of pottery and rock art found in the area indicate the presence of ideas and influences from outside cultures, presumably the Anasazi and the Fremont. Physical remains and "rock art" such as that found at Christmas Rock Shelter and in the Shavano Valley west of Montrose, and on the Dry Fork of Escalante Creek west of Delta, reveal a relatively unchanged way of life over many centuries until the time of European entrance into the area. It has been theorized, on the basis of this evidence, that the Uncompahgre Complex was the pregenitor of the Ute Indian culture.[5]

Although little is known about the Fremont group, it has been established that this people occupied the region to the north and west of the Uncompahgre Complex from about 700 A. D. until approximately the year 1100. The Fremont people constructed pithouse-like structures and used aboveground masonry; they also grew crops, notably corn and squash, while still depending upon hunting and gathering. This way of life continued until 1100 A. D., when they, for unknown reasons, returned to a roving and nomadic existence.[6]



Pueblo period sub-cultural distribution , southeastern Utah (Aikens 1966; Hunt 1953; Jennings 1966, 1974; Lipe, et al. 1960; Marwitt 1970; Morss 1931; Rudy 1954; Sharrock 1966; Wormington 1955).

The most well known of the ancient inhabitants of southwestern Colorado are the Anasazi Indians. Although the Anasazi, a Navajo word meading the "ancients" or the "old people", are most famous for their architectural masterpieces on the Mesa Verde, the extent of their culture went far beyond these "Cliff Dwellings". The fact is, there are a tremendous number of Anasazi sites in southwestern Colorado. The Pueblo I and II culture was shown to have once extended as far north as the Paradox Valley in western Montrose County, and sites have been located in the "Pagosa-Piedra" region in Archuleta County.[7]

Prior to the year 1 A. D., a nomadic people, dependent upon hunting and the gathering of wild seeds, fruit and plants for their livelihood, were scattered over southwestern Colorado and adjacent portions of the neighboring states of New Mexico, Utah, and Arizona. Following this roving and hunting mode of life, a decided advance in the development of this culture came with the introduction of agriculture, the essential character of which fostered a more permanent existence. The Basketmaker Period began with these earliest experiments in agriculture in approximately the year 1 A. D., and lasted until about 450 A. D. Early farming methods were crude, where only a single variety of corn and squash were raised. Archaeological discoveries have shown that small caches and storage bins were constructed in order to hold and preserve their crops. Following the ways of their ancestors, bags, blankets, baskets, and sandals were woven from the tough yucca plants that grew wild on the nearby mesas.[8]

The addition of pottery, the gradual development of the pithouse, and the introduction of the bow and arrow into the culture signalled an evolution into a second Anasazi developmental era, the Modified Basketmaker Period, which is dated from approximately 450 A. D. to 750 A. D. The clay pottery that replaced the use of woven baskets for storage and cooking, and the introduction of the bow and arrow were probably innovations borrowed from other tribes in the area.[9] The basic construction of the Modified Basketmaker pithouse was a simple hole, several feet deep and from ten to twenty feet in diameter. A log frame was built above ground, which was then covered with interwoven reeds and grass. A layer of earth was placed over this lath to form a combination sidewall and roof. A small opening in the center of the structure provided entrance and an exit for smoke. As the majority of pithouses were built on the mesa tops and in the open, this example of Anasazi development suggests that the Modified Basketmaker lived in relative tranquility with his neighbors.

The change from the Modified Basketmaker pithouse as single family units to a more communal housing arrangement marked the beginnings of the Developmental Pueblo Period, which dated from approximately 750 A. D. to 1100 A. D. The first pueblos were rather crudely constructed of posts and adobe. By the end of the period however, adobe had given way to masonry and more advanced construction. The kiva, a Hopi word to describe the rooms that resemble the modern Pueblo ceremonial chamber, became more advanced in structure. Circular, subterranean, some twelve to fourteen feet in diameter, seven or eight feet deep with walls of dressed stone, the kiva was located in front of the living rooms. Like the earlier pithouses, the kiva's only door was a small opening in the center of the roof, which also served as a smokehole. One of the most novel changes in this period was the introduction of the wooden cradle board, replacing the Basketmakers' pliable, pillowed, reed and grass cradle.

Due to this change, it was once thought that the Basketmaker and the Pueblo Cultures were of distinct origin, due to the difference of skull formations found in unearthed remains. Pottery techniques also advanced in the Developmental Pueblo Period, as the dull, natural hues of earlier pottery were abandoned for clear white, which showed designs more advantageously.

The last two centuries of Anasazi occupation in southwestern Colorado, from 1100 A. D. to approximately 1300 A. D., saw the climax of the evolution of cultural development in the Classic Pueblo Period. During this time, agriculture reached new levels. Most crops were cultivated on the mesa tops, but small, terrace-like patches at the heads of canyons were also used. On the floors of canyons, the Pueblo people constructed dams for water storage, the first examples of irrigation technique in Colorado. Cotton probably was not grown in any quantity on the Mesa Verde, so the presence of woven cotton cloth among the ruins suggests trade with other Indians. These last two hundred years were times of societal regimentation; kivas became more standardized, the pueblo dwellings became larger; and tall round towers were built. The mesa tops were abandoned in favor of the more strategic canyon walls. From this period the architectural masterpieces and ornate pottery that we are familiar with today were created. Ironically, this period of cultural greatness marked the beginning of the demise of the Anasazi civilization in southwestern Colorado, for by 1300 A. D. these master craftsmen had abandoned the area.

Numerous theories abound concerning the possible explanation for the Anasazi desertion. Severe drought, war with other tribes, or a depletion of natural resources have all been suggested as reasons.

For 450 years after the Anasazi had left the Mesa Verde and surrounding regions, the ancient ruins that marked the height of their habitation remained a well hidden secret. With the Dominguez-Escalante expedition in 1776, the European world would discover the first remnants of a past and great civilization. Another century would pass before a Coloradan would uncover the ancient beauty of Cliff Palace. From these early discoveries of prehistoric civilizations in southwestern Colorado, people began attempts at reconstruction of these past societies.

Escalante, one of the ancient ruins of the Anasazi civilization.

NOTES

1. Al Look, *1000 Million Years on the Colorado Plateau* (Denver: Bell Publications, 1955), p. 319.

2. *ibid.*, p. 316.

3. United States Department of the Interior, Bureau of Land Management, *Proposed Development of Coal: West Central Colorado Final Environmental Statement,* (Vol. 1 (Denver: Bureau of Land Management, Colorado State Office, 1979), p. 115.

4. *ibid.*

5. For an authoritative treatment of the archaeology of west central Colorado see: William G. Buckles, "The Uncompahgre Complex: Historic Ute Archaeology and Prehistoric Archaeology on the Uncompahgre Plateau in West Central Colorado" (Ph.D. Thesis: University of Colorado, 1971).

6. United States Department of the Interior, *op. cit.*, p. 115.

7. J. A. Jeancon, "Primitive Coloradans", *Colorado Magazine* (II, No. 1, January, 1935), p. 35.

   See also: G. Woodbury, "The Archaeological Survey of Paradox Valley, *Colorado Magazine* (IX, No. 1, January, 1932), pp. 8-15.

8. LeRoy R. Hafen. *Colorado: A Story of the State and Its People* (Denver: The Old West Publishing Co., 1945), p. 39.

9. Information dealing with Anasazi occupation in the southwestern Colorado region appears in numerous history and archaeology texts. The author relied most heavily on the works of the following authors for the discussion of the Anasazi civilization: Carl Abbott, *Colorado: A History of the Centennial State* (Boulder: Colorado Associated University Press, 1976); LeRoy R. Hafen, *Colorado and Its People,* Vol. 1 (New York: Lewis Historical Publishing Co. Inc., 1948); Wilbur F. Stone, *History of Colorado,* Vol. 1 (Denver: S. J. Clarke and Co., 1918); and Carl Ubbelohde, Maxine Benson, and Duane Smith, *A Colorado History* (Boulder: Pruett Press, 1976).

CHAPTER III.

EARLY EXPLORATION AND THE FUR TRADE

Spain, the first European nation to colonize the New World, pushed northward from Mexico to Pueblo Indian villages and beheld the Grand Canyon of the Colorado River eighty years before the Pilgrims landed at Plymouth Rock. In the seventeenth and eighteenth centuries, Spain drew no boundaries for New Mexico. The province stretched as far to the north as military expeditions could enforce periodic recognition of Spanish power among the Indians on the plains and in the mountains.

The exact date of the earliest Spanish contact with the Ute Indians of Colorado remains in question, but it has been established that the introduction of the horse to the Utes dates from as early as 1640. Having seen horses and learned of their utility as mounts, the Indians were eager to procure these animals. Subsequently, Spanish traders followed trails into distant Ute villages, and Indians made return calls at New Mexican towns such as Taos bringing buckskin, dried meats, furs, and slaves to barter for horses, knives, and blankets.[1] As a result of trading, during the seventeenth and early eighteenth centuries, Spanish-Ute relations were characterized by peaceful interaction. The relative harmony between the two cultures aided the Spanish in their attempts to explore the frontier north of New Mexico.

By the middle of the eighteenth century, rumors of mineral wealth in the distant San Juan Mountains drifted into the New Mexican capital of Santa Fe. Responding to these reports, Juan de Rivera conducted three expeditions into the southern Colorado Rockies between 1761 and 1765. He took soldiers, traders, and *padres* north, via Taos and the San Juan River, past the La Plata Mountains to the Dolores River. He then followed the Uncompahgre River to its confluence with the Gunnison River. In the vicinity of the Gunnison River in 1765, the expedition met a band of Utes and other mountain Indians and a brisk trade was established. The party returned to New Mexico discouraged however, as they found little in the way of precious metal. After these initial expeditions, not much is known about Spanish activity in southwestern Colorado, except that from time to time New Mexican records show that the veterans of the Rivera expeditions conducted trade with the northern Indians.[2]

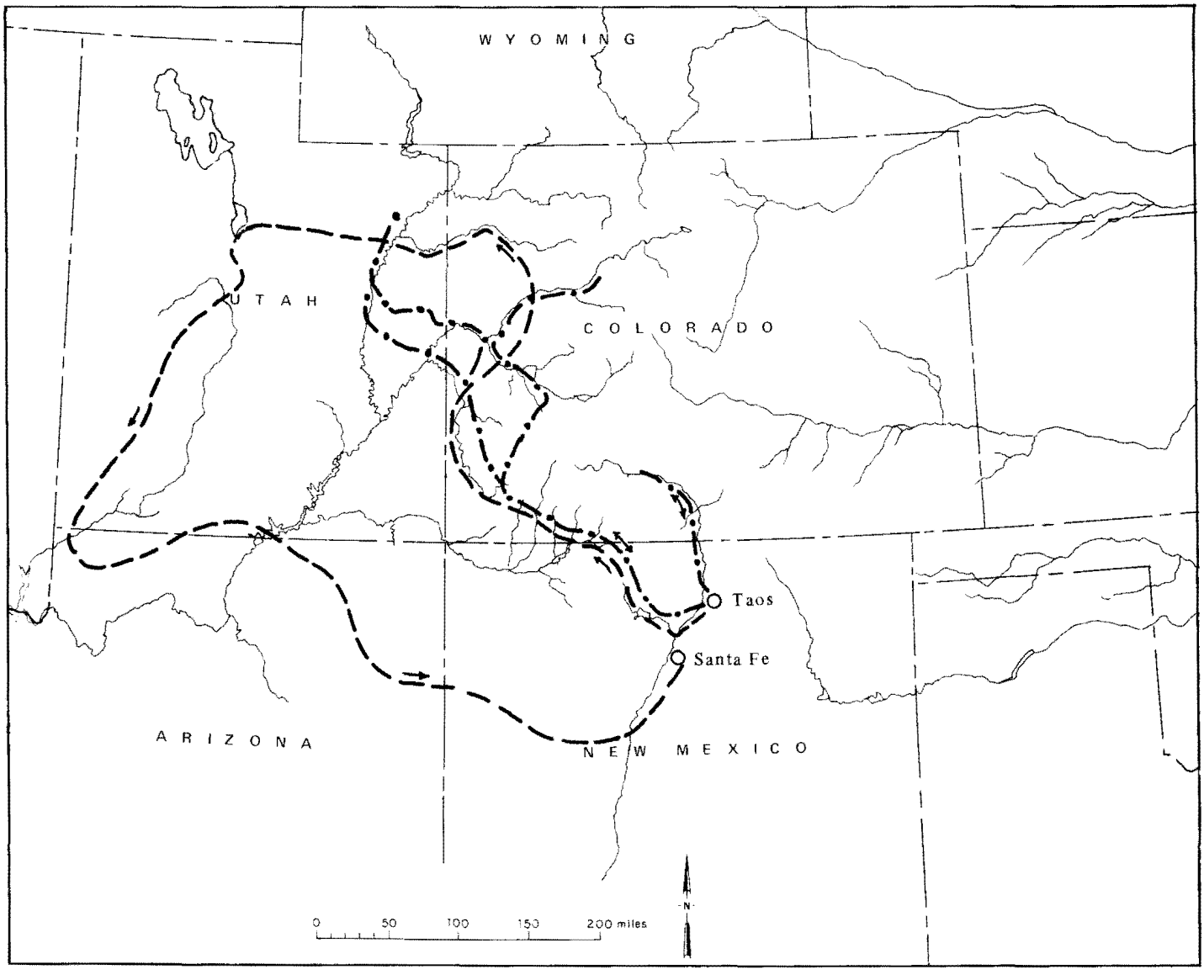
At the same time Rivera searched for gold and silver in Southwest Colorado, inroads into the territory surrounding Spain's New World empire were being made by her European rivals. By the mid-eighteenth century, England possessed considerable North American territory, including the American colonies, and was moving with concerted interest into the Northwest Territories. France had established herself as a North American power in Canada, and had begun exploration southward with obvious intentions toward Spanish holdings along the Gulf of Mexico. Russia explored and took possession of west coast territory in the regions of present Alaska, Washington, Oregon, and northern California. Conflict and empire predominated the history of the European continent. North American territories acted as one stage for the unfolding of this historic drama.

Fifteen years after the first Rivera expedition, Fathers Francisco V. Dominguez and Silvestre Velez de Escalante hoped to discover a mission-route that would establish a strategic communications link between Santa Fe and the missions of California. Convinced that a westward course to California in the latitude of the Hopi villages was impractical because of Hopi hostility, and that a route through Ute country north of the Colorado River would be more feasible, Dominguez and Escalante set out in

1776 upon what would become a five-month, 2000 mile journey that would take them through much of present western Colorado, Utah, Arizona, and New Mexico. Although the purpose of the Dominguez-Escalante mission was not accomplished, the expedition did have long range effects on the history and development of the southwest. The explorers revealed a geography, potential resources, and the inhabitants of a vast inland area. The information, the accounts and maps preserved from the expedition would provide others, New Mexicans and Americans alike, a base upon which to fulfill the *padres'* dreams. After the expedition's discoveries, traders from New Mexico who went to the distant Ute country were no doubt influenced by Escalante's journey. The route of the Escalante Trail, followed in part, soon became known by American traders as the Old Spanish Trail. This historic route symbolized much of what was to become the larger drama of the southwest; a contest of Empires. When nations gambled for imperial stakes in land and commerce, first-footing gave claim, and occupancy meant possession. In such a time the exploring man of commerce served more effectively than did the soldier.[3]

By the beginning of the nineteenth century, Spain became more protective of the northern buffer to her Mexican holdings. After 1803 and the Louisiana cession, the Spanish government shifted its earlier ban on Ute trade; Americans were forbidden the fruit of southwestern commerce. The Adams-Onis Treaty, ratified in 1819, established an official boundary between Spanish and American possessions in the southwest. This agreement left the southern plains, a substantial portion of the western Rocky Mountains, and the entire western plateau region of Colorado in Spanish hands.[4] With a demarcation set, the Spanish made little attempt to maintain defenses of their northern borderlands. Although this treaty remained in force until the American annexation of Mexican lands following the Mexican War in 1848, such diplomatic agreements were given little notice by a new type of frontier explorer, the fur trapper. Following potentially beaver-rich streams rather than guided by political boundaries, the fur trappers, Americans, French-Canadians, and New Mexicans alike, explored areas of western Colorado, Utah and Wyoming as early as 1812.[5] The Green River region below the Wind River Range in Utah had not been systematically trapped by 1821, yet when Mexico gained her independence in that year, new diplomatic relations between the United States and Mexico opened the area as a new commercial frontier. Responding to reports of rich beaver-streams in the Green River Valley, and hoping to establish successful trade relations with the New Mexican government, a host of American entrepreneurs came to Santa Fe in 1821 when New Mexico became a Mexican territory.

The earliest fur trading expeditions were based in the New Mexican trading towns of Santa Fe and Taos, which were strategically positioned at the terminus of the newly opened Santa Fe Trail. With a convenient commercial link to U. S. and international markets, the fur trading business developed rapidly. William Becknell, forgetting about the Santa Fe Trail almost as soon as he had found it, set out to locate a practical route to the beaver-rich Green River Valley other than the Old Spanish Trail. In 1824, he led a party north from Taos to the Green River. In August of that same year, William Huddart with fourteen others, left Taos, travelled north through the San Luis Valley, crossed the Cochetopa Hills at an ancient Ute and buffalo traverse, and by way of the Gunnison and Uncompahgre Rivers pushed on into eastern Utah to the Green River. At about the same time, an expedition led by Kit Carson and Jason Lee followed



—·—· Juan de Rivera Expeditions 1761-1765

——— Dominguez-Escalante Expedition 1776

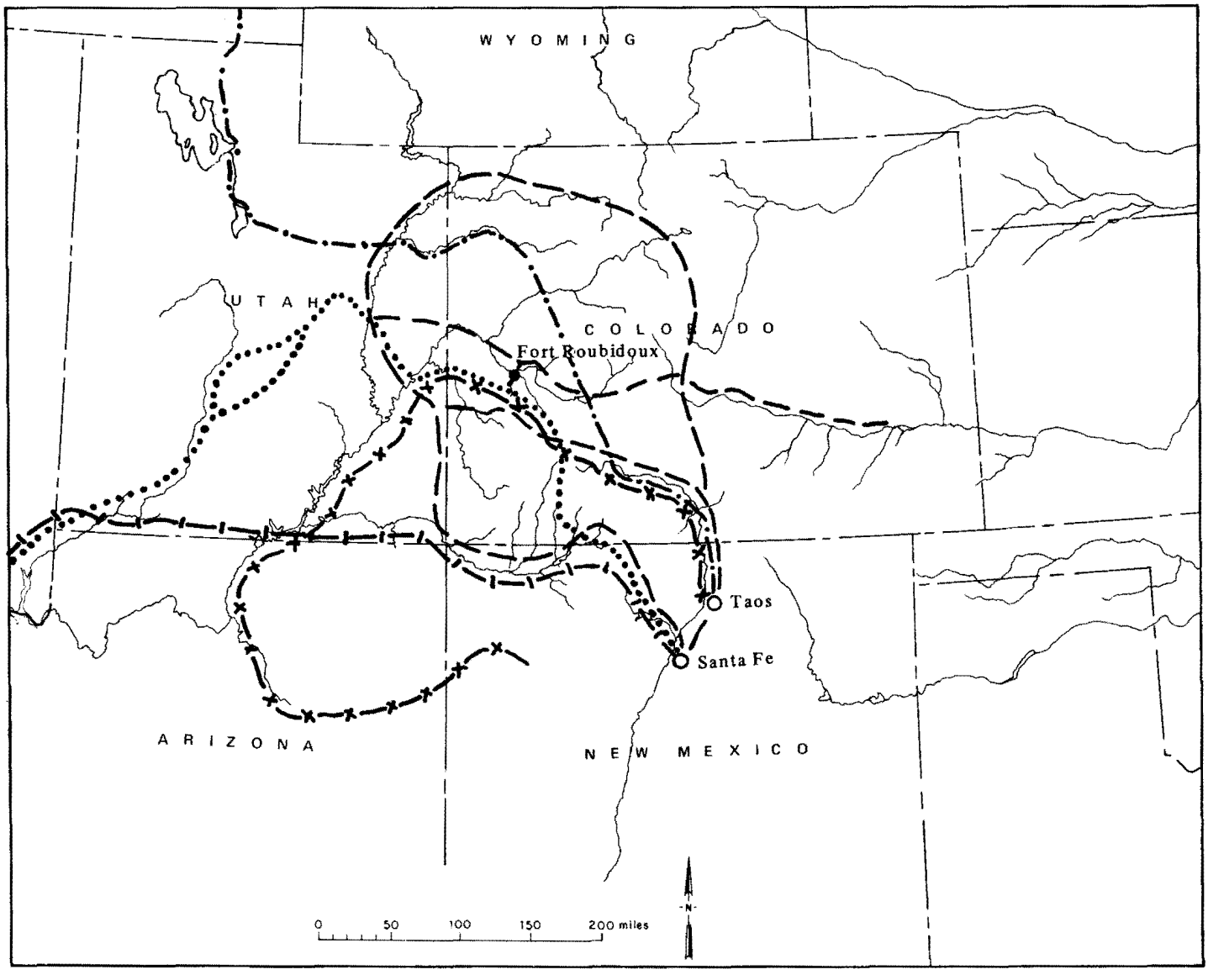
the Old Spanish Trail along Escalante's route north, and met Antoine Robidoux at the mouth of the Uinta River in Utah.[6] By the end of 1824, at least six parties of trappers had travelled north from Santa Fe or Taos, through southwestern Colorado, into the Green River region by way of the Old Spanish Trail or the northern extension of that trail via the Cochetopa Pass route, also known as the Trappers' Trail. Besides those of Huddart, Becknell, and Carson, there were groups led by William Wolfskill, Etienne Provost, and Antoine Robidoux.[7]

Through the mid-1820's, the fur brigades of Provost, Robidoux and Becknell repeatedly worked the Green River until larger trapping expeditions invaded this choice beaver country.[8] Such trapping parties were directed by the future Fur Barons, William Ashley and John Jacob Astor. In the spring of 1824, Ashley sent his men out to trap the region, and then arranged to meet them at a "rendezvous" on the Henry's Fork of the Green River to exchange their furs for the trading goods that he had brought from St. Louis.[9] The rendezvous system proved so successful that extensive trapping became the order of the day, and the large operations such as the Hudson's Bay and the American Fur Companies reaped huge profits from the fur trade. By 1826, however, many of the northern streams became "trapped out" and by the early 1830's the prices of pelts had begun to drop.

The over-exploitation of streams and the intense competition of the large fur companies prompted many trappers and traders to move south from the Green River Valley. Antoine Robidoux, maintaining a trading post at Taos, built a fort near present Delta, Colorado in 1828, from which he sent out trapping parties along the Colorado River as far south as the Gila River, as well as on the various streams in closer proximity to the fort. Fort Robidoux, Colorado's first and America's second "general store" west of the Continental Divide, served as a trading and supply establishment for the "free trappers" in the vicinity, and was located on the north-south trailway used by trappers traveling from New Mexican settlements north. By the mid- 1830's, Robidoux had set up a direct arrangement with his brother's trade establishments in St. Louis and Fort Osage. Bypassing the New Mexican settlements, the Robidoux brothers freighted supplies directly through the Gunnison River country by way of Cochetopa Pass to the Fort. Until its destruction in 1844, the Fort also served as a supply base for immigrants moving westward to California.[10]

Although the fur trade excitement had declined, Antoine Leroux, Kit Carson, Charles Autobees, Tom Tobin, and "Uncle Dick" Wootten along with Robidoux, continued to trap the Gunnison River area in the Fort Robidoux district during the 1830's and 1840's.[11] While these last efforts at free trapping were being undertaken, several of the mountain men who had blazed trails important to the fur business had turned their attention to California, a distant source of commercial interest.

Although New Mexicans were the first to inaugurate the commercial trade to California, Americans were quick to see its potential. Traffic to California by annual caravan was begun by New Mexico's Governor Antonio Armijo in 1829 and 1830. Utilizing knowledge gained from fur trading explorations, Armijo and his party moved up to the Chama River from the New Mexican outpost at Abiquiu, and continued on the traders' trail until they reached the San Juan River, which they followed through parts of southwestern Colorado in the Four Corners region. They pushed on to the Colorado River, and traversed the Old Spanish Trail to California.



FUR TRAPPING TRAILS

—·—·— Provost

— — — Trapper Routes into Southern Rockies

—x—x— Peg Leg Smith

••••••• Old Spanish Trail

—I—I— California Trade Routes

Directly on the heels of Armijo were parties that included among it members explorers such as William Wolfskill, Ewing Young, Kit Carson, and Tom "Peg-Leg" Smith. Although their routes varied substantially at times with those of the New Mexican traders, the general course was northwesterly from Taos to the Grand (Colorado)* River, crossing sections of southwestern Colorado, and, via the Old Spanish Trail, on to California. The Young-Wolfskill party of 1830-1831 is credited with covering the entire distance of the Old Spanish Trail, which became the regular caravan route for the Missouri-Santa Fe-Los Angeles trade.[12] Because of small amounts of snow in the winter, many early immigrants and traders travelled over Cochetopa Pass in order to reach California, and according to Antoine Leroux, two old trappers, William Pope and Isaac Slover and eight members of their families, made the first such trip from Taos to the Pacific Coast by wagon in 1837.[13]

In 1842, Marcus Whitman and J. B. Chiles, in two separate journeys, made the return trip from California to Santa Fe, which took them over basically the same route as that followed by the Slover-Pope party and the Old Spanish Trail through southwestern Colorado.[14]

By the mid-1840's, relations between Mexico and the United States had become strained. The Texas independence question and the need to silence any signs of rebellion in New Mexico and California led to a restriction of trade for Americans along the Old Spanish Trail. The imposition of duties further deterred commercial traffic, and with a decreased demand for pelts in New York and London, the day of the trapper and trader in the southwest drew to a close. What the trapper-explorer accomplished however, cannot be measured merely in a commercial sense, for these unofficial explorers had plotted the courses of the western rivers, discovered the passes through the Rocky Mountains, prepared the way for government explorations, and opened the door for European settlement by breaking down Indian self-sufficiency.[15] The first permanent wedge had been driven into the rugged transmontane west. Although a few of the mountain man-fur trapper breed would aid the coming generation of Army explorers in the late 1840's and 1850's, most of what the trapper had learned by hard experience had to be relearned and reinterpreted in order to suit the needs of a more modern generation.[16] Antoine Leroux, who had repeatedly trapped and explored the present Gunnison country, was one of the trappers who would later describe his knowledge to Senator Thomas Hart Benton of Missouri and others seeking information of the best rail route to the Pacific. Leroux later served as guide on the Gunnison exploration party in 1853, an expedition that would greatly influence the future events of southwest Colorado.

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* With the enactment of the Colorado River Compact in 1929, the Grand River officially became known as the Colorado River.

NOTES

1. For a concise and informative discussion of the early Spanish and American explorations in the Southwest see: LeRoy R. Hafen and Ann Hafen, *The Old Spanish Trail* (Glendale, California: The Arthur Clark Co., 1954). References for Ute-Spanish relations are located on pp. 51 and 84.

2. An excellent study of exploration and its influences on the shaping of the American Southwest is William H. Goetzmann's, *Exploration and Empire* (New York: W. W. Norton and Co. Inc., 1966). Specific references on the Rivera and Dominguez-Escalante expeditions are found on pp. 68-70.

3. Hafen and Hafen, *op. cit.,* pp. 20, 52-59.

4. Carl Abbott, *Colorado: A History of the Centennial State* (Boulder: Colorado Associated University Press, 1976), p. 35.

   See also: LeRoy R. Hafen, *Colorado: A Story of the State and Its People* (Denver: The Old West Publishing Co., 1945), p. 88.

5. Duane Vandenbusche, *Early Days in the Gunnison Country* (Gunnison: B & B Printers, 1974), p. 7.

   See also: Marshall Sprague, *The Great Gates* (Boston: Little, Brown and Co., 1964), p. 71.

6. Densil H. Cummins, "Social and Economic History of Southwestern Colorado, 1860-1948" (Ph.D. Thesis: University of Texas, 1951), p. 189.

   See also: Sprague, *op. cit.,* p. 109.

7. Dale L. Morgan, *Jedediah Smith and the Opening of the West* (Lincoln: University of Nebraska Press, 1955), pp. 147-148.

   See also: Goetzmann, *op. cit.,* pp. 67-68.

8. Hafen and Hafen, *op. cit.,* p. 105.

9. Ray A. Billington, *Westward Expansion: A History of the American Frontier* (New York: MacMillan Publishing Co. Inc., 1974), p. 387.

10. Joseph J. Hill, "Antoine Robidoux, Kingpin in the Colorado Fur Trade", *Colorado Magazine* (VII, No. 4, July, 1930), pp. 125-132.

    See also: Vandenbusche, *op. cit.,* p. 6.

11. Forbes Parkhill, *The Blazed Trail of Antoine Leroux* (Los Angeles: Westernlore Press, 1965), p. 61.

    See also: Billington, *op. cit.*, p. 387.

12. Hafen and Hafen, *op. cit.*, pp. 151-152, 166-171.

13. Parkhill, *op. cit.*, p. 74.

    See also: Vandenbusche, *op. cit.*, p. 7.

14. Mark T. Warner, "Black Canyon of the Gunnison National Monument", *Colorado Magazine* (XI, No. 3, May, 1934), p. 88.

    See also: Goetzmann, *op. cit.*, p. 74.

15. Billington, *op. cit.*, p. 379.

16. Goetzmann, *op. cit.*, p. 78.

CHAPTER IV.

THE GREAT RECONNAISSANCE AND THE REDISCOVERY OF THE SOUTHWEST

The decline of the fur trade in the Rocky Mountain region ushered in an era of transition. For two decades trappers and traders had used the trails and passes until most of the region had been seen, although little of it had been mapped and nothing resembling settlement had taken place.[1] With much of the basic discovery work accomplished by 1840, exploration in southwestern Colorado entered a new phase. The economic motives implicit in the fur trading period now became explicit national and political objectives as relations between the United States and Mexico became strained.[2] American aims turned toward expansion. The government, always a partner in discovery, began to assume a major responsibility in launching expeditions into the Far West designed to aid its citizens in the settlement and development of the region. It was to facilitate this aim that the government reorganized the United States Army Corps of Topographical Engineers in 1838 and created a separate branch of the military whose primary duties were the exploration and development of an underdeveloped continent.[3]

The Mexican War (1846-1848) presented new opportunities for exploration in the southwest, and the Army explorers who went out as a result of the conflict returned with new data and new points of view concerning the west that shaped national policy for years to come.[4] From the conclusion of the Mexican War, in 1848, to 1850, present-day Colorado was jointly a part of the unorganized territory of the United States and the State of Texas. With the Compromise of 1850, the territory of Utah was created, bounded on the west by the State of California, on the north by the Oregon Territory, on the east by the summit of the Rocky Mountains, and on the south by the 37th parallel of north latitude.[5] From 1850 until the demarcation between New Mexico and the new Territory of Colorado was set in 1861, southwestern Colorado was part of the Utah Territory. With the continental boundaries set, a new series of tasks came to the fore.

The discovery of gold in California in 1848 provided renewed interest in the establishment of a transportation link with the Pacific. What with California gold, Oregon's agriculture, and Mormon migrations to Utah, millions of Americans suddenly discovered the west. These people besieged Congress with demands for wagon roads, railroads, forts, telegraph lines, and anything else which might ease their path to a variety of promised lands.[6] The "Great Reconnaissance" was basically an inventory of the area that had been opened to settlement through the acquisition of new lands, and the Army explorers who carried out such tasks played a significant role in the opening of America's western frontier.

In the decade immediately preceding the Civil War, Army explorers traversed much of the west, their objective was to dramatize the region, and to provide a vast range of scientific knowledge and economic information about the west that would underscore its value and encourage overland migration.[7] The chief task, however, was the necessity of locating vital transportation routes, and particularly a practical path for the transcontinental railroad. To achieve this aim several expeditions, between the period 1848 and 1859, came to southwestern Colorado.

Senator Thomas Hart Benton of Missouri, long interested in the financial potential of the west, befriended Taos trapper Antoine Leroux in hopes of discovering the best way from Missouri to California. Leroux's response to the Senator's inquiries was to "start as the people do now, going to New Mexico from the frontier of the State of Kansas or Independence, and for summer travelling go through the prairies up towards Bent's Fort, and up to the Huerfano to the pass El Sangre de Cristo; then out by the Coo-che-to-pa Passing, [*sic*] following a trail to the Great Spanish Trail".[8] Benton realized the city that seized the initiative, and made a dramatic effort on its own toward building the railway route would ultimately secure necessary federal support. In the summer of 1848, he convinced several St. Louis businessmen to finance an exploration of a central, or 38th parallel route that would run west from St. Louis to San Francisco. The expedition would be led by his son-in-law, John Charles Fremont.[9]

By 1848, Fremont had already undertaken three explorations of the west. In 1842, 1843, and 1845 he had traversed, explored, mapped and described the Oregon Trail and the wagon routes to California.[10] In his fourth western expedition, Fremont planned to follow the 38th parallel as closely as possible and locate a new pass over the Continental Divide in the vicinity of the Cochetopa Pass, which led out from the San Luis Valley, and would open a route over the San Juan Mountains into the valley of the Green River. He and Benton both seemed to believe that there was indeed an easy passage in this vicinity, and on the other side of which the mountain was an accessible route to California. In this assumption, they were ignoring a great deal of Colorado geography, as Fremont was to discover. The party left Westport, Missouri on October 20, 1848, followed the Kansas River, and pushed across the prairie until they reached the Arkansas River. Following the south bank of that river past Bent's Fort they came to El Pueblo, where the experienced mountain men warned them of an unusually hard winter to come. While at El Pueblo, Fremont engaged "Old Bill" Williams as guide, and then moved on, past Hardscrabble Post, over the Sangre de Cristos' at Mosca Pass, and down into the upper Rio Grande region in the San Luis Valley. It was December, and the party had already encountered heavy snows while crossing Mosca Pass, but Fremont persisted in his search for a central railroad route. Accordingly, "Old Bill" led the party north up Alder Creek, and into the San Juan Mountains, an impassable wintry waste where the snow was more than ten feet deep and the temperature fell to twenty degrees below zero. Somewhere in the snow Bill Williams lost his way, and the party turned north fifteen miles too soon. By the middle of December they were 12,327 feet above sea level, on Pool Table Mesa near Wanamaker's Creek, and caught in a blinding snowstorm.[11]

In all, ten perished in a month-long ordeal before rescue, which is recorded as one of the greatest disasters in the history of American exploration. Surprisingly, Fremont's and Benton's enthusiasm for the 38th Parallel route had not diminished. Five years passed before another such expedition attempted to penetrate the rugged mountain barrier of the San Juans. It would be under a different command however, that the route was explored.

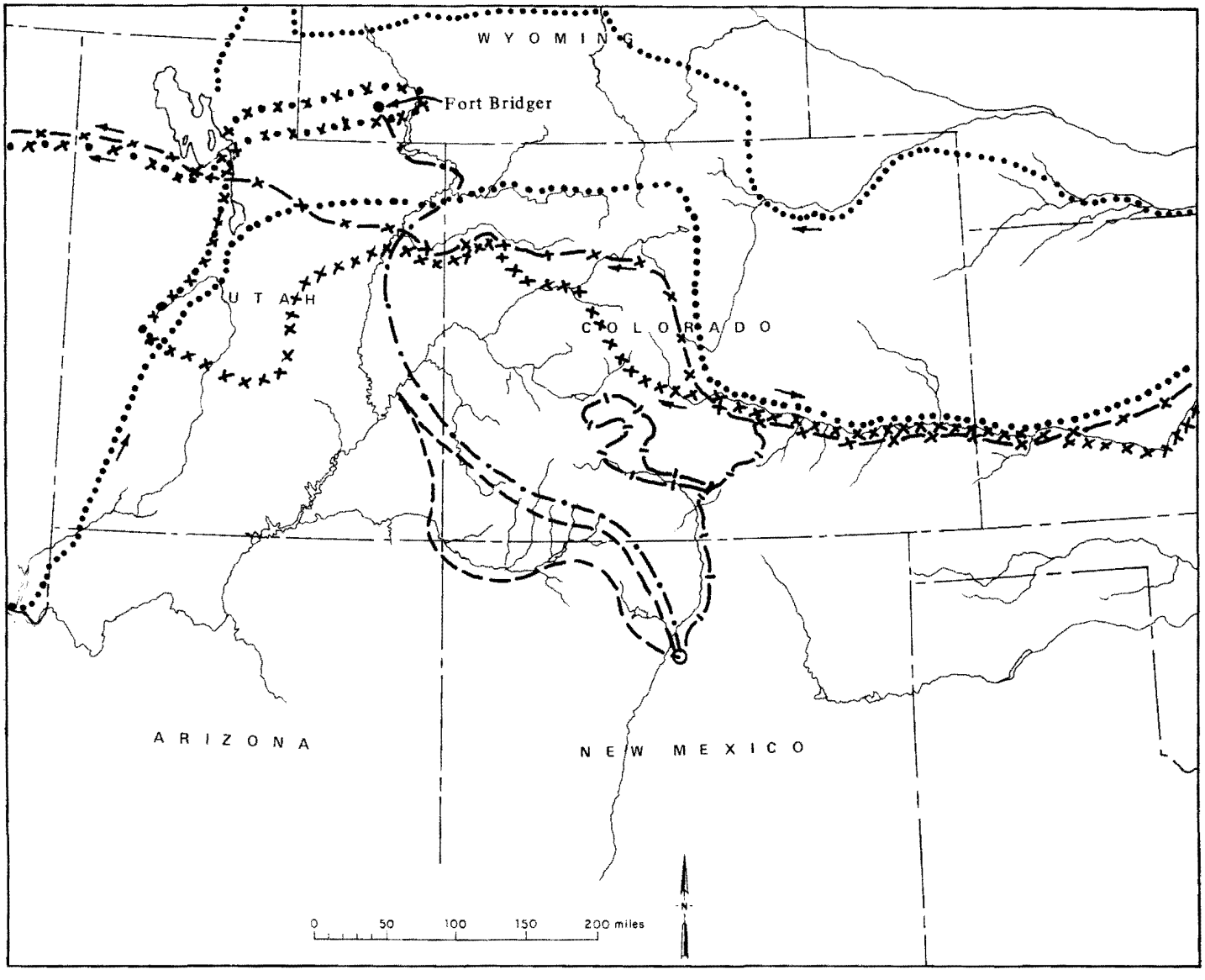
By an act approved March 3, 1853, Congress authorized the Secretary of War, under the leadership of President Franklin Pierce, to employ four engineering survey parties to find a practicable route for a railroad from the Mississippi River to the

Pacific Coast. In the instructions issued to Captain John Williams Gunnison, defining the purpose of the expedition, he was told to "explore and survey the pass through the Rocky Mountains in the vicinity of the headwaters of the Rio Del Norte, by way of the Huerfano River and Coo-che-to-pa [*sic*], or some eligible pass, into the region of the Grand and Green Rivers, and westwardly to the Vegas de Santa Clara and Nicollet River of the Great Basin; and thence northwardly to the vicinity of Lake Utah on a return route, to explore the most available passes and canyons of the Wasatch Range and South Pass to Fort Laramie".[12]

Gunnison launched his 38th parallel expedition from Fort Leavenworth, Kansas on June 23, 1853. The crucial phase of the expedition was the survey of Cochetopa Pass in southwestern Colorado, and the location of a railroad route westward out of the San Luis Valley. Near the end of August, after obtaining the aid of Antoine Leroux, Gunnison's party made a reconnaissance of the Robidoux Pass area in order to determine its feasibility as a more direct route from the Huerfano River. An initial survey of the pass concluded it to be impractical for a railroad and little better for a wagon route.[13] The exploration party moved westward through the San Luis Valley to Cochetopa Pass where several thorough reconnaissances were made. Lieutenant Edward G. Beckwith noted in his journal that "no mountain pass ever opened more favorably for a railroad than this".[14] The descent on the western slope of Cochetopa was made by way of Pass Creek and Cochetopa Creek, to the Gunnison River. Following the Gunnison River toward the Uncompahgre River, the party encountered numerous difficulties. Continually harassed by hostile bands of Ute Indians, and menaced by engineering obstacles presented by the Black Canyon, Blue Mesa, Fitzpatrick Mesa and the tough sagebrush hills west of the Lake Fork, Captain Gunnison became convinced that a transcontinental railroad through that region would be impractical as well as prohibitively expensive. Continuing west by southwest, Gunnison's party crossed Cimarron Creek, climbed over Cerro Summit, and reached the Uncompahgre River Valley. The expedition passed present-day Montrose, Olathe, and Delta, and then paralleled the Gunnison River to present-day Grand Junction.

From the Grand (Colorado) River, Gunnison marched across the Green River Valley, and over the Wasatch Mountains into the valley of the Sevier River. At this point Gunnison assumed that the major task of the expedition had been completed, and the danger from Indian attack was over, but early on the morning of October 26, a party of hostile Paiutes struck the camp. Only four men survived the raid, and Gunnison was included among the fallen. The massacre of Captain Gunnison and his command was the worst disaster suffered by the Army in the west up to that time, and the publicity it received was a severe blow to advocates of a central railroad route.[15]

Command of the expedition fell to Lieutenant E. G. Beckwith, and in completing a slightly altered version of the original route through Utah, he provided the link between the Topographical Corps' 1849 and 1850 reconnaissances of California and Wyoming made by Lieutenant William H. Warner and Captain Howard Stansbury respectively. In so doing, Beckwith anticipated the actual route taken by the first transcontinental railroad through Utah and Nevada.[16]



UNITED STATES GOVERNMENT EXPEDITIONS
INTO COLORADO

- •••••••• Fremont 1843-1844
- —x—x- Fremont 1845
- —|—|— Fremont 1848
- xxxxxx Gunnison 1853
- x•x•x•x Beckwith 1853
- —·——·· Marcy 1857-1858
- — — — Macomb 1859

Senator Benton and John Fremont were not idly watching the progress of the 1853 railroad surveys. As soon as the Senator failed to have Fremont appointed head of the 38th parallel survey party, he again arranged and financed a private expedition. Fremont was sent out into the field nearly on the heels of the Gunnison party, but he was again to meet grief in the San Juan Mountains. Before he reached civilization on the other side of the mountains, the "Pathfinder" saw his expedition disintegrate, and, on the verge of rescue one of his men perished, frozen in the snow. [17]

Although Fremont's fifth exploration of the west and his second in hopes of discovering a central railroad route had failed, Benton had a second ace in his hand. Backed by a substantial appropriation and the appointment of Edward Beale as the Indian Commissioner of California, Benton made yet another attempt to publicize the central route to the Pacific Coast. Beale accepted his appointment and planned to take with him his cousin, the journalist Gwinn Harris Heap, who was to keep a day-by-day account of their three month journey. As a result of the trip, following basically Gunnison's 38th parallel route, and which was in itself relatively uneventful, Heap produced a privately printed report which made the Cochetopa Pass route seem almost incredible in its economic possibilities. [18]

Despite the severe hardships encountered by the Fremont and Gunnison expeditions, much publicity was given to the central route to the Pacific. During the early 1850's, roads were established across the mountains, and periodically, emigrants to California traversed the basic route followed earlier by Gunnison and Beale. Taking advantage of the trail being blazed by the Gunnison expedition were two parties of California-bound immigrants, following about ten days behind. One was known as the Hildreth party, and the other was under the command of a Colonel Burwell. It is possible however, that these were two divisions of the same group. It has been suggested that the Hildreth party, implicated in the death of an old Parvain (Paiute) chief, was responsible for the attack on the Gunnison expedition.[19] In 1858, the first major wagon train followed much of the Colorado portion of the Gunnison route heading east. The train was made up of a military detachment under the command of Colonel William Loring, and included fifty wagons and about three hundred men. [20]

As a result of the Mormon War in 1857, a series of exploration parties were sent out with orders to locate trails which converged on the Mormon kingdom from all sides, and over which supplies might be sent to General Sidney Johnson's troops in southwestern Wyoming. Desperately in need of livestock and supplies, Johnson sent out Captain Randolph B. Marcy and 64 men south to pick up the provisions from Fort Union, New Mexico. With famed scout Jim Baker leading the way, the party camped near present-day Delta, Colorado in early December, 1857. The expedition soon ran into serious trouble as it moved east, paralleling the Gunnison River, on the way to Cochetopa Pass. Drifting snow deepened, 66 mules died, twelve men froze their feet, and near the top of the pass the desperate men ran into powder snow so light that the three or four men in the lead were forced to lie down and crawl so that the snow would pack. Stranded in the winter mountains of southwestern Colorado, and living on the meat of frozen mules, the Marcy resuce expedition was itself finally rescued in mid-January. At Taos, Marcy engaged the services of Antoine Leroux to guide the return mission back to Johnson's army. Avoiding the San Juans altogether, Leroux led Marcy's men down the San Luis Valley, over La Veta Pass, up the front range to Laramie, and then into southern Wyoming and Utah.[22]

If the desired purpose of Army and scientific exploration of the Rocky Mountains was to locate a practical railroad route for migration and commerce, the experiences of Fremont, Gunnison, and Marcy did not speak highly of the potential of southwestern Colorado. In 1859 and 1860, two further expeditions into the region occurred, both of which encountered hardships in the rugged mountain wilderness. The results of these explorations further postponed any ideas of permanent settlement in southwest Colorado until the mineral discoveries of the 1870's led to a renewed interest in the area.

In the summer of 1859, Captain John M. Macomb of the Topographical Corps led a party northward out of Santa Fe along the Old Spanish Trail. He crossed over to the headwaters of the San Juan River, and marched due west from the river past the southern edge of the Sierra de la Plata Mountains of southwestern Colorado. In the Montezuma Valley region, he and his men found the ruins of numerous ancient Indian villages.[23] His task was to discover if there was a practical railroad or wagon route through the San Juan River country into Utah, and on to the west coast. He found the country so difficult that he recommended against the construction. The Macomb expedition, brought the day of the Army explorer in southwestern Colorado to a close. The mountainous terrain obviously was not a good place to build a railroad, and the weather was too severe for permanent settlement. It was to be left to the unofficial explorers, the mineral prospectors, to bring the full potential of the region to light.

One such mining expedition was led by Captain Charles Baker, who brought a prospecting group into the Animas River Valley in 1860. This party, like the Army explorers who preceded it, was met with hardships and discouraged expectations. The prospectors camped in what was known as Baker's Park, the site of present Silverton, and began diggings. After reporting lucrative findings, the area underwent a minor rush of about 300 prospectors and treasure seekers.[24] Baker's reports however, were misleading. Placer prospecting proved inadequate to a task that only later lode mining could accomplish. Heavy winter snows, a continual battle against rugged terrain, and harassment by hostile Indians combined with the persistent reminder of Fremont's and Marcy's ordeals in the San Juans to put an end to active interest in the area for at least another decade.

The southwestern Colorado region proved initially unfavorable to the needs of early Anglo-American explorers and prospectors. The potential for a transcontinental railroad, permanent settlement, and even mineral wealth, spurred by discoveries in eastern Colorado in 1858 and 1859, seemed, at best, remote. The area did, however, continue to be particularly suited for its original inhabitants. The Ute Indians had long found the mountains and river valleys amenable to their way of life. With a resurgence of interest in mineral resources by 1870, American miners, prospectors, and settlers flocked to the region once spurned for its rugged environment. A new period of development was taking shape in southwest Colorado. Two decades of southwestern Colorado history, from 1860 to 1880, proved to be a series of cultural clashes over what way of life not only could, but would maintain a permanent hold in this expanding frontier.

NOTES

1. Carl Ubbelohde, Maxine Benson, and Duane Smith, *A Colorado History* (Boulder: Pruett Press, 1976), p. 43.

2. William H. Goetzmann, *Exploration and Empire* (New York: W. W. Norton and Co. Inc., 1966), p. 231.

3. For a history of the Corps of Topographical Engineers, see William H. Goetzmann, *Army Exploration in the American West, 1803-1863* (New Haven: Yale University Press, 1957), pp. 3-21.

4. Goetzmann, *Exploration and Empire, op. cit.*, p. 250.

5. Densil H. Cummins, "Social and Economic History of Southwestern Colorado, 1860-1948" (Ph.D. Thesis: University of Texas, 1951), p. 86.

   See also: Carl Abbott, *Colorado: A History of the Centennial State* (Boulder: Colorado Associated University Press, 1976), p. 50.

6. Marshall Sprague, *The Great Gates* (Boston: Little, Brown and Co., 1964), p. 142.

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8. Forbes Parkhill, *The Blazed Trail of Antoine Leroux* (Los Angeles: Westernlore Press, 1965), p. 164.

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13. Leland H. Creer, "The Explorations of Gunnison and Beckwith in Colorado and Utah in 1853", *Colorado Magazine* (VI, No. 5, September, 1929), pp. 184-192.

14. Duane Vandenbusche, *Early Days in the Gunnison Country* (Gunnison: B & B Printers, 1974), p. 10.

15. Goetzmann, *Exploration and Empire,* p. 287.

16. See: E. G. Beckwith, "Report of Exploration for a Route for the Pacific Railroad", *Pacific Railroad Reports,* Vol. II (Washington: Government Printing Office, 1853), pp. 113-114.

    See also: Goetzmann, *Exploration and Empire,* p. 288.

17. See: S. N. Carvalho, *Incidents of Travel and Adventure in the Far West with Colonel Fremont's Last Expedition* (Philadelphia: The Jewish Publication Society of America, 1954).

18. Vandenbusche, *op. cit.,* p. 15.

19. Parkhill, *op. cit.,* pp. 169-170.

20. Vandenbusche, *op. cit.,* p. 20.

21. Goetzmann, *Exploration and Empire,* p. 306.

22. Vandenbusche, *op. cit.,* p. 13.

23. Cummins, *op. cit.,* p. 204.

24. Frank Hall, *History of the State of Colorado,* Vol. II (Chicago: Blakely Printing Co., 1890), p. 192.

    See also: Richard Bouts, "Lake City to Silverton: A Historical Narrative for the American Flats Planning Unit". Manuscript, Bureau of Land Management, Montrose, Colorado, 1977, pp. 20-21.

CHAPTER V.

THE UTES IN SOUTHWESTERN COLORADO: A CONFRONTATION OF CULTURES

The period immediately following Army explorations in the 1850's can be characterized as one of cultural transition, the decline of one way of life, and the advance and dominance of another. For centuries prior to 1860, the Ute Indian inhabitants of southwestern Colorado maintained seasonal hunting grounds and a wandering way of life with only nominal interference from European and American explorers, trappers, traders and neighboring Indian tribes. A lack of interest in southwestern Colorado as an area for American expansion in the 1840's and 1850's limited intrusions upon the Ute domain. Yet the two decades following 1860, the period of numerous mineral rushes to Colorado, were attended by such large migrations into the territory that the Utes faced the nearly impossible task of maintaining their existence. Early mining history in southwestern Colorado and the decline of Ute Indian culture are so interwoven that they are almost the same story.[1]

The lure of mineral wealth effectively opened the gates of the southwest Colorado frontier, and with subsequent mining expeditions that penetrated the area's mountain barriers came attendant settlement. Mining in southwestern Colorado was not of the transitory placer-type that characterized early activity in the central Rockies. In order to effectively extract the mineral wealth in the mountains, lode mining techniques were essential. The result was a need for large machinery, a substantial labor force, advanced milling works, and transportation. Hence the early mining period in the region brought with it, very early, an urban situation.[2] Displaced from their ancestoral hunting grounds and restricted in their movements by a series of treaties, the Utes increasingly felt, in the 1860's and 1870's, the weight of the advancing mining frontier. The inundating forces of Anglo-American civilization came with such momentum that the domain of the Utes was quickly transformed from an isolated wilderness to one teeming with excitement and many of the attributes of the more settled Front Range.[3]

The conflict which resulted from Ute resistance to the advancing mining frontier was basically a dispute over the "proper" use of the region, rather than one determined by reasons of race. The transition in the occupation of southwestern Colorado that occurred in the years from 1860 to 1881 can be viewed as a series of events shaped by this basic antagonism. Yet to understand the transition, it is necessary to review briefly the "pre-reservation" history of the Ute Indians, and contacts with the Spanish settlements in New Mexico prior to the entrance of American mining interests into the region.

Documentary history of the Ute Indians of Colorado begins with available records of the Spanish administration in New Mexico. Initial interaction between these two cultures came as a result of a gradual movement north, from Mexico, of a Spanish colonial frontier in the years from 1540 to 1580.[4] The Utes, before this time, had made contact with the pueblo villages of New Mexico, and were accustomed to wintering in the area. Throughout the early Spanish colonial period in the southwest, the Ute, together with the Apache, were reported in Spanish chronicles as being in close vicinity to the Spanish frontier. The Ute however, unlike the Apache, did not regard the centers of Spanish influence as encroachments upon their own territorial rights, and because of this, early Ute relations with the Spanish were peaceful.[5] One aspect of these early relations greatly influences the development of Ute culture well into the "reservation" period.

The introduction of the horse into Ute culture around 1640 immeasurably altered the lives of these mountain Indians.[6] Prior to this time, individual Ute families spent each summer and fall hunting deer and elk in the mountains, and gathering nuts and berries. Usually wintering in the river valleys of western Colorado, they assembled briefly into larger bands each spring before spreading out again in search of food.[7] By the mid-seventeenth century, hunting efforts were conducted on horseback. Utes pursued buffalo on the eastern plains in the summer and early fall, and returned to the San Luis Valley or the Uncompahgre River Valley in the early winter months with more than enough meat and skins to feed and clothe their families. The creation of an economic surplus through these more efficient hunting methods made it possible for scattered families to group together in larger bands under stronger leadership.[8] Band consolidation, initially an economic function for providing food and shelter also had military implications. Increased mobility, afforded by the horse, took the Utes into the territory of the Plains Indian tribes, where contested hunting privileges often led to inter-tribal warfare. As the use of horses for hunting and raiding became widespread in the latter half of the seventeenth century, the seven bands of Utes, with which we are familiar today, were formed. The Weeminuche, Capote, and Mouache bands were centered primarily in the San Luis Valley. The Tabeguache, or Uncompahgre, band was based along the Gunnison and Uncompahgre Rivers. The Grand River, Yampa, and Uintah bands were localized in northwestern Colorado.

In order to extend the range of hunting, the Ute bands sought to obtain horses through trade with Taos and Santa Fe. In the latter half of the seventeenth century, the Utes developed peaceful relations with the New Mexican settlements, despite the growth of Spanish military power on the boundary of the Ute domain. In 1675, New Mexico's Governor Miguel Otermin entered into a treaty with the southern Ute bands to fight the traditionally hostile Apache; in the years following, they were used to quell recurring Pueblo disorders. Still later, the Uter served the same function as allies in the Spanish wars against the Commanche. Peaceful barter, especially for horses, paved the way for these alliances.

The process of Ute Indian band consolidation and extended hunting patterns on the eastern plains intensified around the turn of the seventeenth century with the appearance of the Commanche in the region of west Texas. As a result of the Commanche migration, new incentives drew the Ute further onto the plains.

The Commanche were rich in horses. With mobility among the Utes increased, a new supply of horses could be obtained more cheaply than through trade with the Spanish. The years 1727 through 1786 were attended by constant warfare between the Ute and Commanche. Throughout this period, as well, the Spanish-Ute alliance was strengthened.

The eighteenth century was, for the Utes, one of territorial expansion and band consolidation, and peaceful contacts with Spanish and New Mexican traders. Yet at the time when the Utes were expanding their hunting territory to the south and east from southwestern Colorado, they found themselves hemmed in because of massive movements of Commanche, Kiowa, Cheyenne and Arapaho along the eastern plains.

What had been a period of expansion and consolidation in the eighteenth century changed dramatically by the beginning of the nineteenth century. The gradual shrinkage of the Ute domain through the large movements of other tribes, and the increase of Spanish military power in New Mexico served to impede band mobility and limited the utilization of natural resources, such as the buffalo on the eastern plains. That the Spanish perceived a growing threat to their New World holdings in the southwest at this time, as a result of her European rivals' intentions is significant. Content to maintain rather than extend their northern borderland, the Spanish left control of the southwestern Colorado frontier to its native inhabitants.

During the first half of the nineteenth century, while Spanish and Mexican authority in the southwest diminished, the extent of Ute territorial hunting grounds declined as well. The process of territorial loss, for the Utes, was well established by the beginnings of the Anglo-American contact period. At the time of the acquisition of the southwest by the United States, following the Mexican War in 1848, the area of Ute Indian occupation closely resembled the present outlines of the state of Colorado and the eastern half of Utah.

The American conquest of New Mexico did not, at first, involve any change in the peaceful disposition of the Ute toward their Anglo neighbors, but this attitude was more the result of inferior military strength than any desire to welcome American domination.[9] Within a month after the Army's entrance into New Mexico, in 1846, William Gilpin, who fifteen years later became Colorado's first Territorial Governor, was sent north from Santa Fe to quell Navajo disturbances in the San Juan River area and to confer with the neighboring Utes.[10] On December 30, 1849, the first official treaty between the Utes and the United States was negotiated at Abiquiu, New Mexico by James S. Calhoun, the first Indian Agent for New Mexico.[11] An agency was opened at Taos the following year. By this treaty the Utes recognized the sovereignty of the United States, and agreed not to depart from their accustomed area without permission. By 1853, with Kit Carson as agent, the Taos agency served the Mouache and Capote bands. The Weeminuche band was highly individualistic however, and did not fall under effective control. The Tabeguache Utes heard of rations being allotted to their relatives and went to Taos in 1856. Agent Carson recommended that an agency for the Tabeguache be set up closer to their lands but his request was not acted on by the United States for several years. During the early period of United States relations with the Utes of Colorado, the chief objective of the federal government and the Army was to insure peace in the newly acquired areas, especially as it concerned the raiding Apache and Navajo. The Treaty of 1849 developed from this attitude, yet no boundaries were set that would limit the range of the Ute territory. Colorado remained after all, according to the Army exploration reports of Captain Gunnison, a territory unsuitable for Anglo-American settlement; and reservation control of the Indian inhabitants was not deemed appropriate.

In 1858, just five years after the fateful Gunnison expedition, gold was discovered near the present site of Denver, and with that find hordes of treasure seekers entered the central region of Colorado. The emigrant-miner population increased so rapidly that the Territory of Colorado was organized in 1861. Territorial Governor, William Gilpin, was appointed Superintendent of Indian Affairs within the Territory, and thus, the Utes came under local control. In 1861, an agency was opened at Conejos, Colorado,

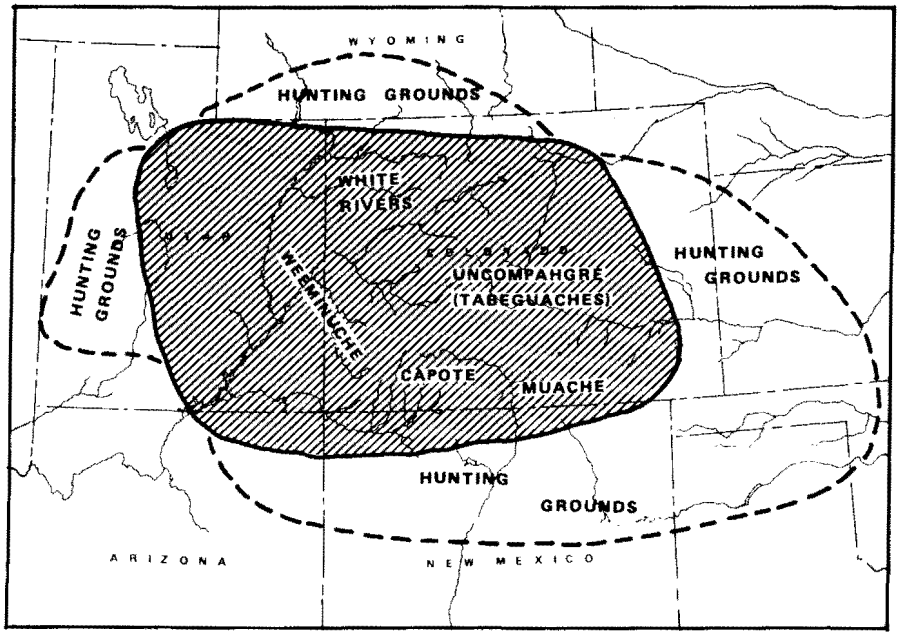
75 miles south and slightly east of present Gunnison and refused to go any further. To avoid trouble, the officer in charge directed that the agency be built where the band wanted it, and so it was that the Los Pinos Agency was placed off the reservation boundary and not on the Los Pinos River, deep in the San Juan country. To avoid confusion and to conform to the name of the stream designated in the treaty, the tributary of the Cochetopa Creek was named Los Pinos Creek.

Travel to the Los Pinos Agency from Saguache, Colorado, 70 miles southeast of Gunnison and the nearest supply center, was difficult. Eleven days, even under the best conditions were needed to supply the agency, and often that schedule could not be met. The transportation problem led to the establishment of a supply point or "cow camp" in 1871, located just west of Gunnison near the juncture of the Gunnison River and Tomichi Creek. Josiah White, aided by James Kelley, took charge of the camp, which became the first location for cattle and sheep ranching in the area, the first stock numbering 640 head of cattle and 1,160 sheep. [16]

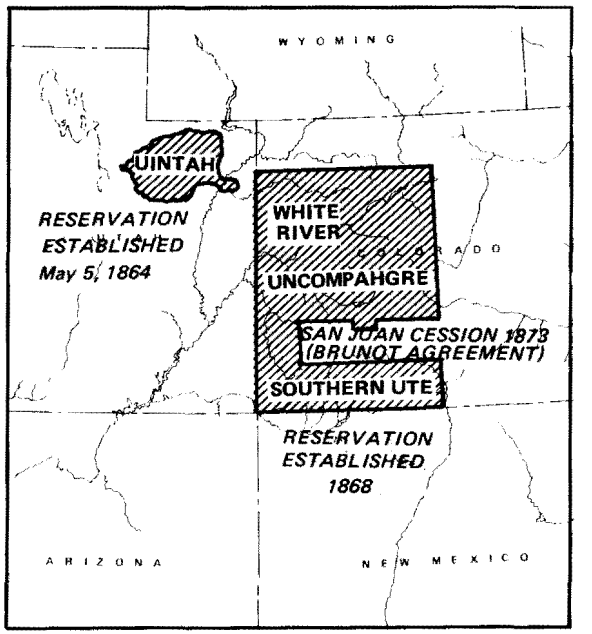
Despite the fact that by 1868, all the land in southwestern Colorado had been established as part of the Ute Indian Reservation, miners and prospectors continued to enter the region. When minerals were located in the San Juans, and in the Gunnison country, near what was to become the Tin Cup mining district, the Los Pinos Agency actually became a way-station for these acts of trespass. By 1872, the federal government directed troops to maintain the terms of the 1868 Treaty, but the tide of miners and new settlers could not be stemmed. As a result of persistent mineral locations in southwestern Colorado, Coloradans pushed for a revision of the 1868 Treaty.

Felix Brunot, United States Commissioner of Indian Affairs, Charles Adams, United States Indian Agent, with interpreter Otto Mears, a man who further opened the southwest Colorado frontier at this time through the construction of a network of toll roads, finalized negotiations for another Ute land cession on September 13, 1873. [17] The Brunot Treaty or the San Juan Cession as it was often called, removed 4,000,000 acres of land in the San Juan country from the Ute Reservation. The valley lands were retained by the Utes as part of the treaty agreement. The Brunot Treaty was of ultimate historic significance, for with the Utes gone from this rich region, thousands of miners and settlers rushed into the San Juan Mountains and established Silverton, Lake City, Rico, Ouray, and dozens of other camps in every promising gulch and mountain valley. [18] The result was the opening of southwestern Colorado's silver-laden San Juan country to permanent settlement. With the excitement and the building of permanent communities, it was not long before these early prospectors and entrepreneurs set their sights on the surrounding territory with the thought that only the Indian stood between them and potential wealth.

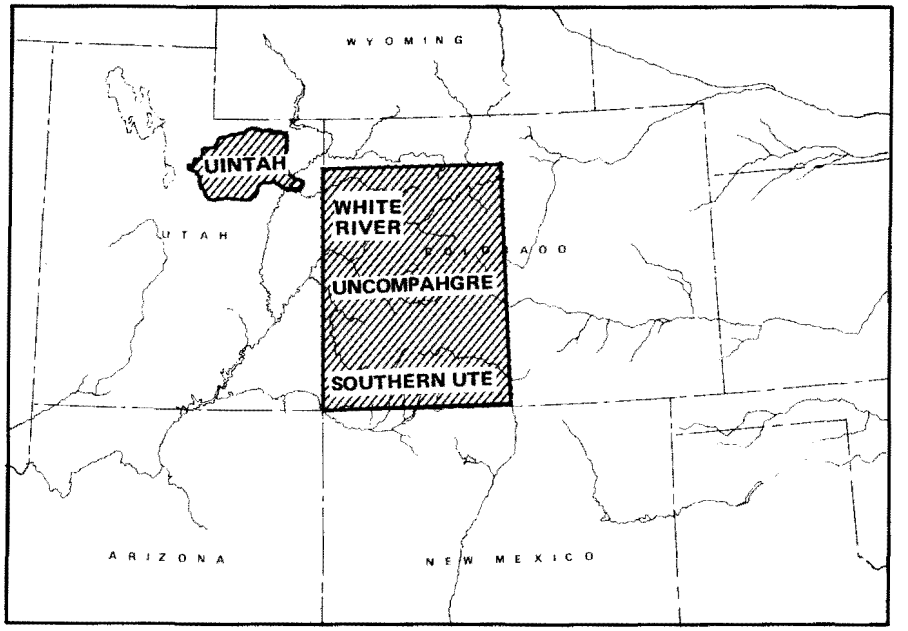
By the summer of 1875, as a result of increased settlements near the Los Pinos Agency and with a threat of hostility, orders came from Washington, D. C. to remove the Utes under that agency's supervision farther west, to the Uncompahgre River Valley where the second Los Pinos Agency was established, near the present village of Colona, Colorado, twelve miles south of modern day Montrose. [19] The 1,200 head of government cattle were herded from the Taylor Park region to where Cow Creek flows into the Uncompahgre River, about seven miles to the south of the new



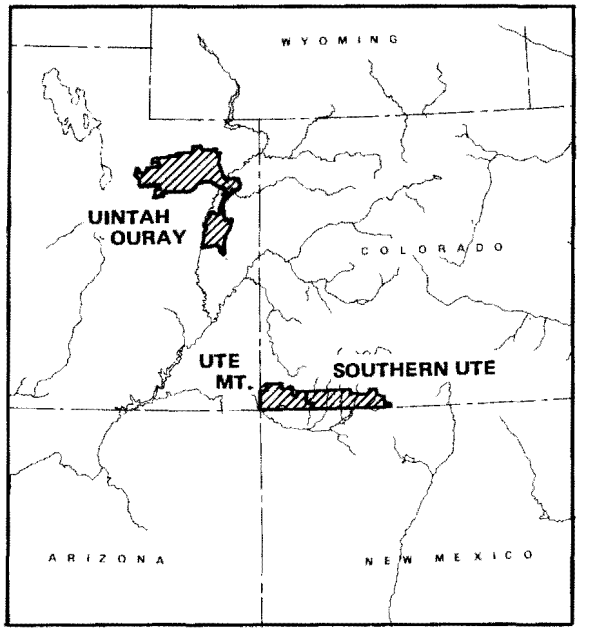
ORIGINAL UTE DOMAIN



UTE INDIAN TERRITORY 1873



UTE INDIAN TERRITORY 1868



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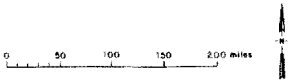


Colorado-Utah map illustrating the stages of Ute removal from southwestern Colorado (Delaney, 1974).

agency site. Transfer of equipment from the Los Pinos Agency to the Uncompahgre River site over seventy-five miles of rugged terrain was no easy matter. It took twelve men, four wagons, nine yoke of oxen, and one mule team three weeks to remove the sawmill. Hundreds of Indian ponies, heavily loaded with belongings, took part in the evacuation. The final removal to the Uncompahgre Agency was completed by November, 1875. [20]

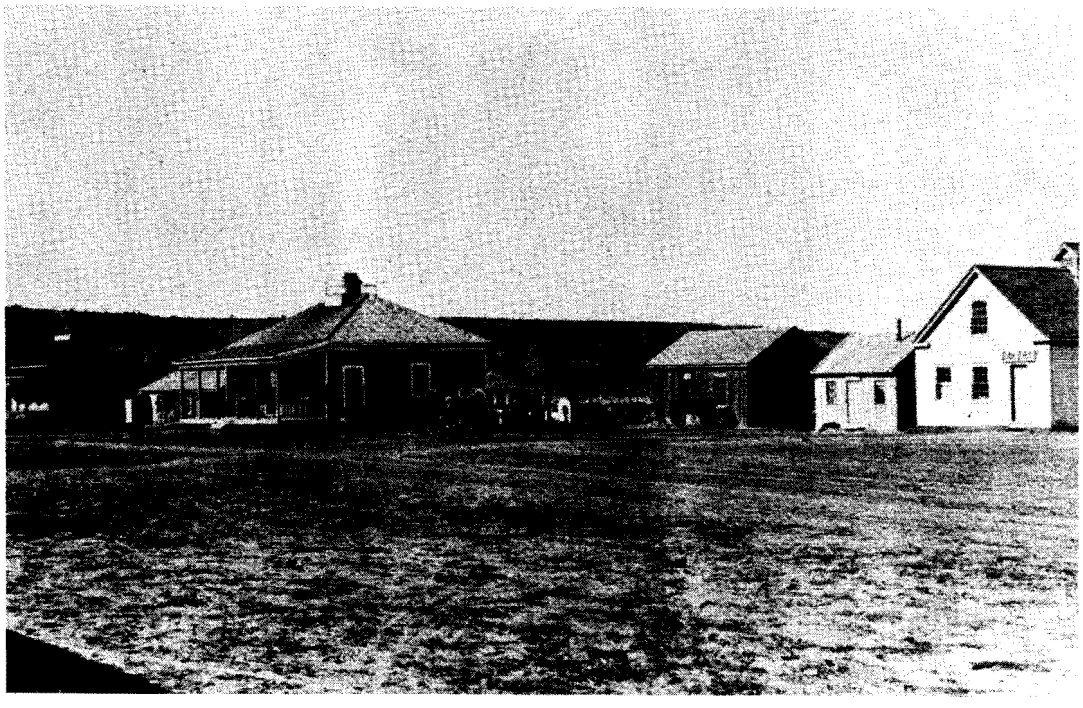
Thought to have reconciled Colorado miners and adequately compensated the Utes, the Brunot Treaty served only to compound the disputes over territorial rights. The ceded land, due to its desirability, and adjacent Ute reservation land, were trespassed time and again by Indians and Anglo-Coloradans alike. The Utes, reluctant to give up their established hunting and gathering grounds, continued to roam at will throughout the San Juan country even after the implementation of the Brunot Treaty. They became increasingly hostile as the number of settlers multiplied and more of the rich valley lands were taken up. In the mountains where farms were not practical, settlers brought in cattle to graze on the rich, abundant grass lands. The cattle competed with wild game, and diminished one source of the Utes' food supply. Coloradans violated the Treaty of 1873 as well, by trespassing on reservation lands along the Colorado-New Mexico border. Southern Utes reacted bitterly as herds of cattle were driven from both north and south across the reservation, eating most of the sparse pasture. In order to prevent open warfare, a military post was built near present Pagosa Springs in 1878. Fort Lewis, garrisoned on October 17, 1878, with about one hundred men in order to safeguard the terms of the Brunot Treaty, was positioned where the Indian and military trails crossed the San Juan River.[21] Realizing the threat of hostility, plans were underway to restructure the southern portion of the reservation in order to ensure a more tranquil co-existence between Utes and Coloradans. Before any such plans could be implemented however, events at the White River Agency in northwestern Colorado, on September 30, 1879, determined a more significant reconstruction of the Ute Reservation boundaries.

The Thornburgh ambush on Milk Creek, the murder of Agent Nathan Meeker and ten other males at the White River Agency, and the kidnapping of five females, including Mrs. Meeker and her daughter was seen as a foreshadowing of a general Ute uprising in western Colorado. However, appeals made by Chief Ouray to Ute warriors to lay down their arms, and the dispersal of Army troops to the agency and surrounding posts immediately returned a semblance of order. Following the massacre, General Phillip Sheridan ordered one thousand troops to the White River Agency on October 11, 1879; and six companies, under the command of Colonel R. S. Mackenzie, were directed north, from Texas, to Fort Garland in the San Luis Valley.[22] Earlier, on October 8, 450 men under Colonel Edward Hatch, commissioner of the United States Indian Bureau, reinforced the garrison at Fort Lewis. Acting on reports that southern Ute tribes would attempt to join the rebellion in northwestern Colorado, Hatch's command immediately departed from Fort Lewis with orders to occupy Animas City. [23]

The Meeker Massacre, while it illustrated the height of Ute-Anglo hostility, symbolized the incompatibility of the two cultures in western Colorado. The advancing mining frontier and the accustomed Ute way of life simply could not co-exist. Coloradans viewed potential mineral and agricultural resources going to waste as Ute

hunting or reservation lands. The Denver *Times* put it bluntly: "Either they [the Utes] or we must go, and we are not going. Humanitarianism is an idea, Western Empire is an inexorable fact." [24] Thus, the Meeker Massacre became the pretext on which Coloradans sought the removal of the Utes from their ancestoral hunting grounds on the western slope. More than to rid themselves of the threat of Indian hostility, they saw an opportunity to gain access to potentially valuable land held by the Ute people.

Early in 1880, a delegation of Utes, headed by Ouray, was escorted to Washington D. C., and on March 6, 1880, yet another treaty was put together. By the terms of this agreement, arrived at after long negotiations with the Utes and internal squabbles amongst the appointed commissioners, the Northern and Uncompahgre Utes were to be removed west to the Utah territory on the Uintah and Ouray reservations respectively. In May of 1880, in order to affect the removal of the Uncompahgre Utes from Colorado, Colonel Mackenzie was ordered to move the nine companies of infantry and six companies of cavalry under his command north from Fort Garland to the Uncompahgre Valley. While maintaining a temporary camp near the agency site, Mackenzie's men were directed to survey for a more permanent post. This site was established on July 21, 1880 on the west bank of the Uncompahgre River, about four miles north of the agency and eight miles south of present Montrose. Anticipating no trouble during the winter, Mackenzie withdrew his cavalry and four companies of infantry to Fort Garland, leaving the remaining soldiers to begin construction of the new post. [25] The "Cantonment on the Uncompahgre", to be renamed Fort



Photograph of Fort Crawford, "The Cantonment on the Uncompahgre", showing the camp's bakery, hospital, and guard house.

Denver Public Library, Western History Department

Crawford in 1886, was completed by the summer of 1881, just prior to the final removal of the Utes from Colorado.

On September 7, 1881, under Mackenzie's supervision, the last band of Utes left Colorado. By the Treaty of 1880 the Southern Utes, having taken no direct part in the White River hostilities, were allowed to remain on their reservation on the strip of land approximately fifteen miles wide by one hundred miles long across the southwestern corner of the state. This inhospitable country was made up of only sparse pasture and a great expanse of "drylands", a domain attractive to neither farmer nor miner. In June of 1882, Congress opened six million acres of former Ute land to public settlement, an act of legislation that proved to be of major significance for the future of southwestern Colorado.[26]

In a period of twenty years from the establishment of the Colorado Territory, the Ute Indians witnessed the rapid diminution of their domain. The removal of the Utes from the Western Slope, rather than retribution for acts perpetrated against Anglo-Coloradans, was emblematic of the crushing weight of an advancing mining frontier in southwestern Colorado. This mining frontier, fundamental as it was to the Ute removal in 1881, played an even more crucial role in the future determination of the region's development and occupation.

NOTES

1. Carl Ubbelohde, Maxine Benson, and Duane Smith, *A Colorado History* (Boulder: Pruett Press, 1976), p. 181.

2. Robert G. Athearn, *The Coloradans* (Albuquerque: University of New Mexico Press, 1976), p. 136.

3. See: Duane Smith, *Rocky Mountain Mining Camps* (Bloomington: Indiana University Press, 1977).

4. Carl Abbott, *Colorado: A History of the Centennial State* (Boulder: Colorado Associated University Press, 1976), p. 25.

5. For excellent background material concerning Ute culture on the southwestern United States' frontier, see: Marvin K. Opler, "The Southern Ute of Colorado", in: *Acculturation in Seven American Indian Tribes* (New York: D. Appleton-Century Co., 1940).

6. For a general discussion of the importance of the horse to Ute culture see: LeRoy R. Hafen, *Colorado: A Story of the State and Its People* (Denver: The Old West Publishing Co., 1945), p. 52.

   See also: Eleanor Ritchie, "General Mano Macho of the Utes and Spanish Policy in Indian Relations", *Colorado Magazine* (IX, No. 4, July, 1932), p. 150.

   See also: Opler, *op. cit.,* p. 171.

   See also: Abbott, *op. cit.,* p. 27.

7. Duane Vandenbusche, *Early Days in the Gunnison Country* (Gunnison: B & B Printers, 1974), p. 3.

8. Abbott, *op. cit.,* p. 27.

9. Opler, *op. cit.,* pp. 160-175.

10. Hafen, *op. cit.,* p. 130.

11. One of the more authoritative histories of the Indian in the American Southwest is: Edward E. Dale, *The Indians of the Southwest* (Norman: University of Oklahoma Press, 1949). For a discussion of early United States relations with the Utes of Colorado, see pages 47-51.

12. For an informative treatment of the history of United States-Ute treaties see: Robert W. Delaney, *The Southern Ute People* (Phoenix: Indian Tribal Series, 1974), pp. 40-52.

13. Vandenbusche, *op. cit.*, p. 31.

14. Wilson Rockwell, *The Utes: A Forgotten People* (Denver: Sage Books, 1956), p. 72.

    See also: Vandenbusche, *op. cit.*, p. 32.

15. Wilbur Fisk Stone, *History of Colorado,* Vol. I (Denver: S. J. Clarke and Co., 1918), p. 77.

    See also: Delaney, *op. cit.*, p. 51.

16. Vandenbusche, *op. cit.*, pp. 32-34.

17. United States Department of the Interior, *Letter From the Secretary of the Interior in Relation to an Agreement Concluded with the Ute Indians in Colorado, September 13, 1873,* Ex. Doc. No. 53, January 12, 1874.

18. Vandenbusche, *op. cit.*, p. 41.

19. Sidney Jocknick, *Early Days on the Western Slope of Colorado* (Denver: The Carson-Harper Co., 1913), p. 82.

    See also: Rockwell, *op. cit.*, p. 106.

20. Rockwell, *op. cit.*, p. 107.

21. Mary Ayers, "History of Fort Lewis, Colorado", *Colorado Magazine* (VIII, No. 3, May, 1930), p. 82.

22. Richard Ronzio, "Fort Crawford on the Uncompahgre", *Denver Westerners Brand Book,* 1963, pp. 256-257.

23. John Nankivell, "Fort Crawford, Colorado, 1880-1890", *Colorado Magazine* (XI, No. 2, March, 1934), pp. 54-64.

    See also: Ronzio, *op. cit.*, p. 256.

24. Quoted in Dudley Taylor Cornish, "The First Five Years of Colorado's Statehood", *Colorado Magazine* (XXV, September, 1948), p. 221.

    See also: Ubbelohde, *op. cit.*, p. 187.

25. Ronzio, *op. cit.*, pp. 257-262.

26. Athearn, *op. cit.*, p. 137.

CHAPTER VI.

EARLY MINING AND TRANSPORTATION IN SOUTHWESTERN COLORADO 1860-1881

Few Americans in 1848, at the conclusion of the Mexican War, realized or even dreamed of the vast mineral potential of the territories they had so recently wrested from their Mexican neighbors.[1] Fewer still would have thought that southwestern Colorado, an area spurned because of its rugged terrain, severe winter climate, and hostile Ute Indians, would be crisscrossed by miners and prospectors, and that permanent settlement would be so rapid. From the beginnings of the "Territorial period", in 1861, southwestern Colorado was a mineral resource frontier that invited exploitation. Its early history was based solely on the search for gold and silver. Agriculture and ranching in this early period were seemingly afterthoughts, for not until the Utes had been driven from the fertile valleys of the Gunnison and Uncompahgre Rivers would any impetus be given to large-scale agricultural production.

The history of early southwestern Colorado mining, up to the Ute removal in 1881, can be summarized by three basic stages: early gold placer mining near Baker's Park, and in the Tin Cup mining district during the early 1860's; the era of silver mining along the Animas River around Silverton and in the Elk Mountain region of modern Gunnison County during the early 1870's; and the development of hard-rock mining throughout the San Juan country, along with the growth of the Gold Brick mining district on Quartz Creek, near present-day Pitkin in Gunnison County, in the late 1870's and early 1880's.

In 1858 and 1859, the first Colorado Gold Rush took place when the William Green Russell party found "colors" while prospecting along Cherry Creek, Ralston Creek, and Newlin Gulch, near present Denver. In July, 1859, at the Gregory diggings near Blackhawk, the first "arrastra", a Spanish ore-crushing device, was built. At the same time, placer gold was found and worked at Buckskin, Mosquito, Hamilton, Tarryall, Montgomery, and Fairplay on branches of the South Fork of the South Platte River, in the northeast section of South Park.[2] In 1860, a second and larger rush into the central Rockies occurred. Most prospectors headed to the Gregory diggings near Central City, which, being overcrowded, caused the diffusion of miners in all directions.

Outfitted in California Gulch, a prospecting party led by Charles Baker, acting on persistent rumors of mineral wealth in the San Juan Mountains, moved into that rugged region during the spring of 1860. Reports of rich finds made their way back to the more established camps, and several hundred eager treasure seekers followed Baker to the San Juan country in the upper Animas River Valley. In April 1861, prospectors spread out from "Baker's Park" and began diggings nine miles north in Eureka Gulch.[3] Baker's earlier reports had, by this time, proved misleading, for placer operations were not effective in bringing satisfactory returns. In May of 1861, the camp at Baker's Park broke up and many of the prospectors moved south to the fertile Animas River Valley. Animas City was laid out and several buildings were constructed. Most of the prospectors gave up however, and with the outbreak of the Civil War many of these early miners, Baker included, were drawn into service for the Confederacy.[4] Despite the lack of substantial discoveries on the first major prospecting expedition into the San Juan mining district, it was apparent that southwestern Colorado's mineral resources were located in a broad belt that stretched diagonally across the territory from the San Juan country in the southwest to the Elk Mountains along the Continental Divide, in the northeast.

Gold was first discovered in the Tin Cup District of present Gunnison County when in 1860 Jim Taylor, and then in 1861 Fred Lottis, led parties across the Continental Divide from Granite, Colorado, and worked placer gold fields in the region.[5] Evidence of early mining activity was apparent near present Waunita Hot Springs, approximately twenty-five miles east of Gunnison, where rotted flumes used in earlier placer mining were discovered in the 1870's.[6] The first true mining camp in the Gunnison country, Minersville, in Washington Gulch just north of the present day town of Crested Butte, had a population of about two hundred in 1861. During 1862, nearly one thousand prospectors swarmed into the area and took out close to a million dollars in gold by placer mining.[7] By 1863, with the placers played out, and due to the increasing hostility of the Utes, most of the camps were deserted. Not until 1872, when discoveries of silver-bearing rock were made in the Elk Mountains, would large scale mining operations in the area resume.[8]

Little in the way of mineral exploration took place in southwestern Colorado during the mid-1860's because of diminished placer gold deposits and the absence of permanent settlement in the region. Yet the fact that mining had been undertaken on the western slope served as a constant reminder of potential mineral wealth. Although Baker's Park and the San Juans were well within the boundaries of the Ute Reservation, (established in 1868), efforts to prospect the region resumed in 1869. This time prospectors came from the west, when Adnah French and Dempsey Reese, coming from Arizona, prospected along the Dolores River. By 1870, they reached the Animas River, moved into Baker's Park, and began diggings near present Silverton.[9] At the same time a party composed of Sheldon Shafer and Joe Flarhieler, travelling along the Dolores River on their way to Montana from Santa Fe, located what is now part of the Shamrock, Smuggler and Riverside lodes of the Atlantic Cable Group, which they named The Pioneer. [10]

In 1870 and 1871, two major discoveries in the San Juan region caused further mining excitement. The location of the Little Giant Mine in 1870, on the north side of Arrastra Gulch about four miles northeast of modern day Silverton, and the discovery of rich silver veins along Henson Creek that were to comprise the Ute and Ulay lodes just west of present day Lake City, brought prospecting parties into the area. [11]

During the early 1870's, numerous mining expeditions searched the Elk Mountains between present day Crested Butte and the mouth of Rock Creek. The Benjamin Graham and the George and Lewis Waite parties both prospected in and around the Schofield Pass and Crested Butte areas, where silver deposits were located. Jim Brennan, a miner from Denver, became intrigued by the tales of mineral wealth in the Elk Mountains. In 1872, he led a small group of treasure seekers into the rugged Elk range and found fissure veins, which were reported to be of enormous size. The rumors of large ore bodies that followed such prospecting expeditions as Waite's, Graham's, and Brennan's led to the first scientific mineral exploration of the Gunnison country. [12] Doctor John Parsons, in 1873, explored the mineral and agricultural resources of the area with the intention of erecting an ore reduction plant on Rock Creek. Accompanying Parsons was a geologist, Sylvester Richardson, who discovered silver along Spring Creek, east of modern Crested Butte and also large coal deposits west of that future town, along Ohio Creek. Based on the quality and extent of the minerals he located, Richardson intended to establish a settlement with easy access to those discoveries. This early plan climaxed in the building of Gunnison City some years later.[13]

Mining in southwestern Colorado during the early 1870's, as had been the case in the 1860's, was basically exploratory. The one difference was the realization that the location of the region's mineral resources, rather than in gold placer deposits along the streams and rivers, lay in veins, deep within mountainous terrain. Despite the richness of the discoveries and the establishment of numerous mining camps in southwestern Colorado during the early 1870's, several years passed before the prospecting pioneers were bold enough to winter or face the ever present threat of Indian attack within the region. Through the early 1870's, miners, each fall, retreated east across the Continental Divide from the San Juans, wintered in Del Norte or Saguache, Colorado, and then returned in the spring to resume work on their claims. To most miners, however, limited and seasonal operations were unacceptable. Transportation routes, advanced mining equipment, and permanent settlements were needed.

The potential mineral resources of the San Juan region received widespread attention across the Colorado Territory after initial gold and silver veins were located in the years from 1869 to 1871. Beckoning mineral wealth knew no boundaries however, and the Ute Reservation on the western slope was the scene of continual trespass during this period. To hold back the ever increasing tide of prospectors who flooded to the area was an impossible task. By 1873, Coloradans pressed for a revision of the 1868 Ute Indian Treaty, which legally barred entrance to the southwestern Colorado mining frontier. The Brunot Treaty, enacted in 1874, opened four million acres in the heart of the San Juans to impatient treasure seekers and settlers. During the next two decades, prospectors made the ceded lands the scene of one mining rush after another. Ironically, immediately following the opening of the San Juans, the Indian Agency at Los Pinos Creek in Cochetopa Park became a way-station for many of the migrating prospectors. From the agency, came a story of one such prospecting party, a story which continues to be a source of interest and amazement.

In January of 1874, a party of twenty-one men, on their way to the central Rocky Mountain gold fields from Utah, stopped near present day Montrose at the encampment of Chief Ouray. Despite Ouray's warnings of severe winter weather ahead, six men, Israel Swan, Frank Miller, George Noon, James Humphrey, and guide Alfred Packer, left the camp and continued eastward. On April 16, 1874, Packer arrived at the Los Pinos Agency alone, claiming to have been abandoned by the others. Packer related his tale of hardship, suffering, and near starvation, yet he looked healthy and well-fed for a man who had endured such a harrowing ordeal. Shunning offers of food, Packer requested liquor for his first meal, a suspicious action to the agency dwellers. The guide's conduct, while at the agency, continually invited suspicion to the point where Agent Charles Adams accused Packer of killing and robbing the five prospectors. Under pressure, Packer confessed to the killings. In June of 1874, while passing near present day Lake City, *Harper's Weekly* photographer, J. A. Randolph, stumbled onto the bodies of the five slain men. A shanty was found near the spot, and leading from it to the bodies was Packer's well-worn trail, showing that he had made frequent visits to his victims and had subsisted on their flesh. Today, a monument and plaque commemorates the five "who were murdered early in the year 1874 while pioneering the mineral resources of the San Juan country". Packer never paid in kind for his gruesome deeds. After having his death sentence reversed and another forty-year sentence commuted, Packer died in Littleton, Colorado on April 23, 1907, allegedly a confirmed vegetarian.[14]

During the mid-1870's many Coloradans, concerned over the falling population of the central Rockies and along the Front Range, began to advertise the Territory. In a climate of "boosterism", people such as Ovando Hollister, in his *Mines of Colorado,* publicly stated beliefs that a new era was soon to dawn on Colorado, and that to exaggerate on the subject of mineral resources, especially in the southwestern portion of the territory, was almost impossible.[15] The many accounts of rich soil and mineral wealth in the Rocky Mountains brought about a public clamour for scientific surveys to examine these rumors of riches. Unlike the earlier Gunnison and Fremont expeditions, exploration parties were directed to inspect the virtues of the Rockies rather than report on their particular evils as barriers to progress.[16]

Congress, acting in response to public demand, sent out a new group of experts between the period of 1867 and 1878 under the direction of both the Army and the Department of the Interior. To make the continuing search of Colorado's mountains more productive, there was a need for additional topographic knowledge. To fulfill this need, Ferdinand V. Hayden and William H. Jackson, under the direction of the Department of the Interior, examined geologic formations, the flora and fauna, the topography and the scenery of much of southwestern Colorado in the years from 1874 to 1875. Railroad builders, mining investors, and land developers instantly seized upon the information contained within the published *Geological and Geographical Atlas of Colorado and Portions of Adjacent Territory.*[17]

Two sub-survey teams of the Hayden expedition, under the leadership of A. D. Wilson and Henry Gannett explored the San Juans and the Gunnison country respectively in 1874. The Wilson party explored the area west of Silverton, to the head of the San Miguel River and the Dolores River, returned to the Animas River, and then moved on to the future site of Durango. The Animas River Valley, the most active mining area at the time of the survey, was the location of several prosperous camps such as Animas Forks, Eureka, Howardsville, and Silverton.[18] The Gannett team

Photograph of early Howardsville, Colorado, looking north from Baker's Park.
Colorado Historical Society

surveyed the Gunnison and Uncompahgre River regions and all the country between the Uncompahgre River on the east and the San Miguel River on the west. The settlements found in this exploration were the mining camps in the Elk Mountains and in Taylor Park. Small camps thrived on Texas Creek and Batty Creek in Taylor Park and in Union Park near the head of Taylor Canyon, all working placer gold deposits. Northwest of Taylor Park, on the southside of Treasury Mountain, near the headwaters of Rock Creek, a small group of miners worked quartz-lead deposits.[19]

The Wheeler Surveys, west of the 100th Meridian, undertaken at approximately the same time as the Hayden surveys, proposed to make important strides in the opening of western Colorado. The overall plan of Wheeler's Colorado survey team, under the command of Lieutenant William L. Marshall, was "to cut the east-west lines of travel over the mountains in the area south and west of Denver". The Marshall party spent the summer and early fall of 1873 surveying in the San Juan country near Silverton. During that time, thirty-six peaks over 13,000 feet in height were climbed and recorded, and nearly 5,000 miles of roads and streams were traversed. Profiles of nineteen mountain passes, eleven on the Continental Divide and eight over subordinate ranges, were made.[20] In late fall, with that season's objectives nearly completed, Marshall was in Silverton with what he described as "one of the worst toothaches that ever befell a mortal".[21] The nearest dentist was 300 miles away in Denver. Forsaking the well-travelled route over Cochetopa Pass and through the San Luis Valley, Marshall and a freighter, David Mears, set out ahead of the main party, and headed for a low depression over the Continental Divide Marshall had seen in his earlier explorations. In spite of his toothache, Marshall remained a day and a night at the top of this pass, taking thermometer and barometer readings; he also sketched a profile of the pass.[22] Six days after leaving the summit, which would soon bear his name, Marshall arrived in Denver, four days ahead of the survey party. The Lieutenant had located and recorded a route that cut 125 miles from the trip between Denver and the San Juan. Four years from the date of its official location, Marshall Pass became a transportation cornerstone in the development of mineral and agricultural wealth of west central Colorado.[23]

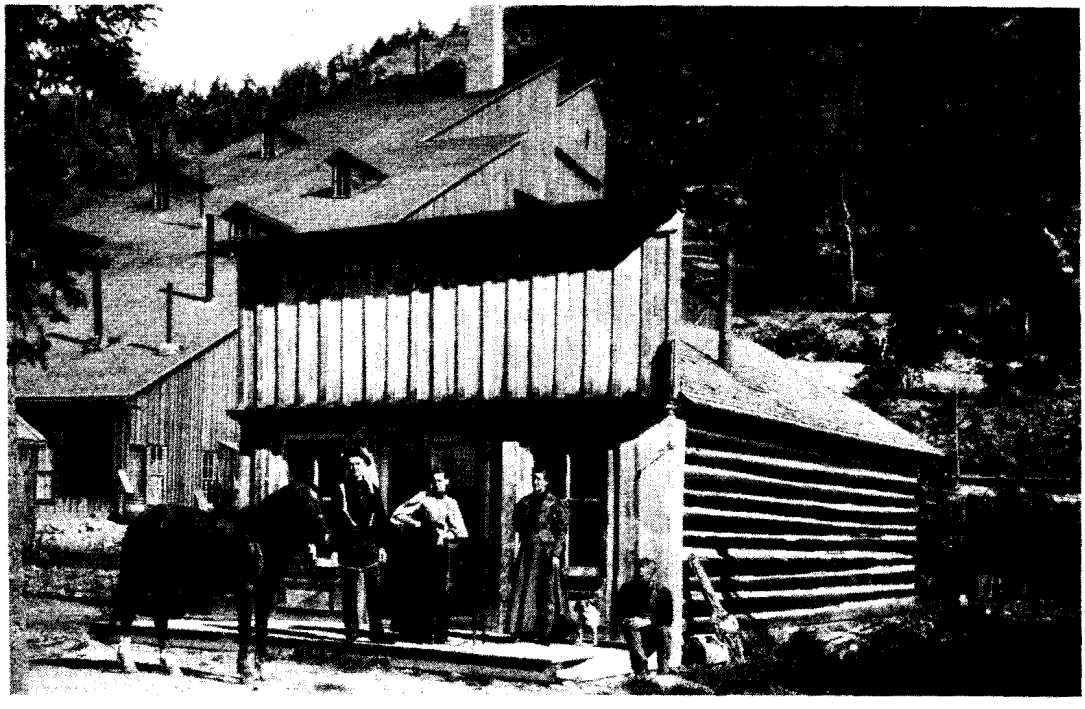
Both the Wheeler and Hayden survey parties explored and recorded the Dolores and Mancos River regions in southwestern Colorado, locating ancient Indian ruins in those areas. Despite fascination with the remnants of prehistoric civilizations, the geologic and topographic information obtained in the San Juan was of more immediate interest to Coloradans in the mid-1870's.

By 1875, the effects of the Brunot Treaty, government surveys, and the booster-style advertising of southwestern Colorado were seen in numerous and intensified mining rushes to the San Juan area.

Much of the San Juan mining excitement in the mid-1870's was attributable to rich finds made outside Lake City when Enos Hotchkiss, a partner with Otto Mears in the construction of the Saguache and San Juan Toll Road, located the Hotchkiss mine in 1874, three miles south of Lake City, which later became the well-known Golden Fleece. With the opening of that mine, a major rush occurred locally, and Hotchkiss, with others, incorporated the town of Lake City in 1875.[24] Wanting the outside world to know of the silver and lead deposits near Lake City, Hotchkiss published a newspaper, *The Silver World,* to advertise the area. The widespread distribution

of the paper helped to quickly transform struggling Lake City from a cluster of cabins into a roaring mining town of two thousand inhabitants.[25] The continued production of the Hotchkiss Mine and the nearby Ute and Ulay Mines, and the erection of the Crooke and Company smelter made 1876 a promising year for the Lake City mining district.

As was typical of a boom period, a large influx of people into a popular mining area meant overcrowding and the subsequent diffusion of miners and prospectors to neighboring regions. By 1876, mineral discoveries were made on the upper Lake Fork of the Gunnison River at the confluence of Cottonwood Creek, and here the Sherman townsite was laid out. Other towns created around this rich area included



Photograph of Sherman, Colorado, showing the town's general store and the Black Wonder Mill.
Colorado Historical Society

Whitecross, Burrows Park, and Tellerium. South on Lost Trail Creek, the town of Carson developed, and for several years it was the largest town in the southern part of Hinsdale County.[26] At the same time, along Henson Creek, west of Lake City, the Henson townsite, Capitol City, and Rose's Cabin developed as a result of mineral exploration in the area.

The San Juan mining rush of 1874 was centered largely in those areas which had been sites of placer prospecting in the 1860's and early 1870's. As a consequence, the Baker's Park region in the Animas River Valley received some two thousand prospectors in 1874, and it was estimated that one thousand lode mining claims were staked during that single year alone. Mining activity took place on Hazelton Mountain, north of Silverton in Arrastra Gulch. Ore taken from such mines as the Aspen and the Prospector were treated in Green and Company's newly erected smelter, just north of Silverton.[27]

Baker's Park had been continuously prospected by one particular group of miners from 1871 to 1874. This party, composed of Francis Snowden, Dempsey Reese, and N. E. Slaymaker, filed claim on land in Baker's Park in September of 1874.[28] The townsite of Silverton was established; later to be incorporated in November of 1876.[29] Silverton became the hub of the mining boom in the mid-1870's, and as a result, gave new life to the mining camps in the Animas River Valley. Howardsville and Eureka were both platted in 1874. Animas Forks, slower to develop, due to temporary inaccessibility, was laid out in 1877.[30]

In the year following the Silverton boom, Augustus "Gus" Begole and John Eckles headed northwest from Green Mountain above Howardsville to prospect along the Uncompahgre River. Locating gold and silver deposits in the Uncompahgre Valley, the two men returned to Silverton to stake their claims and replenish their supplies. In early fall, Begole's and Eckles' success was matched when A. J. Staley and Logan Whitlock discovered the "Trout and Fisherman" lode near where Canyon Creek joins the Uncompahgre River. Returning from Silverton to the place of their previous finds, Begole and Eckles again found rich veins, which they named "Mineral Farm". The location of these mineral deposits in the summer and fall of 1875 created a rush to the area from the nearby mining towns of Silverton, Howardsville, and Mineral Point. Among those early prospectors were Judge R. F. Long and Captain M. W. Cline. Realizing the vast potential of the area, the two men laid out a townsite at the juncture of Canyon Creek and the Uncompahgre River, which they named Ouray. In August, 1876, Ouray was incorporated, and had, by that November, a population of 400 inhabitants.[31]

In the three years between 1877 and 1879, lode prospecting was rapidly extended in the entire San Juan region. The Silverton, Lake City, and Ouray mining districts, during this time, produced large quantities of valuable ores, and further mineral locations prompted intensive mining activity along Henson Creek, the Lake Fork of the Gunnison River, the Animas River, and the Uncompahgre River Valley. In 1878, the town of Ophir was laid out, when rich discoveries were made near Mount Sneffels, on the upper waters of Canyon Creek in Poughkeepsie Gulch, and in Imogene Basin on Bear Creek, southwest of Ouray. Roads and trails were built from the town of Ouray to all these points to compete with the roads being built from Lake City and Silverton to tap these ore districts.[32] In 1878, Charles Sharman established San Miguel City, on the San Miguel River, to service the influx of prospectors coming to the valley. The mining towns of Placerville and Columbia in the San Miguel River Valley were laid out at this time as a result of mineral rushes to the region. Otto Mears, one of the principal stockholders in the Columbia Town Company, helped reincorporate the town as Telluride in September, 1879.[33] In 1878, John Glasgow and Sandy Campbell came northwest from La Plata City, on the La Plata River, and began the successful development of the Grand View Mine and the Atlantic Cable Group in the Dolores River Valley, southwest of Ophir.[34] In the spring of 1879, Colonel J. G. Haggerty, on a visit to Ouray, reported that ore from "Nigger Baby Hill" proved very rich in silver. The towns of Ouray, Silverton, Ophir, and San Miguel City promptly emptied their hundreds into the Rico region. Rico was incorporated on February 25, 1880, and the Grand View smelter began operations not long after.[35]

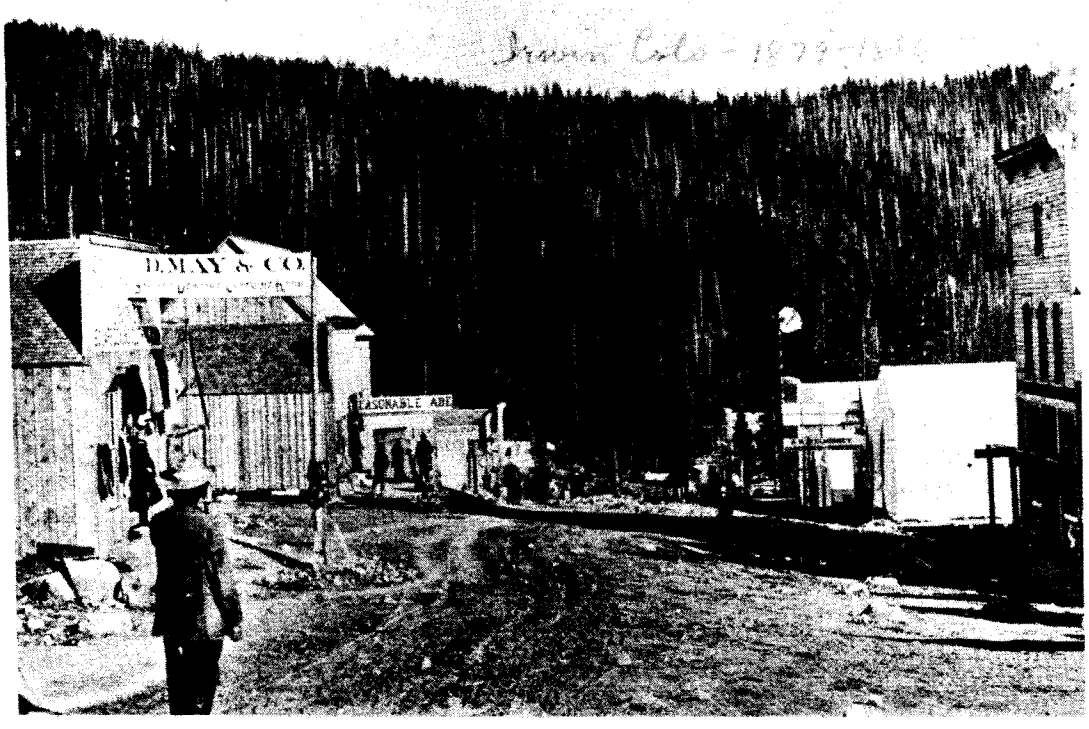
In a period of seven years from the enactment of the Brunot Treaty, the San Juan region of southwestern Colorado had been the scene of remarkable growth and development. Evidence of this growth, a consequence of the expanding Colorado mining

frontier, was seen in the establishment of permanent communities. Miners and prospectors, no longer the only Anglo-Coloradans inhabiting the region, were joined by town promoters, merchants, lawyers, doctors, clergymen, and road builders. On May 1, 1881, telephone service was extended to Lake City, and in the following summer, lines reached to Silverton and Ouray. The original Territorial Counties of southwestern Colorado, Lake and Conejos, were dissected, in 1874, into the new counties of Rio Grande, Hinsdale, and La Plata. San Juan County was made from the northern part of La Plata County in 1876. Following Colorado Statehood in 1876, Ouray County was created from the western portion of San Juan County, and Gunnison County was formed from the western part of Lake County. In 1881, Ouray County was divided in order to establish Dolores County.[36]

At the same time the San Juan country witnessed tremendous growth of towns and mining operations, similar occurrences took place in the central Rockies, near Leadville, Colorado. Massive migrations to that mining district, as was the case with all such boom periods on the Colorado mining frontier, prompted success for a few and dashed hopes for many. Lack of opportunity in Leadville, after 1879, motivated a small army of argonauts west to have a look at the increasingly acclaimed mining regions across the Continental Divide.

The miners who came to the Gunnison country in 1879 and 1880 were not unaware that the region was located on a direct line between Leadville and the San Juan mining region, nor had they forgotten the strikes made there in the early 1870's. The initial rush to the Gunnison area in the spring of 1879 then, was concentrated in a few well-known regions within the Colorado Mineral Belt. Coming by way of Cottonwood Pass, prospectors descended into the Taylor Park region near Willow Creek, and established the towns of Hillerton and Virginia City, when rich discoveries were made nearby at the Gold Cup Mine.[37] Virginia City, originally founded as Tin Cup, had a camp population of nearly 2,000 inhabitants by summer, 1879. Virginia City was incorporated in August, 1880, but reincorporated on July 24, 1882 as Tin Cup.

South of Tin Cup, on Quartz Creek, a mining party led by Frank Curtis established the Quartzville camp in the Gold Brick Mining District, during early 1879. When assays on ore samples from the area's mines ran as high as $2,000 per ton, a major rush to the district took place. A townsite was laid out in April, 1879, and was given the name Pitkin. By mid-May, close to one thousand people lived in the town, and as many mined the surrounding area.[38] North of the Taylor Park and Gold Brick districts, west of the Coal Creek camp of Crested Butte, rich silver discoveries led to the organization of the Ruby Mining District in May, 1879. The towns of Ruby and Irwin, merged by 1880, were focal points for thousands of prospectors and miners through 1884. At the juncture of East River and Copper Creek, north and west of Ruby, the town of Gothic was incorporated on July 17, 1879 when large silver producing mines, such as the Sylvanite, attracted near to 5,000 miners and settlers. Near the headwaters of Tomichi Creek, along the Continental Divide, the towns of White Pine, Tomichi, and North Star, the last to be opened by the 1879 rush, sprang up within four miles of each other. The towns' shortlived heyday came as a result of a large influx of prospectors interested in the area's rich lead and silver deposits. In the midst of all the excitement during 1879, Crested Butte and Gunnison City were destined to become the two most important towns in the Gunnison country, even though they were not directly dependent upon gold and silver themselves.[39]



Irwin, Colorado 1879-1880
Denver Public Library, Western History Department

The town of Gunnison, although not incorporated until 1880, owed its inception to the silver mining expeditions conducted in the early 1870's. Sylvester Richardson, a geologist in one such mining party, became interested in the potential of the country and resolved to begin a colony there. Richardson organized a stock company, and twenty cabins were erected on the present site of Gunnison by the summer of 1874. As a result of the mining excitement in the San Juans and central Rockies, and due to a lack of mineral exploration in the Gunnison country during the mid-1870's, the settlement was, for all purposes, abandoned. Persistent in his resolution, Richardson formed yet another town company in June, 1879, after the region received much acclaim for its numerous silver deposits. The company, composed of Richardson, John Evans, Henry Olney, London Mullin, and Alonzo Hartman, plotted the townsite of Gunnison City in April, 1880. From a sparsely settled camp, Gunnison was transformed almost over-night into a roaring boom town. By the time of its incorporation, an estimated 25,000 people crowded into the Gunnison country, and the town's population reached close to 2,000 inhabitants.[40] Richardson's foresight was quickly rewarded, as Gunnison grew to be the hub and supply point of the surrounding mining region, with trails and roads leading from it in all directions. In little more than a year after its incorporation, Gunnison would experience yet another boom with the addition of rail transportation.

The camp of Crested Butte came into existence when, in 1877, coal was discovered at Mount Crested Butte by the Jennings brothers. During the following year, Howard F. Smith began the town of Crested Butte after purchasing an interest in the Jennings' coal operations.[41] By 1879, the town served as a way-station for the hordes of prospectors en route to the surrounding gold and silver mining country.

Growth resulting from Crested Butte's reputation as a supply town, led to its incorporation in 1880. The town's accessibility to Gunnison through the Slate, East, and Gunnison River valleys and its nearby coal deposits would make it a strategic railroad station by 1881.

The fact that much of the early mining development took place well above timberline, with the attendant high cost of living and transportation, caused delays in the opening of southwestern Colorado. The consolidation of claims and the permanent occupation and development of the region was accomplished under almost incredible hardships and by a mere handful of resolute people. The failure of small smelting operations, at places such as Ophir and Rico in the 1870's, led to a gradual recognition that such enterprises were futile in this remote corner of the State, where supplies of suitable ores and fluxes were unobtainable, fuel was expensive, and business conditions were unfavorable.[42] The early mining camps of southwestern Colorado were isolated, a condition based not solely on distance but on terrain and climate as well.[43] Isolation did not, however, produce the self-sufficiency often described as a typical characteristic of the American frontier. Since the early mining towns did not attract agricultural settlement, foodstuffs, as well as more durable commodities, had to be imported from outside the immediate vicinity, often as far away as Canon City or Alamosa, the nearest railheads at the time. This also meant that ore to be shipped out had to be valuable in order to meet the high costs of transportation and refining.[44]

In the development of the mining frontier in southwestern Colorado, during the early period, the presence of Ute Indians was troublesome and often dangerous, but roads were an even more immediate concern. The need for better transportation was not new to the Colorado mining district.[45] The miner had to open and then develop vital transportation arteries before he could hope to make his ventures profitable. The history of early transportation in southwestern Colorado is in the development of the toll road. Rugged mountains, steep gorges, and river valleys could be breached only by roads built by private enterprise.

Isolated as they were, the mining camps and districts offered a bountiful opportunity for anyone adventurous enough to tie them together with a good road system.[46] Such a man was Otto Mears. Often called the "Pathfinder of the San Juans", he led pack trains, built toll roads, maintained freighting outfits, and finally became a railroad builder, besides being heavily involved in politics and Indian affairs. The chronicle of his toll road building began in 1870 when he incorporated the Poncha Pass Wagon Road Company, which constructed the first well-designed road between the San Luis and Arkansas River Valleys. Realizing the San Juans were undergoing a mining rush in the mid-1870's, Mears and associates incorporated, in 1874, their second road, the Saguache and San Juan Toll Road. The returns from this road proved so great that another road was built to Lake City, this time from the supply town of Del Norte. The Antelope Park and Lake City Toll Road, completed in November, 1875 cut, by one-half, the distance travelled from Lake City to Del Norte.

The Ouray and Lake Fork Wagon Road Company was incorporated in November, 1876 by several Ouray merchants. The proposed road was to be built from Ouray to the Lake Fork of the Gunnison River and then to a point on the Saguache and San Juan Toll Road. By spring of the following year, with only a few miles of road

built, Mears bought the company's stock. Deciding that the former owners' plan was too ambitious, he built, instead, a road from Ouray to the present town of Montrose. Wishing to connect this road with his Saguache and San Juan Toll Road, Mears incorporated, in September, 1877 the Lake Fork and Uncompahgre Toll Road Company. By the following summer, the Lake Fork and Uncompahgre Toll Road ran west from the Barnum Post Office, on the Lake Fork of the Gunnison River, and crossed the Little Blue and Big Blue Creeks and the Cimarron River into what is now Montrose. With the completion of this road, Mears had built a continuous road with fine grades from Ouray to Barnum, a distance of over one hundred miles.[47]

Otto Mears profited from toll road construction during the great mining rushes to the San Juan in the mid to late 1870's. The mining boom in the Gunnison country, during 1879 and 1880, offered similar potential. Knowing that a route over Marshall Pass, from Poncha Pass to the new town of Gunnison, was feasible, Mears was quick to organize a company to build it. Work on the Poncha, Marshall, and Gunnison Toll Road was completed during the spring of 1880. By June 15, W. M. Outcalt, the superintendent of the Marshall Pass work force, reported to the Gunnison *News* that the road was complete, and that "all who travel it, pronounce it the best road in the country".[48] Not everyone shared this optimistic view, however. One day, Otto Mears stopped to exchange the time of day with a couple of unlucky travelers who were stuck in a mud hole on Marshall Pass. Mears listened sympathetically and anonymously as the men spoke a profaned and impassioned denunciation of any man who would dare charge a toll for a road that was in such a condition as the one on which they were presently stuck. After Mears listened quietly to their woes, he told them that they would probably have the chance to meet Mears since he had seen the roadbuilder about ten miles back. With that, the "Pathfinder of the San Juans" rode on, apparently refusing to help the unfortunate gents out of their predicament.[49] Whichever account was most accurate remains a point of speculation, yet Mears collected his toll for crossing Marshall Pass just the same. The Gunnison *News* reported that for a passage from Mears Junction on the Poncha Pass Toll Road to Gunnison, a wagon with a two-horse team was charged four dollars; a wagon with one horse was charged two dollars; a wagon with additional teams of horses cost two dollars per team; loose stock and pack animals cost twenty-five cents per head; and saddle animals cost fifty cents each.[50]

In 1881 and 1882 alone, Mears and his associates completed the Dallas and San Miguel Toll Road, the San Miguel and Rico Toll Road, and the Durango, Parrott City and Fort Lewis Toll Road. Much of the road building, during this period, was actually accomplished by upgrading existent but inferior road bed. In this fashion, between 1881 and 1883, he was responsible for the reopening of the Gunnison and Cebolla Toll Road, and the Ouray and Canyon Creek Toll Road.

Between 1883 and 1884, Otto Mears began a task that would mark his finest achievement as a road builder. The construction of a road from Ouray to Silverton, over Red Mountain (and known as the "Million Dollar Highway"), was undertaken in two stages. The first was a road from Ouray to Red Mountain, and the second, the completion of a road from Silverton to Red Mountain. With this construction, Mears economically linked the two important mining towns. The new toll road, besides making travel to Ouray and Silverton easier, also lessened freight rates on

products hauled between the towns. It also was less expensive to haul ore down into the towns from the mines on Red Mountain. As a result it became profitable to move lower grade ore off dumps and send it to the smelters.

The completion of the Silverton-Animas Forks-Mineral Point Toll Road in 1886 marked a watershed in Otto Mears' life, for in the decade and one half previous to this road's completion, his principal achievements in transportation had been in the construction of numerous toll roads; in the future he would be primarily interested in the construction and operation of railroads. Since 1870, he had built a network of roads almost 450 miles long at a cost of nearly $400,000, the completion of which had an enormous impact upon the development of southwestern Colorado. Freight could be moved into the area more cheaply and a lower grade ore could be shipped profitably. It was no accident that southwestern Colorado experienced a period of dramatic growth during the operation of Mears' toll roads.[51]

Otto Mears' accomplishments were quickly copied by road construction in the Gunnison country. With the mining boom in 1879 and 1880 in that region, came the completion of toll roads in the Quartz Creek, Tomichi, and Taylor Park mining districts. [52]

Access to mining camps and towns in southwestern Colorado was made easier by the construction of better road grades, stage lines and freighting outfits quickly moved into the territory. With the completion of the Antelope Park and Lake City Road, the Barlow and Sanderson stage line began running from Del Norte to Lake City as early as 1876.[53] Dave Woods, the dominant force of the freighting business in southwestern Colorado during the 1880's, constructed a wagon road over Cottonwood Pass into Taylor Park in 1877 in order to haul freight from Colorado Springs into that booming region.[54] With the entrance of rail transportation to southwestern Colorado in the 1880's and 1890's, the stage and freighting businesses saw their most profitable times as "end-of-the-line" operations.

No history of early transportation in southwestern Colorado would be complete without mention of the homely and unromantic burro. This agile and sure-footed animal insured the future for the struggling mining camps in the almost inaccessible Elk and San Juan Mountains. In 1874, the machinery for the Greene and Company smelter at Silverton was packed in on burros from Pueblo via Stony Pass, a distance of 250 miles. [55] The pack trains in the early mining development of southwestern Colorado were the indispensible link that tied isolated camps to supplies and civilization.

While the mining camps in southwestern Colorado struggled to gain a permanent foothold during the period from 1860 to 1881, the ill-effects of rapid and extensive development became evident. With an undiscriminating enthusiasm, so characteristic of mining, more rushed into the business than was justifiable or desireable. Too many small claims were permitted on each section of the better known lodes, with the result that shafts were sunk almost side-by-side, while the surface was cluttered with buildings, shafthouses, equipment, and waste dumps of neighboring companies. Stamp mills in great numbers were built before anyone attempted to determine how much ore would be brought to these plants. Many of the mining operations began without the precise technical knowledge of such projects. Finally, the practice of

stripping the public domain of all trees in the vicinity of a camp gradually created a shortage of timber and fuel, which resulted in high prices for those once plentiful resources.[56] A new era of consolidation, based on efficient management, loomed in the not too distant future.

The miner and the merchant were not the only ones attracted by the wealth of the mining districts of southwestern Colorado; two particular lucrative doors opened for the ambitious. Mining communities offered markets of great potential for farming, for self-sufficiency in food production had not been yet achieved, and better and faster means of transportation were in demand. The company or men that could supply these necessities were sure to strike their own gold mine.[57]

The year 1881 marked the beginning of a new era, as agriculture and rail transportation entered the southwestern Colorado frontier. In that year alone, the Ute Indians were removed from the Western Slope and the Denver and Rio Grande Railroad (D&RG) reached southwestern Colorado at Durango and Gunnison. Agriculture and ranching, and permanent settlement throughout the entire region, ten years earlier, a premature speculation, became a blossoming reality in the last two decades of the nineteenth century.

NOTES

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   See also: Carl Ubbelohde, Maxine Benson, and Duane Smith, *A Colorado History* (Boulder: Pruett Press, 1976), p. 59.

3. Frank Hall, *History of the State of Colorado,* Vol. II (Chicago: Blakely Printing Co., 1890), p. 192.

4. Richard Bouts, "Lake City to Silverton: A Historical Narrative for the American Flats Planning Unit". (M. S. Bureau of Land Management, Montrose, Colorado, 1977), pp. 20-21.

5. S. E. Poet, "The Story of Tin Cup, Colorado", *Colorado Magazine* (IX. No. 1, January, 1932), p. 30.

6. Sidney Jocknick, *Early Days on the Western Slope of Colorado* (Denver: The Carson-Harper Co., 1913), p. 32.

7. Duane Vandenbusche, *Early Days in the Gunnison Country* (Gunnison: B & B Printers, 1974), pp. 15-19.

8. Wilbur F. Stone, *History of Colorado,* Vol. I (Denver: S. J. Clarke and Co., 1918), p. 287.

9. Densil H. Cummins, "Social and Economic History of Southwestern Colorado, 1860-1948" (Ph. D. Thesis: University of Texas, 1951), p. 228.

10. Stone, *op. cit.,* p. 286.

11. Henderson, *op. cit.,* p. 50.

12. Vandenbusche, *op. cit.,* p. 23.

13. Stone, *op. cit.,* p. 156.

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See also: Bouts, *op. cit.,* pp. 62-66.

15. See: Ovando J. Hollister, *The Mines of Colorado* (Springfield, Massachusetts: Samuel Bowles and Co., 1867).

    See also: Carl Abbott, *Colorado: A History of the Centennial State* (Boulder: Colorado Associated University Press, 1976), p. 81.

16. Marshall Sprague, *The Great Gates* (Boston: Little, Brown, and Co., 1964), p. 211.

17. Robert G. Athearn, *The Coloradans* (Albuquerque: University of New Mexico Press, 1976), p. 128.

18. Cummins, *op. cit.,* p. 214.

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20. Richard Bartlett, "The Great Surveys in Colorado, 1867-1879" (Ph.D. Thesis: University of Colorado, 1935). For a discussion of the Wheeler and Hayden surveys in western Colorado, see pages 396-403.

    See also: *Rocky Mountain News,* May 28, 1873, p. 4.

21. Walter Borneman, "Black Smoke Among the Clouds", *Colorado Magazine* (LII, Fall, 1975), p. 317.

22. Bartlett, *op. cit.,* pp. 402-403.

23. Thomas F. Dawson, "The Godfather of Marshall Pass", *The Trail* (XIII, No. 4, September, 1920), pp. 8-9.

    See also: Bartlett, *op. cit.,* p. 403.

    See also: Borneman, *op. cit.,* p. 317.

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    See also: Jocknick, *op. cit.,* pp. 238-239.

25. Athearn, *op. cit.,* p. 129.

26. Cummins, *op. cit.,* p. 236.

27. Thomas Thompson, "The Cultural History of Colorado Mining Towns, 1859-1920" (Ph.D. Thesis: University of Missouri, 1966), p. 47.

    See also: F. L. Ransome, "A Report on the Economic Geology of the Silverton Quadrangle, Colorado", *USGS Bulletin 182* (Washington: Government Printing Office, 1901), p. 20.

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43. Smith, *Rocky Mountain Mining Camps, op. cit.,* pp. 56-57.

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46. Ubbelohde, *op. cit.,* pp. 182-183.

47. For an excellent treatment of the career of Otto Mears see: Michael D. Kaplan, "Otto Mears: Colorado's Transportation King" (Ph.D. Thesis: University of Colorado, 1975). For a discussion of Mears' toll road building exploits, see pages 16-42.

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    See also: Borneman, *op. cit.,* p. 319.

49. Betty Wallace, *Gunnison Country* (Denver: Sage Books, 1960), pp. 52-53.

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CHAPTER VII.

THE PERMANENT SETTLEMENT OF SOUTHWEST COLORADO

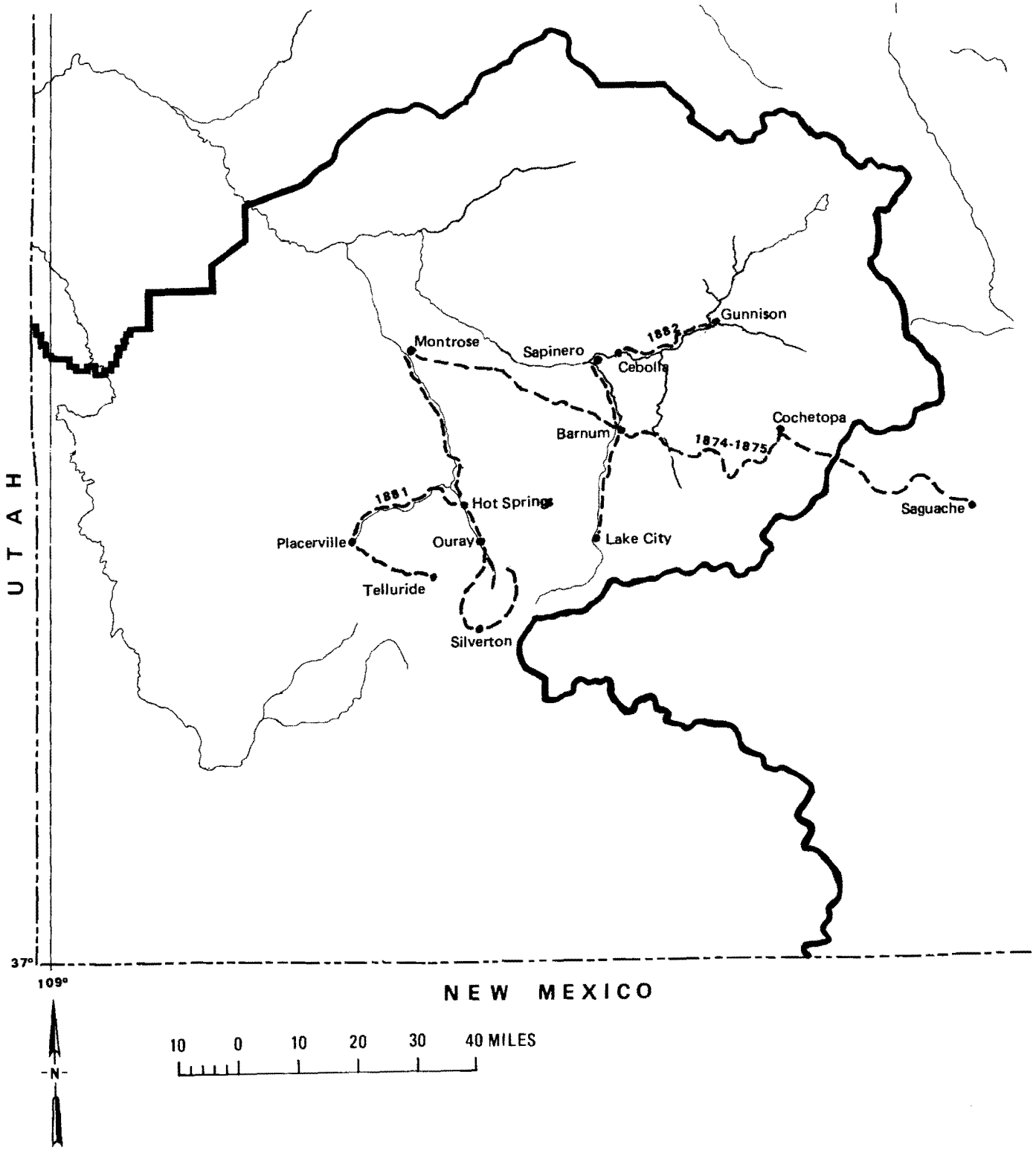
Following the Ute removal in 1881, publicists of the day hailed southwestern Colorado as a place of great promise, an area once sealed off by a mountain barrier that held potential reward for both mining and pastoral endeavors. Parks and fertile valleys such as those found in the Gunnison country and along the Uncompahgre River were described as new lands that would provide homes for thousands.[1] Once the Utes were on their way, By September, 1881, and even before Congress officially opened the lands for filing in June, 1882, a rush began to this new frontier by home-seekers, prospectors, farmers, ranchers, and townsite promoters.[2]

The settlement of lands opened by the Ute removal saw several stages of typical frontier development telescoped into a few years. Cattlemen, sheepmen, farmers, and fruit growers all swarmed into the region together. Almost at once, railroads were built, altering the usual pattern of evolution by providing an early connection with the rest of Colorado and the Nation. Rapid urban growth, considered to be a characteristic of the mining frontier, appeared quickly in those valleys that were opened to agricultural settlement in 1882. This development brought schools, churches, libraries, and cultural attributes generally associated with well established communities. These refinements came to the west in due course, but on the recently surrendered Ute Reservation lands, the process took little more than five years.[3]

In southwestern Colorado, as in the rest of the state, government meant a stable and legal environment for speculative business and commercial interests. Into the region came townsite promoters and irrigation companies. Designed principally to secure sites for the establishment of towns and supply centers, they provided rudimentary regulation of water, mining, and timber claims for the newly arrived settlers. The early forms of municipal governments in such towns as Delta and Montrose, quickly gave rise to county organizations. By 1889, just seven years after the opening of the vacated Ute lands, the present county boundaries in southwestern Colorado were established. In 1883, Gunnison County was reduced to its present dimensions when Mesa, Delta, and Montrose Counties were formed from its western half. In the same year, a new county, Uncompahgre, was created from the eastern portion of Ouray County, and from a part of the old Gunnison County, but three days after its formation, its name was changed to Ouray County, and the name of former Ouray County was changed to San Miguel. In 1885 and 1889, the respective counties of Archuleta and Montezuma were created.[4]

During the 1880's, after the economic Panic of 1873 had passed, money was again available, and the new mining camps demanded faster means of transportation. Colorado's "golden age" of railroad building ensued. Suddenly there was a new kind of boom town, the railroad town. No better indication of development and prosperity could be found than in railroad construction during the 1880's and 1890's, and no where did such activity take place with as much energy as it did in south-western Colorado.

The years from 1881, to the turn of the century marked a major transition period in southwestern Colorado's history. Previously an isolated region dependent almost solely on the development of its mineral resources, the area, during these years, began to exhibit signs of economic self-sufficiency. The entrance of agriculture, ranching, fruit growing, modern communications, and railroad transportation in the last two decades of the nineteenth century promoted a diversified and more permanent period of development.



Montrose District map of the Otto Mears' Toll Roads, illustrating: the major cities connected by road construction, and the major roads.

While the majority of ceded Ute territory on the western slope underwent rapid Anglo settlement during the 1880's, over 700,000 acres of southwestern Colorado remained the domain of three bands of Southern Ute Indians. Although dissimilar to the Anglo experience in southwestern Colorado, the history of the Weeminuche, Capote, and Mouache bands, after 1881, is an important chapter in the larger drama of permanent settlement in the region.

Despite the Ute Treaty of 1880, disputes over the use and occupation of the land on and in the vicinity of the Southern Ute Reservation persisted. Trespass and theft perpetrated by Anglo settlers and Utes alike, in the years after 1882, made for tension between the two cultures. In 1885, stockmen using the country north of Dolores townsite had difficulties with the Indians of the region, whom they accused of butchering their cattle. The affair reached a climax in June of that year, when the stockmen murdered eleven Indians in what was known as the Beaver Massacre. Acting on the threat of Ute retaliation, a number of cattlemen banded together at Narraguinnep Spring, west of Dolores, and constructed "Narraguinnep Fort" for their mutual protection.[5]

As a result of incidents like that of the Beaver Massacre, several Congressional bills were introduced, in the years from 1886 to 1894, which called for the removal of all Southern Ute bands from Colorado to San Juan County, Utah. Opposition to these measures from the citizens of Utah, led to a legislative agreement which located the Southern Utes on their former reservation land in southwestern Colorado. The Hunter Act, passed in 1895, provided for the distribution of individual land allotments to Ute families, and when all had been given land, special status for the reservation was to be removed. Land not taken by the Utes was then to be opened to general homesteading. Before the Hunter Act could be implemented however, the Utes had to agree to its terms. Approval by the Utes was forthcoming, but only by a slim majority. The Mouache and Capote bands were generally in favor of the bill; the Weeminuche however, voted unanimously against the legislation. Opposition stemmed from complications surrounding the 1888 Congressional bill calling for Ute relocation in San Juan County, Utah. The Weeminuche approved this measure along with the proposed reservation site, and actually moved into Utah in 1888. The bill did not pass a Congressional vote however, and officials from the Southern Ute Agency were forced to bring the Weeminuche back into Colorado. The band refused to return to the old agency grounds, and they established a camp on the western end of the Southern Ute Reservation. These actions began the separation of the three bands of Southern Utes into two groups. Implementation of the Hunter Act of 1895 recognized this tribal separation. The Mouache and Capote bands were located on the eastern portion of the former reservation, while the Weeminuche band retained the western end. After the turn of the century the two units became known as the Ute Mountain Reservation, residence of the Weeminuche band, and the Southern Ute Reservation, home of the Mouache and Capote bands. By the late 1890's, the final provisions of the Hunter Act had been implemented, allotments had been given to the Capotes and Mouaches, and a reservation was established for the Weeminuches. In following the terms of the Act, President William McKinley, on May 4, 1899, signed a proclamation opening 523,079 acres of the old reservation to Anglo-American settlement.

The first years of the twentieth century were times of difficult transition for the Utes of southwestern Colorado. Their former way of life and accustomed habitat

was gone, and they found the change to agricultural subsistence totally alien. They did only what they had to do to keep their meager crops alive, working only as long as the need existed. Gradually however, the Ute adapted to their new way of life. By 1915, advances had been made in farming. Over 2,000 acres were planted in alfalfa, wheat, oats, beans, and potatoes on the Southern Ute Reservation, and by the 1920's, the Mouaches and Capotes had begun to raise sheep. By 1932, the flocks had grown considerably and were allowed to graze on forest reserve land at a nominal cost per head.

By the terms of the Wheeler-Howard (Indian Reorganization) Act of June, 1934, the Capote and Mouache bands officially adopted the name, Southern Ute Tribe. The intent of the Act was to provide self-government, a greater degree of management of Indian resources, and responsibility for the agency's future. The Act halted further allotments of land to individual Indians, limited land sales of deceased Indians except to the tribe, and returned any surplus lands to the agency's ownership. The emphasis was to be on the tribe rather than on the individual. Accordingly, the Southern Utes drew up a Constitution and By-Laws, which when ratified, authorized a chairperson and a council of six members to conduct tribal affairs. In 1937, 222,012 acres of land were returned to the Southern Utes.[6]

Despite the many years of difficult adjustment to a permanent way of life and the loss of much of their cultural heritage, by 1940 the Utes exhibited signs of a successful transition to an agricultural-oriented society. The territory under their ownership was making a substantial contribution to the economy of the region, and in more recent times, gas, oil, timber, and grazing leases on reservation land, combined with tourist dollars, have added to the self-sufficiency and permanence of the Ute people in southwestern Colorado.

The most dramatic development in the use and occupation of southwestern Colorado, during the twenty years after 1881, occurred in those areas vacated by the Utes. The establishment of permanent settlements in this expanded frontier region was aided, to some extent, by the existence of already developed towns in the surrounding regions. Mining centers, such as Lake City, Gunnison, Silverton, Ouray, and others, provided supplies and served as way stations for those interested in pioneering the former Ute territory. From the more established areas and towns and travelling on existent roads, settlers rapidly moved into the promising new frontier region.

From Lake City, in August of 1881, Enos Hotchkiss, best-known for his discovery of the Golden Fleece Mine and the development of Lake City, along with Samuel Wade journeyed on to the Ute Reservation After looking over the Uncompahgre River, the North Fork of the Gunnison River, and the Grand (Colorado) River valleys, they returned to Lake City very much enthused about the country they had seen.[7] Determining the region along the North Fork of the Gunnison River fine fruit country, they returned there that September, carrying with them several fruit trees. By June, 1882, the townsites of Hotchkiss and Paonia had been established, orchards planted, and irrigation ditches constructed. Post Offices were secured within the boundaries of Hotchkiss' and Wade's respective homesteads. Both towns, in the years that followed, became important centers of southwestern Colorado's fruit industry.

Less than a month after the Utes had been removed to Utah, George A. Crawford, "the father of Grand Junction", purchased squatter rights from W. O. Stephens located at the juncture of the Uncompahgre and Gunnison Rivers.[8] Crawford's interest in the area led to the organization of the Uncompahgre Town Company. Associated with Crawford in this venture were M. C. Vandeventer and three officials of the Denver and Rio Grande Railroad, whose participation foretold the importance of the expanding railroad for the proposed townsite. In December, 1881, Samuel Wade, the founder of Paonia, platted the townsite of Delta, and by April of 1883, the town had about 250 permanent residents. Unlike the neighboring town of Paonia, which developed exclusively around the fruit industry, Delta had no single industry upon which it was dependent. By the spring of 1882, less than a year from when it was laid out, Delta's strategic location as a railroad stop quickly promoted the town as a focal point for a variety of economic interests in the area. Farms and orchards, taken up along the Uncompahgre River and on California and Garnet mesas south of the townsite, found a market and supply center in Delta. Cattlemen ran their herds during the summer months on Grand Mesa, bringing them into town for shipment to Denver. Until the railroad reached Paonia and Hotchkiss in 1902, Delta was the shipping point for North Fork produce.[9] Based on the approximately 200,000 acres of arable land along the Uncompahgre River, the establishment of Delta in 1881 quickly led to the development of another important settlement in the valley.

In the late fall of 1881, Joseph Selig came from the mining camp of Ruby to locate a townsite in the Uncompahgre valley. Finding attractive sites at Grand Junction and Delta already staked out by George Crawford, he travelled up the valley twenty-one miles to a point where he decided to lay out a town. Selig, along with O. D. Loutsenhizer, S. A. Culbertson, A. Pumphrey, and John Baird, located the Montrose townsite in January, 1882, and had it platted in February of that year.[10] As was the case with Delta, the growth of Montrose was tied directly to the coming of the Denver and Rio Grande Railroad. At first, the town was a sprawl of log shanties but by the summer of 1882, Montrose took on the appearance of a neatly laid-out town with wide streets and frame houses. Otto Mears put up $6,000 to build a hotel; businessmen commenced construction of substantial stores, and fourteen saloon owners took out licenses to operate. The town's role as a distribution point for nearby farms, ranches, and orchards was assured.[11] Montrose profited, as well, from its proximity to the mines at Ouray and surrounding areas. Until 1887, when the Denver and Rio Grande reached Ouray, Montrose served as the supply point and freighting center for that district. The benefits of railroad transportation and access to prosperous mining centers, fundamental to the growth of Montrose, also contributed to the development of the Durango townsite in the Animas River Valley.

When it was determined that General William Jackson Palmer's Denver and Rio Grande Railroad, in the process of building westward from Chama, New Mexico to Silverton, would follow the Animas River to its destination, a party of railroad officials came in to the area to locate suitable sites for the company's operations. Failing to come to terms with homesteaders holding lands adjacent to Animas City, at that time a flourishing town of about 2,500 inhabitants, William A. Bell made arrangements with several individuals to file claims along the Animas River about one and one-half miles below the town. On September 13, 1880, the Durango townsite was staked out. By December of that year, the population numbered between

2,500 and 3,000 people, many coming from Animas City. Approximately five hundred buildings were soon erected.[12] In April of the following year, Durango was incorporated, and only a few months later the railroad arrived. The completion of trackage to Silverton in July, 1882, not only bolstered that mining camp's economy, but assured Durango's role as the major distribution point for the entire San Juan mining district. In 1882, the construction of the New York and San Juan Smelter, by General William J. Palmer and made feasible by the discovery of large coal deposits in the area, strengthened Durango's ties with the southwestern Colorado mining region, fast making it an economic center in the State. Durango was by the mid-1880's, not only a mining center, but was also established as the chief shipping point for the rich farming areas along the Animas River and for the cattle ranches in the mountains and plateaus to the west.

The first permanent Anglo-American settlers to enter the Montezuma Valley, along the Mancos River, came in the mid-1870's to use the region as a winter grazing range for cattle, and by 1881, much of that land had been taken up as homesteads.[13] Ten years later, the Rio Grande Southern Railroad connected the Mancos townsite with Durango, and provided an outlet for its growing cattle industry. Stimulated by the addition of rail transportation Mancos was incorporated on December 24, 1894. The Mancos River valley, attractive primarily to ranchers and to a lesser degree to itinerant prospectors, also appealed to the expansionistic Mormon community in Utah.

The development of the Webber community, just to the south of Mancos, was unique in that the area was settled exclusively by Mormons. Leaving from Cedar City, Utah in 1879, eighty Mormon wagons travelled eastward to find a suitable area for agricultural endeavors and permanent settlement. In 1880, Joseph Stanford Smith, left the main party, ventured up McElmo Canyon in western Montezuma County, and came to the Mancos settlement. Finding attractive land south of the community, Smith located a homestead and returned to the main Mormon encampment at Bluff City, Utah with reports of the possibilities for settlement in the Montezuma Valley. In 1882, about seventy families accompanied Smith back to his homestead on which the Webber community was established. This early settlement prospered and has survived to the present.

While permanent settlement was underway in the Mancos River Valley, similar development took place slightly to the north and west along the Dolores River. Most settlers in the Dolores River country came by way of Mancos, bringing herds of cattle via the Montezuma Valley from Texas and New Mexico. Settlers also came by way of the Animas River Valley, and a few drifted in from the booming Rico mining camp. Homesteaded land along the Dolores River, primarily at the "Big Bend" of the river, was the center of a growing cattle industry. As was the case with Mancos, the coming of the Rio Grande Southern Railroad in 1891, gave impetus to growth and permanence in the Dolores River Valley. As soon as it was apparent that this road would be built, John and Andrew Harris with Judge Adair Wilson acquired the Sherman Phillips homestead and laid out the Dolores townsite. By 1897, Dolores had a population of about two hundred; three years later it was incorporated, and was fast becoming the trade center and focal point of the Dolores country's cattle industry.

The settlement of Cortez in 1886, directly west of Mancos and southwest from Dolores, was associated with the development of the Montezuma Valley irrigation project. Fundamental to town development and agriculture in the region, the projected diversion of water from the Dolores River to the upper Montezuma Valley, brought many families to the area. Following completion of an irrigation canal in 1899, Cortez (incorporated in 1902) became a center for fruit growing and general agriculture.[14]

During the early period of settlement in the Montezuma Valley, ranching predominated the economic life of most of its people. Over-grazing of sparse pasture, however, led to a depletion of that valuable resource, and many directed their attention to agriculture and fruit growing. The Montezuma Valley Irrigation Project, was instrumental in facilitating this diversification and development during the twentieth century.[15]

Pagosa Springs, Colorado in the early 1890's.
Colorado Historical Society

In the upper San Juan River Valley, Pagosa Springs attracted its first settlers as early as 1876. People came with intentions to mine, farm, engage their efforts in the cattle industry, or seek the supposed curative powers of the nearby mineral hot springs. Fort Lewis, established in 1878, was the dominant economic and social center in the area during its two year existence in Pagosa Springs. In 1880, the post was removed to a site five miles southwest of Durango. The growth of Pagosa Springs after the removal of Fort Lewis was unique in the respect that the United States government set aside one square mile surrounding the Pagosa Hot Springs as a townsite, platted the ground in 1883, and in 1885, sold lots to the highest bidders. Pagosa Springs prospered in the 1880's as a stage stop, health spa, center for sheep and cattle

raising, and the headquarters of a small logging industry. Charles Loucks and E. T. Walker, who came to the region in 1879, built the town's first saw mill. Early logging activity produced largely for a limited, local market, the only exception being the Denver and Rio Grande's demand for railroad ties.[16] Despite Pagosa Springs' numerous attractions, real development would come only after October 13, 1900, when the Rio Grande Pagosa and Northern Railroad laid its tracks into the town.

As was the case in the southwestern Colorado region during the 1880's and 1890's, securing railroad transportation and the ability to supply the mining centers and developing agricultural areas meant prosperity and a degree of permanence. The growth of such towns as Dallas, Ridgway, and Portland on the upper Uncompahgre River, and Placerville on the San Miguel River came from their proximity to the activity of the nearby mines. Portland, founded by Enos and Preston Hotchkiss, gained its importance from the fact of its being the chief seat of trade for the "park" and the only available farm land adjacent to the San Juan mines. Ridgway, by the mid-1890's became the most prosperous little town between Montrose and Ouray due to its being a junction town for freight and passenger traffic on the Telluride branch of the Denver and Rio Grande and the terminus for the Rio Grande Southern. Placerville in this early period served as a general supply point for the Paradox Valley as well as a shipping point for ore, cattle, and sheep.[17]

Settlement in the Paradox Valley in western Montrose County occurred prior to the Ute removal. Thomas Goshorn and Riley Watson in 1877, and then Frank Steele and Prescott Stevens in 1879, coming from Utah, entered the area of West Paradox with intentions of grazing cattle. Their success, and the Ute removal brought other ranchers to the area in 1880 and 1881. Cattle raising, the principal industry of the early West Paradox Valley pioneers, was supported by small-scale agricultural production. Montrose provided an early market and shipping point for Paradox ranchers, but in 1890, the Rio Grande Southern's Placerville station replaced it not only as a cattle depot, but for the importation of agricultural goods as well. The discovery of the Cashin copper mine in 1895 created "boom-like" growth in the hitherto ranching area of the Paradox Valley. During the period from 1899 to 1908, the town of Bedrock was founded in close proximity to the mine; the first general store was built on the site in 1898. The Paradox townsite, at this time the only other trading center in the West Paradox Valley, consisted of little more than a general store.[18] Pioneer conditions lasted in this region for many years while much of southwestern Colorado developed more rapidly toward modernization. Improved irrigation, provided by the Buckeye Reservoir, west of the Paradox Valley on Geyser Creek, and the discoveries of carnotite ore in the early twentieth century would account for much of the development in this rugged plateau region.

Permanent settlements in southwestern Colorado during the two decades prior to the turn of the century took place in numerous regions and were motivated by a variety of reasons. One particular western Montrose County settlement in the San Miguel River Valley however, grew out of a unique set of interests. In February, 1894, during a period of economic depression, the Colorado Cooperative Company was incorporated. From its inception, it was to be a utopian enterprise, where "equality and service, rather than greed and competition, were the bases of conduct". The goal of the company's Denver organizers was to locate sufficient land on which to

establish a cooperative community, and to which an irrigation ditch could be constructed. The establishment of a colony on 20,000 acres in Tabeguache Park (First Park), five miles above Naturita, was accomplished in three stages.

After the original parties of communalists outgrew their initial encampment near Naturita, they moved eastward to the junction of Cottonwood Creek and the San Miguel River. Twenty members of the company established the Pinon townsite in 1896, and began construction of the colony's irrigation ditch. A saw mill was erected in Cottonwood Canyon up from Pinon, to supply wood for town buildings, homes, and the irrigation flumes. Excess wood, used for making crates, was sold to Uncompahgre Valley fruit growers.[19] By 1901, fifty buildings had been erected

Photograph of the Pinon townsite on the San Miguel River, looking south.
Colorado Historical Society

at Pinon, and work on the fifteen-mile irrigation canal had proceeded to about the half-way mark. In 1903, the "Cottonwood Trestle" was built. One hundred eight feet at its highest point and eight hundred forty feet in length, the trestle, at that time, was the world's tallest and longest irrigation flume. In the spring of 1904, with the irrigation ditch completed, the Colorado Cooperative Company began its third and final stage of settlement. Picking up the Pinon townsite, approximately 240 colonialists moved to their previously established townsite in Tabeguache Park, which was soon named Nucla.[20] Despite internal crises, the expulsion of dissident members, and a relaxation of earlier ideals, the Nucla community survived, becoming one of the few successful colony efforts in Colorado's history.

The opening of the entire southwestern Colorado region to a large spectrum of economic interests and occupation after 1881, prompted rapid development and permanent settlement. A diversified economy, newer forms of communication and better transportation, while still in their infant stages, laid the foundation for development in the twentieth century. Railroad transportation, the most important factor in this growth, fostered not only agriculture, fruit growing, and ranching, but also accounted for significant advances in mining, the region's first and principal industry.

NOTES

1. Robert G. Athearn, *The Coloradans* (Albuquerque: University of New Mexico Press, 1976), p. 137.

2. Carl Ubbelohde, Maxine Benson, and Duane Smith, *A Colorado History* (Boulder: Pruett Press, 1976), p. 188.

3. Athearn, *op. cit.*, p. 139.

4. LeRoy R. Hafen, "The Counties of Colorado: A History of Their Creation and the Origin of Their Names", *Colorado Magazine* (VIII, No. 2, March, 1931), pp. 48-60.

5. Avon Denham, "Narraguinnep Fort", *Colorado Magazine* (XIX, No. 2, March, 1942), p. 78.

6. For a concise and informative history of the Southern Utes in Colorado after 1881, see: Robert Delaney, *The Southern Ute People* (Phoenix: Indian Tribal Series, 1974), pp. 66-79.

7. Ezra Wade, "Early Days at Paonia", *Colorado Magazine* (IV, 1927), p. 66.

8. Wilbur Fisk Stone, *History of Colorado,* Vol. I (Denver: S. J. Clarke and Co., 1918), p. 154.

   See also: Ubbelohde, *op. cit.*, p. 189.

9. Wilson Rockwell, *Uncompahgre Country* (Denver: Sage Books, 1965), pp. 38-52.

10. Stone, *op. cit.*, p. 154.

    See also: Rockwell, *op. cit.*, pp. 64, 68.

11. Athearn, *op. cit.*, p. 138.

12. Mary Ayers, "The Founding of Durango, Colorado", *Colorado Magazine* (VIII, No. 3, May, 1930), pp. 85-86.

    See also: Robert Athearn, *The Rebel of the Rockies* (New Haven: Yale University Press, 1962), p. 104.

13. LeRoy R. Hafen, *Colorado: A Story of the State and Its People* (Denver: The Old West Publishing Co., Inc., 1948), p. 265.

14. A factual, detailed, and localized treatment of Montezuma County's development, both in early and more contemporary times is offered in Ira Freeman's, *A History of Montezuma County, Colorado* (Boulder: Johnson Publishing Co., 1953). For a discussion of the Webber community, Mancos, Cortez, and Dolores, see pages 37, 58-68, 209-305.

15. Hafen, *Colorado: A Story of the State and Its People,* p. 265.

16. For an excellent history, complete with many fine illustrations of railroad operations in and around Pagosa Springs, see: Gordon Chappell, *Logging Along the Denver and Rio Grande* (Golden, Colorado: Colorado Railroad Museum, 1971), p. 27.

17. Sidney Jocknick, *Early Days on the Western Slope of Colorado* (Denver: The Carson-Harper Co., 1913), pp. 150-151.

18. Rockwell, *op. cit.,* pp. 122-123, 135, 183-188.

19. Ellen Peterson, "Origins of the Town of Nucla", *Colorado Magazine* (XXVI, No. 4, October, 1949), p. 253.

20. Duane Mercer, "The Colorado Cooperative Company, 1894-1904", *Colorado Magazine* (XLIV, No. 2, Fall, 1967), pp. 299-303.

CHAPTER VIII.

TRANSPORTATION AND MINING (1881-1920)

Railroad construction in southwestern Colorado was the foundation on which the region developed during the last two decades of the nineteenth century. The benefits created by such activity influenced almost every aspect of economic, political, and social life. Railroad building linked the area to the important industrial centers of the state and nation, and opened a period of advancement that affected development well into the twentieth century. The primary interest of the major railroad companies, during the nineteenth century, was the potential offered in southwestern Colorado's prosperous mining districts. Mining towns and mining companies were also aware of the long-term benefits rail transportation would provide for their particular interests.

The history of railroad building in southwestern Colorado is really the development of four systems, the Denver and Rio Grande (D&RG), the Denver, South Park and Pacific (DSP&P), the Rio Grande Southern (RGS), and the three Otto Mears' railroads operating out of Silverton. The rail lines that first served the region did not escape the intense competition that characterized earlier railroad construction in eastern Colorado and the central Rockies. As prospectors and financiers fought each other for the wealth of southwestern Colorado's mountains, so too did railroad companies compete for the right to ship those same riches. In this competetive climate, William Jackson Palmer of the D&RG Railway, in continual battles with the Atchison, Topeka, and Santa Fe and the Denver, South Park and Pacific, eventually won the day. Between 1878 and 1883, a network of D&RG tracks, totalling close to 1,500 miles, was built over the Rocky Mountain region.[1]

Palmer's bid to capture the Raton Pass road for the D&RG failed in 1877, and he quickly directed his attention to a road through the Royal Gorge from Canon City to Salida and on to booming Leadville. Reaching Leadville on July 20, 1880, the D&RG was positioned at three strategic points, eager to cross the Continental Divide into southwestern Colorado. From Salida, it could cross Poncha Pass to Saguache or Marshall Pass to Gunnison City. Leaving Alamosa, a prospective line could extend over the San Juan Mountains, and proceed to the rich mineral areas of Durango and Silverton. From Leadville, trackage, via Tennessee Pass, could enter the Grand (Colorado) River Valley and move on to Grand Junction and Salt Lake City.[2]

At the time of the Leadville mining boom and the subsequent rush into the area, the rivalry between the D&RG and the DSP&P reached its zenith. With its western terminus lying on the Arkansas River, the DSP&P Board of Directors decided to build down the Arkansas as far as the present village of Nathrop and then go west up Chalk Creek to St. Elmo. From that point, the road would tunnel through the Continental Divide, via the Alpine Tunnel, out on to Quartz Creek above Pitkin, and move down this drainage to its juncture with Tomichi Creek at Parlin. From Parlin, trackage would proceed to Gunnison City, and then by the most feasible way, strike a route to Ouray, with a branch line to Lake City.[3] The decision was perceived by Palmer and the D&RG as an open declaration to invade territory that the Palmer line had previously decided was its own. The race was on to southwestern Colorado and the rich mineral districts around Gunnison and in the San Juans.

The outcome of this railroad construction race to gunnison typified the style and determination of General Palmer, where tremendous capital expenditure in labor and machinery resulted in an outdistanced competitor. In August, 1881, Gunnison was reached by way of the Marshall Pass route, an engineering accomplishment facil-

itated by the fact that Palmer had purchased the existing toll road over the pass from Otto Mears at a price of $13,000, making the grading for a railroad inexpensive and less time consuming.[4] While the DSP&P puzzled over the mechanical problems of tunneling the Alpine Pass route, the D&RG reached its goal a full year ahead of its rival. The DSP&P was partially rescued from its misfortune by tapping the coal mines along the main line near Pitkin, and at Baldwin on the company's only important coal branch line. The Baldwin-Castleton line, built up Ohio Creek, north of Gunnison in 1883, also became part of the D&RG system, when in 1937 the DSP&P, in the process of abandoning its holdings, sold the line to its rival.[5]

During October, 1881, D&RG tracks were laid to Crested Butte, and only four months after the DSP&P reached Gunnison, the D&RG line extended through Montrose, Delta, Grand Junction, and connected with the existing Denver and Rio Grande Western Railroad at the Colorado-Utah border. December 19, 1882, marked the completion of this feat in mountain engineering.

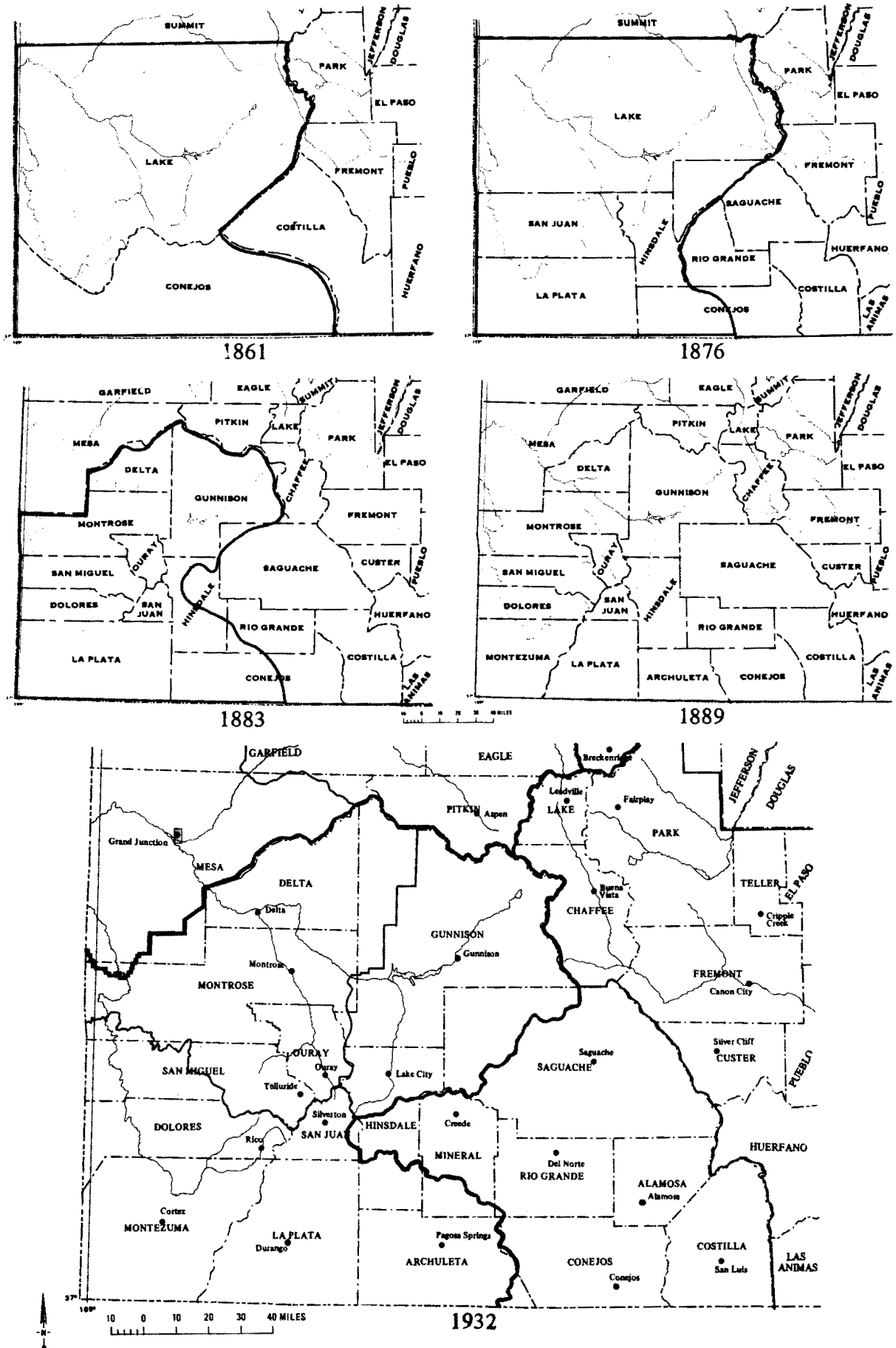
While the D&RG competed for the Gunnison market, Palmer began construction of a road into the San Juan country. In 1880, trackage extended from Pueblo to Antonito, by way of La Veta Pass and Alamosa in the San Luis Valley. With the flat distances of the high parks left behind, heavy rock-work construction was encountered in the jagged mountains that guarded the San Juans. From Cumbres Pass to Chama, New Mexico the grade was four percent, and construction was of the most expensive nature. At one point, to cover the distance of only a half mile, it was necessary to build two and a half miles of track, trestle, and embankment, of which one mile alone cost $140,000. Nor was this the exception, for to cover the larger distance of thirty-five miles, some sixty-four miles of track had to be laid.[6] From Chama, through Pagosa Junction, the D&RG reached Durango in July, 1881, just a month prior to the completion of the line to Gunnison. The arrival of the D&RG at Silverton in July, 1882, brought about a wedding of the mountain mines there with the shipping center at Durango. With faster and more extensive transportation facilities, the cost of transporting ores and concentrates dropped from $60 to $12 per ton.[7]

From 1886, when the line was reorganized as the Denver and Rio Grande Railroad Company, to the turn of the century, activity was centered around extending service, both commercial and passenger, to those areas where demand and profit potential existed. In 1887, a branch line was built from Montrose to Ouray, designed to capture the markets in the San Miguel River Valley and the Red Mountain region north of Silverton. Having completed the line only to Ouray however, it was left to Otto Mears and his Rio Grande Southern to build into the San Miguel Valley. The Silverton Railroad was to reach Red Mountain from the south. Also, after nearly a decade of impatient solicitations, Lake City residents received D&RG service in 1889. With the addition of rail transportation, that town experienced flush times. In 1889, a branch line was built from Hierro, on the main line a few miles west of Gunnison, to Aberdeen to secure granite for the construction of the State Capital building. In 1893, two lines from Crested Butte were completed to Floresta and Anthracite, tapping rich coal fields in the western Elk Mountains. In 1896, the Rio Grande Delta, a subsidiary of the D&RG, was chartered to build the North Fork line. Completed in 1902 to the fruit towns of Paonia and Hotchkiss, the road was later extended to the coal areas around Somerset and Oliver in western Gunnison County.[8]

The penetration of San Juan country by D&RG routes, up until the late 1880's, tapped only Durango and the adjacent areas of Silverton and Ouray. With an eye toward the further consolidation of the mining region, Otto Mears turned his attention from toll road construction to the development of railroads. The Rio Grande Southern, incorporated under the leadership of Mears in 1889, and completed in 1891, left the Montrose-Ouray extension of the D&RG at Ridgway, went over the Uncompahgre Plateau by way of the Dallas Divide to Placerville. Traversing the San Miguel River Valley to Vance Junction, it then ascended the South Fork of the San Miguel River, went over Lizard Head Pass and then followed the Dolores River to Rico. From that point and continuing along the Dolores River Valley, the tracks reached the town of Dolores at the "Big Bend" of the river. From Dolores, the line turned southeast to Mancos, continued eastward, and then connected with the D&RG at Durango. The completion of the Rio Grande Southern, in December of 1891, as had been the case with the D&RG's Silverton road, had a profound effect on San Juan mining. J. H. Ernest Waters, for example, manager of the Sheridan-Mendota Mine at Telluride reported that upon completion of the railroad he was able to save $7.50 a ton on transportation costs. The lower freight rate enabled Waters to salvage 100,000 tons of ore that previously would have been relegated to the dump pile.[9]

Mears was equally responsible for three other important railroads in the San Juan country, all of which extended northward from Silverton into the rich mining districts surrounding that town. One of these was the Silverton Railroad. Operating between 1887 and 1924, it ascended Mineral Creek as far as the towns of Red Mountain, Chattanooga, and Ironton, and then continued to the Albany Mill. The Yankee Boy and Orphan Girl Mines, dating from rich mineral discoveries during 1881 and 1882 in the Red Mountain District, were the largest shippers on the line. A second railroad starting at Silverton was the Silverton, Gladstone and Northerly. Chartered in 1889, construction began up Cement Creek to Gladstone, and was to have proceeded as far as Lake City. Due to grade difficulties, trackage went only as far as Gladstone, where it served the Gold King mines. The line was leased to the Silverton Northern Railway Company in 1910, and was sold to the same in 1915. The Silverton Northern Railroad, begun in 1896, was constructed from Silverton up the Animas River to Howardsville, Eureka, and Animas Forks. Planned originally to extend as far as Mineral Point, from where it might go on to Lake City or Ouray, construction was halted at Animas Forks due to grade difficulties and financial troubles. The line from Eureka to Animas Forks was abandoned in 1916, while the remainder continued to operate during the 1920's and 1930's in order to serve the Sunnyside Mines and Mill at Eureka. [10]

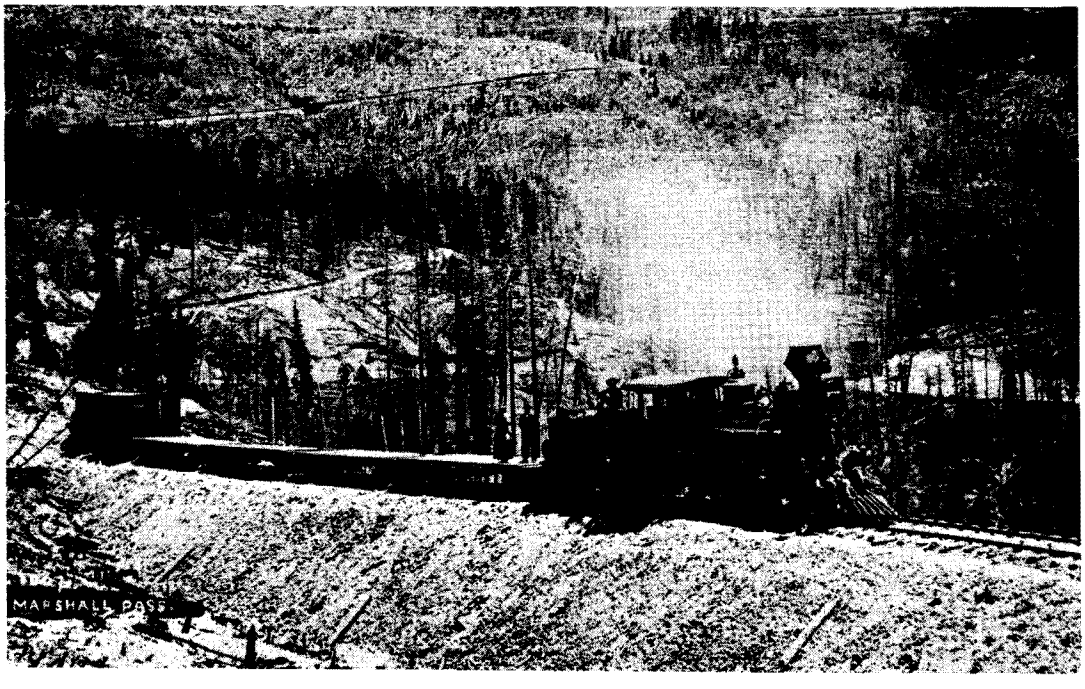
The era of railroad construction in southwestern Colorado did not automatically end dependence on well-constructed roads and other forms of transportation. Although freighters and stage line operators ceased to function once rail lines took over a particular town's passenger and commercial traffic, these businessmen did experience prosperous years as "end-of-the-line" operators. Despite the remarkable speed with which railroads built to the major towns of the region, the need to supply the outlying areas until rail lines could reach them encouraged such enterprises. Doing business by staying one step ahead of advancing railroad construction were freighters like Dave Wood and stage line operators such as Bradley Barlow and Jared L. Sanderson.



Montrose District map illustrating the formation of southwestern Colorado's counties

The most successful freighter in southwestern Colorado was Dave Wood. Entering the business at Gunnison in 1881, when the D&RG made him their "forwarding and commission merchant", Wood freighted supplies west to construction gangs and newly-settled towns from the railroad's end-of-the-line. When the D&RG built its narrow gauge line through the Black Canyon and over Cerro Summit into Montrose, Wood took his business to that town. Montrose would be his largest and most permanent base, and for five years he was the exclusive agent for all freight going to Ouray, Telluride, and Rico.[11] The D&RG extension, built from Montrose to Ouray in 1887, forced Wood to again move his base of operations. From his new location at Ridgway, he did a large freighting business into Telluride and Norwood. The completion of the Rio Grande Southern in 1891 ended Wood's operations. Built in 1882, the famous Dave Wood Road between Montrose and Telluride, via Horsefly Mesa, ran on the west side of the Uncompahgre River parallel with the present highway from Montrose to Ouray, and is today identified by a U. S. Forest Service marker.[12]

Stage line operators, as did freighting outfits, arranged their schedules and bases of operation in accordance with the advancing railroad. Quick to see the advantage of end-of-the-line staging were Bradley Barlow and Jared Sanderson. Even before the entrance of the D&RG and the DSP&P into southwestern Colorado, Barlow and Sanderson stages ran from Chama, New Mexico to Pagosa Springs, Durango, Animas City, and Silverton. As soon as Otto Mears had completed his Marshall Pass Toll Road,



Denver and Rio Grande work train on the westside of Marshall Pass.
Colorado Historical Society

stages ran to Gunnison, Crested Butte, Irwin, and Gothic. Railroad expansion in 1881 and 1882 forced the Sanderson company's coaches higher into the San Juans and onto the Uncompahgre Plateau. Stages provided service from Gunnison to newly settled Montrose, where the company's stage barn was one of the early frame buildings.

The fare for the rugged trip was $16.50 one way, with each passenger allowed fifty pounds of baggage.[13] Between 1882 and 1890, moving south from Ridgway, Sanderson coaches ran to Placerville, San Miguel City, Telluride, Ophir, and Rico. As had been the case with Dave Wood's freighting business, the completion of the Rio Grande Southern Railroad brought an end to the Barlow and Sanderson Stage line. By 1900, except for the few operations in areas where the railroads did not run, the day of the large-scale wagon freighting business and the stage coach had given way to more modern forms of transportation.

The extension of railroads during the 1880's and 1890's into southwestern Colorado mirrored similar developments in the Central Rockies and eastern Colorado. The last two decades of the nineteenth century witnessed the remarkable expansion and consolidation of American industry. With the rail lines that reached into southwestern Colorado came many of the characteristics associated with this national phenomena. Directed primarily at the region's growing mining industry, the entrance of investment capital, industrialization, and scientific innovation gave rise to a period of growth and transition.

With more efficient and less expensive forms of transportation, larger quantities of ore could be shipped, and the machinery to process that ore could be more easily imported to the mining centers of the region. At the same time railroads facilitated ore production, scientific advances improved mining techniques. The introduction of hydro-electric power to light mines and mills, and the use of electricity to operate power drills, dramatically altered the nature of the mining industry. Geologic expertise was utilized to locate and identify types and quantities of ore. A more complete understanding of chemistry and geology prompted the introduction of revolutionary reduction processes, whereby base metals could be more easily separated from complex ore bodies.

Mining companies, financed by Colorado, eastern, and European investors, spent millions of dollars in the construction of mine shafts, tunnels, underground railroads, smelters, and reduction plants. Big money brought big business. The advent of high-finance, geologic expertise, and industrialization gradually ended the era of the wandering prospector and the small-time owner. Many of these mining frontier pioneers left southwestern Colorado in search of the "virgin vein", but some remained, becoming miners for the larger companies. Joined by other emigrating Americans and large numbers of European immigrants, the wage-earning miners and millworkers constituted a substantial labor force in the late nineteenth and early twentieth centuries. Working conditions were often primitive and dangerous, and pay was low. Like other wage earners in America at this time, both hard-rock and coal miners organized labor unions to demand higher wages and improved working conditions. Unions like the Western Federation of Miners (WFM) and the United Mine Workers (UMW) made known their grievances. Town authorities and company officials resisted union activity, thus prompting confrontation and violence.

The types of ores mined during this period also changed. The price of silver declined after 1873, and finally by 1893, the market for that metal completely collapsed when the government discontinued its policy of purchasing silver for currency production. By 1900, markets for lead, copper, and zinc increased because of the general expansion of American industry and the appearance of wholly new demands,

such as copper for electrical wiring and lead for automobiles and other products. Industrial demands also accounted for the growth of coal mining in southwestern Colorado. By the turn of the century, this industry replaced gold, silver, and other base metal mining as the largest producer. In 1898, discoveries in the Paradox Valley of carnotite ore, from which uranium is milled, provided a stimulus for growth in that previously underdeveloped region.

During the period from 1881 to 1920, due to improvements such as railroad transportation, the discovery of new ore processing methods, and the entrance of major capital investment, mining in southwestern Colorado went through numerous changes. Even by 1900, the industry showed little resemblance to its nineteenth century predecessor; its history clearly reflects this transition.

The southwestern Colorado mining boom that occurred in the late 1870's carried over into the eighties, and in the period prior to 1893, the region reached its peak in silver production. Considerable activity took place in the Tin Cup, Pitkin, Gothic, and Tomichi Mining Districts in the Gunnison country. With a few notable exceptions during this period, the San Juan mines produced ores in which silver and lead predominated. The mines in or near such towns as Lake City, Silverton, Ouray, Rico, and Telluride continued and expanded their silver mining operations. By 1881, the Virginius Mine, at the head of Canyon Creek near Ouray, was worked in three underground levels on two main shafts. In 1881, rich deposits between Red Mountain and Ironton in Ouray County were discovered, and in 1882 and 1883, prospectors swarmed into this new field.[14] By 1890, a great deal of mining activity west of Lake City took place at the head of Henson Creek on Engineer Mountain, where the Polar Star, Ben Butler, and Frank Hough mines were worked. Silver mined from this area was treated at the fifteen-stamp Palmetto mill, located at the confluence of Henson Creek and Palmetto Gulch. [15]

Until the early 1890's, there was nominal gold production in southwestern Colorado. Collected only from the most accessible areas, placer gold was panned or mined using hydraulic methods; the loosening of surface gold deposits by intense water pressure. Placer gold mining accounted for only $188,635 in San Miguel County, (first in gold lode mining production in southwestern Colorado and third in the state) during the period from 1878 to 1924.[16] Yet, one such placer mining project stands out in the history of the San Miguel River basin. Financed by a St. Louis company, the Montrose Placer Mining Company in 1889, bought six and one-half miles of mining claims at Mesa Creek Flats, situated along the Dolores River, four miles below its juncture with the San Miguel River. To placer mine the area by hydraulic means, the company found it necessary to bring water from the San Miguel River, twelve miles away, and carry it by ditch and flume the entire distance. The "San Miguel Flume", eight miles of which ran along the northern wall of the San Miguel Canyon, was supported on brackets along the side of perpendicular cliffs and ranged from 100 to 150 feet above the river and from 250 to 500 feet below the summit of the gorge. It extended about one-and-a-half miles on the sandstone cliffs above the San Miguel River and some six-and-one-half miles on the canyon wall above the Dolores River. At a cost of about $100,000 and using 1,800,000 feet of lumber, the San Miguel Flume was completed early in the summer of 1891. This remarkable engineering achievement proved however, to be a less than satisfactory device in placer mining. The "leaf gold" in Mesa Creek Flats was so fine that it was impossible to recover when

run through sluice boxes under pressure. Despite the immediate abandonment of the operation after 1891, remnants of the San Miguel Hanging Flume are still in evidence on the canyon walls near present-day Uravan.[17]

The general failure of placer operations in southwestern Colorado did not exclude the possibilities for gold lode mining. Prior to 1900, mining technology had used the cyanide process, a method whereby gold or silver could be more easily separated from low grade ores, or those with a low percentage of valuable metals. Simply stated, the cyanidation process involved treating finely crushed gold bearing ores with solutions of sodium or potassium cyanide. The solution, in which the gold dissolved, was deposited upon zinc or copper plates, where the valuable metal precipitated. With this process, gold producers could recover profit from previously discarded ores. Shipment of low grade ores to modern processing plants was made feasible by the availability of railroad transportation. A third explanation for the advance of gold mining in the mid-1890's was the collapse of silver prices brought on by the Depression of 1893. In many cases, areas where silver had been extensively mined saw renewed mining activity on the basis of new gold discoveries. These were areas where new mining technology was most often applied and where railroad routes had been previously constructed.

In the period following 1895, gold mining was centered primarily in the established centers of San Miguel, San Juan, and Ouray Counties. In the five years from 1897 to 1901, gold production of these counties alone approximated $20 million, or one-sixth of the entire State's output for those years. From 1898 the significant gold mining operations of southwestern Colorado were located mainly in the Telluride District of San Miguel County, and came from the mines of three major companies, the Tomboy Gold Mines Company, the Liberty Bell Gold Mining Company, and the Smuggler Union Mining Company. The gold-bearing veins of the Liberty Bell mine were discovered as early as 1876, but the property was allowed to sit idle due to difficult terrain, production costs, and transportation rates. In 1897, the mine was purchased by the U. S. & British Columbia Mining Company, and from 1898 to 1920, the firm's production from the Liberty Bell and adjacent properties was valued at close to $16 million. The Tomboy Gold Mines Company, incorporated in 1899, showed similar success. From 1899 to 1920, its gold production reached close to $19 million. Although the majority of operations were located in the San Juan region, the Gunnison country mines did show some gold production during this period. In Gunnison County considerable gold was mined in the Ohio City and Pitkin areas, particularly around the Gold Links Mine in the Gold Brick (or Ohio City) Mining District. Southwest of Gunnison, in the Domingo District, the Vulcan and Good Hope mines were large producers at this time.[18]

The decline of silver production in the mid-1890's and the subsequent emphasis on gold mining created numerous personal hardships, businesses went under, and several towns famous for their silver mines were deserted. For some however, this change caused renewed success. No better example of the transisition was that of Thomas F. Walsh's Camp Bird mine. Located above Ouray in the Imogene Basin, the mine was originally discovered by William Weston in 1877. Following four years of only marginal silver production, Weston abandoned the Una and Gertrude mines. The property remained idle for fifteen years, but attracted the attention of Thomas Walsh. At that time, Walsh owned and operated a smelter in Ouray, and his initial interest

in the Una and Gertrude rested in the availability of suitable fluxes* for use at his smelter. In examining the dump piles at the Gertrude mine, Walsh discovered ore rich in quartz-gold. When ore samples were assayed, values ran as high as $3,000 per ton.[19] Walsh immediately set out to acquire the abandoned claims and surrounding land. In the four years following the 1896 purchase, Walsh's property, renamed Camp Bird, included 103 mining claims, twelve mill sites, and covered over 900 acres. Appraised in July, 1900 at $6,000,000, the Camp Bird mine had, by that time, yielded $2,535,512 gross and a profit of $1,650,000. Walsh sold the Camp Bird in 1902 to a British syndicate for an estimated $5,200,000, and from that date to 1916, the Camp Bird (Ltd.) produced $21,884,894 in gold.[20] Despite the tremendous profits of the Camp Bird property under British supervision, the fascination surrounding the mine's history belongs with Walsh's ownership. In less than a decade, from near bankruptcy following the Silver Crash of 1893 to 1902, Thomas Walsh became a multimillionaire. Walsh's former home, in the mining-ghost-town of Animas Forks and the library in Ouray, which bears his name, are present-day reminders of an uncommonly successful mining career.

Probably the most important single factor in the development of gold mining and the mining industry in general during the 1890's was the use of new ore reduction processes. The smelting and milling of low-grade and complex ores, during the last decade and one-half of the nineteenth century, increased in importance as efficient reduction methods meant the difference between profit and loss for many mining operations. The location of railroad routes and shipping points in proximity to successful mining regions facilitated the transportation of ore and promoted the growth of localized milling and smelting industries.

William Palmer's D&RG Railroad was built to the San Juans in 1881 with the intention of capturing the region's ore transportation market. Palmer and English financier, William Bell took this goal one step further. Viewing the strategic location of Durango in relation to the Silverton mining district, the idea of building a smelter in Durango was contemplated even before the railroad reached its final destination. The fact that Palmer's road would carry large quantities of ore, much of which was to be extracted from mines in which he had an interest, combined with the availability of coal from mines at Crested Butte and near Durango and presented an excellent opportunity for the smelter business in Durango. In the summer of 1880, Palmer and Bell incorporated the San Juan and New York Smelting Company, and immediately acquired the Silverton smelting works owned by George Greene and Company.[21] In addition to the Silverton plant, Palmer and his associates purchased a limestone quarry, and several coal mines near Durango. Palmer's group wanted the enterprise to own everything required for reduction except the ores which would come from the entire San Juan country. Converting the Silverton facility into a sampling works where ores could be evaluated before shipment, the San Juan and New York Smelter was relocated at Durango in 1882.

Because of the relative isolation and slow development of the smelting industry in southwestern Colorado, mountain smelters that had been erected before the Durango plant remained in business longer than their counterparts in the Central

* Fluxes are ores or other materials used in the process of removing undesirable substances like dirt or sand from a molten mixture.

Rockies. At Lake City, the firm of Crooke Brothers and its successor, the Crooke Mining and Smelting Company Ltd., operated until the mid-1880's. At Rico, the Grand View Smelting Company and the Pasadena Mining and Smelting Company went into business about 1880 and operated until the latter part of the decade.[22] In addition to these plants, short-lived smelters were erected at Tin Cup and just west of Ophir at Ames during the early 1880's. From 1888 to 1890, the San Juan and New York Smelting Company improved its plant at Durango, installed new roasting ovens, and enlarged and modernized its blast furnaces. As a result of these innovations, the smaller mountain smelters could no longer compete with the newer facilities due to increasingly low prices returned for silver and higher reduction costs.

The middle and late 1890's were not prosperous times for the smelting industry. Declining silver prices following the Silver Crash of 1893 and lower returns for lead ores contributed to narrow profit margins for producers and processors alike. In April, 1895, the Directors of the San Juan and New York plant in Durango were faced with the realities of decreased revenues, and leased the property to the Omaha and Grant Smelting Company of Denver. By 1899, as continued low silver prices stunted further development and as the nationwide industrial consolidation movement swept over the smelting business, the Omaha and Grant operations became part of the American Smelting and Refining Company. The formation of this quasi-monoply in smelting typified the patterns and trends of big business during the "Gilded Age".

Smelters in southwestern Colorado prospered during the 1880's and early 1890's when the high country mines produced large quantities of relatively rich ores. For years these smelters processed more than one-half of the State's output of precious and base metals.[23] When silver prices fell and attention was turned to gold and other base metal production in the late 1890's and early 1900's, the smelting business suffered. The development of metallurgical techniques and the consolidation of many large producing mines in the San Juan region through syndication combined to promote less dependency on the Durango operations. The new reduction processes, such as cyanidation, concentration, and amalgamation*, were incorporated into the operations of the large mining and milling companies. Increased production and treatment of lower grade ores locally, gradually superseded the necessity for smelter shipments. Rather than transport minerals to the Durango smelter, mining companies brought the reduction process to the mines during the years following the turn of the century.

The Smuggler Union, the Tomboy, and the Liberty Bell Mills in the Telluride District were by 1899 utilizing concentration methods in the milling of low grade ores, the Liberty Bell adding a seven-ton cyanidation plant to its eighty-stamp amalgamation mill. In Dolores County, zinc mining increased dramatically following 1898. In that year zinc production jumped to 200 tons from the finteen tons mined in the previous year. In 1901, many of the mines in the Rico District were consolidated under the name of the United Rico Mining Company, and three concentration mills used in lead

* The concentration method is one in which minerals are separated and accumulated from useless ore bodies through crushing and the application of intense heat. The amalgamation process involves suspending ore concentrates in water and then passing the separated materials over a surface of liquid mercury. The amalgam, or mercury-gold substance, is subjected to intense heat from where the gold is recovered.

and zinc production were erected. In 1901, the cyanidation process was added to the Camp Bird and Smuggler Union operations. In 1904, machines were added to the Silverledge Mill at Chatanooga in the Red Mountain District so as to separate iron from the lead-zinc-iron ore, making this mill the first in San Juan County in which zinc was recovered as a marketable product. In 1908, due to a decline in zinc and lead prices, mineral production fell off for approximately five years until new technology and increased demands brought on by World War I, revitalized the copper, lead, and zinc industries. From 1915 to 1920, the mining industry in southwestern Colorado saw a brief resurgence when the value of all metals produced rose thirty per cent, due to the increased production of zinc. The Ute and Ulay Mines outside Lake City produced considerable low grade ore containing large quantities of zinc-blende. The Black Bear mine near Telluride produced complex lead-zinc-copper-iron-silver-gold ore in 1915, and from that time to 1920, a large percentage of San Miguel County's mineral output was obtained from the Smuggler Union Mill's treatment of ore received from the Black Bear. The Yankee Girl and Guston mines in the Red Mountain District, owing to the increase in copper and lead prices, saw a brief revival from 1915 to 1918 after experiencing previous inactivity.

New milling methods, undertaken in order to recover larger quantities of low grade ore, caused the smelting industry to suffer from the mid-1890's well into the twentieth century. By 1920, the Durango plant, one of only two American Smelting and Refining Company facilities remaining in the state, was working at low capacity, with rarely more than one furnace in blast at any given time. The smelter served a few mines at Telluride and other towns in the San Juan country, but when the severe economic dislocation of the Great Depression shut down these mining operations, the Durango plant also failed and was permanently closed in 1930.[24]

Further developments in mining technology supplemented the industry's growth in the 1890's and the early 1900's. Improved facilities for the transportation of ore from mines to mills was provided by wire-rope trams. Guided by large wooden supports, wire cables carried ore cars and at times miners from mine to millsite, replacing the slower burros. A wooden tram-support network, used to transport ore from the Tobasco Mine to the Tobasco Mill, is still in evidence on Cinnamon Pass. Of greater importance to the development of mining efficiency was the introduction of electric power. The history of mining in southwestern Colorado during the last part of the nineteenth century and the first decade of the twentieth runs parallel to the development of hydro and steam power plants, and their application to the mines of the region.

In 1890, a hydroelectric plant was installed four miles below the Caroline mine near Mount Sneffels on Canyon Creek. The experiment of using a tension of 900 volts higher than had ever been used in that kind of work was adopted, and from the Revenue Tunnel Plant Number Two, power lines were run into the mine to supply power to the electric motors and drills.[25] During the winter of 1890 and 1891, L. L. Nunn, owner of the Gold King mine, constructed a hydroelectric plant below his mine at the junction of the Lake and Howard Forks of the San Miguel River, just west of Ophir. Using an experimental Westinghouse generator, the Ames Power Plant was one of the first in the country to generate high voltage alternating current for commercial purposes.[26] The current was generated 2.6 miles to the Gold King mine

where it powered a 100-horsepower electric motor which was in turn, belted to a 40-stamp mill. In 1896, the plant was rebuilt with two-phase equipment, operated at 11,000 volts, and the transmission line was extended across the mountains seventeen miles to the Camp Bird operation. The Bridal Veil Powerhouse, built above Bridal Veil Falls outside Telluride in 1907, provided power by alternating current to light the Smuggler Union mine and to run its mill. A portion of the water needed to run the generator was carried by flume to the facility from Blue Lake, 3,000 feet above and four miles away from the plant. Power was then transmitted to the mines 2,000 feet below. The powerhouse remained in operation until 1953 when the Idarado Mining Company found it cheaper to purchase electricity from the coal-fired plants of the San Miguel Electric Association.[27]

By 1906, the Animas Power Company had completed its hydroelectric plant at Rockwood above Durango, and from that year on it furnished electric power to the neighboring mines. The Western Colorado Power Company, a subsidiary of the Utah Power and Light Company, was formed in 1913 out of the existing systems at Durango and Telluride. The Durango plant, a reserve steam system, was in operation as early as 1886.[28] Serving Durango, Telluride, Montrose, Delta, Ouray, and Silverton, Western Colorado Power furnished practically all of the power requirements for mining operations in southwestern Colorado.

The improvement of ore reduction technologies and the development of industry in Colorado brought with them a need for increased amounts of fossil fuel. From these demands, at the turn of the century, grew a booming Colorado coal business. The first coal mining however, came with the entrance of the Denver and Rio Grande and Denver South Park and Pacific Railroads in the early 1880's. The construction of railroad lines in southwestern Colorado during the 1880's and 1890's was determined by the desire to connect gold and silver mining camps with the rest of the state, but was also motivated by the necessity of securing locomotive fuel from the many rich coal fields in the area.

The largest and most productive coal region in southwestern Colorado was the Uintah Field. Located in northern Gunnison County and in portions of eastern Montrose, Delta, and Mesa Counties, the Uintah Field is composed of three major coal mining centers located in Gunnison County. First discovered in 1879, the Crested Butte coal fields developed rapidly after 1881 when the D&RG built to the town of Crested Butte. The Crested Butte mines, opened by the railroad in 1884, were worked primarily to supply bituminous coal* to the Colorado Coal and Iron Company plant at Pueblo.[29] In 1900, the mine produced its greatest output, 285,889 tons, and employed its largest work force of 326 people. From its first year of operation in 1884, the progress or decline of the Crested Butte mines determined the subsequent fortunes of the town of Crested Butte until 1952, when the mines were closed. Located just north and slightly west of Crested Butte is one of the few anthracite coal* fields found in the State. Located on the Slate River, the Anthracite or Mesa mine (renamed the Smith Hill mine in 1914) was opened in 1882. In 1892, the mine produced 80,182 tons of anthracitc coal, and employed 175 people. Connected with Crested Butte

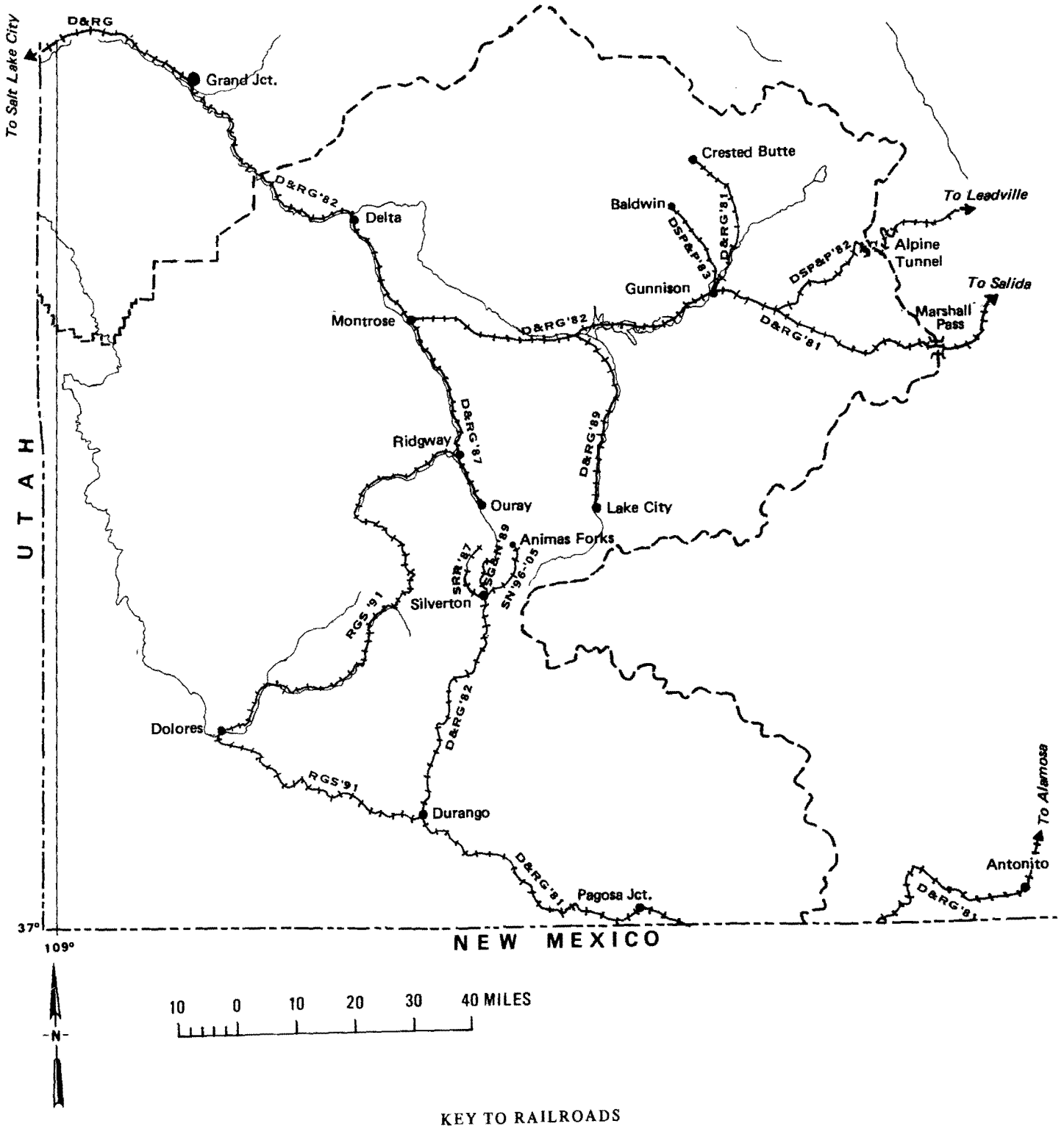
* The difference between the various types of coal is determined by the percentage of fixed carbon content. Anthracite coal has a higher percentage than bituminous. Subbituminous coal has less carbon content than bituminous, but more than lignite coal.

by a D&RG branch line in 1893, the Mesa mine continued production until 1907 when it was closed. Coal deposits on Ohio Creek, in the Mount Carbon field, were discovered by Sylvester Richardson in 1880. By 1883, the townsites of Baldwin and Castleton grew up as these deposits were worked by the Union Coal Company of Denver. That company's affiliation with the Denver, South Park and Pacific Railroad prompted the building of a branch line, north from Gunnison, up Ohio Creek, into these towns and their nearby coal mines. The first operations at the Baldwin mine were short-lived as its highest annual production of 52,892 tons was achieved in 1889. In April of 1893, the mine was closed. The Floresta or Ruby mine, north of Baldwin on Kebler Pass in the Floresta field, was opened in 1893. In that year, the mine was connected with Crested Butte by another D&RG branch line. The Floresta coal mine, a large producer in its own right, was noted for the fact that it was located at a higher elevation than any other coal mine in the United States, and ranked second in the world for this category. Before closing in 1919, the Floresta mine achieved its largest output in 1910, when 68,980 tons of coal were mined. The fourth division of the Uintah Field, the Grand Mesa field, begins around Somerset, in western Gunnison County, near Paonia in Delta County, and extends to near Palisade in Mesa County. The largest of the Grand Mesa mines in southwestern Colorado was located at Somerset. First operated in 1903, the mine was soon connected to the nearby markets at Paonia, Hotchkiss, Cedaredge, and Delta when the Denver and Rio Grande Railroad built up the North Fork of the Gunnison River valley. By 1910, the mine's production was 250,568 tons, which surpassed the Crested Butte mine's output for that year by more than twofold. After a 337,542 ton-year in 1917, production fell off by 1920, when 286,586 tons were mined. During the first quarter of the twentieth century, the Somerset mine was a consistent producer, supplying coal to such towns as Montrose and Grand Junction. [30]

The second major coal field in southwestern Colorado, the San Juan or La Plata Field, extends westward from near Pagosa Springs through La Plata, Montezuma, and portions of Dolores and San Miguel Counties. The largest production came from La Plata County, where the coal mines in the vicinity of Durango supplied the fuel needs of the Denver and Rio Grande Railroad and the nearby mining operations. The Hesperus, Ute, and San Juan mines were large producers during the 1890's. La Plata County's coal production in 1900 was 438,563 tons, while in 1910, the county's mines produced 664,069 tons of coal and employed 715 people.[31]

The Tongue Mesa Field, located in the common corner of Montrose, Ouray, and Gunnison Counties, covers about forty square miles, and its coal reserve has been estimated at 840 million tons.[32] Little mining was done in this field during the 1890's and early 1900's since the coal was subbituminous, and no immediate railroad connection was made to the field. Production was limited entirely to local demand, and the greatest part of this was consumed at Montrose, about ten miles north of the field.[33]

The southwestern Colorado coal industry in the late 1880's and 1890's was totally dependent on the railroads that consumed its output and linked its mines to local and outside markets. The collapse of the silver mining industry after 1893 affected all areas of mining and transportation, yet coal mining fairly well held its own. The D&RG's heaviest traffic during the mid-1890's was in coke and coal, eighty percent of which was carried outside of the state for sale.[34] Through continual



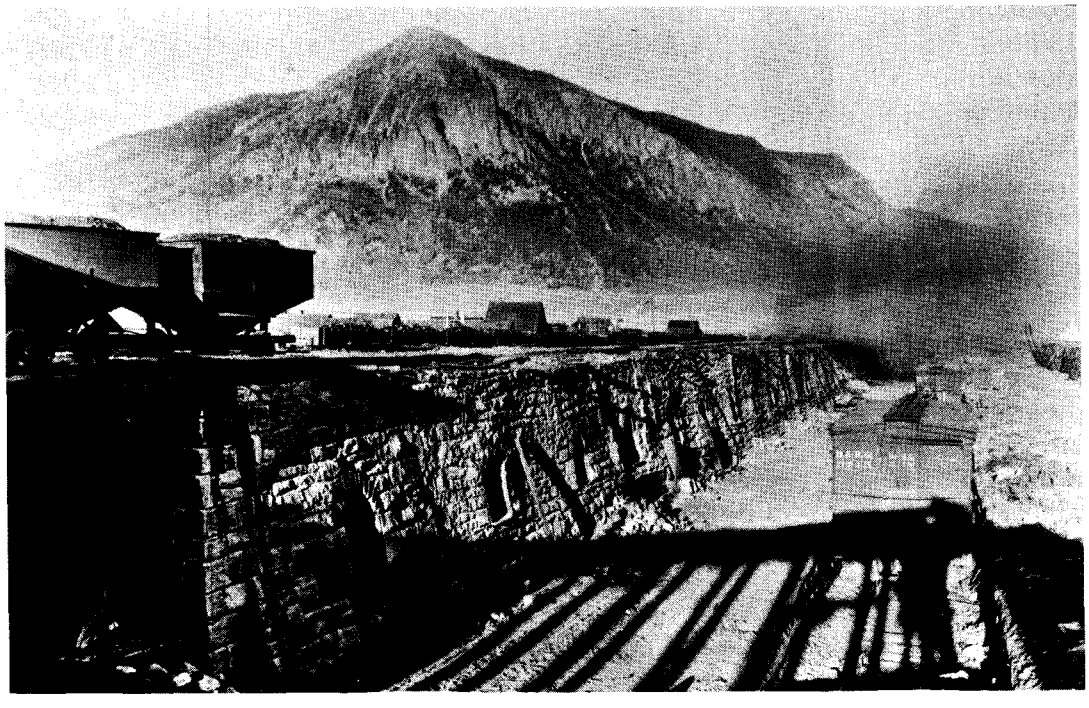
KEY TO RAILROADS

D&RG	Denver and Rio Grande
DSP&P	Denver South Park and Pacific
RGS	Rio Grande Southern
SN	Silverton Northern
SRR	Silverton Railroad
SG&N	Silverton Gladstone and Northerly

Montrose District map of the major railroad construction in southwestern Colorado. (1881-1905)

production and development, coal mining, while still associated with the railroads, began to prosper on its own by the turn of the century thanks to increasing industrialization in the State and region. The fact that much of southwest Colorado's coal was of high quality aided in the expansion of the industry at this time. For example, from 1894 to 1900, Gunnison County's coal mining increased from 200,325 to 432,555 tons, while La Plata County's production grew from 53,571 to 123,524 tons. In 1900, Gunnison County ranked fifth and La Plata County seventh in Colorado coal production.[35]

The growth of the coal mining industry in southwestern Colorado can also be accounted for in the development of the coke industry*. Smelters and newly erected reduction centers demanded fuel with which to heat their ovens, and the major coal producing areas readily supplied their needs. The three major coke producing areas in southwestern Colorado were in Crested Butte, Durango, and Rico. During the



Coke Ovens at Crested Butte
Denver Public Library, Western History Division

mid-1880's, coke was produced near Rico, where some of the earliest toll roads in Dolores County were used to transport coking coal from the mines near the town to the coke ovens a few miles to the north. When the Rio Grande Southern Railroad built its line along that route in 1891, the site between Rico and Ophir was formally named Coke Oven.[36] The Durango mines produced coking coal, but by far the largest producers were the fields located near Crested Butte. By 1917, due to the decline of mining in general, the coke industry had all but closed in the region, with the exception of the Crested Butte ovens, which remained open until the end of the decade.

* Coke is most commonly derived from a process whereby the volatile constiuents of bituminous coal are driven off by heat, and the fixed carbon and ash components are driven together. The important quality of coke is the intense heat it creates when burned.

As hard rock mining declined from 1917 to 1920, the coal industry actually expanded, and by 1920 surpassed silver and gold in value of production. Gunnison County remained the largest producer in southwestern Colorado, the Somerset Mine in the western portion of the county ranking as one of the main contributors with an average capacity of 1,800 tons per day. [37]

TABLE II
Southwestern Colorado
Coal Production (In Short Tons)
1916-1919*

COUNTY	1916	1917	1918	1919
Delta	76,986	102,248	94,870	88,682
Gunnison	511,755	653,233	651,995	472,735
La Plata	111,406	138,523	141,040	116,509
Montezuma	2,855	1,600	1,927	2,262
Montrose	922	1,684	1,020	1,856
Ouray	-----	1,129	641	227
State Total	10,522,185	12,515,305	12,658,055	10,406,543

Consolidation and industrialization of the southwestern Colorado mining industry at the turn of the century did not come without attendant costs. From the human perspective, the modernization of the industry through the advance of technology brought with it a struggle between labor and management. The growth of unions in the 1890's was the response of laboring men to the increasing constriction of opportunities in Colorado industry, low wages, long hours, and poor working conditions. Much of the political strength of organized labor that rose to address these grievances came from the growth of the Western Federation of Miners (WFM). In Colorado the growth of the WFM had been particularly noticeable in the decade from 1893 to 1903. Representatives from Aspen, Creede, Ouray, and Rico helped found the organization in 1893, and Colorado's miners continued to be its leaders. As early as 1896, Colorado's Bureau of Labor Statistics reported that the WFM had chartered locals in both coal and metalliferous camps and estimated that their membership included at least fifty percent of all miners in the state.

The WFM's reputation for lawlessness and violence originated in its initial encounter with mine owners in the Cripple Creek District during early 1894. The union's subsequent strikes enhanced this image, yet in all cases, both sides bore equal responsibility for disorders. In March, 1899, the WFM local at Henson, three miles west of Lake City, struck the Hidden Treasure and the Ute and Ulay mines when the owners demanded that unmarried employees live in the company's boarding houses. Early in the strike armed miners seized the mines and retained possession until state troops restored the property to the owners.

* The above data was compiled from the *Yearbook of the State of Colorado,* 1918-1920.[38]

The most significant labor dispute in southwestern Colorado occurred in the Telluride mining district. Until 1899, the prevailing wage in the district's mines had been $3 for an eight-hour day, but when the Smuggler Union mine was acquired by Boston capitalists, its manager, Arthur L. Collins, instituted the "fathom" (or contract) system where the quantity of ore mined and not the hours spent in the mine, determined the work day.

Dissatisfaction with the fathom system, which was foreign to the mining camps of Colorado, increased until on May 2, 1910, Miners' Union Number 63 struck the Smuggler Union over the question of how labor was to be employed in the district. Flatly refusing to negotiate, Collins reopened the mine on June 17 with nonunion labor hired at terms denied the strikers. Clearly, the labor question at the Smuggler Union was not one of wages or hours, but of union recognition. Union members interpreted Collins' strikebreaking tactics as an attempt to destroy their organization. The dispute climaxed on July 3, 1910, when about 250 heavily-armed strikers surrounded the Smuggler Union properties. Negotiations for a settlement between strikers and strikebreakers degenerated into a morning-long battle in which three men were killed and six were wounded. The strikebreakers surrendered and nearly 100 of their number were forcibly removed from Telluride. On July 6, an agreement between the disputing factions was arranged wherein a $3-eight-hour-day clause was included in a union contract with all the companies of the district. The strike however, had divided the mining camps and the town of Telluride into pro-union and anti-union forces. Reconciliation of any sort became impossible when on November 19, 1902, Arthur Collins was murdered by an unknown assassin. Anti-union fears and hatred, enhanced by the intransigent Telluride Mining Association, led the business community to conclude that the WFM should be destroyed. Their chance came in the late summer of 1903.[39]

In part, the renewal of trouble in Telluride was the result of a general drive by labor to force improved working conditions throughout Colorado industry during 1903 and 1904. Although Telluride's miners won the eight-hour day in 1901, millworkers had been excluded from contract negotiations. To obtain equitable employment conditions, on September 1, 1903, approximately 100 millmen from the Smuggler Union walked off their jobs, forcing six mills to close. Immediately the Liberty Bell, Tomboy, and Nellie mines shut down, bringing to a virtual standstill all mining activity in the district. Reacting to the walkout, citizens, businessmen, and mine owners alike quickly formed the Telluride Citizens' Alliance (TCA), part of a national employers' movement, whose goal was the destruction of the WFM. Mine owners, with the backing of the TCA planned to reopen the mines with nonunion labor, but were fearful that violence, like that which had occurred in 1901, would result. State and military intervention was requested, and after considerable deliberation, Governor James H. Peabody, on November 20, 1903, ordered Major Zeph T. Hill and his command to Telluride to insure peace. Hill, in assuming command of Telluride by January, 1904, proceeded to "clean out" the town of activists and union members. Essentially imposing martial law, Hill had deported to Montrose and Ridgway, close to 100 strikers by February. Violence threatened when it was announced that these banished miners would return to Telluride from Ouray escorted by fifty armed union men. On April 8, 1904, seven union leaders led approximately sixty of the deported miners back to Telluride. Anti-union forces met the train,

arrested the sixty-seven men, and promptly deported them again. Although strikers refrained from violence, their efforts did not result in union recognition. The mines and mills ran with nonunion labor and anti-unionism clearly ran the mining district. Throughout July and August, civil authorities continued to banish "undesirables", yet by December mine owners conceded the $3-eight-hour-day to all its employees. The union's calling off the strike did not alter the mine owners' determination never to hire a member of the WFM however. Few, if any, known WFM members found employment in the district. For anti-union forces, the mauling of the WFM in Telluride represented a clearcut victory by management over southwestern Colorado miners.[40]

As science and technology provided several necessary steps in the growth of southwestern Colorado's mining industry during the years from 1881 to 1920, so too did mining aid in the development of technology and science. Two of the region's numerous ore and stone deposits played a part in the construction of important state and national buildings.

Southwestern Colorado provided a fair share of building stone, granite being the most significant non-precious mineral. Although some granite was quarried near Durango, the most important granite field was in Gunnison County, at Aberdeen. Located four miles up Beaver Creek, about five and one-half miles from the abandoned railroad site of Hierro, and six miles west of Gunnison, the granite mines were part of an 1890 placer claim that included 120 acres. The mines were first worked in 1889 when the firm of Gettis and Scerie removed stone for the building of the State Capital. In 1905, stone was quarried for the State Capital steps, and from 1911 to 1912, large amounts of stone were taken out in order to build the State Museum in Denver. Gunnison County was also famous for its marble quarries on Yule and Crystal Creeks, near the town of Marble. One of the first buildings to be constructed from Yule marble was the United States Post Office in Denver. Lincoln Memorial, the Tomb of the Unknown Soldier, Union Station in Denver, the Federal Reserve Bank, Colorado National Bank, and the United States Customs Building were constructed with stone taken from the Marble quarry. By 1941, its resources depleted, the quarry shut down its operations, never to reopen.[41]

One of the major developments in southwestern Colorado mining was in the carnotite, uranium, and vanadium industries. The Colorado portion of the large carnotite region in the American southwest is bounded on the west by the Colorado/Utah line, on the north by the Uncompahgre Plateau, on the east by the San Juan Mountains, and on the south by McElmo Creek.[42] Located in the area comprising western Montrose, San Miguel, and Dolores Counties, carnotite mining was first taken up in the Paradox and Gypsum Valleys. Although radium was not discovered in Paradox until 1898, carnotite, the soft yellow ore from which uranium is processed was attracting the attention of Paradox valley pioneers as early as 1881, when the Talbert brothers sank a shaft into the yellow material while in search of gold and silver on Roc Creek. This claim, which showed no potential for precious metal was abandoned, but in later years it became part of the Copper Prince mine near Uravan from which carnotite ore was extracted.

In the spring of 1898, a sample of carnotite was sent by Gordon Kimball of Ouray to the French chemist, Charles Poulet, who was then in Denver. Poulet found the sample to be rich in uranium. This radioactive ore, one of the first of its kind to be found in the world, was used in the discovery of radium, and between 1898 and 1928, ores taken from the Uravan region accounted for almost one-half of the world's production. The existent towns of Nucla, Bedrock, and Naturita underwent considerable growth when reduction plants were established between the Paradox Valley and Naturita by Standard Chemical, the Radium Company of Colorado, and General Vanadium Company. Radium ore, with an estimated value of $1,100,000 was produced in the southwestern Colorado counties alone in 1919. H. E. Bishop, manager of the Radium Company of Colorado estimated in 1923 that ninety percent of the 150 grams of radium used in the United States came from the Colorado and Utah carnotite regions. With the discovery and production of Belgian Congo radium ore in 1923, demand for carnotite mined in southwestern Colorado fell off sharply. As a result, population decreased in the Paradox Valley although production continued on a small scale. By 1933, Bedrock was quiet, claims had been deserted, and the Yellow Bird, Monogram, Thunderbolt, and Jo Dandy carnotite camps were but memories.[43]

In 1915, the vanadium phase of carnotite mining began. Lasting through World War II, vanadium mined in Colorado accounted for eighty-five to ninety percent of world production. Vanadium, a rare metal used as an alloy in the strengthening of steel and iron, was mined chiefly by the Primos Chemical Company and the General Vanadium Company. The Primos Company obtained most of its ores along Bear Creek in San Miguel County, while the General Vanadium Company worked deposits on the north side of the San Miguel River between Sawpit and Placerville, and along both sides of Leopard Creek between Placerville and Brown.[44] The only large vanadium mill in the state was located at Vanadium, eight miles west of Telluride. During the later stages of vanadium mining, most of the work was done by the Vanadium Corporation of America, which had bought out the other companies. Radium, sodium uranate, uranium nitrate, and various vanadium compounds were mined on a small scale along the Dolores River after 1920. The most recent stage of carnotite production includes uranium mining for nuclear power; this development, along with continued vanadium mining, affected the use and occupation of the Paradox Valley during the early 1950's.

Moving toward modernization and with a need to grow from frontier camps into stable communities, mines and mining towns succeeded or failed in the period after 1881 according to their ability to procure for themselves railroad transportation, agricultural produce, electricity and a modern communications system.[45] The effects of industrial consolidation, a significant change in federal currency programs, and national economic depression caused, by 1920, many individual mining operations and small camps to disappear. The larger towns like Gunnison, Crested Butte, Silverton, Durango, Lake City, and Ouray lost large percentages of their populations. The steady decrease of population in the San Juan country after 1900 is testimony to the fact that mining alone could not support the large numbers once living in the mining "boom" towns. An example of such a population decline is shown for Lake City in Table III. The mining camps in the Gunnison country, as well, showed a decline. Table IV illustrates the manner in which many southwestern Colorado camps,

failing to secure railroad transportation, or simply having their mines worked out, ceased to exist. All of the towns except Whitepine, Tin Cup, and Sillsville in the following Table passed from the census between 1910 and 1920, and have never been re-occupied. [46]

TABLE III

Decline in the Population of Lake City
1890-1940*

YEAR	POPULATION
1890	862
1900	1609
1910	646
1920	538
1930	449
1940	349

TABLE IV

Early Towns of Gunnison County
That Have Ceased to Exist**

TOWN	1890	1900	1910
Allen	---	---	101
Castleton	63	322	351
Crystal	88	101	4
Dorchester	---	---	33
Gothic	48	50	0
Howeville	---	300	119
Irwin	45	264	56
Kezar	28	83	111
Sillsville	189	194	45
Spencer	49	88	39
Tin Cup	209	264	56
Vulcan	---	93	38
Waunita	65	150	27
Whitepine	237	322	35

* This table originally appeared in "Social and Economic History of Southwestern Colorado, 1860-1948", by D. H. Cummins (Ph.D. Thesis: University of Texas, 1951), p. 238.

** Twelfth Census of the U. S. (1890), I, *Population,* Part I, p. 440; Thirteenth Census (1910), II, *Population,* pp. 207-208. This table originally appeared in "Social and Economic History of Southwestern Colorado, 1860-1948", by D. H. Cummins (Ph.D. Thesis: University of Texas, 1951), p. 530.

The diversification of the mining industry at the turn of the century, facilitated by the coming of the railroads, was symbolic of a larger trend in southwestern Colorado during the years from 1881 to 1920. As interest and productivity in mining waned during the early years of the twentieth century, attention was directed to other areas of economic life. Southwestern Colorado was more than a mineral resource frontier, and the men and women who came to the region after 1881 made use of fertile river bottoms and high country grazing lands. The development of ranching and agricultural production in the period from 1881 to 1920 opened a new era of land use in southwestern Colorado, one that would have lasting effects on the character of occupation in the region up to present times.

NOTES

1. Carl Abbott, *Colorado: A History of the Centennial State* (Boulder: Colorado Associated University Press, 1976), p. 90.

   See also: Robert G. Athearn, *The Coloradans* (Albuquerque: University of New Mexico Press, 1976), p. 125.

2. D. H. Cummins, "Social and Economic History of Southwestern Colorado, 1860-1948" (Ph.D. Thesis: University of Texas, 1951), p. 446.

3. *Ibid.*, p. 449.

4. In researching and writing the history of William Jackson Palmer's Rio Grande Western Railroad during its construction phases in southwestern Colorado, the author relied upon the excellent work of Robert G. Athearn, *Rebel of the Rockies* (New Haven: Yale University Press, 1962).

5. Cummins, *op. cit.*, p. 449.

6. Athearn, *Rebel of the Rockies*, p. 101.

7. Frank Hall, *History of the State of Colorado,* Vol IV (Chicago: Blakely Printing Co., 1895), p. 311.

8. Cummins, *op. cit.,* pp. 455-459.

9. For a concise chronology of the career of Otto Mears and southwestern Colorado transportation, much useful information was obtained from the chapters on railroading in Michael D. Kaplan, "Otto Mears: Colorado's Transportation King" (Ph.D. Thesis: University of Colorado, 1975).

   See also: Sidney Jocknick, *Early Days on the Western Slope of Colorado* (Denver: The Carson-Harper Co., 1913), p. 242.

   See also: *Ridgway Herald,* January 7, 1892.

10. Cummins, *op. cit.,* pp. 479, 492.

    See also: Wilbur F. Stone, *History of Colorado* Vol. I (Denver: S. J. Clarke and Co., 1918), p. 381.

11. See: Zeke Scher, "The Man Who Kept the Mining Camps Alive" *Denver Post Empire Magazine,* April 23, 1973.

    See also: Duane Vandenbusche, *Early Days in the Gunnison Country* (Gunnison: B & B Printers, 1974), p. 117.

12. Wilson Rockwell, *Uncompahgre Country* (Denver: Sage Books, 1965), p. 79.

13. See: Morris Taylor, "The Barlow and Sanderson Stage Lines in Colorado, 1872-1884", *Colorado Magazine* (L, No. 2, Spring, 1973).

    See also: Ouray *Solid Muldoon,* March 3, 1882.

14. Cummins, *op. cit.,* p. 479.

    See also: S. E. Poet, "The Story of Tin Cup, Colorado", *Colorado Magazine* (IX, No. 1, January, 1932), pp. 30-38.

15. Charles Henderson, *Mining in Colorado* (Washington: Government Printing Office, 1926), p. 53.

16. Rockwell, *op. cit.,* p. 160.

17. Hall, *op. cit.,* p. 235.

    See also: Rockwell, *op. cit.,* p. 165.

18. For useful statistics concerned with gold and silver mining and production levels in Colorado from 1858 to 1923 see Henderson, *op. cit.,* pp. 45, 94-96, 224.

    See also: William M. Brown, "The History of the Cebolla-Powderhorn Country" (M.A. Thesis: Western State College, 1935), p. 32.

19. Colorado Writers' Project, *Colorado: A Guide to the Highest State* (New York: Hastings House, 1941), p. 57.

    See also: Rockwell, *op. cit.,* p. 238.

20. Several informative newspaper clippings concerned with Thomas Walsh and the Camp Bird mine were found in the Thomas F. Dawson Scrapbooks, "Mining", (Colorado Historical Society, Denver, Colorado): *Denver Post,* May 4, 1905; *Denver Times,* January 26, 1912; and the *Rocky Mountain News*, January 23, 1916.

    See also: Henderson, *op. cit.,* pp. 184-185.

21. Thomas A. Rickard, *The Development of Colorado's Mining Industry* (Denver: The American Institute of Mining Engineers, 1896), p. 9.

    See also: LeRoy R. Hafen, *Colorado: A Story of the State and Its People* (Denver: The Old West Publishing Company, 1945), p. 273.

    See also: Mary Ayers, "The Founding of Durango, Colorado", *Colorado Magazine* (VII, No. 3, May, 1930), pp. 85-94.

22. For a detailed history of the smelting industry in Colorado, see James Fell, "Ores to Metals: The Evolution of the Smelting Industry in Colorado, 1864-1921" (Ph.D. Thesis: University of Colorado, 1975), pp. 245-247.

23. *Ibid.,* pp. 324, 337, 415.

24. Henderson, *op. cit.,* pp. 12, 16, 50-51, 115.

    See also: Fell, *op. cit.,* p. 409.

25. Colorado State Planning Commission, "Development of the Electric Power Industry in Colorado, 1916-1936" (WPA Project No. 3089, September, 1938), p. 4.

26. T. L. Baker, *Water for the Southwest: Historical Survey and Guide to Historic Sites* (New York American Society of Civil Engineers, 1973), p. 61.

    See also: *Electrical World,* March 17, 1891, pp. 1237-1243.

27. Colorado State Planning Commission, *op. cit.,* p. 4.

    See also: Baker, *op. cit.,* p. 63.

28. Stone, *op. cit.,* p. 322.

29. Cummins, *op. cit.,* p. 597.

    See also: *Denver Post,* January 1, 1911.

30. The information concerning coal mine production and employment figures were taken from the Colorado State Coal Mine Inspector's Reports. The data utilized in this manuscript was originally transcribed from those reports by H. L. Scamehorn who lent the author the results of his research. Subsequent references to material used from Scamehorn's compilations will be noted under Colorado State Coal Mine Inspector's Reports. The information cited above was taken from the reports on Gunnison County for the years 1889, 1892, 1893, 1910, 1917, and 1920.

    See also: Cummins, *op. cit.,* pp. 599-601.

31. See: Colorado State Coal Mine Inspector's Reports, *op. cit.,* for La Plata County, 1900 and 1910.

    See also: Cummins, *op. cit.,* pp. 600-601.

32. Cummins, *op. cit.,* p. 602.

33. Stone, *op. cit.,* p. 475.

34. Athearn, *Rebel of the Rockies,* p. 183.

35. Stone, *op. cit.,* p. 465.

36. Cummins, *op. cit.,* p. 602.

37. Stone, *op. cit.,* p. 458.

38. For statistics on annual coal production in Colorado, see: Colorado State Board of Immigration, *Yearbook of the State of Colorado, 1918-1920* (Denver: Welch-Haffner Printing Co., 1918, 1919, 1920).

39. The principal source used in the account of the Western Federation of Miners in Southwestern Colorado was George Suggs', *Colorado's War on Militant Unionism* (Detroit: Wayne State University Press, 1972). For specific references to the WFM's strike in Telluride see pages 20-21, and 118-119.

40. Abbott, *op. cit.,* p. 134.

    See also: Suggs, *op. cit.,* p. 145.

41. Cummins, *op. cit.,* pp. 615-616.

42. *Ibid.,* p. 606.

43. Lee Deets, "Paradox Valley: Historical Interpretation" *Colorado Magazine* (XI, No. 5, September, 1934), pp. 194-196.

    See also: Rockwell, *op. cit.,* p. 201.

44. Cummins, *op. cit.,* p. 609.

    See also: Carl Ubbelohde, Maxine Benson, and Duane Smith, *A Colorado History* (Boulder: Pruett Press, 1976), p. 288.

45. For excellent analyses of the development of mining camps in southwestern Colorado and the Rocky Mountain West, see: Duane Smith, *Rocky Mountain Mining Camps* (Bloomington: Indiana University Press, 1967).

    See also: Rodman Paul, *Mining Frontiers of the Far West, 1848-1890* (New York: Holt, Rinehart, and Winston, 1963).

46. Cummins, *op. cit.,* p. 530.

CHAPTER IX.

RANCHING AND AGRICULTURE:
THE ECONOMIC DIVERSIFICATION OF SOUTHWESTERN COLORADO

Until 1881, agriculture in southwestern Colorado was confined to limited areas, being basically nothing more than a service industry for mining camps and developing towns. Mining was the initial engine for economic growth in the 1870's, gold and silver were the products that brought people and money to the region, and agriculture was the oil that kept the machinery moving.[1] The increasing importance of agriculture, ranching, and fruit growing came about through several events. The removal of the Utes from the Western Slope in 1881 freed the alluvial valleys of the Uncompahgre River, the Gunnison River, and the North Fork of the Gunnison River for agricultural purposes, railroad construction, and permanent settlement. Stimulated by the promotion and construction of irrigation projects, agriculturalists moved away from dry land farming techniques, and began experimenting with a variety of crops on the newly opened lands. By the mid-1880's, the North Fork of the Gunnison River, the lower Uncompahgre River, and the Montezuma valley regions had been discovered to be well-suited for fruit growing. The forested regions near the San Juan River and the Dolores River attracted enterprising lumber companies during the 1890's and after the turn of the century. Valley hay production, and summer grazing in the mountains, had natural advantages over eastern Colorado range conditions, and caused the establishment of a prosperous livestock industry. Finally, the decline in the price of silver after 1893 promoted diversification in regional economics, sending many former miners to the newly developing towns in agricultural areas.[2]

The attraction of open and unused land, a theme which runs throughout the history of the American west, provided the stimulus for the development of ranching and agriculture in southwestern Colorado during the last two decades of the nineteenth century. Like early mining however, enterprising ranchers, farmers, and lumbermen began their operations without full knowledge of the extent and vulnerability of the resources they developed. In their minds, the land, the water supply, and forests were abundantly available for their particular purposes. By the turn of the century, another philosophy concerned with land use arose. Motivated by a desire to counter the destructive use and to promote the efficient management of the country's natural resources, conservationists enacted legislation beginning in 1891, that called for the withdrawal of numerous forest reserves throughout Colorado and the west. The creation of the White River Forest Reserve in 1891 and the Battlement Mesa Forest Reserve in 1892 marked the beginning of a different and modern approach to resource use and protection.

The history of contemporary ranching and agriculture in southwestern Colorado was determined, to a large extent, by the federal government's creation of forest reserves, its imposition of public domain regulation, and the promotion of numerous reclamation projects. The idea of conserving the state's and nation's natural resources through regulation was often vehemently opposed by western slope communities, especially its cattle growers. While not an entirely peaceful transition, the assumption on the part of the government, during the twentieth century, for the regulation of the public lands is an important factor in the history of southwestern Colorado. The history of ranching and agriculture from 1881 to 1920 then, is characterized by the attempts of ranchers, farmers, lumbermen, and fruit growers to adapt to the requirements of the land and the resources from which they made their livelihood.

The history of the range livestock industry in southwestern Colorado begins with the establishment of the Los Pinos Indian Agency cow camp, in 1869, on Tomichi Creek just outside present Gunnison. To supply the agency with beef, government agents drove Texas cattle, usually Longhorns, north from New Mexico, through the San Luis Valley, and over Cochetopa Pass. Jim Kelley and Alonzo Hartman, names synonomous with the later growth of the Gunnison country's cattle raising industry, were in charge of the cow camp. They grazed the agency's stock on Tomichi Creek and in Taylor Park. The Longhorns that were procured for agency consumption because of their abundance and low cost, lost favor among western slope ranchers in subsequent years due to their tough meat, and their failure to acclimate to higher altitudes. Southwestern Colorado has been chiefly Shorthorn and Hereford cattle country. Introduced to the region in the 1870's and 1890's respectively, the Shorthorn and Hereford breeds adapted well to the environment of the western slope. Sturdier and stockier than the Texas cattle, these English breeds offered considerably more prime beef.[3]

One of the first herds of Shorthorns, from Missouri, to enter southwestern Colorado was driven by Fernando James and Frank Wadsworth in the early 1870's. When the Utes denied them admittance to southeastern Colorado, James and Wadsworth took their herd over Raton Pass to Santa Fe, and then to Farmington, New Mexico. From Farmington, they persuaded the Utes to allow them to enter present-day Montezuma County. Upon arrival, the cattle were broken up into a number of small herds which were then parcelled out, each placed in the care of an Indian family. The Indians learned to drive their cattle to the high mountain ranges during the summer, bringing them down to the valleys in the fall. For almost a decade, James and Wadsworth furnished supplies and horses to the Utes while receiving a large share of the annual livestock increase. These early Shorthorns became the foundation stock for many of the herds in western Colorado in later years.[4]

Although comparatively smaller in scope than eastern Colorado's cattle industry, southwestern Colorado did experience open range days and "an era of the cattle kings". Beginning in the late 1870's, and lasting until the mid-1890's, large herds of cattle were grazed in the Montezuma Valley, the Paradox and San Miguel Valleys, in the Gunnison country, and along the North Fork of the Gunnison River. Initially with Shorthorns and later with Herefords, the cattle kings extended their herds over large areas of western slope range country, and dominated the political and economic life of the growing towns in their respective regions.

In 1879, the grazing land between the Mancos River and the Dolores River attracted the attention of the prominent Trinidad cattleman, George W. Thompson. Thompson first used the range from the Mancos River to Cross Canyon, on the Dolores River, to graze approximately 5,000 head of cattle. By 1884, Thompson Park cattle, including forty purebred Herefords and fifty purebred Shorthorn bulls, numbered close to 12,000 head. As the townsites of Dolores and Mancos developed and land was increasingly taken up for homesteads, Thompson moved out. In 1884, he trailed his entire herd eastward across the mountains into the San Luis Valley and on to West Las Animas on the Arkansas River, from where they were shipped to Kansas City.[5]

The lower San Miguel and Paradox Valleys, like the Montezuma Valley, were settled by cowmen. In the early 1880's, W. H. Nelson, travelling from Lathrop, Colorado by way of the Gunnison River Valley and Montrose, summered his herd of 600 cattle at Iron Springs Mesa, about ten miles northwest of Placerville. Nelson soon established a summer range camp near the base of the Lone Cone in southern San Miguel County, a fall range camp on Dry Creek, west of the Lone Cone camp in what is now referred to as the "Basin", and a winter range camp at the junction of Gypsum Creek and the Dolores River.[6] In 1883, James P. Galloway brought 1,200 head from Wagon Wheel Gap and settled in the Paradox Valley near Bedrock, close to Nelson's winter grazing operation. Galloway established a 1,600-acre ranch from where he managed his herds. The San Miguel Cattle Company and the Club Ranch established their headquarters near the site of modern Uravan, and ran cattle between the San Miguel River and East Paradox during the early 1880's. In 1884, Harry B. Adsit, with about 1,000 head, settled in the Lone Cone region. In 1885, these and other cattlemen formed a headquarters near their fall and spring ranges, and called it Norwood. Each spring during the late 1880's, ranchers from the San Miguel and Paradox Valleys gathered their respective herds and trailed them through Norwood en route to summer range in Beaver Park and on Goshorn Flats in the Big Cone and Little Cone areas in southern San Miguel County. In the fall, the cattle were herded back through Norwood and driven north to the freighting centers of Montrose and Delta. In 1890, when the Rio Grande Southern was built, cattle were trailed to the Placerville station, from where they were shipped to eastern markets. In 1890, close to 30,000 cattle grazed the Norwood region.[7]

At the same time the Paradox and lower San Miguel River Valleys were opened as cattle country, Sam Hartman, Alonzo's brother, came from Denver by way of Gunnison to settle and graze his herd of Shorthorns in the North Fork of the Gunnison River Valley. Encouraged by the North Fork's potential for cattle operations, Hartman returned to Gunnison in 1882 to purchase more cattle, saddle horses, and 300 pounds of oats. By 1883, Sam Hartman had one of the largest herds in western Colorado, running them in the summer months on Crystal Creek, Curecanti Creek, and Soap Creek, while wintering them near his homestead near the Little Muddy River, below Castle Rock. By this time, other stockmen had come into the North Fork's grazing territory, driving their cattle from Gunnison over Black Mesa via the old Indian trail. Aaron Clough and Sam Angevine put the first cattle on the Minnesota Creek range in 1883, and at about the same time, David and Solomon Stevens drove a herd into the Holy Terror Creek country. Near the headwaters of the North Fork, Enos Hotchkiss and the Wade brothers, more noted for fruit growing in the region, were also the first cattlemen in the Big Muddy territory.[8]

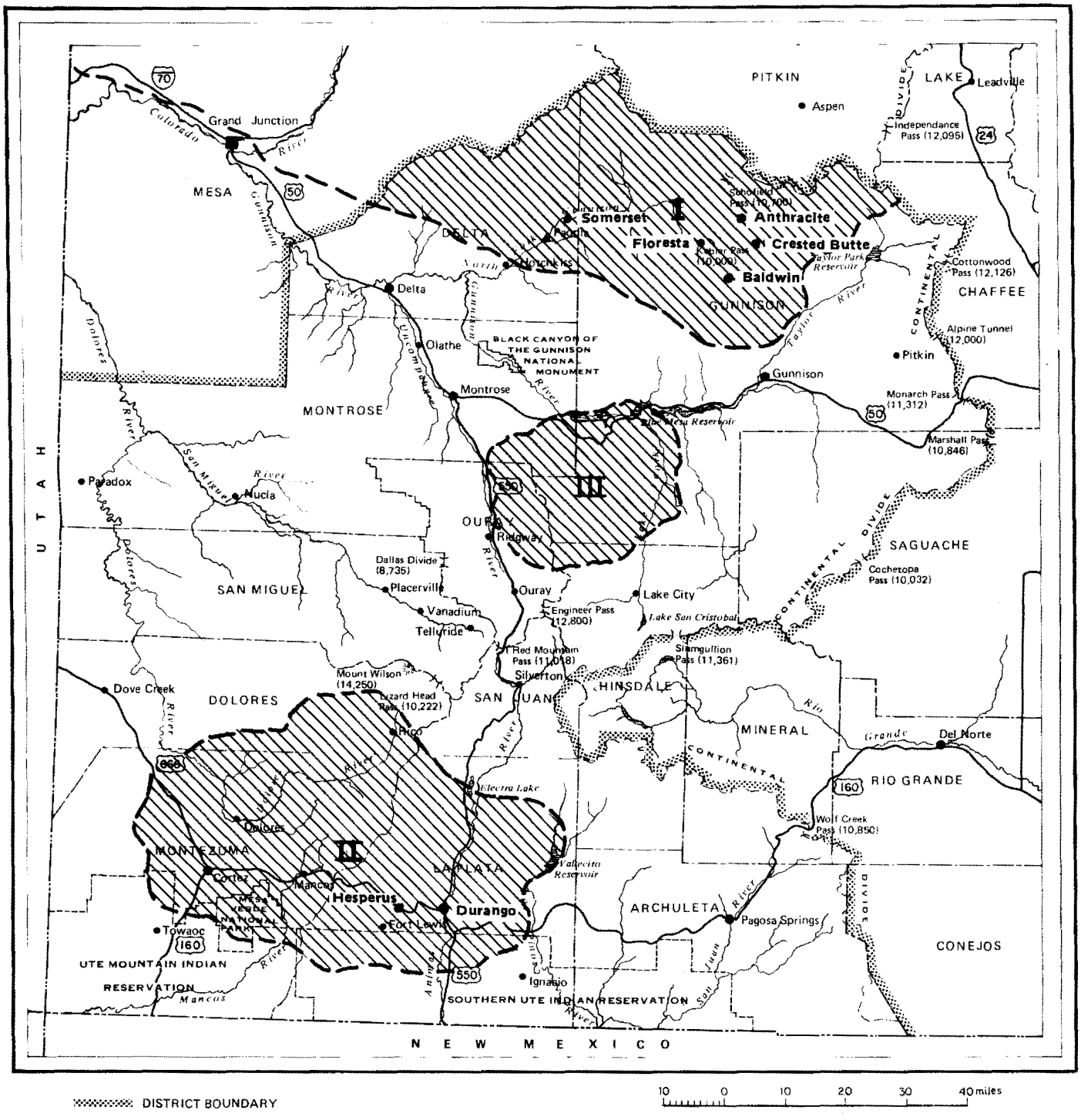
Shorthorns were the pioneer stock of the North Fork cattle country in the 1880's; they were brought in from eastern Colorado by way of Gunnison and Black Mesa. By the early 1890's some Hereford bulls were herded onto the Terror Creek range, and before long the Hereford breed outrivalled their predecessors because of general hardiness and superior lung power. During the 1880's and early 1890's, North Fork cattle were wintered in the valleys near the towns of Crawford, Paonia, and Hotchkiss, and summered in the surrounding mountain ranges. In the fall, herds were driven from their summer ranges to Delta, Glenwood Springs or taken over Black Mesa along the "Hartman Trail" to Sapinero, from where they were shipped to Denver and eastern markets by rail. Approximately 150,000 head roamed Delta

County from 1884 to 1890. The last big summer roundup occurred in 1893. By this time the winter ranges along the North Fork Valley had been largely fenced or overgrazed. Thousands of cattle also died during the unusually harsh winter of 1893.[9]

A major determinant in the growth of the cattle industry in southwestern Colorado was the arrival of rail transportation. With such facilities, the towns of Durango and Gunnison, during the 1880's, became shipping centers for cattle raisers in their respective regions. Gunnison became a focal point for the cattle industry of west central Colorado when in 1882, the first shipment of marketable steers was made over the Denver and Rio Grande Railroad from that city to Denver.[10] By 1885, Alonzo Hartman had expanded his ranching operation on Tomichi Creek by parlaying his original 160-acre homestead into one of the great ranches of the Gunnison country. The general and expanded use of abundant land for grazing in the vicinity of the Gunnison market place, in Taylor Park, along Ohio Creek, and in the Cebolla-Powderhorn country, made the entire region during the 1880's and 1890's, one of the fastest growing cattle centers in the state. For example, by 1905, Hartman's Dos Rios mansion, from where he managed 2,000 acres of land and ran 2,000 head of cattle, became a landmark for the region.[11]

Cattle running on the Ohio Creek range near Castleton.
Colorado Historical Society

Attractive not only to cattlemen, southwestern Colorado's valley regions also appealed to homesteaders, farmers, and fruit growers. As these persons took up more land claims, subsequently reducing the extent of open range areas, cattle raising had become, by the turn of the century, a scattered, small-scale enterprise. Cattle grazed on fewer acres of land. This, in turn, depleted natural grasses on available range lands.



I. Uintah Field
II. La Plata Field
III. Tongue Mesa Field

Montrose District map illustrating the major coal fields in the region.

As cattlemen failed to adapt to a changing situation in southwestern Colorado, they were forced out of business, leaving unoccupied lands open to others. The gradual diminution of the cattle range in southwestern Colorado, was accompanied by two significant developments, the creation of national forest reserves and the emergence of the sheep industry. The conflict that arose at the turn of the century over forest reserve administration, as well as between sheepmen and cattlemen regarding range use, represented the beginnings of a new direction within the range industry in southwestern Colorado. Administration of the public lands and the question of grazing rights, while they had their origins about 1890, remain fundamental and inter-related issues today. A clause in the General Revision Act of 1891 stated that:

> *The President of the United States may, from time to time, set apart and reserve in any State or Territory . . . any part of the public lands wholly or in part covered by timber or undergrowth, whether of commercial value or not, as public reservations, and the President shall, by public proclamation, declare the establishment of such reservations and the limits thereof.* [12]

On October 16, 1891, in accordance with the General Revision Act, President Benjamin Harrison created the White River Timber Land Reserve (White River Forest Reserve), the second such forest reserve in the United States and the first in Colorado. In the following year, on Christmas Eve, the most imposing withdrawal of the state's forested land to that date, the Battlement Mesa Forest Reserve was created. Important to conservation efforts, this reserve, which was composed of land in Gunnison and Delta Counties, sealed off from homestead entry the entire watershed of the North Fork of the Gunnison River. Reaction among southwestern Coloradans was mixed. On the one hand, farmers and fruit growers in the vicinity of the towns of Delta and Montrose were enthusiastic about the protection of their interests through the conservation of natural water supplies. On the other hand, cattlemen in the region were skeptical about the reserve, for in 1892, no administrative plan for its use had been spelled out. In the spring of 1898, Secretary of the Interior Hoke Smith established a grazing permit and quota system, whereby signatures were required from all applicants who wished to use the grazing lands within the reservation. Despite the initial furor over the creation of forest reserves in Colorado, some cattlemen favored the conservation program. They argued that unless overgrazing was stopped, the cattle industry faced certain extinction on the western slope. The permit system, if administered properly, might prove beneficial to the "little man", while restricting the cattle barons. Finally, cattlemen favored the permit and quota system on the grounds that it protected them from encroaching sheep populations. [13] At the turn of the century, large numbers of sheep entered the grazing lands in the southwestern corner of the state from Utah and New Mexico. By 1910 for example, the sheep population of Archuleta, La Plata, Montezuma, and Montrose Counties was 200,031 as compared to 68,508 cattle.[14] Measures which barred the entrance of sheep onto the Battlement Mesa Forest Reserve were fully supported by the area's cattlemen. The attitude of many cattlemen in Gunnison and Delta Counties, who saw an opportunity, through federal management, to keep sheep off the Battlement Mesa Reserve, shifted to the anti-conservation ranks when on April 4, 1900 forest reserve grazing permits, for all livestock, were allowed by the General Land Office. [15] The growing disapproval of the forest reserve concept reached its peak during the period from 1905 to 1907 during the second administration of Theodore Roosevelt.

In May, 1905, President Theodore Roosevelt created the Gunnison Forest Reserve; while in June, the San Juan, Cochetopa, Montezuma, and Uncompahgre Forest Reserves were established. In a period of one month, a total of 3,664,506 acres had been withdrawn in southwestern Colorado. Making matters more detestable to the region's cattle growers was the administration's grazing tax program, which went into effect on January 1, 1906. To graze on the forest reserves, cattlemen were required to pay from twenty-five to thirty-five cents per head during the regular season, and sheepmen paid from five to eight cents under the same conditions. Although initial grazing quotas were generous and rates were fair, cattlemen protested the very idea of government supervision. Verbal protest during the late 1890's turned, at times, to violent threats in the 1910's. Forest Service Rangers such as James Lowell in the Montezuma Forest Reserve and William Kreutzer of the Battlement Mesa and Gunnison Forest Reserves faced intense and often hostile opposition to the imposition of grazing regulation and management. [16]

As much as the federal government attempted to regulate use of the forest reserves for grazing purposes, they were powerless to completely alleviate the persistent tension between sheep and cattle interests. Sheepmen were discouraged from using Gunnison and Delta County ranges by the Cattle Growers' Protective Association, an extra-legal society which often used violence as a weapon to stop sheepmen and their flocks from entering the region. Testimony to the association's effectiveness is the fact that in 1910, only seventy-two sheep were counted in Gunnison County. [17] On the insistence, and under the supervision of the Forest Service, sheep were finally allowed into the Muddy Creek, North Fork, and Taylor Park regions after 1910, but as late as 1917, the Gunnison River was the recognized dividing line between the sheep and cattle country near Sapinero; the north side belonging, by unwritten law, to the cattlemen, while the south side was occupied by sheepmen. [18] Despite a gradual easing of tensions after 1920, controversy over range use and government supervision continued. The livestock industry remains one of the largest contributors to the economy of southwestern Colorado, and as it has developed into modern times so too has federal involvement with it. The enactment of the Taylor Grazing Act in 1934, and the creation of the Bureau of Land Management in 1946, are examples of such expanded federal activity. Their importance to southwestern Colorado, will be discussed in the following chapter.

As cattlemen considered grazing lands and the open range on the public domain theirs by right of first use, and as mining operations sought to locate and extract all valuable minerals within reach, so too did southwestern Coloradans, in the nineteenth and early twentieth centuries, perceive forested areas as exploitable and practically limitless resources. Government conservation policies of the 1900's, in affecting the regulation of grazing lands, were aimed directly at stopping the destruction of timberlands themselves. The rapid development of mining, and the construction of townsites and railroads in the 1880's and 1890's were dependent upon the availability of large amounts of timber. Mine-shaft timbers, railroad ties, and building lumber were supplied by abundant forests. For example, the cross-ties used by the Denver and Rio Grande Railroad were hand hewn and six and one-half feet long by six inches square each. Millions of board feet of lumber went into the construction of culverts, trestles, bridges, water tanks, and buildings along the railroad. With the exception of railroad contracts, early logging in southwestern Colorado

supplied a limited, local market. Yet the available and plentiful timber resources attracted, by the 1890's and 1900's, businessmen interested in developing a lumber industry. The operations of two such lumber companies in the San Juan River Valley and in the Dolores River Valley clearly illustrate that despite conservation legislation, logging interests prevailed for many years after the creation of the national forests.

In February, 1895, Edgar Biggs, C. D. McPhee, and J. J. McGinnity of the New Mexico Lumber Company incorporated the Rio Grande and Pagosa Springs Railroad (RG&PS). They intended to build their line from Lumberton, New Mexico, on the D&RG main line, to the timber regions around Pagosa Springs, establishing saw mills and lumber camps in the vicinity of construction. By the close of 1896, the RG&PS line had been built just within the Colorado border, and on the Rio Navajo, the lumber towns of Edith and Chromo were established. By 1898, the Edith and Chromo mills had a combined daily capacity of 85,000 board feet of lumber. The timber resources around Pagosa Springs also attracted A. T. Sullenberger, who, in April of 1899, incorporated the Rio Grande Pagosa and Northern Railroad (RGP&N). Sullenberger's proposed line would run between Pagosa Junction, on the D&RG main line, to Pagosa Springs. Two weeks after the formation of the RGP&N, Sullenberger expanded his interests by incorporating the Pagosa Lumber Company. The spring of 1899 began what appeared to be a race to the ponderosa pine forests in the San Juan River Valley around Pagosa Springs.

In October, 1900, the "Pagosa and Northern" began regular service; by that time the RG&PS had managed only slight progress north of its Chromo mill site. As a result of no real competition from the New Mexico Lumber Company, the Pagosa Lumber Company quickly expanded its logging operations in all directions from its newly established saw mill at Pagosa Junction. Sullenberger carried out initial operations north of the mill in the vicinity of Dyke. In 1903, the Pagosa Lumber Company built its second saw mill at Dyke. Employing twenty-five to thirty men, this plant, during the ensuing years, turned out several million board feet of lumber. As the area between Pagosa Junction and Dyke, which supplied most of the logs milled at the Junction plant, was progressively stripped of its timber, it seemed to Sullenberger good business to move the main plant nearer the scene of cutting. The most available forests were located north of Pagosa Springs, along the San Juan River and east of the RGP&N line. To fulfill its needs, the Pagosa Lumber Company constructed in 1905, a logging railroad spur which stretched into the hills north of Pagosa Springs for more than a dozen miles, then descended back to the southeast into the San Juan Valley. The large stands of timber, it appeared, would provide profitable work for at least another decade. Their expectations were realized for the timber resources in the San Juan River region were almost completely depleted by 1915. In 1916, the Pagosa Lumber Company pulled up stakes, railroad spurs, plant facilities, and left Pagosa Springs.[19]

Logging in the Edith region, like that near Pagosa Springs, had stripped so much of the available timber that the New Mexico Lumber Company was forced, in 1914, to pull its operations back into New Mexico. However, during the latter stages of logging in the region, Edgar Biggs had set his sights on another potentially rich timber region in southwestern Colorado.

Construction of the Rio Grande Southern, in 1891, formed a large arc of narrow gauge trackage through the heavily forested regions in the La Plata and San Miguel Mountain ranges. In 1901 and 1902, with available railroad facilities for his logging interests at Dolores, Biggs bought cutting rights to large stands of timber north of that town. In 1905, Biggs hired Arthur Ridgway to survey the region for its timber potential. Ridgway's report estimated that 210 square miles or 134,400 acres of prime western yellow pine were available in the area. He also proposed that Biggs construct a sixty-five mile logging railroad with which to harvest close to 135,000 narrow gauge carloads of lumber.

Biggs' original plan was to harvest the timber north of Dolores without New Mexico Lumber Company backing. McPhee caught wind of Biggs' plan however, and purchased the Denver-based lumber company which Biggs had hoped would finance his operation. Although Biggs remained affiliated with New Mexico Lumber until 1917, McPhee and McGinnity, after their coup of 1907, took charge of operations in the Dolores River Valley. Soon after, they extended Biggs' initial holdings by filing on alternate sections of land north and west of Dolores in a checkerboard fashion, isolating intermediate sections and rendering them inaccessible to competitive operations. By 1913, New Mexico Lumber, under the direction of McPhee and McGinnity, had obtained cutting rights in the Dolores region which totalled close to ninety million board feet of lumber.

McPhee focused his attention on his New Mexican timber operations until 1924, when a government timber sale in the Montezuma National Forest was announced. United States District Forester Allen Peck estimated that the timber offered amounted to about seventy million feet of western yellow pine. Beginning seven miles north of Dolores, the forested tract extended fifty-five miles and covered 118,391 acres. With its adjacent holdings, the New Mexico Lumber Company made good its bid for the national forest timber, and began planning its harvesting. The company made plans to erect a mill town approximately four miles north of Dolores, construct a railroad to that town, and extend railroad logging spurs into the available timber stands. In June, 1924, the logging town was named McPhee. By the end of the following year, McPhee's lumber mill was in full operation, the logging railroad extended for over forty miles into the timber stands, and the town bustled with activity. By August, 1926, it was reported that the lumber mill at McPhee produced 125,000 board feet of lumber per day. According to the *Denver Post*, McPhee, in 1927, had one of the west's biggest saw mills. Employing a crew of about 500, the McPhee plant accounted for more than one-half of the state's sixty million foot production for 1927. While 1927 was the peak year of McPhee's lumber operations; the years that immediately followed were ones of bad luck and failure. Destructive fires in the saw mill and the economic impact of the Great Depression of the 1930's all but shut down the mill and logging operation. By July, 1933, the last of the logs adjacent to the railroad were brought into McPhee.[20]

A perspective on the logging industry in southwestern Colorado is, at best, a two-sided proposition. The lumber which the companies of Sullenberger, Biggs, McPhee, and McGinnity manufactured was indispensable to the development of towns and other industry on the western slope. Their efforts were a valuable contribution to the growth of regional economics. Clearly however, the New Mexico Lumber Company and the Pagosa Lumber Company's operations demonstrated the necessity

of establishing rigid guidelines for timber harvesting. The untold damage to the region's forests, animal life, and watersheds through unrestricted cutting severely jeopardized natural reforestation. Timber harvesting in southwestern Colorado at present, while not the prolific or exploitative enterprise of former years, attempts to meet the requirements of lumber users as well as those of forest protection measures.

Similar to ranching and the logging industry, agriculture is dependent upon the availability and productivity of natural resources, suitable climate, soil, and moisture being primary requirements. With agriculture, there is an additional factor; the farmer must experiment with planting methods and wait for results. Pioneer agriculturalists in southwestern Colorado, during the last two decades of the nineteenth century had to answer two fundamental questions as well. Would crops prosper at high elevations, and was there enough water to ensure adequate yields? One of the early experiments in agriculture that proved successful was in the area of fruit growing.

In the fall of 1881, Sam Wade and Enos Hotchkiss visited the North Fork of the Gunnison River. Upon discovering that thorn apple and buffalo berry bushes grew in abundance, they were convinced that many varieties of fruit might be raised in the valley. After returning to Lake City, Wade went back to the North Fork during the following spring, bringing with him a number of experimental fruit trees from Missouri. Wade's fruit cargo consisted of 100 apple trees, ten pear and apricot trees, twenty peach trees, 200 cherry trees, 100 grape vines, 1,000 blackberry plants, and 500 maple trees.[21] He planted them on his homestead, the site of present-day Paonia. In the spring of 1882, Hotchkiss set out a few fruit trees of his own on his homestead, near modern day Hotchkiss. By this time, about 600 acres in the North Fork valley had been taken up for fruit growing, and irrigation ditches were constructed to the various orchards. After the first planting in 1882, Hotchkiss, Wade and others waited anxiously for results. The soil actually exceeded expectations, and although Wade lost close to one-third of his planting during the winter, the remainder of the crop grew well. By 1885, the potential of the North Fork valley received wide spread attention after the region's fruit growers displayed their wares at a fair sponsored by the Delta County Board of the State Horticultural Society.[22]

Following the success of North Fork growers, the fruit industry spread to other regions of Delta County and to Montrose County. The Bell orchard, in Montrose County, was planted in 1889, and contained 3,000 apple trees, 3,000 peach trees, 500 pear trees, and seventy-five cherry trees. The Stephens orchard, near Delta, was composed of 950 apple trees, 1,150 peach, and a number of pear, plum, and apricot trees. In 1891, apple, peach, pear, and cherry orchards in Montrose and Delta Counties yielded, for shipment, 31,225 and 198,680 pounds of produce respectively.[23]

While fruit growing prospered in Delta and Montrose Counties during the early years of the twentieth century, similar developments took place in Montezuma County. By the turn of the century, west of Cortez, in McElmo Canyon, apple and peach orchards had been planted. In 1904, McElmo Canyon peaches won national awards at the St. Louis World's Fair. During the years from 1909 to 1912, apple orchards were set out in the vicinity of Lebanon, approximately seven miles north of Cortez.[24] The southwestern Colorado fruit industry, a mainstay in the Montezuma Valley, Uncompahgre Valley, and North Fork's economy by 1910, was

developed steadily into the 1920's. In 1920, Delta County ranked first in Colorado for the number of productive apple and apricot trees, and second, behind Mesa County, for peach and pear trees; and in 1925, apple production for southwestern Colorado was more than one-half of the state's total.[25]

A row of York Imperial Apple trees at the Ashenfelter orchard near Montrose, Colorado.
Denver Public Library, Western History Department

The development of staple crop and feed crop production in southwestern Colorado progressed in a pattern quite unlike the fruit growing industry. Where fruit growing began as an experimental and entrepreneurial venture, staple and feed crop production was undertaken out of necessity. With rapid population growth during the 1880's and 1890's, arose food supply demands that had not existed earlier. Where the mining camps of the 1870's had imported the bulk of their food requirements from eastern Colorado producers, the large number of settlers who came to the region during the last twenty years of the nineteenth century made arrangements unfeasible. Although meat was easily supplied, cattle and even wild game being used, the attention of early agriculturists was focused on staple crop, subsistence production.

Probably the first staple crop to be grown in southwestern Colorado was wheat. Introduced initially to Colorado by Mexican settlers, wheat was planted in the Montezuma Valley during the early 1880's, and not long after that in the Uncompahgre Valley.[26] To supply herds of cattle during the winter, ranchers bought alfalfa or raised it themselves. Colorado alfalfa was grown as early as the mid-1880's, primarily in the large cattle raising regions of the Montezuma Valley, the Uncompahgre River, Gunnison River, and North Fork Valleys. Alfalfa is not only a good drought resistor, but it is a crop that also adds vital nutrients to the soil. During the 1890's

and early twentieth century, crop diversification techniques prompted experimentation in alternating alfalfa with other crops. By the turn of the century, it was found that potatoes, when planted after several seasons of an alfalfa crop, grew abundantly. Introduced to southwestern Colorado by eastern growers and European immigrants, potatoes were grown primarily in the Uncompahgre River Valley. In 1921, potatoes raised near Montrose, Olathe, and Delta yielded for shipment a combined total of 2,350 railroad carloads.[27] Diversification of crop planting in the early twentieth century also led to the successful cultivation of onions and peas. A crop that brought good returns in southwestern Colorado was Pinto or Mexican beans. Successful bean planting resulted from the discovery that beans could be grown without irrigation through dry land farming methods. Thought to have possibly been introduced by prehistoric inhabitants of the Dolores River Valley, twentieth century bean growing occurred largely in sections of Montezuma and Dolores County. Beans, in fact, were Dolores County's major agricultural product. Another crop that was found to grow well in southwestern Colorado soil was sugar beets. Beets were first raised in 1887, on the western slope in Mesa County; the first sugar beet factory was built in Grand Junction in 1899. Sugar beet farming in the Uncompahgre Valley did not get underway until 1904, and except for a few farms in Uncompahgre Park (in Ouray County), all the sugar beets grown in southwestern Colorado were found in Delta and Montrose Counties.[28] Originally shipped to the Grand Junction factory, sugar beets from the Delta and Montrose regions were, after 1920, processed at a newly opened plant at Delta. The Delta sugar beet factory, managed by the Holly Sugar Company, produced at a 600-ton per day capacity by 1926. The beet sugar industry, successful in its own right, also supplemented other agricultural endeavors. Beet pulp, tops and beet molasses, in the diets of cattle and sheep, promoted fattening and increased meat and milk production.[29]

Southwestern Colorado's soils showed potential for high yields from the beginning of agricultural experiments. The accomplishments of fruit growers during the 1880's and 1890's were a good example. Despite early successes however, it was apparent to farmers that diverted or stored water was required to ensure continued production. The beginnings of the sugar beet industry on the western slope was based exclusively on irrigation, as beet crops required watering in the late summer when streams are usually at low levels. As the amount of land taken up for agricultural purposes steadily increased, demands by farmers, fruit growers, and townspeople put a strain on already limited water supplies. The development of irrigation engineering, undertaken from the outset of agricultural experimentation, became necessary even before the turn of the century.

Water rights and water shortage problems have been a part of Colorado history since the early settlement period. Common law or riparian rights, giving land owners the right to water that flowed over their land, even though no beneficial use was made of it, were rejected by Colorado's pioneers. The First Territorial Legislature enacted, in 1861, a law stating that "all persons claiming, owning, or holding a possessory right or title to any land in the Colorado Territory that is on the bank, margin, or neighborhood of any stream of water shall be entitled to its use for agricultural purposes".[30] The Colorado State Constitution upheld this doctrine, by reaffirming "the right to divert the unappropriated water of any natural stream to beneficial uses shall never be denied. Priority of appropriation shall give the better right as between those using the water for the same purposes". [31]

With legal precedents for the diversion of water established, pioneer agriculturalists in southwestern Colorado during the early 1880's, put them to use. Sam Wade, for example, diverted water from the North Fork of the Gunnison River to his orchards at Paonia as soon as they were planted. As the number of water users increased, so too did the size of irrigation projects. By the mid-1880's, the capital to build large irrigation canals was generally raised through the formation of corporations. One of the more successful ventures of this type was organized in the Montezuma Valley.

In November, 1885, James W. Hanna, of Cortez, and a number of wealthy men from outside the area formed the Montezuma Valley Water Supply Company. The company intended to construct an irrigation canal from the Dolores River through the divide that separated that river from the Montezuma Valley. Beginning in 1887, and for two years, crews worked on a 5,400 foot tunnel of the "Great Cut" through the divide. In 1889, the tunnel was completed, and brought water to farmers and ranchers in the Montezuma Valley. At about the same time work was underway on the Montezuma Valley project, a second company, known as the Dolores Number Two Land and Canal Company, was organized. In 1887, construction at the point of the "Great Cut" tunnel intake began. The Dolores Number Two Canal, when finally completed in 1907, carried water, through the Morton Flume, to the Yellow Jacket, Hovenweep, and McElmo Canyon regions. Narraguinnep Reservoir was filled, as well, by this canal. Despite numerous changes in corporate ownership, indebtedness, and dissatisfaction among water users, the Montezuma Valley Irrigation Company survived, and to this day continues operations.[32]

The first irrigation project in the Uncompahgre River Valley began in 1882, when O. D. Loutsenhizer built a four-mile ditch from the Uncompahgre River to Montrose. Finding the Loutsenhizer ditch inadequate to meet water demands, the Uncompahgre Ditch and Land Company organized and built, in 1883, the Montrose and Delta Canal. Its outtake was seven miles south of Montrose, and it extended down the valley as far as Delta. Numerous ditches were dug further down the Uncompahgre River around Olathe and Delta, but it was discovered, by 1890, that despite the continued construction of irrigation canals from the river, there was not nearly enough water to meet ever increasing demands. It was estimated, in 1890, that water from the Uncompahgre River could effectively irrigate only 10,000 acres out of a total of 185,000 acres of irrigable land in the valley. This shortage caused the residents of the Uncompahgre Valley to look longingly at the torrent of water plunging through the Black Canyon of the Gunnison River, only sixteen miles away.[33] To divert water from the Gunnison River into the Uncompahgre Valley, large amounts of money and machinery were required; needs that neither private individuals or corporations could provide. At the turn of the century, however, federal agencies became interested in the reclamation of irrigable lands, and gave hope to the farmers, ranchers, and fruit growers in the Uncompahgre Valley that such a project could be possible.

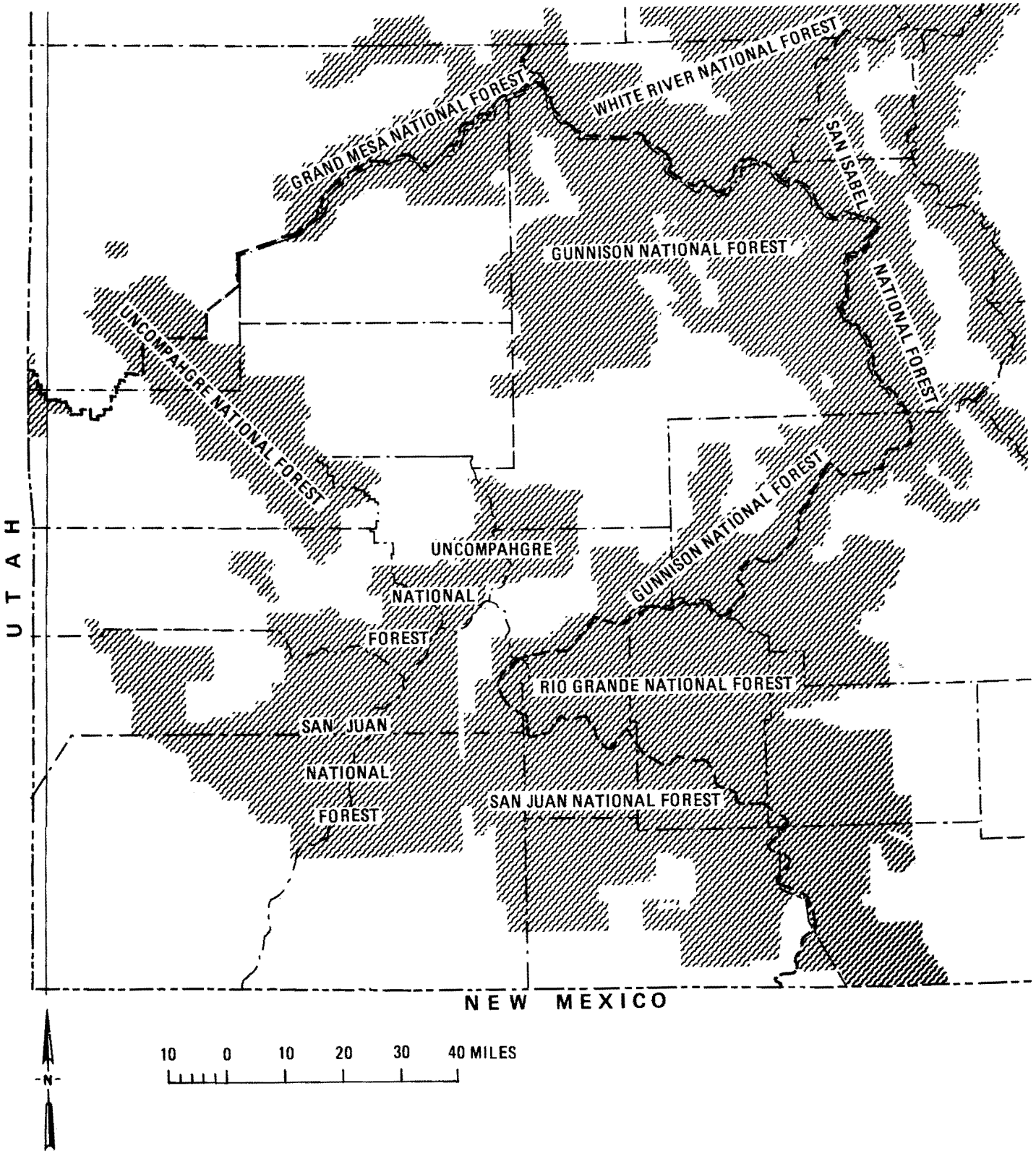
The first person to recognize the feasibility of diverting water from the Gunnison River was F. C. Lauzon, of Montrose. Though he spoke tirelessly on the subject at school board and town meetings, he failed to secure funds from property owners for his diversion scheme. In 1900, Mead Hammond, of Paonia, placed a measure before the Colorado House of Representatives that called for a $25,000 appropriation

to survey and begin construction of a tunnel from the Gunnison River to the Uncompahgre Valley. Although the bill passed and 800 feet of tunnel was completed, the financing was wholly inadequate to meet the demands of such a large project.[34]

In June, 1902, the Newlands Act was signed by President Theodore Roosevelt. This piece of legislation provided a plan whereby financing for projects like the one on the Gunnison River could take place. The Newlands Act established a fund that would be used for surveying, constructing, and maintaining irrigation works for water storage, diversion, or transmission. Appropriations for individual irrigation projects, as approved by the Department of the Interior, were to be repaid through assessments on the project's reclaimed land. These payments, in turn, would create a revolving fund from which future projects could be financed. In March, 1903, the Bureau of Reclamation, created by the Newlands Act, took over the Gunnison Tunnel Project from the State of Colorado. Construction began in January, 1905 and was not completed until September, 1909. The importance of the Newlands Act, the Bureau of Reclamation, and the Gunnison Tunnel can be seen in the growth of farming and irrigation acreage for Gunnison and Delta Counties after 1909.

In the Uncompahgre River Valley, the Montezuma Valley, and in other areas of southwestern Colorado as well, irrigation promoted the development and growth of agriculture in the years after 1900. Tables V and VI illustrate the increased irrigation acreage in southwestern Colorado counties for two separate time periods; Table V demonstrates the general increase in irrigation acreage before 1909; and Table VI points to the fact that after 1930, irrigation began to catch up with the amount of land suitable for agricultural production. Table VII, in relation to Tables V and VI, demonstrates that the increase in irrigation greatly affected the growth in farm acreage, and the increase in the number of farms started in the years between 1900 and 1920.

The year 1905 stands out as a milestone, not only as regards the growth of ranching and agriculture, but for the development of southwestern Colorado in general. In that year, the Bureau of Reclamation began work on the Gunnison Tunnel Project. In May and June of 1905, the Gunnison, San Juan, Montezuma, Cochetopa, and Uncompahgre Forest Reserves were created. The entrance of the federal government into the determination of southwestern Colorado land use is clearly a major transition in the region's history. In all respects, 1905 was the beginning of a new and modern era in southwestern Colorado. Replacing ineffective and wasteful use of the region's natural resources with scientific and planned management, while not always popular, was of great impact. Federal programs for grazing, timber harvesting, reclamation, and public lands leasing affected ranching and agriculture directly in the years from 1905 to 1920, but shaped, as well, those industries which would play an important role in the continued development of southwestern Colorado.



Montrose District map showing the boundaries of the national forests in the region.

TABLE V
IRRIGATION ACREAGES 1889 TO 1909*

County	1889	1899	1909
Archuleta	3,084	6,529	15,008
Delta	17,846	35,219	62,411
Dolores	216	855	1,139
Gunnison	20,115	26,971	55,848
Hinsdale	1,389	1,399	2,924
La Plata	11,785	10,771	40,840
Montezuma	2,122	12,246	27,176
Montrose	27,361	34,132	55,993
Ouray	7,894	10,440	15,621
Saguache	52,543	75,909	145,874
San Juan	---	---	---
San Miguel	2,125	5,425	14,712
TOTAL	160,188	255,769	516,710

TABLE VI
IRRIGATION ACREAGES 1919 TO 1939**

County	1919	1929	1939
Archuleta	11,933	16,225	15,425
Delta	93,509	107,333	113,580
Dolores	1,023	630	579
Gunnison	58,280	41,474	69,042
Hinsdale	3,675	5,212	4,605
La Plata	63,755	94,532	75,218
Montezuma	44,083	62,146	48,453
Montrose	94,757	84,058	86,837
Ouray	14,016	20,401	16,663
Saguache	137,581	163,815	147,782
San Juan	---	---	---
San Miguel	18,634	18,249	24,250
TOTAL	640,718	753,125	715,027

TABLE VII
The Number of Farms and Farm Acreage in Southwestern Colorado, 1900-1920***

County	Number of Farms			Land in Farms (Acres)		
	1900	1910	1920	1900	1910	1920
Archuleta	215	282	420	41,298	85,130	146,028
Delta	874	1,741	1,741	93,689	142,193	142,193
Dolores	36	31	186	3,382	5,578	57,889
Gunnison	239	277	376	52,795	83,282	121,579
Hinsdale	35	24	40	5,288	5,436	10,633
La Plata	297	735	1,069	60,069	151,709	305,003
Montezuma	261	1,004	904	46,072	159,204	192,703
Montrose	524	1,138	1,368	83,349	151,375	218,255
Ouray	128	189	180	25,673	48,833	73,010
San Juan	6	0	0	55	0	0
San Miguel	229	140	334	45,566	35,600	128,492
State Totals	24,700	46,170	59,934	---	13,532,113	24,462,014

*Twelfth Census of the United States (1900), V., *Agriculture,* Part 2, p. 832; Thirteenth Census (1910), *Agriculture, By States, Alabama-Montana,* 227-232. This table was originally found in the *Social and Economic History of Southwestern Colorado, 1860-1948,* by Dansil Highfill Cummins, p. 670.

**Fourteenth Census of the United States (1920), VII, *Irrigation and Drainage,* 156-161; Fifteenth Census (1930), *Irrigation of Agricultural Lands,* p. 106-111; Sixteenth Census (1940), *Irrigation of Agricultural Lands,* p. 216. This table was found in the *Social and Economic History of Southwestern Colorado, 1860-1948,* by Densil Highfill Cummins, p. 671.

***Figures for 1900 and 1910 were taken from the Thirteenth Census of the United States (1910), *Agriculture,* Vol. IV., (Alabama-Montana) (Washington: Government Printing Office, 1913), pp. 184-232. Figures for 1920 were taken from the United States Census of Agriculture 1925, *Colorado* (Washington: Government Printing Office, 1927), pp. 203-259.

NOTES

1. Carl Abbott, *Colorado: A History of the Centennial State* (Boulder: Colorado Associated University Press, 1976), p. 166.

2. See: D. H. Cummins, "Social and Economic History of Southwestern Colorado, 1860-1948" (Ph.D. Thesis: University of Texas, 1951), p. 626.

3. For a general description of the various breeds of cattle in the pioneer range days of Colorado, see: Ora Peake, *The Colorado Range Cattle Industry* (Glendale, California: A. H. Clark Co., 1937).

   See also: Richard Goff, *Century in the Saddle* (Denver: Colorado Cattlemen's Centennial Commission, 1967).

4. Goff, *op. cit.,* pp. 20-21.

5. Lamar Morre, "George W. Thompson: Cattleman of Southern Colorado and Northern New Mexico" Western Range Cattle Industry Series, Colorado State Historical Society, Denver.

6. Walter Gilliam, "First Cattle in Norwood District", *Colorado Magazine* (XV, No. 2, March, 1938), pp. 76-77.

7. Wilson Rockwell, *Uncompahgre Country* (Denver: Sage Books, 1965), p. 174.

8. Wilson Rockwell, *New Frontier: Sage of the North Fork* (Denver: The World Press, Inc., 1938), pp. 71-72.

9. *Ibid.,* pp. 74-75.

10. Ora Peake, *op. cit.,* p. 272.

11. Duane Vandenbusche, *Early Days in the Gunnison Country* (Gunnison: B & B Printers, 1974), p. 37.

12. Michael G. McCarthy, *Hour of Trial* (Norman: University of Oklahoma Press, 1977), p. 11.

    See also: United States, *Statutes at Large,* Vol. XXVII, p. 1103.

13. McCarthy, *op. cit.,* p. 68.

14. United States, *Thirteenth Census of the United States* (1910), Vol. IV, Agriculture, (Washington: Government Printing Office, 1913), pp. 200-205.

15. E. Louise Peffer, *The Closing of the Public Domain* (Stanford: Stanford University Press, 1951), p. 73.

16. McCarthy, *op. cit.*, pp. 185-186. For an in-depth biography of William Kreutzer, see: Len Shoemaker, *Saga of a Forest Ranger* (Boulder: University of Colorado Press, 1958).

17. United States, *Thirteenth Census of the United States*, pp. 200-205.

18. Rockwell, *New Frontier*, p. 169.

19. For the discussion on the logging industry in southwestern Colorado, the principal reference used in this work was Gordon Chappel's, *Logging Along the Denver and Rio Grande*, (Golden, Colorado: Colorado Railroad Museum, 1971). For specific references for the Pagosa Springs lumber industry, see pages 33 and 77.

20. For specific references for the McPhee lumber industry, see: Chappell, *op. cit.*, pp. 141-157.

21. Alvin Steinel, *History of Agriculture in Colorado*, (Fort Collins: Colorado A & M University, 1926), pp. 507-508.

22. Rockwell, *New Frontier*, p. 42.

23. Steinel, *op. cit.*, pp. 508-509.

24. Ira Freeman, *A History of Montezuma County Colorado*, (Boulder: Johnson Publishing Co., 1953), p. 106.

25. State Board of Immigration, *Yearbook of the State of Colorado*, (1920), (Denver: Welch-Haffner Printing Co., 1920), p. 187.

26. Freeman, *op. cit.*, pp. 189-190.

27. *Denver News*, July 28, 1921.

28. Cummins, *op. cit.*, p. 696.

29. Steinel, *op. cit.*, p. 307.

30. Carl Ubbelohde, Maxine Benson, and Duane Smith, *A Colorado History*, (Boulder: Pruett Press, 1976), p. 197.

31. Abbott, *op. cit.*, p. 151.

    See also: Article XVI, Sections 5 and 6, *Constitution of the State of Colorado*, 1876.

32. Freeman, *op. cit.*, pp. 96-103.

33. Rockwell, *Uncompahgre Country,* p. 87.

34. *Ibid.,* p. 103.

CHAPTER X.

THE FEDERAL GOVERNMENT IN SOUTHWESTERN COLORADO

In 1890, over sixty percent of the land, or over forty-four million acres, in Colorado was owned by the federal government, a sizeable portion of which lay in southwestern Colorado. This fact becomes interesting when one takes into account that for close to thirty years prior to this date, the government's role in determining the use of the public domain was oriented exclusively toward the sale of the public lands to westward migrating Americans. The Homestead Act of 1862, the Timber Culture Act of 1873, the Desert Land Act of 1877, and the Timber and Stone Act of 1878 were, in varying degrees, attempts to promote the settlement of the western areas of the country. The availability of open lands at a low price, and the interest in mining and agriculture resulted in large-scale migrations to the west. Yet, in the government's eyes, the early settlement and economic development of southwestern Colorado, as in other western states and territories during the years from 1880 to 1890, resulted in the overuse and exploitation of timber, grassland, and water supplies. As a consequence, by 1890 the government had expanded its policies for the administration of the public lands to include the conservation of the country's natural resources. The creation of the White River and Battlement Mesa Forest Reserves, in 1891 and 1892 respectively, illustrated this trend. The establishment of the Gunnison, Cochetopa, San Juan, Montezuma and Uncompahgre Forest Reserves in 1905, while further extending conservation as a federal land policy tool to over four million acres of southwestern Colorado forests, gave rise to unfavorable public reaction as well. Southwestern Colorado stockmen, were in most cases adamantly opposed to the conservation of and forced grazing restrictions on forest reserves. They advocated a return to the pre-conservation policies of unrestricted development. Groups in favor of conservation, notably the region's irrigation farmers, maintained that forest reserve policy protected important watersheds, and thereby ensured successful water development. In attempting to respond to both sides of the conservation argument, federal land policy during the twentieth century was formulated to encompass the important issues of reservation, as well as public land sales and development.

By advocating the establishment and efficient management of forest reserves, the Theodore Roosevelt administration (1901-1909) sought to protect certain timber and watershed areas of the public domain from misuse by preventing private homestead entry. Roosevelt did not retreat from the policy of homesteading the vacant public lands however. Despite the fact that between 1880 and 1890, thousands of acres on the western slope were opened to cultivation by irrigation and settlement took place in boom-like fashion, by 1900 the demand for remaining public domain decreased. The problem was a lack of water. Although locally-sponsored irrigation projects had supplied earlier demands, the extent of water needs by 1900 were considerable. The inability of private interests to finance additional irrigation and reservoir construction after the 1890's, in spite of the impetus given to such activities by the Carey Land Act of 1894, prompted the federal government to direct its attention toward development and the reclamation of the arid west.

The Newlands, or Reclamation Act of 1902, in fulfilling the Roosevelt administration's three objectives toward public land use, provided that all receipts from the sale and disposal of public lands in the western states should go into a special fund to be used for the construction of irrigation works. The law authorized the Secretary of

the Interior to withdraw from all forms of entry any public lands which might be served by future federal irrigation projects. The cost of construction and maintenance was to be assessed against the allotments of land issued in the reclaimed districts following construction. By this means, it was intended that a revolving fund would be established by which the system of irrigation construction would be self-perpetuating. Under the terms of the Newlands Act, a special bureau was created to oversee the administration of the federal irrigation projects.[1]

In March, 1903, the Bureau of Reclamation assumed the direction of the Gunnison Tunnel Project after progress had stalled on the state-sponsored operation during the fall of 1902. In January, 1905, work crews commenced drilling from each side of Vernal Mesa, and finally, in September, 1909, they met. The intake of the tunnel on the Gunnison River was called the "River Portal", while the west portal, the distributing headquarters for material, was called "Lujane". Here, too, were government barracks for workmen, homes for the families of the married workmen, a post office, a public school, and two churches.[2] When President William Howard Taft touched a golden plate at 5:18 p.m., September 23, 1909, he closed an electric current that opened the headgate of the Gunnison Tunnel, and released water that ran through the tunnel's long bore and out into the Uncompahgre Valley. The tunnel was later improved by concrete lining, and by 1925, the project was considered complete. The total expenditure for the Gunnison Tunnel Project was $6,713,584.[3]

Arch at Montrose, Colorado for the Gunnison Tunnel Opening, September 23, 1909.
Denver Public Library, Western History Department

Land entries, after 1909, were never as numerous as had been hoped. As a result, Congress passed the Warren Act in 1911. Designed to promote settlement in federal reclamation areas, this act provided that if there was a surplus of water, the Secretary of the Interior could contract with private industry, associations, and irrigation districts

whose lands were within the project, and sell that water to those interests at the actual cost of carriage.[4] Despite early concerns over the lack of public lands settlement, from 1925 onward, the Uncompahgre Valley provided the region with a considerable bounty of agricultural returns. In 1925, the total area farmed under the Gunnison River Diversion Project was 61,637 acres; the average size of farms within the undertaking was 43.8 acres. Agricultural production was valued at $3,032,395, the principal crops being alfalfa, wheat, potatoes, oats, sugar beets, corn, onions and apples. The livestock census showed 5,420 horses, 4,628 dairy cattle, 8,291 beef cattle, 4,656 swine, 28,129 sheep and 61,248 poultry. Farm population was established at 6,092, and town population in the Uncompahgre River Valley (Montrose, Delta and Olathe) was set at 7,400.[5] If Uncompahgre Valley agriculturalists and fruit growers accepted federal involvement in the area with enthusiasm, the region's stockmen viewed government activity with mixed emotions, and often with blatant resentment.

The government's forest reservation and reclamation land use policies had cut into the grazing lands of the public domain that southwestern Colorado's stockmen had long considered their own. Livestock raisers were also hurt by a downward trend in national meat consumption during the years from 1908 to 1914.[6] The situation of western stockmen was made worse by the fact that a lack of supervision and a continued overuse of unappropriated public lands resulted in the depletion of grass and forage resources. Congressional proposals to remedy deteriorating conditions on the public grazing lands through federal controls and leasing programs were, however, countered effectively by those in favor of homesteading. The Grazing Homestead Act of 1916 attempted to dispose of rather than control use of the vacant public domain. The law provided for homesteads of 640 acres on nonirrigable, non-timbered land, chiefly valuable for grazing and forage crop cultivation. The government's efforts to settle the public lands through the Grazing Homestead Act proved to be a failure. By 1920, the number of land entries had been so few that federal officials and Congressmen gradually recognized that grazing might have been the most efficient and perhaps the only use for the unappropriated public domain in the western states. Yet, the lack of grazing controls on the public lands continued throughout the 1920's and early 1930's. Conditions in those areas continued to deteriorate; use was difficult to supervise, and overgrazing became widespread.

Not until June 28, 1934, with the enactment of the Taylor Grazing Act, did the federal government attempt to regulate and control grazing on the unappropriated public lands so as to bring order to the range. The Taylor Grazing Act provided for supervision of the public domain to prevent overgrazing, while attempting to stabilize a livestock industry dependent upon the public range. The Taylor Grazing legislation authorized the Secretary of the Interior to withdraw public domain lands from settlement or entry, and to reserve for classification, the unreserved lands for use as grazing districts in twelve western states. After a grazing district was established, the forage resources in that area were to be leased for not more than ten years to holders of valid grazing permits. From the standpoint of southwestern Colorado stockmen, the most satisfactory part of the Taylor Grazing Act was the provision instructing the Secretary of the Interior to cooperate with local stockmen's associations in the administration of the grazing districts. Due to the poor condition of the range-

lands in the state, Colorado stockmen, for the most part, changed their attitude about federal involvement in public land use, and they supported the law as their last chance against being forced out of business.[7]

Problems involving the Taylor Grazing Service and the administration of the grazing districts arose almost immediately after the passage of the Taylor Grazing bill. In 1940, Senator Pat McCarran of Nevada, a member of the Senate Committee on Public Lands and Surveys, argued that the Service was not providing adequate or effective administration of the public ranges, and was not making progress in the stabilization of the livestock industry. Disputes over range administration deepened further in the mid-1940's when the Department of the Interior proposed an increase in grazing fees. The rationale behind the fee increases stemmed from the fact that in the years since the Grazing Service had been in operation, range conditions and forage resouces in most districts had shown marked improvement. The Department of the Interior calculated a fee proportionate to the quality and extent of the resources under its jurisdiction. The debate that followed, however, took on political overtones. The House Committee on Appropriations, concerned with the growth of the Grazing Service's administrative costs, demanded fee increases. The Senate Committee on Public Lands and Surveys, having substantial backing from western stock interests, demanded that no increases take place. When no increases were forthcoming, in March of 1946, the House Committee drastically cut the Grazing Service's budget. Three months later, the Service lost its status as an independent bureau. The President's Reorganization Plan Number Three, on July 6, 1946, merged the Taylor Grazing Service with the General Land Office, the dispenser of the public lands since 1812, to form the Bureau of Land Management. Under the terms of reorganization, grazing supervision was to be handled by a division within the newly created bureau. In assuming control of the Taylor Grazing districts, the Bureau of Land Management inherited the responsibility for over two million acres in southwestern Colorado. In 1947, the Ouray and Dolores districts, both of which had their headquarters in Montrose, supervised the grazing of 52,860 head of cattle, 207,850 sheep, and granted licenses to over 700 southwestern Colorado stockmen.[8]

The creation of the Bureau of Land Management, in 1946, brought to a close the question of who would determine the use of the public domain. In a period covering some fifty-five years, the federal government gradually assumed responsibility for the maintenance and supervision of all the land under its jurisdiction. By no means did disputes over who would use the public lands find easy solutions with the entrance of federal involvement. If a single theme runs consistently throughout the history of federal land policy in southwestern Colorado, it is that of conflict. Questions as to what use was appropriate, and what interests affected best use of the public domain have characterized the chronicle of the government's land status determinations from 1891 (the creation of the Forest Reserves) into the present. The Bureau of Land Management, the Forest Service, the Bureau of Reclamation, and the National Park Service (an agency that will be discussed in the following chapter) have faced the task of reconciling conflicting interests while promoting the highest possible use of the public domain. The obstacle to a solution satisfactory to federal agencies, conservationists, as well as public land users was the fact that an increasing number of interests asserted rights to the federal lands. The battle between cattlemen and sheep

raisers, agriculturalists and homesteaders, homesteaders and stockmen, and conservationists and the "exploiters" of natural resources shaped the direction of land use decisions during the first half of the twentieth century.

The basic conflicts over government land use policy and the disputes between land users and conservationists, which developed early in the twentieth century, remain today. In a real sense, the problems have grown larger as new and exploitable mineral resources are discovered, and as interests such as tourism, wildlife management, and cultural resource protection present different approaches to proper public land use.

Perhaps one of the more important effects of federal involvement in conservation and land use policy was found in the way twentieth century southwestern Coloradans perceived their environment and their natural resources. What emerged from federal activity was a gradual recognition that water, timber, and grassland resources were not as plentiful as their nineteenth century ancestors had thought. The waste and over use of southwestern Colorado's land and resources, was part of the frontier experience. The imposition of federal land regulations and conservation policies, while they did not completely arrest abuses during the years following the turn of the century, did necessitate a change in attitude. The notion that the frontier was a place of unlimited resources and the idea that development should be unrestricted gradually lost its application in southwestern Colorado. This change in attitude marked an important transition in southwestern Colorado's history. In the years since 1920, control and management of the region's natural resources and the diversification in the use of those resources characterized the beginnings of a modern era.

NOTES

1. For a detailed treatment of the federal government's policies concerning the public domain see: E. Louise Peffer, *The Closing of the Public Domain: Disposal and Reservation, 1900-1950,* (Stanford: Stanford University Press, 1951). For a discussion regarding the Newlands Act see pages 33-62.

2. Sidney Jocknick, *Early Days on the Western Slope of Colorado,* (Denver: The Carson-Harper Co., 1913), p. 288.

3. Alvin T. Steinel, *History of Agriculture in Colorado,* (Fort Collins: Colorado A & M University, 1926), p. 39.

4. Densil H. Cummins, "Social and Economic History of Southwestern Colorado, 1860-1948", (Ph.D. Thesis: University of Texas, 1951), p. 653.

   See also: Carl Ubbelohde, Maxine Benson, and Duane Smith, *A Colorado History,* (Boulder: Pruett Press, 1976), p. 264.

5. Steinel, *op. cit.,* p. 539.

6. Peffer, *op. cit.,* p. 157.

7. For a general treatment of the debate over grazing on the public domain and the passage of the Taylor Grazing Act see: Wesley Calef, *Private Grazing and Public Lands,* (Chicago: University of Chicago Press, 1960).

   See also: Peffer, *The Closing of the Public Domain.*

8. Colorado State Planning Commission, *Yearbook of the State of Colorado, 1945-1947,* (Denver: Bradford-Robinson Publishing Co., 1948), pp. 567-568. For a discussion of the events leading up to the creation of the Bureau of Land Management, see: Peffer, *The Closing of the Public Domain,* pp. 232-301.

CHAPTER XI.

SOUTHWESTERN COLORADO IN THE MODERN ERA

The modern era in southwestern Colorado's history, defined here as the years following 1920, can be seen as a continuation of the trends in use, occupation, and economic activity that had been established during the first two decades of the twentieth century. As has been discussed, the three most important developments in the years from the turn of the century to 1920 were in the involvement of the federal government in land use determinations; the advance of farming, ranching, and fruit growing as essential industries in southwestern Colorado; and the gradual decline of hard-rock mining. Between 1900 and 1920, the combined value of gold, silver, lead, copper and zinc output from southwestern Colorado's mines fell from $9,219,803 to $8,402,240.[1] During the same years, the number of farms in the region rose from 2,399 to 6,718. The shift of orientation to more rurally-based economic activities was also reflected in demographic changes. Although the population for the entire southwestern Colorado region increased by about fifty percent from 1900 to 1920, the most dramatic growth was witnessed in the agricultural areas of Delta, La Plata, and Montrose counties. In these three counties alone, the population jumped from 21,038 in 1900 to 36,738 in 1920, while in the mining regions of Hinsdale, Ouray, and San Juan counties, the population dropped from 8,682 to 4,857.[2]

While the twenty years following the turn of the century are important for the shift from mining to agriculture, the period is significant, as well, because of the federal government's initiation of conservation policies. The enactment of the Newlands bill in 1902, the completion of the Bureau of Reclamation's Gunnison Tunnel Project in 1909, and the creation of the San Juan, Gunnison and Uncompahgre National Forests in 1905, make the period from 1900 to 1920 important as an era of conservation. Federal activity in southwestern Colorado coupled with general economic diversification within the region during these years marked the beginnings of an era of planned development which replaced the nineteenth century concept of unrestricted resource exploitation. The historical significance of the basic changes described above lies in the fact that they have had lasting effects on human use and occupation in southwestern Colorado. In a fundamental way, the developments that took place in the first years of the twentieth century established a pattern of growth that forms the key to understanding the region's history in the decades that have followed.

The modern era in southwestern Colorado can be seen as two developmental periods; the first being the two and one-half decades after World War I, and the second, the years following World War II. The period from 1919 to 1940, were years of economic decline. Gold and silver mining and the coal industry staggered under the impact of constantly shrinking markets and falling prices during the 1930's. The value of production for gold, silver, lead, copper and zinc had fallen to $3,900,519 by 1930. By 1941, these production figures had risen only slightly to $4,538,270. With continually falling prices for agricultural produce and livestock following World War I, the region's farmers and ranchers endured equally hard times during the 1930's. Between 1920 and 1940, the decrease in the number of farms in southwestern Colorado reflected this economic decline. From 1920, when the number of farms was listed at 6,718, farm properties decreased from 6,639 in 1930, to 5,488 in 1940.[3] The Great Depression years (1929-1939) did see, however, federal activity in the area. As over one-half of the land area within the region was under the jurisdiction of the government, the Bureau of Reclamation and the Public Works Administration,

an agency created during the New Deal, initiated several water diversion, road, and building projects. As was detailed previously, the Taylor Grazing Act of 1934 was implemented so as to provide federal supervision for ranching use of federal lands, and importantly, to stabilize a weak livestock industry dependent upon the forage resources on the public domain. In all, the twenty years following the conclusion of World War I passed with a determined, yet only gradual response to economic hardships. The 1920's and 1930's were years characterized by a perceptible slow-down in resource development. Yet, during the years following World War II, the quiet of the depression years gradually faded, and the region again experienced the excitement that new economic potential offered.

The period following World War II was one of new opportunities and the opening of new areas of resource development. The initiation of uranium exploration by the Atomic Energy Commission (AEC) during the late 1940's caused the renewed growth of the rare metals industry in western Montrose and San Miguel counties. Gold, silver, lead, copper and zinc mining was also revived in these years after having been given a boost by government fiscal policies during the Depression. By 1950, the value of these metals was $12,923,792, a figure almost three times that of 1941. The overall prosperity experienced in the United States due to post-war industrial production was also reflected in the recovery of agriculture. Although the number of farms in southwestern Colorado decreased from 1940 to 1950, the land used for agriculture increased. In that decade, farming land rose from 2,134,828 to 3,451,298 acres.[4] The tourist industry, by no means new to southwestern Colorado, did, however, grow in such proportions during the 1950's that it assumed a larger share in the economy of the region than it had formerly. Much of the growth in tourism resulted from the attraction of the area's national parks and monuments. Created in 1916, the National Park Service, under the direction of the Department of the Interior, supervises one national park and three national monuments in southwestern Colorado. Attendance to such areas as the Black Canyon of the Gunnison National Monument and Mesa Verde National Park increased over three times between 1941 and 1953.[5]

The period following the conclusion of World War II, then, can be seen as the beginnings of a "new frontier" in the history of southwestern Colorado. The developments that took place in the 1940's and 1950's symbolized the entrance of a new era of resource development. Yet, the economic benefits that accompanied a potential new "boom" in the region necessitated a change in the attitudes concerning the best and proper use of the area's resources. The questions of use and development, first raised in the early twentieth century, continued into the modern era. The significance of such questions is the fact that answers and possible solutions to them are still being worked out today. The following outline of the history of agriculture, mining, tourism, and federal activity serves as a summary of modern development in the region and at the same time it may provide an introduction for present and future discussions concerning human use and occupation in southwestern Colorado.

The conclusion of World War I signalled an end to one of the brief periods of agricultural prosperity in the United States. War-inflated grain and livestock prices fell sixty percent from 1919 to 1921, and the reduction of prices and farm income during the early 1930's simply worsened an existing problem. The decline in agricultural economics on a national scale was reflected within Colorado. The livestock

industry in southwestern Colorado experienced a reduction in quantities of animals as well as in values for range cattle. From 1921 to 1929, the number of beef cattle decreased from 162,329 to 130,187 and the value of livestock products on the region's farms declined from $13,076,817 in 1930 to $9,298,005 in 1940.[6] Similar depressed conditions prevailed in the area's fruit and vegetable industries. Between 1921 and 1930, for example, the value of all fruit produced in southwestern Colorado declined from $3,442,120 to $933,490, a total more than $1,000,000 less than Delta County's production alone in 1921. The region's potato industry, which accounted for over one-third of Montrose County's agricultural revenue in 1921, fell off after that year. From 1921 to 1930, the total value of potatoes produced in southwestern Colorado declined over $1,000,000; Montrose County's output slipped from $1,193,866 in 1921 to $463,040 in 1930. The overall picture for agriculture in the region from 1920 to 1940 was, indeed, grim. Although there was a gradual decrease in the value of crops harvested from 1921 to 1930, the period from 1930 to 1940 saw the value of crops harvested drop from $8,046,340 to $6,139,973.[7]

The effects of economic depression, during the 1930's, on the fruit and vegetable industries all but wiped out the protective measures attempted in cooperative management and marketing associations that were begun in the previous decade. The Colorado Potato Growers Exchange, a front range marketing cooperative, began operations in 1921, and early successes led to the establishment of associated offices in Olathe in 1922, and in Montrose in 1926. Cooperative warehouses were set up at Montrose, Olathe, and Delta at this time. The United Fruit Growers Association, centered in Palisade, Colorado, and operating in other western slope fruit growing regions in the early 1920's, was like the Potato Growers Exchange, ominously inactive during the 1930's as a result of the decline in fruit and vegetable prices.[8] Despite the failure of some cooperatives to effectively respond to depression conditions, a few collectives began operations in the 1930's. Supported by funding from the Federal Emergency Relief Administration (FERA), the Delta Cooperative was organized in May of 1934. In conjunction with the Mesa County (Grand Junction) Cooperative, the Delta group started the Delta Cannery Project in July of that year. Originally funded with $15,000, the 104 families involved with the Delta project attempted to revitalize the fruit industry in the Uncompahgre, North Fork, and Colorado River valleys. The cannery project failed, despite additional federal subsidies, as a result of a lack of fruit production during the economic crises of the 1930's.[9]

The effects of economic depression on Colorado's agricultural regions were accentuated, during the 1920's and 1930's, by drought conditions, and water shortages led to a reevaluation of state and interstate water rights. In 1923, New Mexico and Colorado officials agreed on the equitable diversion of waters from the La Plata River, and in 1929, the Colorado River Compact established a system of interstate water rights for seven western states. Federal water diversion and storage projects in southwestern Colorado increased after 1935 with the aid of Public Works Administration funding. One of the first achievements was a survey of the entire western slope region for possible Bureau of Reclamation projects. The Taylor Park Reservoir, in northeastern Gunnison County, was built in 1936 through a cooperative agreement between the Bureau and Uncompahgre valley water users. When completed, the reservoir covered 2,033 surface acres, and provided an important storage facility for Gunnison and Uncompahgre valley water needs. More recently, the Taylor Park area has become

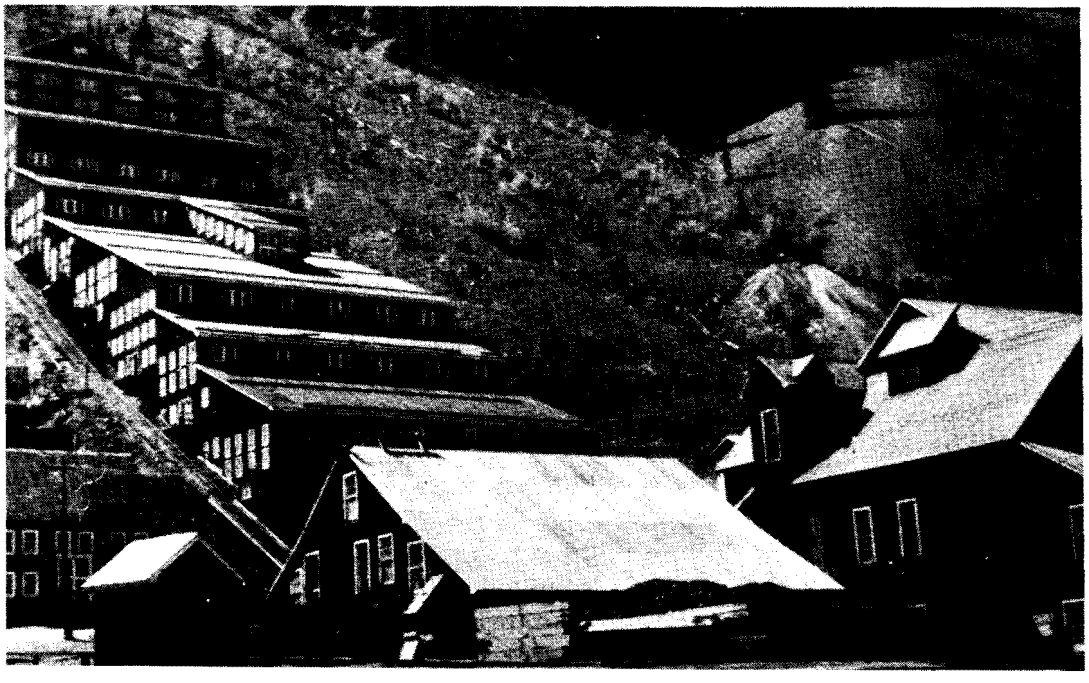
popular for its fishing, boating and recreational opportunities. The Vallecito Reservoir, another Bureau of Reclamation project, was begun in 1938. The large earthen dam built near Bayfield, at the junction of Vallecito Creek and the Los Pinos River, was designed to store sufficient water to irrigate some 65,000 acres along the Los Pinos River valley. Constructed at a cost of three million dollars, the water stored at the Vallecito facility is also used by the Southern Ute Reservation, in the vicinity of Ignacio.[10] More than a question of conservation, federal reclamation projects and other land use legislation, such as the Taylor Grazing Act, were motivated by a desire to promote economic recovery. Despite the benefits of these and other government measures during the 1930's, the stimulus for renewed growth came from demands brought about by war conditions.

During the period from 1940 to 1945, the value of all crops sold by southwestern Colorado agriculturalists rose almost threefold, from $3,291,870 to $9,365,928. The value of livestock on the region's farms showed similar increases during these years. Livestock revenues from southwestern Colorado's farms and ranches jumped from $10,033,118 in 1940 to $16,240,485 in 1945. Sheep and lambs from Montrose County, valued at $605,452 in 1940, increased to $2,862,974 by 1950. The number of cattle and sheep in southwestern Colorado also increased in the decade from 1940 to 1950. The area's potato farmers, after suffering through staggering price declines during the 1930's, saw renewed successes after 1940, when the value of their crops increased to $1,689,752 in 1943. One of the larger increases in southwestern Colorado agriculture was seen in fruit production. By 1945, the amount of apples produced in Delta, Montezuma and Montrose counties had increased by a total of 746,205 bushels since 1940. The peach crop from these three counties, which provided 21.7 percent of Colorado's 1940 harvest, accounted for 28.2 percent in 1945. The value of peaches grown in these counties alone increased by over $1,250,000 in the decade from 1940 to 1950. Ranked third in the state for dry field bean production, Montezuma County's percentage of Colorado's bean output increased from 9.6 percent to 10.9 percent from 1940 to 1945, while the prices returned for that crop more than doubled.[11]

Southwestern Colorado's agricultural industries illustrated a general trend towards recovery by 1950, after undergoing economic decline and depression in the 1920's and 1930's. As had been the case with the region's agricultural production, the mining industry followed a similar course during the period from 1920 to the 1950's. At the conclusion of World War I, mining in southwestern Colorado was a greatly altered industry, when compared to the years immediately following the turn of the century. In 1918, for the first time, the value of gold, silver, lead, copper and zinc produced in the state dropped below that of other minerals.[12] As gold, silver and lead producers experienced a decline in their mine and milling operations, many miners moved on to the "booming" carnotite and rare metal regions in western Montrose and San Miguel counties that had grown as a result of war demands for vanadium. In 1921, for example, carnotite and vanadium were mined at Redvale, Nucla, Vanadium and Sawpit in San Miguel County. Besides the Cashin mine at Bedrock, which produced copper and silver, the eight mines in Montrose County listed in the annual report of the Colorado Bureau of Mines in 1921 worked carnotite ores.[13] With the importation of Congolese uranium during the mid-1920's however, the demand for Colorado carnotite decreased. By 1930, most mines in the Paradox Valley's carnotite region had ceased operations. Southwestern Colorado's coal mining industry experienced new

highs in the level of production in the years leading up to 1920. In one year, from 1919 to 1920, coal output in the region jumped from 682,621 to 883,359 tons. Yet, decline also characterized coal mining during the years after 1920. By 1924, coal production decreased to levels attained five years previously. In 1929, coal production for southwestern Colorado was 681,368 tons.[14] Another development in subsurface activity during the early 1920's was the location of oil fields in southwestern Colorado. Responding to new demands from industry and automobile drivers, wells were drilled in Delta and San Miguel counties as early as 1917, but proved dry. In 1920, a Colorado Geological Survey report stated that petroleum could be obtained in considerable quantities from Archuleta and Montezuma counties. During the following year, oil was struck at a test well in McElmo Canyon by the Midwest Oil Company. As a result of this excitement, approximately one dozen oil companies, principally Wyoming operators, had representatives in the field and were grabbing acreage as fast as possible. The test drilling in McElmo Canyon went on for another year and developed a flow of 2,000,000 cubic feet of wet gas. By 1921, many wells had been drilled in the Dolores River region and some petroleum was located, but due to the limited commercial quantity of those finds, a major oil boom never materialized.[15] Although new areas of mineral and metals development took place during the post-World War I period, the industry as a whole, experienced a reduction in output as a result of falling prices and economic depression in the late 1920's and 1930's.

In the years from 1920 to 1932, the value of all minerals mined in Colorado decreased from $76,037,896 to $25,800,227.[16] Despite this downward trend, several of southwestern Colorado's major mining operations remained at least partially active. From 1921 to 1930, for example, mines such as the Smuggler-Union near Telluride, the Camp Bird in Ouray County, the Sunnyside operations at Eureka, the Good Hope and Vulcan mines in Gunnison County and the Ute and Ulay mines near Lake City



Sunnyside Mill at Eureka
Colorado Historical Society

continued limited production.[17] These operations and others that were geared to the mining of gold, silver, lead, copper and zinc were given a stimulus towards recovery in 1934 when the federal government devalued the dollar. A direct consequence of this action was a sixty-nine percent increase in the price of gold and the revitalization of many gold producing regions. The renewal of gold mining after 1934 stimulated, in turn, copper, lead, and to a degree, zinc mining. In counties such as Dolores, La Plata, Montezuma and Montrose there was an increase in metals production during the period from 1930 to 1940 as more accessible lodes were exploited. Although the value of gold, silver, lead, copper and zinc production in southwestern Colorado rose only slightly during these years, the increase for these four counties was from $166,340 to $982,269.[18] Federal monetary policies also aided the silver mining industry. In 1930, the price of silver was $0.38460 per ounce, and by 1932, it had reached an all-time low, where the average price returned was $0.28204 per ounce. Producers were given encouragement by the passage of the Silver Purchase Act of 1934 which provided for the government purchase of silver in such amounts so as to balance the nation's monetary stock at a ration of one-quarter silver to three-quarters gold. The price of silver in 1934, as a result of this measure, rose to $0.773 per ounce, and caused an increase in the volume of silver worked from the older producing regions.[19] Federal involvement in the mining industry continued during the 1940's. Through a loan of $1,300,000 from the Reconstruction Finance Corporation (RFC) in 1943, the Idarado Mining Company began construction on an extension of the 12,000 foot Treasury Tunnel in Ouray and San Miguel counties. With work completed in 1944, the company, the owner of the Black Bear mine near Telluride, which was served by the tunnel extension, increased output to such an extent that the RFC loan was liquidated one year after construction began.[20]

As silver and gold mining increased during the 1930's, there was also a gradual rise in other metal production. Due to military mobilization and armament construction in Europe during the late 1930's, demands for copper, lead and zinc increased. In 1938, Colorado ranked sixth among the states in lead production, with San Juan County providing more than forty percent of that total. The three chief zinc mining operations in southwestern Colorado at this time were the Rico Argentine near Rico, the Shendoah-Dives at Silverton, and the Callaghan Corporation at Whitepine. In 1940, Dolores County produced fifty-two percent and San Juan County accounted for twenty-seven percent of the zinc output for Colorado.[21] Although coal production in Colorado declined during the late 1930's, southwestern Colorado's output from 1934 to 1941 actually increased from 790,666 to 881,874 tons. In Gunnison County, the volume of coal mined during these years rose from 447,971 to 712,717 tons. The Crested Butte mine and the Somerset mine, the principal operations, accounted for a combined output of 314,630 tons in 1934 and 505,400 tons in 1941.[22]

The post-war years in the United States were ones in which the requirements of industry meant an expanded demand for energy resources. Coal production in Colorado reached an all-time high in 1943, but dropped off steadily following the war when the demand lessened and competition from oil and gas increased.[23] In 1947, oil wells were located near Chromo, in Archuleta County, and in 1948, a major "strike" occurred in Montezuma County, twelve miles west of Pleasant View. The first big well to come in was the Driscoll Number One, and reports said "the well's potential tested between 750 and 1,000 barrels of high premium petroleum and about

20,000,000 cubic feet of gas daily." By 1953, oil fields in Archuleta County had reported 234,000 barrels, and the gas fields in Montezuma County, near Mancos, and in La Plata County, near Ignacio, reported a combined output of 8,667,073,000 cubic feet of gas.[24] While petroleum exploration in southwestern Colorado increased during the post war period, coal production declined. In 1953, the output from the region's coal mines fell to levels similar to those of the depression decade. Gunnison County's coal production alone declined by over one-half from 1941 to 1953. The closing of the Crested Butte mine in 1952, and the diminished output from the Somerset mine accounted for this decrease. By 1960, southwestern Colorado reported only 456,001 tons of coal produced, with Gunnison County accounting for some 272,286 tons.[25]

The trend toward increased production in hard-rock mining during the late 1930's continued through the 1940's and the war years. The removal of government controls after the war caused prices and production to reach new heights. In 1948, copper prices had risen to $0.217 per pound, lead was $0.179, and zinc was $0.133 per pound. In 1950, Colorado's production of gold, silver, copper, lead and zinc was the highest in many years. During that year, San Miguel County was the largest gold producer in the state, the Telluride Mines Company, owners of the Smuggler, Union-Montana mining groups being one of the important contributors. In 1951, that operation was Colorado's third largest producer of gold, lead and zinc, while the Idarado Mining Company ranked first in gold, silver and copper production. The Shenandoah-Dives mines at Silverton were third in the state for silver production during that year. By the late 1950's, however, gold, silver, lead, copper and zinc production had again declined. The value of southwestern Colorado's output for these metals slipped to $6,814,005 in 1959. In terms of the state's metal production during the 1950's and 1960's, uranium, molybdenum and vanadium were, by far, the largest contributors.[26]

Southwestern Colorado's mining industry, during the 1950's, reflected America's entrance into the atomic age. A renewed excitement in the rare metals resulted from the Atomic Energy Commission's (AEC) 1948 program of uranium exploration on the western slope. Attention was focused on Uravan and the Paradox Valley, where carnotite ores had been mined early in the twentieth century. For the next two decades, uranium lured the adventuresome as gold and silver had some ninety years before, and thousands rushed into the southwestern Colorado region, spurred on by stories of rich discoveries. The AEC sponsored road building projects to isolated areas, and small towns such as Uravan, Naturita and Dove Creek prospered. Mills and reduction plants to process the uranium ores were authorized and set up by the AEC in Durango, Gunnison and Uravan. From 1948 to 1960, Colorado produced uranium ores valued at about $133,456,000. The value of uranium output in the 1960's gradually declined to approximately twenty million dollars in 1968, with Montrose and San Miguel counties accounting for over one-half of the state's total.[27]

The uranium boom of the post-World War II decades, like gold and silver mining in the 1880's and 1890's, left behind scars on the landscape, pollution and abandoned buildings. Uranium mining created new problems as well. Radioactive waste material, like the tailings piles that mark the site of the Durango mill, raised questions concerning the long range effects of such operations on the human population as well as on

the natural environment. Besides its environmental and economic impact, uranium mining during the 1950's and 1960's illustrated a major transition within the mining industry itself. Modern uranium and vanadium operations took over the position of leadership once held by gold and silver in the nineteenth and early twentieth centuries. Although precious metal mining lost much of the alluring quality that characterized its past, the legacy of the early mining camps in southwestern Colorado, continued to play a part in the region's economy in the modern era. In a real sense, the tourist trade has acted as a tonic in the economic revitalization of areas once solely dependent upon hard-rock mining. An important modern development in southwestern Colorado came, in the twentieth century, when people learned that it was more profitable to work tourists than ore bodies. [28]

Tourism in southwestern Colorado actually began when explorers perceived both the economic potential and the rugged beauty of the region's natural resources. The first recreational publicity received for southwestern Colorado was made in the official report of Captain J. N. Macomb of the United States Corps of Topographical Engineers in 1859, when he predicted fame for the mineral and hot springs at Pagosa Springs. [29] By the late 1860's, journalists and artists were intrigued by the many rumors of potential adventure, and began to inspect the entire region's scenery with a thought to its possible exploitation. Ovando Hollister, as early as 1867, concluded that the connection of the Rocky Mountain region to the United States by rail transportation would open a "new world to science, a new field of adventure to money and muscle, and new and pleasant places of summer resort to people of leisure". The supposed curative climate and the rugged beauty of its scenery made southwestern Colorado a popular mecca for the tubercular, the sightseer, and the adventurous. During the 1890's, the Denver and Rio Grande Railroad was particularly active in seeking the patronage of middle-class tourists who could afford a quick trip through the west. An advertising budget of $60,000 per year was used to attract such people as junketeering school teachers to the "Around the Circle Tour", for which $28.00 would purchase a four-day, 1,000-mile loop through some of the best scenery in the Rockies. [30] The Durango-Silverton branch line, originally built in 1882 and now included in the National Register of Historic Places, remains in operation and serves hundreds of thousands of sightseers and railroad enthusiasts.

As southwestern Colorado attracted tourists and sightseers to its booming mining camps during the 1880's and 1890's, it also interested many who were intrigued by the discovery of an ancient civilization's architectural remains. When people learned of the archaeological ruins in the Mesa Verde region, a story of devastating vandalism unfolded. Dr. Jesse Nusbaum, (for years Superintendent of Mesa Verde Park), described conditions in the 1880's and 1890's as years of wholesale, commercial looting by "pot hunters". To meet increasing market demands for artifacts, these pot hunters caused destruction and loss of archaeological sites and their values, since they sporadically searched for salable loot by unscientific excavation methods. This type of vandalism was carried on for years, and it was not until the end of the nineteenth century that attention was given to protecting the ancient "apartments" at Mesa Verde. Protests by such groups as the Colorado Cliff Dwellers Association and by individuals like Mrs. Gilbert McClurg finally prompted Congress to address the problem at Mesa Verde. In June 1906, the Antiquities, or Lacey Act imposed criminal penalties for destroying, excavating or injuring any historic or prehistoric ruin, monument, or object

of antiquity situated on lands under the jurisdiction of the United States. The President was also authorized to set aside, by proclamation, historic sites, landmarks or structures on government lands. Exactly three weeks from the enactment of the Antiquities Act, on June 29, President Theodore Roosevelt signed the Mesa Verde Park bill, specifically ensuring the protection of the Mesa Verde archaeological ruins. In 1913, Cliff Palace was added to the park for its continued protection.

With the creation of Mesa Verde Park and other areas in the United States came a need for central control and effective management of those parks. On August 25, 1916 President Woodrow Wilson signed the National Parks Act into law, which provided for the establishment of the National Park Service under the direction of the Department of the Interior. The purpose of the service was to promote and regulate the use of national parks, monuments and reservations, to conserve the scenery, the natural areas, historic sites, and the wildlife within those areas, and to provide facilities for the enjoyment of the parks.[31] The Black Canyon of the Gunnison River was proclaimed a national monument in 1933, and the Yucca House and Hovenweep National Monuments in Montezuma County were created in 1923 and 1919 respectively. Beyond the commercial and recreational value of these areas, scientific research and the attempts to reconstruct the societies of ancient Coloradans have been aided by federal action.

Closely related to the increased growth of tourism in southwestern Colorado during the twentieth century was the development of modern transportation and the construction of a comprehensive highway system. Before the automobile, railroads had provided the necessary transportation facilities for both passenger and commercial traffic. In 1910, the peak of rail traffic was reached, and the high mark of railroad mileage came in 1914, when 5,739 miles of track existed in the state.[32] With the automobile came the necessity of providing well paved roads. By 1910, the State Highway Commission had been established. With the impetus given by the federal government's "Good Road Bill" of 1916, which provided matching funds for the construction of a national road system, the State Highway Department was created in 1917.[33] By 1920, a number of state roads had been built into southwestern Colorado. A section of road called the "Rainbow Route" ran from Salida across Monarch Pass and into Gunnison. That road, known today as Highway 50, then continued from Gunnison along the Gunnison River valley, crossed Cerro Summit, and dropped into Montrose. From there, the highway ran via Delta to Grand Junction, and connected with the "Midland Trail" in Utah. From Montrose, a major road was constructed south to Durango and into New Mexico. A portion of present-day Highway 550, the "Million Dollar Highway", which runs from Ouray to Silverton, affords a view of some of the finest mountain scenery in southwestern Colorado. Another major route into the region from the front range, Highway 160, was also built during the late 1910's. From the "Great North and South Highway" (known today as Highway 25), the state road ran west and south from Walsenburg over La Veta Pass and into Alamosa. From there, it followed the Rio Grande River to Del Norte, and by way of South Fork station, the road ran over Wolf Creek Pass. Descending from Wolf Creek Pass, the road dropped into the West Fork of the San Juan River valley, and went on to Pagosa Springs, Durango, Mancos and Cortez. From Cortez, the completion of a road north through Dolores, Rico, and Placerville added to southwestern Colorado another scenic section of highway.[34]

The automobile and the construction of a state highway system dramatically increased passenger travel for reasons of enjoyment. Between 1916 and the early 1920's, for example, the number of cars in the state rose from 15,000 to 300,000. The new access that the automobile provided to all parts of Colorado also contributed to a changing attitude toward the outdoors. The construction of roads to many areas of scenic, cultural and recreational interest opened the region's national forests and parks to increased tourist traffic. Cortez prospered because of its proximity to Mesa Verde National Park and its location on a major highway. As more and more tourists began to take advantage of the recreational opportunities offered in southwestern Colorado's national forests, a larger concern arose over whether these areas were being over-exploited. Men such as Arthur Carhart and Aldo Leopold developed organizations like the Wilderness Society and the Sierra Club, whose purpose it was to advocate an ecological point of view. To such men and a growing number of Americans, wild nature was a resource that should be appreciated and approached on its own terms. In southwestern Colorado today, lands preserved within the West Elk Wilderness Area, the San Juan, Uncompahgre, and Wilson Mountain Primitive Areas are among the most treasured possessions of its citizens. [35]

One of the more contemporary and popular winter recreational activities in Colorado, skiing, actually began both as a form of enjoyment as well as a necessary mode of transportation. Ski races began as early as 1883 in such mining areas as Crested Butte and Irwin. In more recent times, skiing has contributed substantially to the economy of former mining towns like Telluride and Durango. These towns have actually become major attractions in their own right. Whether as ghost towns, such as

Skiers near Irwin; March, 1883
Denver Public Library, Western History Department

Animas Forks or Capitol City, or as renovated districts, mining camps in southwestern Colorado continue to have an impact on the economy of the region. Beyond their economic successes, towns like Crested Butte, Lake City, Silverton and Telluride have also been recognized for their historic significance, and are presently included in the National Register of Historic Places.

The most recent stage in the history of southwestern Colorado can be viewed as the latest development of the area's resource frontier. Throughout the entire chronicle of growth, each progressive stage in use and occupation placed new demands on the region's resources. As time passed and as the needs of new generations multiplied, the number of resources developed in southwestern Colorado increased in like measure. The growth and development of the mining industry in southwestern Colorado from the mid-nineteenth century down to the present serves as an example of this trend. The excitement and successes of the early gold and silver mining frontier brought to the region its initial economy. Yet, as the value of these precious metals declined at the turn of the century, new demands for other metals and minerals such as copper, zinc and coal prompted the miners to begin development of these resources. The expansion of American industry and the demands for new forms of energy during the twentieth century has greatly extended the scope of mining in southwestern Colorado. The abundance of numerous metals and minerals within the region can afford industrial, scientific and governmental interests a wide range of potentially exploitable resources. Present-day demands for molybdenum near Mount Emmons, close to Crested Butte, alunite at Red Mountain near Lake City, carbondioxide reserves in McElmo Canyon, and for coal along the North Fork of the Gunnison River near Somerset will cause the extensive development of these areas in the near future.

Southwestern Colorado is, however, more than a mining frontier, and its history is more diverse than the progressive development of one natural resource after another. Besides its vast potential for metals and minerals development, the region was and is a "conservation frontier". That national forests, wilderness areas, national parks and monuments were created, confirmed a changing attitude that the region's natural and cultural amenities should, in some way, be conserved and protected from over-exploitation. The history of southwestern Colorado is actually then, the chronicle of two resource frontiers; and the debate over what constituted proper land use has formed much of that history. From the time of the Ute Indian treaties and land cessions to the days when cattle and sheep ranchers fought each other and federal government officials over national forest grazing policy, the arguments over the proper use of southwestern Colorado's resources were basic in many episodes of the region's development. At present, the debate goes on. Residents of a historic mining town question the benefits and fear the environmental effects of proposed large-scale mining operations nearby. Questions, indeed, remain as to whether certain areas within southwestern Colorado should be used for mining, for sheep and cattle grazing, for skiing, whether their most appropriate use is limited or managed use or no use at all. The resource frontier and the conservation frontier lie today at the crest of a divide. Questions of whether new energy needs outweigh modern conservation and preservation requirements demand answers that will be mutually satisfactory to all involved. Southwestern Colorado lies again on the verge of yet another frontier and another transition, the nature of which will be shaped by present determinations, and the history of which awaits the interpretation of a future generation.

NOTES

1. C. W. Henderson, *Mining in Colorado,* (Washington: Government Printing Office, 1926), pp. 95-96, 102.

2. For information on population and the number of farms in southwestern Colorado during the first two decades of the twentieth century, see: United States Bureau of the Census, *Thirteenth Census of the United States, Agriculture,* Vol. IV. Alabama-Montana (Washington: Government Printing Office, 1913), pp. 184-232.

   See also: United States Census of Agriculture, *Colorado,* (Washington: Government Printing Office, 1927), pp. 203-259.

   See also: Colorado State Board of Immigration, *Year Book of the State of Colorado, 1920,* (Denver: Welch-Haffner Printing Co., 1920), pp. 175-210.

3. For statistics on mining and agriculture during the Depression years, see: Colorado State Planning Commission, *Year Book of the State of Colorado, 1941-1942,* (Denver: The Bradford-Robinson Printing Co., 1942), pp. 85-86, 141.

   See also: Colorado State Board of Immigration, *Year Book of the State of Colorado, 1931,* (Denver: The Bradford-Robinson Printing Co., 1931), p. 219.

4. For data on mining and agriculture during the 1950's, see: Colorado State Planning Commission, *Year Book of the State Of Colorado, 1951-1955,* (Denver: State Printers, 1955), pp. 347, 362.

5. See: Colorado State Planning Commission, *Year Book of the State of Colorado, 1941-1942, op. cit.,* pp. 481-482.

   See also: Colorado State Planning Commission, *Year Book of the State of Colorado, 1951-1955, op. cit.,* pp. 414-416.

6. Colorado State Board of Immigration, *Year Book of the State of Colorado, 1925,* (Denver: The Bradford-Robinson Printing Co., 1925), pp. 118-121.

   See also: Colorado State Board of Immigration, *Year Book of the State of Colorado, 1928-1929,* (Denver: The Bradford-Robinson Printing Co., 1929), pp. 138-139.

   See also: Colorado State Planning Commission, *Year Book of the State of Colorado, 1941-1942, op. cit.,* p. 88.

7. For crop and total harvest values for the years 1921 and 1930, see: Colorado State Board of Immigration, *Year Book of the State of Colorado, 1921,* (Denver: Eames Bros., State Printers, 1921), pp. 65-67.

   See also: State Board of Immigration, *Year Book of the State of Colorado, 1931, op. cit.,* pp. 64-65.

8. See: Alvin Steinel, *History of Agriculture in Colorado,* (Fort Collins: Colorado A & M University, 1926), pp. 327-330.

   See also: Carl Ubbelohde, Maxine Benson, and Duane Smith, *A Colorado History,* (Boulder: Pruett Press, 1976), p. 295.

9. For a short discussion on the Delta Cannery Project during the Depression, see Charles M. Schweiso, "The Unemployed Cooperatives in Colorado" (M.A. Thesis: University of Colorado, 1935), pp. 49-50.

10. D. H. Cummins, "Social and Economic History of Southwestern Colorado, 1860-1948", (Ph. D. Thesis: University of Texas, 1951), pp. 667-668.

    See also: Ubbelohde, *op. cit.,* pp. 196-297.

11. Colorado State Planning Commission, *Year Book of the State of Colorado, 1945-1947,* (Denver: The Bradford-Robinson Printing Co., 1947), pp. 104-116, 216-217.

    See also: Colorado State Planning Commission, *Year Book of the State of Colorado, 1951-1955, op. cit.,* pp. 194-199, 340-341.

    See also: Colorado State Planning Commission, *Colorado Agriculture Statistics, 1943 Final 1944 Preliminary,* (Denver: Bradford-Robinson Printing Co., 1945), p. 22.

    See also: United States Census of Agriculture, *Wyoming-Colorado,* Vol. I, Part 29 (Washington: Government Printing Office, 1946), pp. 80-92.

12. Colorado State Planning Commission, *Year Book of the State of Colorado, 1941-1942, op. cit.,* p. 133.

13. State of Colorado Bureau of Mines, *Annual Report for the Year 1920,* (Denver: Eames Bros., State Printers, 1921), pp. 43, 49.

14. For statistics concerning coal production in southwestern Colorado from 1920 to 1929, see: Colorado State Board of Immigration, *Year Book of the State of Colorado, 1925, op. cit.,* p. 147.

    See also: Colorado State Board of Immigration, *Year Book of the State of Colorado, 1931, op. cit.,* p. 199.

See also: Colorado State Planning Commission, *Year Book of the State of Colorado, 1941-1942, op. cit.,* p. 151.

See also: Colorado State Planning Commission, *Year Book of the State of Colorado, 1951-1955, op. cit.,* p. 371.

15. Several newspaper articles concerned with oil well exploration were found in the Thomas F. Dawson Scrapbooks, "Mining", (Colorado Historical Society, Denver, Colorado): *Rocky Mountain News,* September 13, 1921; and *Denver Post,* March 29, 1922.

See also: Cummins, *op. cit.,* pp. 611-612.

16. Colorado State Planning Commission, *Year Book of the State of Colorado, 1941-1932, op. cit.,* p. 133.

17. See: State of Colorado Bureau of Mines, *Annual Report for the Year 1920, op. cit.,* pp. 38-49.

See also: State of Colorado Bureau of Mines, *Annual Report for the Year 1930,* (Denver: Bradford-Robinson Printing Co., 1931), pp. 51-59.

18. Colorado State Board of Immigration, *Year Book of the State of Colorado, 1931, op. cit.,* pp. 218-219.

See also: Colorado State Planning Commission, *Year Book of the State of Colorado, 1941-1942, op. cit.,* p. 141.

19. See: Cummins, *op. cit.,* pp. 581-583.

See also: Colorado Writers' Project, *Colorado: A Guide to the Highest State,* (New York: Hastings House, 1941), p. 61.

20. Colorado State Planning Commission, *Year Book of the State of Colorado, 1951-1955, op. cit.,* p. 363.

21. Cummins, *op. cit.,* pp. 592-593.

See also: Colorado Writers' Project, *op. cit.,* p. 60.

22. Colorado State Planning Commission, *Year Book of the State of Colorado, 1941-1942, op. cit.,* p. 151.

See also: Notes transcribed by H. L. Scamehorn from the Colorado State Coal Mine Inspector's Reports, for Gunnison County, 1934 and 1941.

23. Ubbelohde, *op. cit.,* p. 334.

24. Cummins, *op. cit.*, pp. 611-613.

25. See: State of Colorado Coal Mine Inspector's Reports for Gunnison County, 1960.

    See also: Colorado State Planning Commission, *Year Book of the State of Colorado, 1959-1961,* (Denver: State Printers, 1961), p. 490.

26. See: State of Colorado Bureau of Mines, *Report for the Years 1950-1951,* (Denver: State Printers, 1952), pp. 24, 30.

    See also: Colorado State Planning Commission, *Year Book of the State of Colorado, 1959-1961, op. cit.*, p. 482.

27. Ubbelohde, *op. cit.*, pp. 334-336.

28. See also Rodman Paul, *Mining Frontiers of the Far West, 1848-1890,* (New York: Holt, Rinehart, and Winston, 1963).

29. Laura White, "Pagosa Springs, Colorado", *Colorado Magazine,* (IX, No. 3, May, 1932), pp. 89-90.

30. Carl Abbott, *Colorado: A History of the Centennial State,* (Boulder: Colorado Associated University Press, 1976), pp. 170, 182.

    See also: Ovando Hollister, *The Mines of Colorado,* (Springfield: Samuel Bowles and Co., 1867), iv.

31. For a discussion on Mesa Verde National Park, the Antiquities Act of 1906, and the creation of the National Park Service, the author relied heavily on the work by John Ise, *Our National Parks Policy,* (Baltimore: John Hopkins Press, 1961). For specific references to the above topics, see pages 145, 163-170, 185-192.

32. LeRoy R. Hafen, *Colorado: A Story of the State and Its People,* (Denver: The Old West Publishing Co., 1945), p. 338.

33. Cummins, *op. cit.*, pp. 506-509.

34. See: Wilbur F. Stone, *History of Colorado,* Vol. I (Denver: S. J. Clarke and Co., 1918), pp. 583-584.

35. Abbott, *op. cit.*, pp. 186-189.

    See also: Ubbelohde, *op. cit.*, p. 350.

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