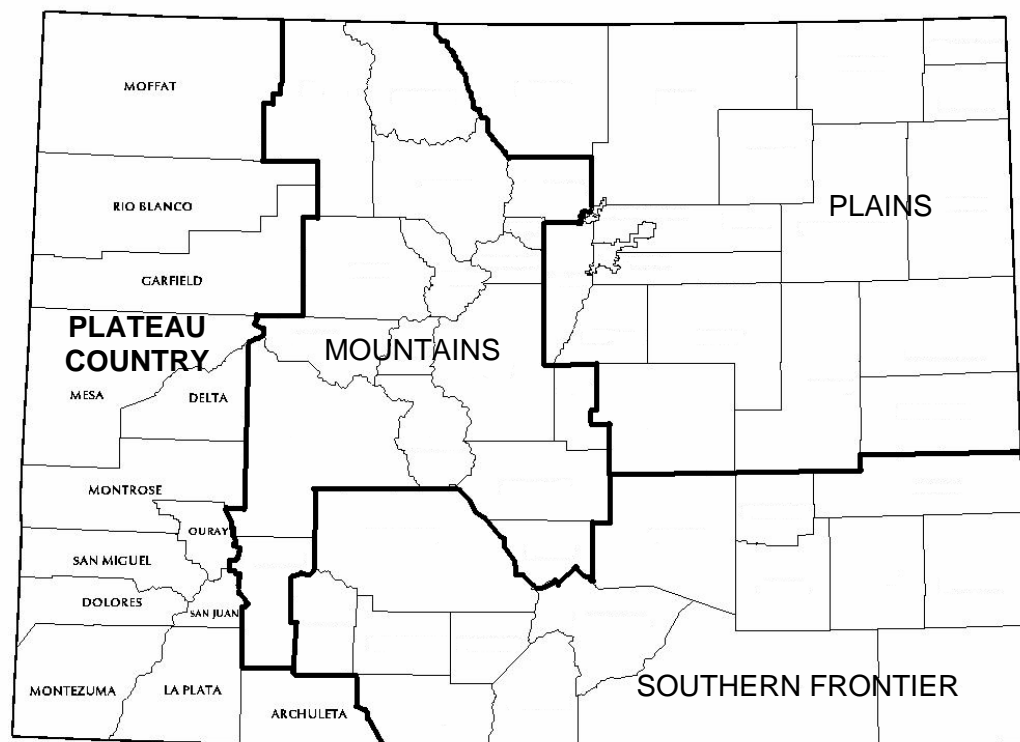


COLORADO PLATEAU COUNTRY HISTORIC CONTEXT



OFFICE OF ARCHAEOLOGY
AND HISTORIC PRESERVATION
COLORADO HISTORICAL SOCIETY

COLORADO PLATEAU COUNTY HISTORIC CONTEXT

MICHAEL B. HUSBAND

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**OFFICE OF ARCHAEOLOGY
AND HISTORIC PRESERVATION
COLORADO HISTORICAL SOCIETY
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**PUBLICATIONS IN THE
RESOURCE PROTECTION PLANNING PROCESS (RP3) CONTEXT SERIES**

<u>Title</u>	<u>Number</u>
Colorado Plateau Country	606
Colorado Southern Frontier	607
Colorado Mountains	608
Colorado Plains	609
Colorado Engineering	610
Colorado Urbanization and Planning	611

These publications are available from the Office of Archaeology and
Historic Preservation or online at:

<http://www.coloradohistory-oahp.org/publications/contexts.htm>

Since the completion of the RP3 context series in 1984, a number of new
regional and thematic contexts have been developed that expand on this
Colorado Plateau County Historic Context document. These too are available
from OAHp or online:

<u>Title</u>	<u>Number</u>
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PREFACE

The Colorado Historical Society, Office of Archaeology and Historic Preservation, is proud to present this set of historic contexts for the State of Colorado. The set includes regional historic contexts and also topical contexts which summarize and evaluate the history of the state from the earliest historic events up through World War II.

The four regional historic contexts include the Plains, the Mountains, the Southern Frontier in southeast Colorado, and the Plateau Country along the western edge of the state. For each of these regions, themes are based on socio-economic units of development in the region. These are presented in rough chronological order, but they are not strictly chronological units. They reflect the historic themes of development in each region and the historic properties associated with them.

Four "topical" contexts were developed: Engineering, Urbanization and Planning, Historical Archaeology and Architecture. The Engineering context is oriented toward a history of engineering technology. This context is organized by topics including Water Resources, Power Resources, Transportation, Industry, Mining, Communications, and Waste Disposal. Within each topic are themes for the various specific resources types. For example, the themes within Power Resources include Petroleum and Shale Oil, Natural Gas, Uranium, Electric Power and Coal.

The Urbanization and Planning context was developed to focus attention on the significance of town planning, layout and transportation modes, the latter including the Stage/Wagon Era, Rail Era and Auto Era. The themes within this context address town form or town function and selected aspects of towns during the transportation eras. Additional themes are presented for the three major urban centers in the state including the Central Business Districts, Residential Development, and Rail/Industrial/Warehousing Districts during the transportation eras.

For all of the historic contexts, the presentation of data for each theme begins with a narrative of the history and description of the theme. A chronology, description of the location of historic properties, and a list of cultural resource types are presented. Then the quality and quantity of existing data about the theme are evaluated. This includes an assessment of the historical documentation, number and location of sites, data gaps, future needs and important resources. Research questions and a guide to evaluation standards for physical condition are presented. References and a map are included for each theme.

The Historical Archaeology context is based on ten temporal units identified as socio-politically significant periods spanning the history of the state. For each unit the quality and quantity of past historical archaeology work is presented and research recommendations and identification and dating problems are considered. In addition, the context presents a research framework for future historical archaeology work in the state.

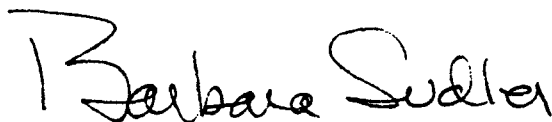
The architectural context for the project is presented as "A Guide to Colorado Architecture." The guide standardizes the terminology used for architecture styles in Colorado and presents pictures and descriptions of these styles.

The overall purpose of these reports is to provide a framework to identify and record the historical resources in the state and to provide research direction to analyze the significance and preservation of these resources. The contexts can provide guidance for state and federally mandated cultural resource management, as well as direction for pure research. We anticipate that the recording and evaluation of historic sites will benefit by using the combined contexts.

The reports were produced by the Colorado Historical Society with the assistance of a grant from the Colorado Commission on Higher Education. The development of these reports is a direct outcome of the RP-3 (Resource Protection Planning Process) effort led by Office of Archaeology and Historic Preservation Archaeologist Judith Halasi who provided research, coordination and editing for the project.

The editorial content of this publication was supported by a grant-in-aid through the funding provisions of the National Historic Preservation Act of 1966, as amended, which is administered by the National Park Service, Department of the Interior. The content and opinions do not necessarily reflect the views or policies of the Department of the Interior nor does mention of trade names or referenced publications constitute endorsement or recommendation by the Department of the Interior.

We hope that these volumes will stimulate an awareness of and appreciation for the historical resources of Colorado.

A handwritten signature in black ink, reading "Barbara Sudler". The signature is written in a cursive, flowing style. The first letter 'B' is large and prominent, with a long vertical stroke extending downwards. The rest of the name is written in a more compact, cursive script.

Barbara Sudler
President
State Historic Preservation Officer

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PLATEAU COUNTRY

1. SPANISH EXPLORATION, THE FUR TRADE, AND AMERICAN EXPLORATION

NARRATIVE

The earliest European contact with the Plateau country was the trade between the Ute Indians and the Spanish in New Mexico. Spanish traders traveled to Ute villages and the Utes made return calls to New Mexican towns to trade buckskin, dried meat, furs, and slaves for horses, knives, and blankets. The trade relations between the two groups remained friendly through the 17th and early 18th centuries. When relations with the Utes became unfriendly, an alliance was reached between the two groups by the middle of the 18th century. At about the same time (1762), France ceded to Spain all of Louisiana west of the Mississippi. Rumors of mineral wealth in the San Juan Mountains, no doubt resulting from Spanish parties looking for gold, prompted a Spanish gold seeking expedition into the region. One expedition was conducted by Juan de Rivera into the Southern Colorado Rockies between 1761 and 1765. This was the first recorded Spanish exploring venture into the Plateau Country. His party traveled north via Taos and the San Juan River, past the La Plata Mountains to the Dolores River. He traveled along the Uncompahgre River north to its junction with the Gunnison. The party was successful in trading with the Ute Indians, but had discouraging reports about precious metals. Except for later trade expeditions by veterans of the Rivera expedition, little is known about ensuing Spanish activity in the area. One party, led by Pedro Mora, Gregorio Sandoval, and Audre Muniz, reached the mouth of the Uncompahgre in 1775.

A second major Spanish expedition was led by Farthers Francisco V. Dominguez and Silvestre Velez de Escalante in 1776. The expedition sought to discover a new route, avoiding the hostile Hopi Indians, to connect Santa Fe with Monterey, California. This expedition again followed the San Juan north, past the La Platas, and up the Dolores River. The party continued north up the San Miguel, Uncompahgre, and Gunnison Rivers to the North Fork Valley. Crossing the Colorado River near the present site of Parachute, they journeyed to present day Rangely and continued west along the White River into Utah. Although the expedition did not reach California, the explorers revealed information on geography, potential resources, and the inhabitants of a vast, unknown area. This information no doubt influenced subsequent Spanish traders in the area and part of the route of the Escalante trail became known as the Old Spanish Trail to later American trappers and traders. Although the Dominguez-Escalante expedition stimulated interest in Western Colorado, few Spaniards visited the Plateau Country after 1800. Hostile Utes, failure to find appreciable amounts of gold, the inhospitable geography and diplomatic developments contributed to this lapse in exploration and exploitation.

American fur trappers appeared in the Plateau Country after 1800. When Mexico achieved its independence from Spain in 1821, the region was opened

for fur trade and the trade flourished from 1824 to about 1840. Exploiting the beaver in the Colorado, Gunnison, Animas, Yampa, Green, San Juan, Eagle, Blue, Dolores, and Uncompahgre Rivers, such figures as Antoine Robidoux, who built a trading post near present day Delta in 1828, were active in the area until about 1840. Fort Robidoux was located on the trailway that linked the New Mexico settlements to the trapping areas of Northwestern Colorado, and was a vital supply post until its demise in 1844.

Brown's Hole, named for fur trader Baptiste Brown and located in extreme Northwestern Colorado, was the Plateau's most active rendezvous from 1825 to 1840. The first cabins were built in Brown's Hole in the winter of 1831-1832 by the Bean-Sinclair trapping party. In 1836, Fort Davy Crockett (appropriately called Fort Misery) was constructed in Brown's Hole, but was abandoned four years later due to overtrapping and the decline of the beaver fur market from increased competition from foreign silk hats. Except for a few individuals and parties, 1840 signaled the end of the fur trade in the Plateau Country. In 1841, several groups of trappers, including Jim Baker and Henry Fraeb, who were camped on the Little Snake River in Colorado were attacked by a large group of Cheyenne and Arapaho Indians. This fight, designated as Battle Creek, became known as the largest single battle between Indians and fur traders in Colorado history. The final actors in the fur trapping/trading drama in the Plateau Country were Luther Simmons and Gus Lankin, who trapped in Northwestern Colorado in the late 1870s.

The earliest American explorers were primarily private travelers who entered the region during the fur trade era. These included Captain Benjamin L.A. Bonneville (1826, 1832) and Thomas Jefferson Farnham (1839). Private travelers F.A. Wislizenus and E. Williard Smith both visited Brown's Park in 1839 and 1840, respectively.

Federal exploration of Western Colorado did not begin in earnest until the 1850s. The American victory in the Mexican War and the discovery of gold in California, both in 1848, led to new federal exploration in the west. The chief task, in addition to exploration, was to locate transportation routes, and especially a practical path for a transcontinental railroad. John C. Fremont made three well-publicized treks through the region between 1843 and 1853 searching for negotiable mountain passes. In 1852, Richens Lacy "Uncle Dick" Wooten led a sheep drive from New Mexico to California that passed through the region. The expedition led by Lt. Edward Beale crossed the Colorado River near present day Grand Junction in 1853, and, shortly thereafter, Captain John Gunnison visited the Uncompahgre River and Grand Valleys while on a railroad surveying venture. Captain Randolph Marcy of the United States Army embarked on a perilous winter expedition to Western Colorado in 1857-58, a military wagon train was conducted by Colonel William Loring in 1858, and Captain John Macomb of the Topographical Corps searched for a practical railroad route through the San Juan River country into Utah in 1859. Two years later, Edward L. Bethoud blazed trail across the pass that bears his name to Middle Park; from that point the Bethoud expedition, accompanied by famed mountain man Jim Bridger, forged a trail to Salt Lake City via present day Craig and Meeker.

Once the Civil War was concluded, the federal government turned its attention to exploration of the Rocky Mountain West once again. During the

period, members of the Army and the newly formed United States Geological Survey (USGS) spent much time in Colorado cataloguing and mapping the land for future development. The initial USGS survey in Colorado was conducted by John Wesley Powell, beginning in 1868, as part of the exploration of the entire Colorado River.

During the period 1871 to 1873, the noted California naturalist, Clarence Rivers King, was in Colorado as part of the USGS 40th Parallel Survey from the Pacific to the Continental Divide. His reports added much to the understanding of the region. He also exposed a diamond mine hoax in northwestern Colorado in 1872. The expedition conducted by J.B. Wheeler of the U.S. Army in 1873 was primarily carried out in the San Juan and Elk Mountains to locate new routes and post sites.

Between 1873 and 1876, Ferdinand Hayden accomplished the most comprehensive exploration of the region thus far, and this expedition, with the survey of northwestern Colorado by John Wesley Powell in 1869, produced a wealth of accurate information on the Plateau region. The Plateau Country, following the great surveys, was now open to prospective settlers.

CHRONOLOGY

- | | |
|-----------|--|
| 1760-1820 | - Era of Spanish influence and exploration. |
| 1761-1765 | - de Rivera expeditions in Western Colorado. |
| 1775 | - Mora, Sandoval, and Muniz expedition. |
| 1776 | - Dominguez-Escalante expedition. |
| 1800-1821 | - Anglo-American trappers and traders set the stage for the fur trade era. |
| 1821 | - Mexico gains independence from Spain. |
| 1824-1845 | - Major era of the mountain men in the Plateau Country. |
| 1828 | - Antoine Robidoux established his post near Delta. |
| 1825-1840 | - Era of fur trading activity in northwestern Colorado at Brown's Hole. |
| 1836 | - Fort Davy Crockett established. |
| 1840s | - Decline of fur trade. |
| 1841 | - Battle Creek battle in Routt County. |
| 1843-1845 | - Fremont's first two expeditions to explore mountains and Western Colorado. |
| 1848 | - Colorado becomes American territory following Mexican War. |

- 1852 - Richens Lacy Wooton leads sheep drive through region.
- 1853 - Fremont's last Colorado expedition.
- 1853 - The Beale and Gunnison expeditions.
- 1857-1858 - The Marcy expedition.
- 1858 - Colonel Loring leads wagon train through region.
- 1859 - The first Colorado gold rush stimulates new exploration phase.
- 1861 - The Berthoud-Bridger expedition.
- 1869 - The Powell surveying expedition.
- 1871-1873 - King, 40th Parallel Survey in Colorado.
- 1873 - Wheeler expedition in Southwestern Colorado (U.S. Army).
- 1873-1876 - The Hayden surveying expeditions.

LOCATION

The sphere of Spanish exploratory influence extended through Southwestern Colorado, the Uncompahgre Plateau and Northwestern Colorado. (See map on page 9). Fur trapping and trading trails and activities were likewise widely distributed throughout the Plateau Country. The primary focus of the Plateau fur trade occurred in the Yampa and White River drainage basins.

Two fur trading forts were located in the region: Fort Robidoux near Delta, and Fort Davy Crockett in Brown's Park. Additional cabins were located in Brown's Park.

American exploration also occurred across all parts of the region(see map on page 11).

CULTURAL RESOURCE TYPES

Sites include: Brown's Hole, the Battle Creek battlefield in Routt County, Spanish and Anglo-American trails and identified routes, campsites, caches, storage pits, and natural sites such as Berthoud Pass, identified with significant individuals related to the theme.

Structures include: Trading posts/forts, cabins, survey markers.

Districts include: Fur trade areas/districts, such as the Yampa fur area, and the White River Fur area.

Materials include: Firearms, trade goods, saddlery of the nineteenth century, camp tools, surveying equipment.

THE QUANTITY AND QUALITY OF EXISTING DATA

Historical Documentation

The historical documentation for this theme is extensive, due, primarily to the tremendous popular and professional interest in the mountain men and early explorers. Original records of most Spanish official expeditions have been translated and annotated in English. In addition, many books about facets of Spanish borderlands history such as Bannon's Spanish Borderlands Frontier overview have been published.

While the majority of mountain men were illiterate, records of their adventures have been written based on diaries and accounts of others as well as assisted autobiographies. Basic to an understanding of these topics is Leroy Hafen, Mountain Men and the Fur Trade (10 vols.); David J. Weber, The Taos Trappers; Reuben G. Thwaites, Early Western Travels (32 vols.); and a host of monographs, biographies and edited diaries.

Documentation of federally sponsored activities and explorations exist in many forms from original notebooks and diaries to edited and published journals, both contemporary and modern. These help in the reconstruction of routes, provided the researcher is familiar with the region's geography and archaic place names. For early exploration, the standard sources are William Goetzmann, Army Exploration in the American West and Exploration and Empire: The Explorer and the Scientist in the Winning of the West. These works contain detailed maps and excellent bibliographies as well as providing a contextual framework for study of this period. The role of explorers in the Plateau Country during the years after Colorado's gold rush has not been investigated to the extent that many other topics have been. Nevertheless some work has been completed and the explorers reports have been published. Foremost of the government published reports are F.V. Hayden's Ninth and Tenth Annual Reports of the Survey of the Territories (1877 and 1878) and his Atlas of Colorado Geology and The Great West. John Wesley Powell's works, especially The Exploration of the Colorado River add to the body of literature of late nineteenth century exploration. Reports of federal explorations are readily available at libraries that maintain extensive collections of government documents. Norlin Library at the University of Colorado has an extensive collection of these reports. An additional major source of information about the post-1859 explorations is the U.S. Geologic Survey Library at Golden, Colorado. This depository not only maintains copies of the reports and some field notes, but also has an extensive collection of photographs dating to the 1870s. The documentary information extant should allow for easy tracing of routes and areas seen by explorers.

Several addition works basic to the history of the Plateau Country are relevant to this theme. These include: Duane Smith and Duane Vandenbusche: A Land Alone: Colorado's Western Slope, Steven F. Mehls, The Valley of Opportunity: A History of West-Central Colorado, Paul O'Rourke, Frontier in Transition: A History of Southwestern Colorado, and Frederic J. Athearn.

An Isolated Empire: A History of Northwest Colorado. (The latter three volumes are Bureau of Land Management publications.)

Number/ Condition

Despite the extensive documentation relative to this theme, the data are insufficient to determine the number and type of resources that once existed or may have existed. There are currently no known structural remains directly attributable to the Spanish exploration or trade in the region, due to the transitory nature of those activities. The route of the well publicized Dominguez-Escalante expedition has been retraced and mapped using the historic journals of the expedition. One commemorative site has been recorded; the Escalante Site, a prehistoric pueblo in southwestern Colorado near Dolores that was reported in Escalante's journal. Some resources associated with the fur trading era in the region are well known and documented, including the two fur trading forts, Fort Robidoux and Fort Davy Crockett, and the site of the Battle Creek battlefield in Routt County. The forts are completely destroyed and the exact location of them has not yet been established. Fur trade cabins in Brown's Park have yet to be identified by archaeological evidence. The number of such resources is unknown although the condition is deteriorated, with only possible archaeological evidence remaining. The identification of other resources associated with the era of fur trade, such as campsites and trails, left no permanent changes on the ground. Presently recorded archaeological evidence, such as campfire rings, often provide little new information because the Euro-American trappers adopted Native-American methods of wilderness living, making it nearly impossible to ascertain which group used a given site. Further, Indian trails were often followed by trappers and explorers. Since many of these followed water courses and other natural travel routes, they were also adopted by later residents for travel, obliterating evidences of earlier use.

The transitory nature of most American explorer's activities precluded construction of permanent structures for shelter since most parties were equipped with tents and other portable camping gear as well as processed food stuffs prevalent during the late nineteenth century. Hayden's party and others piled rocks into small (five to seven feet high) cairns for survey and triangulation markers. Photos of these exist (U.S.G. Library, Golden) and may be used to identify these markers if found. The location of portions of some of the explorer's trails have been recorded in the State inventory records. These present approximate routes of the explorers based on the exploration accounts.

Data Gaps

- * Discernable trade and exploration trails.
- * Archaeological identification of locations of such structures as Fort Robidoux, Fort Davy Crockett, and fur trade era cabins in Brown's Hole.
- * Markers related to theme activities.
- * Clearly discernable/representative campsites and caches of trapping and exploration parties.

Future Needs

Surveys conducted specifically to find on-the-ground evidence of the early Euro-Americans in Colorado should be given low priority due to the extensive documentary evidence available about the era and the low possibility of finding clearly distinguishable sites within the region. Such an undertaking would require the efforts of an historian, working with the documentary evidence, and an historical archaeologist. The mapping of approximate routes of exploration and expedition routes would be of value for guiding cultural resource management studies in the region. The location of the routes would alert surveyors to be aware of the possible occurrence of such resources in a survey area. As cultural resource surveys are currently conducted in the region, investigators should be aware of the possible occurrence of resources associated with this theme.

Important Resources

Due to the apucity of known resources, any site is important. Activities of the explorers and mountain men are imortant because they stimulated American interest in the west and in Colorado, leading to its settlement, statehood, and continued development. In addition, the explorers, as representatives of their various governments during a period when the region's international ownership was in doubt, played a significant role in this diplomatic struggle. Any site that substantiates these roles would serve to verify existing documentation and interpretations.

RESEARCH QUESTIONS

1. What resources, if any, remain that provide information on the exploration of Colorado?
2. Can cultural resources provide new information or reinterpretations relative to the day-to-day activities of trapping, trading, and exploring parties?

Can distinguishable sites provide new information as to relationships between traders or explorers and regional Indian groups?

PHYSICAL CONDITION

Any site which is clearly distinguishable and evidences minimal surface disturbance is important for research purposes. Any survey markers (cairns) that can be verified from historical documentation as a marker from one of the expeditions to western Colorado that remains intact.

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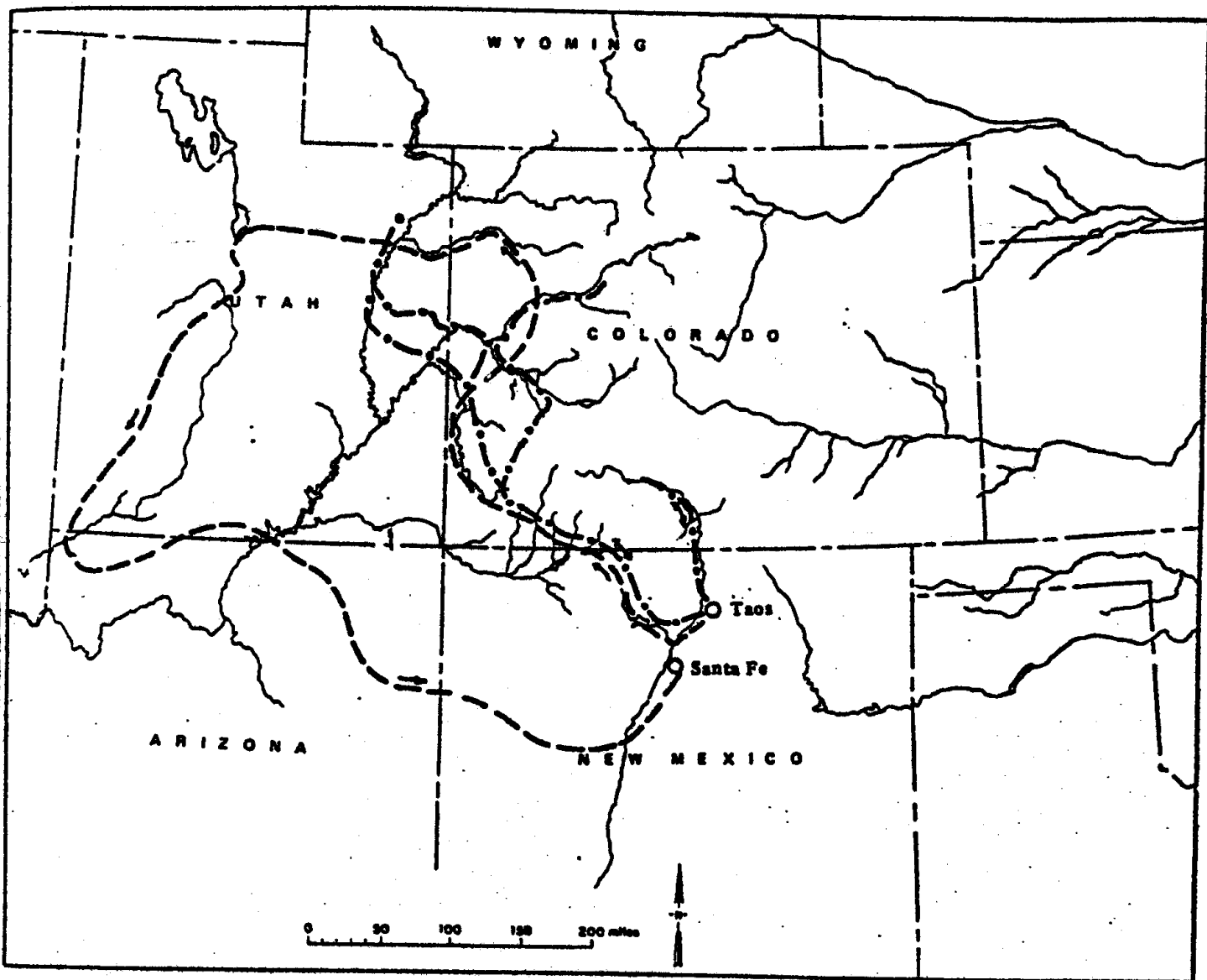
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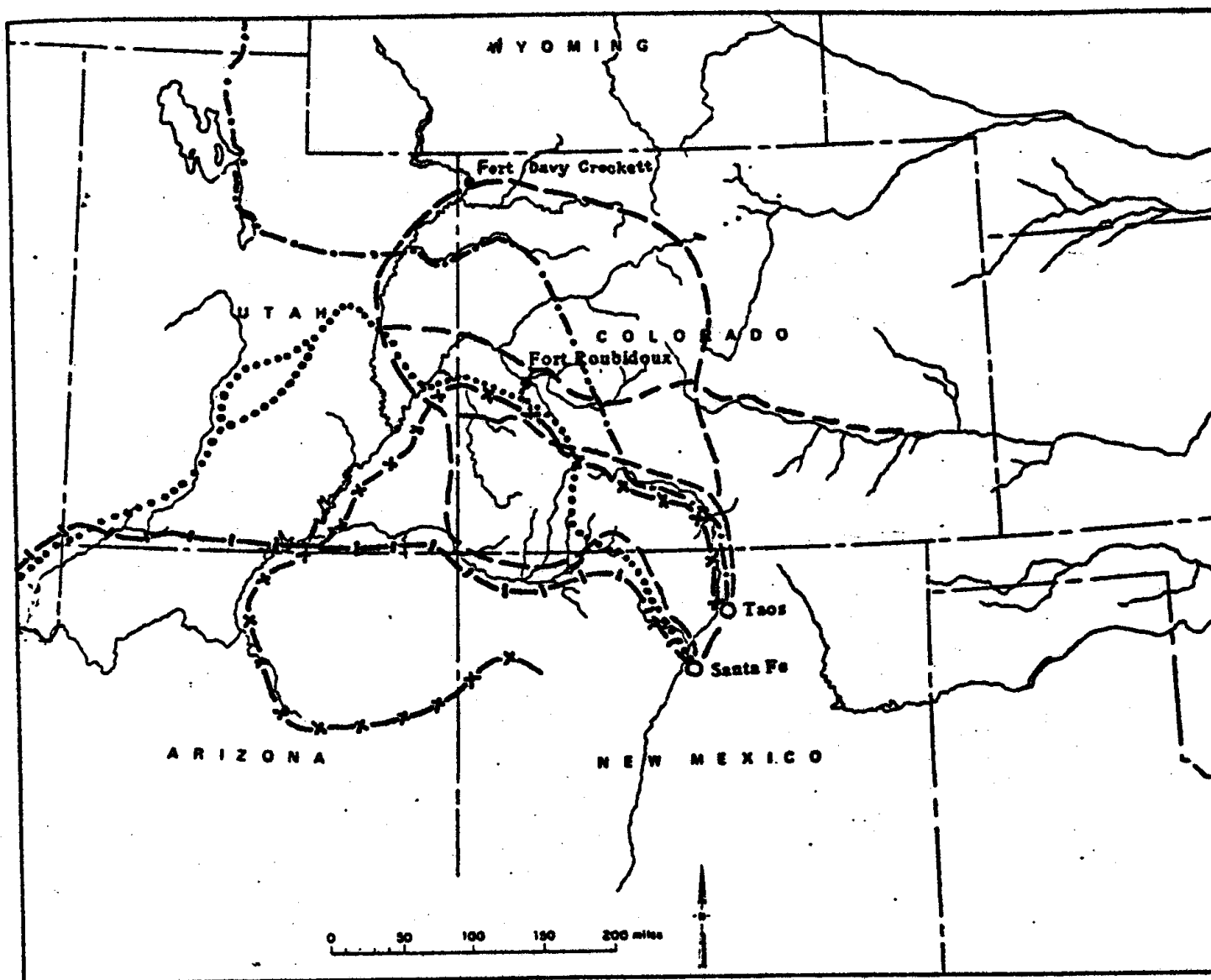
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----- Dominguez-Escalante Expedition 1776

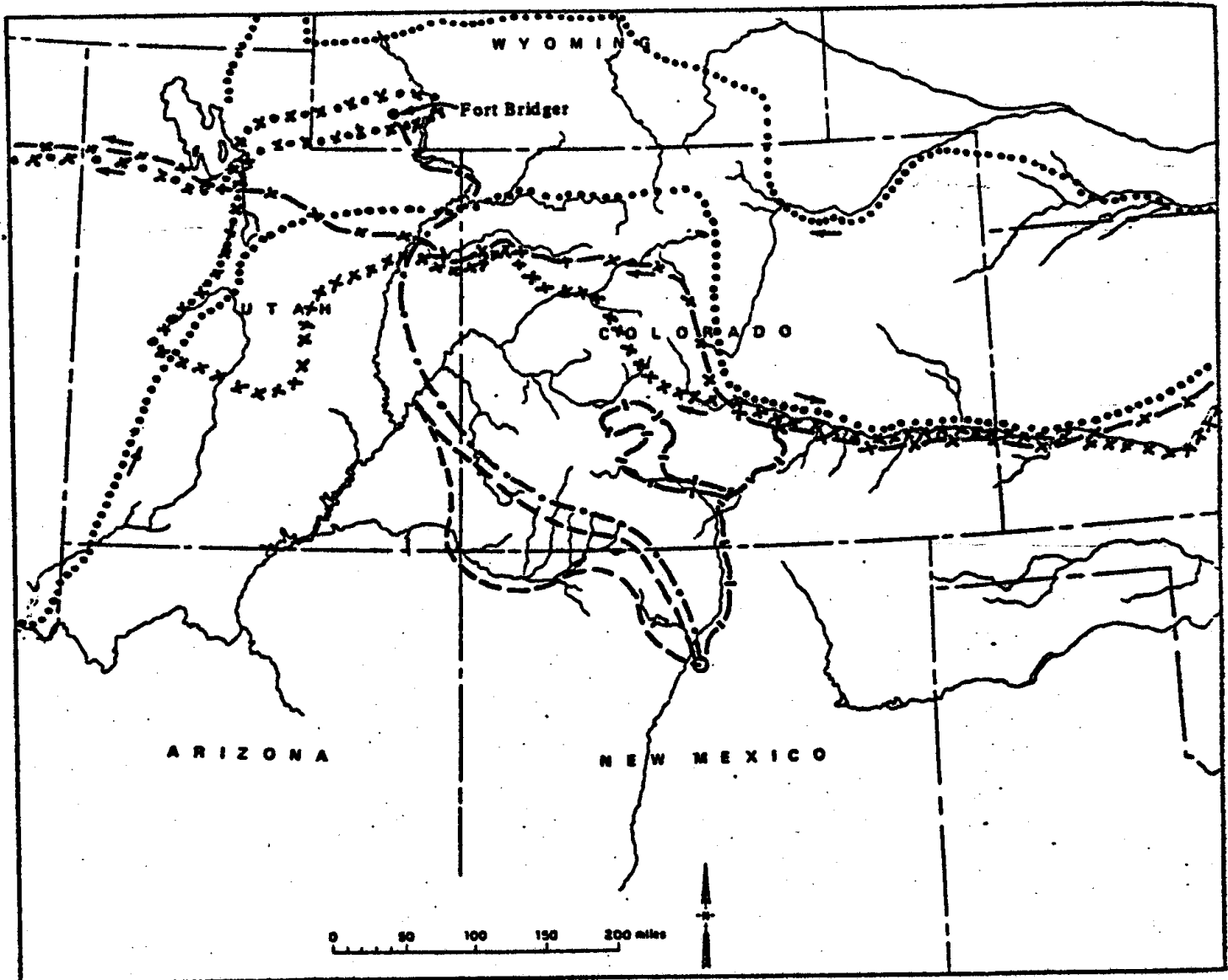
O'Rourke—FRONTIER IN TRANSITION



FUR TRAPPING TRAILS

- · — · — Provost
- — — Trapper Routes into Southern Rockies
- x — x — Peg Leg Smith
- · · · · Old Spanish Trail
- | — | — California Trade Routes

O'Rourke-FRONTIER IN TRANSITION: A HISTORY OF SOUTHWESTERN COLORADO (BLM, 1980)

UNITED STATES GOVERNMENT EXPEDITIONS
INTO COLORADO

- Fremont 1843-1844
- - - - - Fremont 1845
- . - . - Fremont 1848
- xxxxxx Gunnison 1853
- x . x . x Beckwith 1853
- Marcy 1857-1858
- - - - - Macomb 1859

2. UTE/EURO-AMERICAN CONTACT

NARRATIVE

Until the Spanish permanently colonized the Rio Grande Valley, historic Ute occupation of the Colorado Plateau Country was virtually undisputed. The Utes acquired horses from the Spanish as early as the mid seventeenth century and this, in addition to their introduction to European trade items, revolutionized Ute life and expanded their geographic range. Raids and trade with the Spanish became a way of life, and the two groups were uneasy neighbors throughout the period of Hispanic influence.

Rivera met and traded with a band of Utes near the Gunnison River in 1765 and Dominguez and Escalante documented contact with the Utes on the San Miguel River, in the North Fork Valley, and at various points along their expedition route. For nearly fifty years thereafter, the Euro-American threat to Ute dominance was minimal, but the fur trade rush which began by the 1820s brought yet another revolutionary transformation to Ute life. The Ute people traded extensively with American traders and trappers, and frequented posts and forts, often intermarrying with Anglos. And yet, despite these contacts with traders and trappers, as well as explorers, Western Colorado remained unchallenged Ute domain. The American victory in the Mexican War marked the real beginning of the end for Ute sovereignty in the region, and in 1849, by the first official American treaty with the tribe, the Calhoun Treaty, the seven Ute bands agreed to recognize American sovereignty and to remain within their traditional hunting ranges. The first Colorado gold rush of 1859 increased Anglo settler-miner pressure on Ute lands. Colorado Territory was established two years later.

Expanding pressure by miners and farmers brought the Utes and Anglos to the conference table once again. The Treaty of 1863, the Evans Treaty, aimed at the removal of the Utes from the path of incoming white miners and settlers, defined boundaries for a Ute reservation. The Tabeguache Utes were to give up land already occupied by Anglos in exchange for livestock and rations. Implementation of the treaty never took place. The U.S. Government failed to supply the Utes with promised rations and the Utes continued to raid and hunt within their established, traditional areas. The whites, who regarded the Utes as trespassers, demanded government intervention. The resulting Treaty of 1868, the Hunt Treaty, provided for a single reservation for all seven Ute bands. This treaty reduced the Indian lands to roughly one-third of the Colorado Territory. It was in that year that Ouray, a Tabeguache (or Uncompahgre) leader, became the spokesman for the entire tribe, by federal appointment. As a condition of the treaty, federal authorities established two agencies on the new reservation. One, for the White River Utes, was located near the present town of Meeker on the White River. The other, which would serve the Southern and Tabeguache Utes, was located at the Los Pinos Agency, west of Saguache. Seven years

later, in the face of increased settlement and the threat of hostilities, the Los Pinos Agency was moved to the newly established Uncompahgre Agency, located near the village of Colona, south of Montrose. A containment was established for troops north of the agency in mid-1880. It was known as Fort Crawford after 1884.

As a result of mineral exploration in the San Juans, the Brunot Agreement (or San Juan Cession) of 1873 removed 4,000,000 acres from the Ute Reservation in the San Juan Country, and effectively opened the mineral rich region to permanent settlement by Anglos. Both Utes and Anglos violated the provisions of the treaty and a military post, Fort Lewis, was established near Pagosa Springs in 1878 to enforce the agreement. The fort was later removed to a site near Hesperus in 1880. When hostilities did occur, however, they started in Northern Colorado at the White River Agency.

The White River Agency had a history of problems since its establishment in the 1863 treaty. The final trouble came under the misguided intentions of the Indian Agent, Nathan Meeker and his plans to create a model community based on agriculture. By late summer of 1879, the agency was in a turmoil. Some Utes travelled to Denver to protest "Father Meeker's" actions. Meeker sought help from the War Department. With the approach of troops, two incidents occurred. Major T.T. Thornburgh was on his way to the White River Agency with about 140 men and 33 wagons at the request of Agent Meeker when the command encountered Ute resistance some twenty miles northeast of the present town of Meeker. Thornburgh's command was decimated in the battle. The second incident, the Meeker "massacre" took place a short time later. Nathan Meeker and ten other males at the White River agency were killed, and five females were kidnapped.

The "Meeker Massacre" and the Thornburgh battle on Milk Creek resulted in the removal of the Tabeguache and White River bands to Utah in 1881; the Southern Utes remained where they had been previously placed. By 1889, the remaining Ute Reservation had been opened to settlement, and Ute lands had dwindled to the small Ute Mountain and Southern Ute Reservations in southwestern Colorado.

CHRONOLOGY

- | | |
|-----------|--|
| 1200-1881 | - Ute domination of Colorado Plateau. |
| 1640-1821 | - Era of Hispanic-Ute trading/raiding frontier. |
| 1811-1860 | - Ute/Anglo-American trading era. |
| 1849 | - First Ute-U.S. Treaty, Calhoun Treaty. |
| 1859 | - First Colorado gold rush threatens Ute domination. |
| 1863 | - The Evans Treaty defines Ute boundaries. |
| 1868 | - Single reservation defined and agencies established. |

- 1873 - Ute Cession of San Juans in Brunot Agreement.
- 1879 - Meeker Massacre and Thornburgh Battle.
- 1881 - Removal of White River Utes to Utah.
- 1889 - Remaining Ute lands opened to settlement.

LOCATION

The seven Ute bands originally included the entire Plateau Country within their domain. Therefore evidence of historic Indian occupation might be expected to occur throughout the Plateau Country. Ute holdings dwindled, through treaties and cessions, to two small reservations in Southwestern Colorado (See map).

CULTURAL RESOURCE TYPES

Sites include: Established Ute hunting and migratory trails (original) and later trade routes; traditional sacred grounds, burial sites, and temporary campsites (including tepee rings/foundations, cave shelters and chipping/kill sites and lithic scatters) where bands and/or groups, including familiar units, lived and/or worked on a seasonal basis; battle sites, such as the locations of the Meeker Massacre, the Thornburgh ambush; the Ute wars of 1887 and 1897 and the Beaver Creek Massacre (McPhee); agency (building) sites; historic petroglyph (rock art) sites (such as those in Glade Park and Unaweep Canyon); post removal tribal sites (tribal headquarters, ceremonial grounds, etc.); military establishments/posts for the protection of individuals and property, reservations and land cessions' wickiup sites; forked stick lodges.

THE QUANTITY AND QUALITY OF EXISTING DATA

Historical Documentation

There is considerable source material on the historic Utes, ranging from the popular (Wilson Rockwell, The Utes: A Forgotten People, and Jan Petit, Utes: The Mountain People, published this year), to the scholarly (J. Donald Hughes, American Indians in Colorado; Robert Emmitt, The Last War Trail; Marshall Sprague, Massacre: The Tragedy at White River; Omer Stewart, "Ute Indians Before and After White Contact," Utah Historical Quarterly, Ethnohistorical Bibliography of the Ute Indians of Colorado; Robert W. Delaney, The Southern Ute People), to the tribally published (James Jefferson, et al, The Southern Utes: A Tribal History).

The Western History Center of the University of Utah has published extensively on the Ute people. There are numerous articles on Utes in The Colorado Magazine, The Trail, and Harpers as well. Other sources include National Archives records of the Bureau of Indian Affairs, Reports and Minutes of the treaty commissions and other documents. For the 1860s, 1870s, and 1880s, Colorado's contemporary newspapers give very good accounts of Anglo-American feelings and impressions about the Utes

as do other writings of the times such as Josephine Meeker's account, The Ute Massacre.

Number/Condition

The presently surveyed data base includes several hundred relevant resources, including petroglyphs, pictographs, tipi rings, and campsites. In particular, one should peruse the surveys conducted by the Grand River Institute which has recorded over 100 historic Ute sites in the Plateau Country, W.C. McKern, Western Colorado Petroglyphs (B.L.M. Cultural Resource Series no. 8), H. Wolcott Toll, Dolores River Archaeology... (B.L.M., Cultural Resource Series no. 4), and the aforementioned Dallas Creek Project Survey (S. Baker, Centuries Research, Inc.) which surveys an area that was once in the center of the Uncompahgre Ute Reservation and describes numerous historic Indian sites. This data provides, in the words of one surveyor, "a good beginning," but the information must be synthesized in order to more adequately interpret it. The condition of the sites will generally be deteriorated or disturbed.

Data Gaps

- * Clearly distinguishable trading/contact sites.
- * Specific locations of such sites as the Cow Creek agency and Shavano's homestead.
- * Dating of sites to determine a time frame for historic Ute activity in the Plateau Country.

Future Needs

The present data base must be synthesized and analyzed in order to more completely interpret Ute activity in the region. Once this is accomplished, it should be compared to documentary evidence including early accounts of Ute sites. At that time an evaluation of the kind of survey or research needed should be undertaken.

Important Resources

All discernable sites relative to Euro-Ute contact are significant. Of particular significance are resources/sites relating to Ute cultural adaptations as evidenced in farming and trading patterns. Agency and battle sites that can contribute to our understanding of cross-cultural contact are equally significant.

Sites of traditional or documented historic Ute use and occupation are important. Sites related to important historic events such as sites of Indian/Anglo skirmishes or battles (the Meeker Massacre and the Thornburgh Battlesite) or sites associated with important people such as Ouray, Shavano, or Meeker, are important. Resources that help to explain cultural adaptations are also significant, especially to document Euro-American

affect on Ute lifeways. In addition, these sites may have significance for yielding important archaeological information about the historic tribe. All sites should therefore be evaluated according to the archaeological research priorities established for the historic Indians in the region (refer to Archaeological research designs). The significance in terms of the National Register for these sites will be affected by the integrity of the site. This should be determined on a site-by-site basis.

RESEARCH QUESTIONS

1. What cross-cultural interrelationships occurred between Utes and non-Indian farmers and miners?
2. What correlations can be drawn between Ute and non-Indian transportation routes?

PHYSICAL CONDITION

None of the sites associated with this theme have continued in use or have been maintained from their original use. Therefore all will be affected by deteriorated physical condition or obliteration from later use. If a site can be located and identified from historic documentation and has significance through association with important or people, the site may still retain its importance regardless of deteriorated condition. If a site is important for archaeological information it must retain sufficient integrity of location and deposition to be able to yield that information. Integrity for these sites will have to be determined on a site by site basis. Generally, trails should be clearly discernable; structural remains should provide evidence of function, and sites should show minimal surface disturbance.

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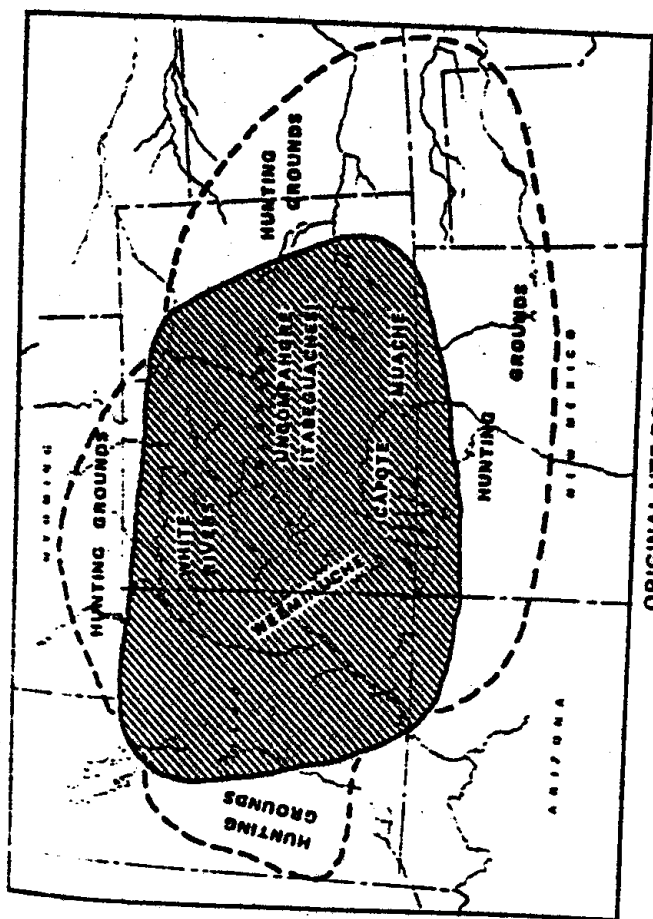
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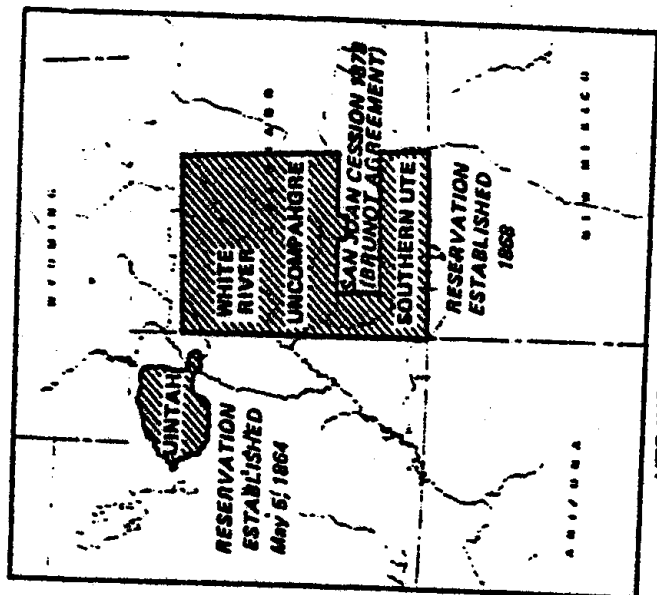
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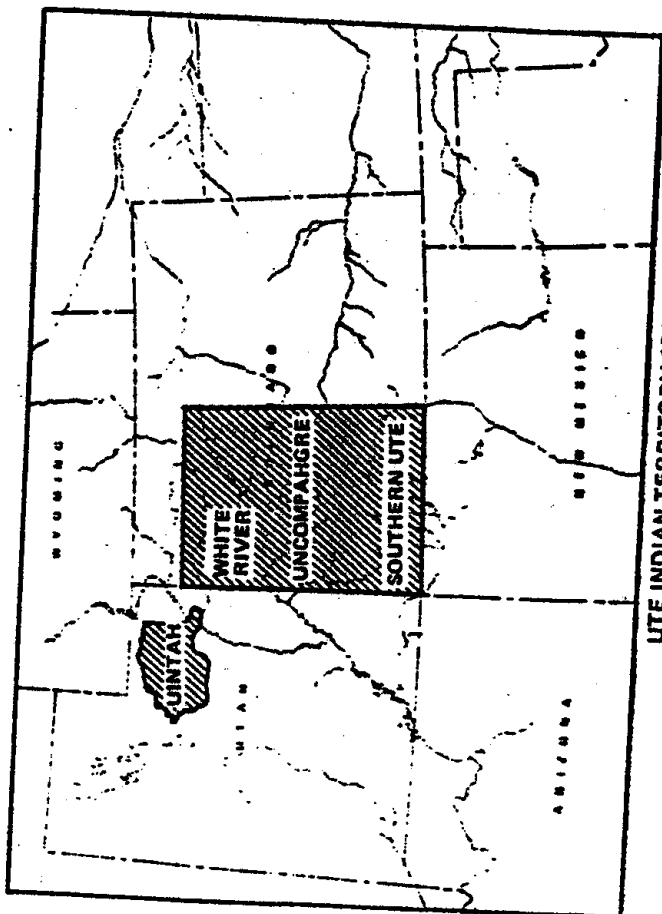
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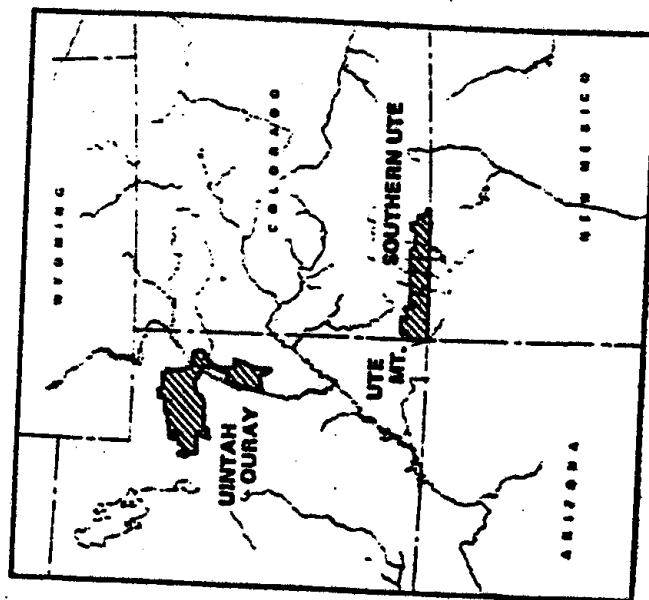
ORIGINAL UTE DOMAIN



UTE INDIAN TERRITORY 1873

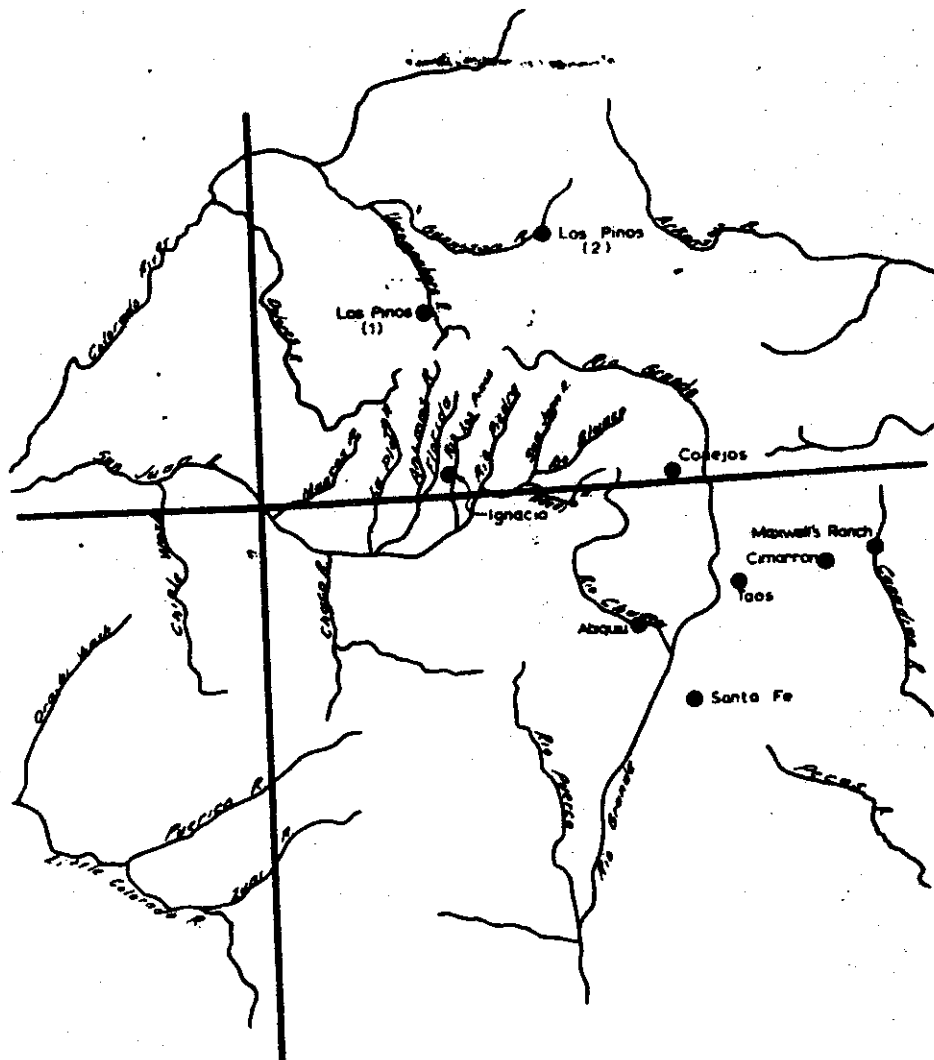


UTE INDIAN TERRITORY 1868



UTE RESERVATIONS 1872

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



- Y PRINCIPAL RIVERS OF THE AREAS
 ● AGENCIES WHICH HAVE SERVED THE SOUTHERN UTES

3. THE EARLY GOLD RUSH (1859-1870)

NARRATIVE

The existence of gold in Colorado was confirmed by 1859; by early autumn of that year, prospectors had crossed the Continental Divide, usually in groups for protection against Utes and the elements and for mutual support. Throughout the 1860's, the exploration and exploitation of Western Colorado's gold fields continued unabated.

In Northwestern Colorado, Joseph Hahn, a German immigrant, found placer gold in the Elk River area in 1860; he began serious mining operations there six years later. Later, miners initiated the permanent settlement of the Hahn's Peak area of the Elk River Valley. By 1872, Hahn's Peak was a booming mining camp, and within two years, its citizens created a mining district, which included a number of small summer camps, used primarily as bases for placer mining. The mining activity in Northwestern Colorado stimulated the development of agriculture; cattle were introduced to the region by the mid 1870's. An anticipated silver and copper boom in Northwestern Colorado did not materialize; a lack of transportation facilities hampered the development of the region during this initial mining era.

Miners also ventured into the San Juans' during this period as well. Prospectors from "Bakers Park", discouraged by the difficulties of separating gold from ore, established Animas City in 1861. But the Ute threat, the absence of permanent settlement, the inhospitable environment and diminished placer gold deposits stalled the rush until 1869, when prospecting parties returned to search for the San Juan "mother lode". Still, however, the expected boom languished. According to Smith and Vandenbusche, "...placer mining had dropped off and lode mining had not yet taken up the slack..". By the early 1870's, however, the real mining boom, accompanied by permanent settlers-farmers, ranchers, lumbermen, town builders, merchants and tourists-would arrive. Early explorations that led eventually to intense activity around Silverton began during the late 1860's-early 1870's.

Placer mining, a transitory endeavor based on individualistic enterprise and a pan, shovel, pick, sluice boxes and a few personal effects, did not encourage permanent settlement as did lode (or underground) mining in later years. In addition to panning, sluicing, and hydraulicing were employed during this early mining period in Western Colorado; the latter demanded flumes, ditches, new equipment and, on a small scale, corporate backing.

CHRONOLOGY

- | | |
|-----------|--|
| 1859 | Existence of gold in Western Colorado confirmed |
| 1860-1873 | Era of gold placer prospecting and mining in the Plateau Country |
| 1873 | Decline of placer mining |
| 1870's | (early) Introduction of permanent agricultural frontier to Northwestern Colorado |

LOCATION

See map for location of early placer mining districts and related settlement patterns.

CULTURAL RESOURCE TYPES

Although little, if anything, in terms of physical, built remains from this early mining phase remains, this list of sites should include: mining/placer campsites, many of a very temporary nature, adits, glory holes, mining and settler trails and roads, mining claim sites. Structures include: mining townsites with attendant trash dumps, privy pits and foundations; farmstead sites, arrastra, hydraulic(ing) mining, long tom, rocker or sluice box. Districts include: gold placer area/mining districts.

THE QUANTITY AND QUALITY OF EXISTING DATA

Historical Documentation

The early gold rush, like the era of the mountain men, has stimulated intense popular and scholarly interest, and there is a large body of historical literature on this theme. Basic sources on the early rush include: Leroy Hafen, Colorado and Its People, William S. Greever, The Bonanza West: The Story of The Western Mining Rushes, 1848-1890, and the various works of Duane Smith, the leading contemporary chronicler of Colorado's mining history. The latter's works include: Colorado Mining: A Photographic History (particularly valuable for site reference) and Rocky Mountain Mining Camps. Numerous county and town/city histories such as Duane Smith's history of Durango, Rocky Mountain Boom Town are valuable for site reference. Robert Brown, in his several books (including An Empire of Silver), has recorded many hundreds of significant mining sites with his photographs. The Class One overviews produced for the Plateau region by the Bureau of Land Management also contain valuable information. The researcher should consult Mehl's The Valley of Opportunity: A History of West Central Colorado, O'Rourke's Frontier in Transition: A History of Southwestern Colorado, and Athearn's An Isolated Empire: A History of Northwest Colorado.

Contemporary guidebooks and promotional literature offer interesting though often uninformed site information and illustrations, and The Colorado Magazine includes, over the years, references to an/or articles about most of the early mining camps and districts. Newspapers, in addition, are a vital

source; contemporary issues offer insights into all phases of the theme, but editorial bias must be taken into account.

Many graduate theses pertain to the theme, and the holdings of many Colorado research collections, including local and county historical societies, are invaluable. The Ouray and San Juan Historical Societies, for example, have extensive photo archives documenting resources relative to the theme.

Number/Condition

Due to transitory and impermanent nature of the early rush, even the large body of extant data are insufficient to determine the number of resources which existed or may have existed. Nevertheless, numerous sites associated with this theme have been recorded. These include camps and towns, mines, districts and the like. Because the succeeding and more permanent mining frontier obliterated many resources associated with the earlier rush, it is difficult to determine the number of the latter, based on current data, with any degree of certainty. Since the first mining was later redeveloped into lode or other kinds of mining in the same place, older sites are "buried" under or completely obliterated by the new sites. Such an example is seen at Tarryall in South Park.

Data Gaps

Representative and clearly discernable initial mineral discovery sites.

Distinguishable prospectors, campsites, early workings and other evidences of early mining endeavors.

Clearly discernable in situ evidence of early mining efforts at locations that later became mining centers.

Future Needs

Presently, vast quantities of historical documentation and recorded cultural resources associated with the placer mining frontier make future surveys for these resources relatively low priority. However, much work needs to be done with the present data base to make it more useable for researchers. Also, because of the poor descriptions and locations contained in some cultural resource site forms, some areas or sites may have to be resurveyed to upgrade the information.

There is also a need for future survey and recording of resources to include research historians working with field surveyors and historical archaeologists, in order to reveal more site-specific information relative to this early phases of regional history.

Important Resources

Although many resources associated with the theme have already been recorded, temporary workings, camp and townsites and the like could yield important information about the social and technological patterns of the

early miners. Unfortunately, site degradation has been extensive and there may be few sites worthy of protection. Because of the large number of sites associated with this theme, many of which have been or are likely to be placed on the National Register, only sites with high levels of integrity and at their original location, should be considered important. The information potential of many sites, especially adits, glory holes, and hydraulic locations is extremely low, and most should not be considered significant.

RESEARCH QUESTIONS

1. What discernable resources remain which can provide information as to the social and ethnic, demographic and technological patterns of the early prospecting and mining activities and settlement patterns be established?
2. Can a causal correlation between early prospecting and mining activities and settlement patterns be established?
3. What resources remain that can establish and clarify patterns of Anglo-American prospecting activity in the Plateau Country?
4. What cultural resources, if any, can verify historic documentation about activities and techniques of Colorado's placer frontier?

PHYSICAL CONDITION

Prospecting/mining campsites: Should be intact to the degree that a feeling for the function, fabric and social arrangement can be clearly recognized.

Adit, arrastra, hydraulic mine, long tom, sluice box/rocker: Enough of the equipment should be left to clearly discern its function and should be dated to the proper era.

Prospect holes: Should be clearly recognizable and datable; such technological resources as sluice boxes, flumes and hydraulicing equipment should be intact to the point of recognizability.

Claims and trails: Should be discernable and verifiable by documentation and/or date.

REFERENCES

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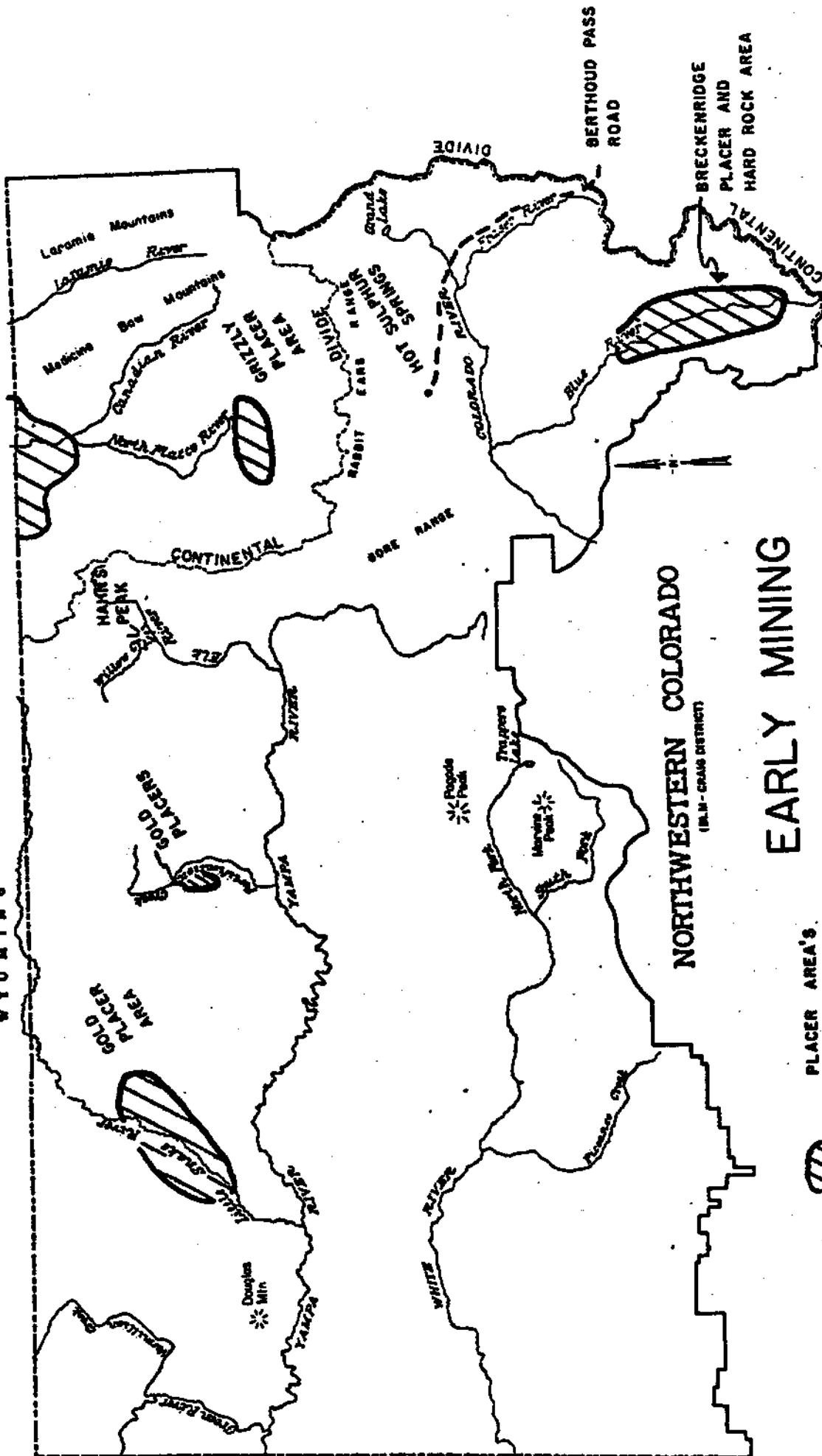
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WYOMING



U T A H

IV-25

NORTHWESTERN COLORADO

(GRAND DISTRICT)

EARLY MINING AND SETTLEMENT

PLACER AREA'S

TOWN SITE

PASS ROAD

Archean-AN ISOLATED EMPIRE

4. PRECIOUS METAL MINING (1870-1890)NARRATIVE

In the two decades following 1870, mining was the predominant activity in the Plateau Country. During this era, unlike the previous early placer mining phase, miners were accompanied and/or followed by permanent settlers. Mining in Southwestern Colorado could not be conducted with the placer operations utilized in the Colorado Mountains. Lode mining techniques were essential to extract the minerals. As a result, there was a need for large machinery, a substantial labor force, advanced milling works and transportation. Therefore, the mining brought with it an early urban situation. Mining camps and towns sprang into existence virtually overnight, and, by the mid 1870s, areas of Ouray, San Juan, San Miguel, Dolores and La Plata counties were being prospected, mined and settled. Some of the region's premiere mining communities--Ouray, Silverton, Rico, Telluride and Lake City--date from the 1870s; and several smaller camps--Animas Forks, Parrott City, Sneffles, Gladstone, Tellurium, Ironton, Guston and others--which were later abandoned, came into being during the 1870s and 1880s.

The Brunot Agreement of 1873, which removed the Utes from the precious metal-rich region of the San Juans, coupled with reports of the area's mineral wealth, stimulated numerous, intensive rushes to the gold- and silver-rich San Juan area. The rush of 1874 was centered primarily in those areas which had been explored and exploited by gold placer miners in the 1860s. In Southwestern Colorado, Silverton (the scene of earlier placer activity in Baker's Park) became the center of the boom. The area attracted thousands of prospectors, encouraged the growth of numerous camps and witnessed the staking of thousands of claims throughout the decade.

In Northwestern Colorado, Hahn's Peak was a booming mining district, although on a much smaller scale than the San Juan activities. The lack of transportation had hampered settlement and development in the region during the 1860s, but with the extension of the Union Pacific to Rawlins, Wyoming, settlers, cattlemen, and visitors joined the miners. The area never enjoyed the intense booms associated with the San Juan's and later mining efforts would concentrate on non-precious minerals.

The year 1890 marked the end of the Plateau Country's pioneer period. The mineral rushes had, in turn, stimulated the rapid development of agriculture and rail transportation throughout the region, and permanent settlement was an accomplished fact as the nineteenth century came to a close. Mining camps and districts were interconnected with rails and toll roads. Permanent communities, with their merchants, professional practitioners, clergymen, cultural and recreational facilities, and other evidences of "civilized" society, enjoyed remarkable growth, and successful farming and ranching endeavors, such as those in the Animas Valley surrounding the major smelter town and railroad of Durango, added to the rapid population growth.

Urbanization was, decidedly, a regional trend; between the 1880 and 1890 census, for example, Ouray County's population increased nearly two and one-half times.

The adverse impact of rapid development and growth included inefficient management and mine/mill over-expansion. Placer mining, and, to a less obvious degree, hardrock mining, both impacted the environment--tailings affected mountain streams and creeks, while dumps, buildings, shafts and mills cluttered the landscape. Once corporate control intervened in hardrock mining, as it did by the 1890s, a new era of industrialization, absentee ownership and unionization began for the industry. This also played an important part in the socio-economic development of the Plateau Country.

CHRONOLOGY

1870-1890	Era of major gold and silver exploitation (and other metals) in the Plateau Country).
1873	The beginning of the San Juan mineral rush.
1874	The beginning of the San Juan mineral rush.
1877-1879	Lode prospecting extends into entire San Juan region.
1870-1880	Homesteads established along the Yampa River.
1882	The Denver and Rio Grande reaches Silverton.
1887	The Rio Grande railroad reaches Ouray.
1893	Pioneering phase of Plateau Country history ends; the silver panic.

LOCATION

Lode prospecting and mining occurred throughout the Southwest and Northwest areas of Plateau region, although the rushes in the latter section were far less intense than those in the San Juans. Milling, smelting and associated industrial manifestations of the industry took place in the three mining districts in the Southwestern area. (See map.)

CULTURAL RESOURCE TYPES

Owing to the more permanent nature of this mining frontier phase, examples of built resources are extensive and include: numerous buildings (period house, privies, public and commercial buildings, opera houses, livery stables, banks, bordellos, hotels, boarding houses, prospectors' cabins, farmsteads and appurtenant outbuildings (which are representative of 1870-1890's styles and/or regional design adaptations); such structures as underground mines, stampe mills, smelters, ore crushing mills, flotation plants, shaft houses,

loading chutes, tool and repair shops, flumes, tunnels, aerial tramways and tramway terminals, powder houses, concentrating mills, exterior support cribbing, ore storage bins, ore chutes, tram towers, headframes, headworks, gallows frames, whims, hoists, ore car trestles and turntables, electric generating plants, tripples.

Sites include: cemeteries, abandoned town and mining campsites, sites of labor problems related to mining, ore dumps and tailings ponds, mining claim sites; such objects as ore buckets, ore cars, ore binds, isolated mining machinery and equipment.

Districts include: mining/placer districts, working class neighborhoods in mining towns, business blocks, red light districts, snowslide areas (such as Riverside and Mother Cline slide districts) and districts/areas indicating environmental scarring as a result of mining activities.

THE QUANTITY AND QUALITY OF EXISTING DATA

Historical Documentation

In addition to the basic reference sources on Colorado prospecting and mining referred to in "The Early Gold Rush" theme, consult, for this later period, such volumes as James Fell, Ores to Metals, George Suggs, Colorado's War on Militant Unionism, as well as state, county and local histories which can give insights into the business, industrial, and social aspects of mining and the local growth, socially and economically, pertaining thereto. (Two examples are Jessie Moore Crum's history of Ouray and the four-volume D.A.R.-sponsored Pioneers of the San Juan Country.)

For the business of mining, see Joe King's A Mine to Make A Mine, as well as the Engineering and Mining Journal and local newspaper files. A number of Colorado research libraries include companies and personalities. In addition, the extensive documentary and photo archives of the State Historical Society of Colorado, the Western History Department of the Denver Public Library and the Western History collections at the University of Colorado's Norlin Library, are replete with documentation relative to associates sites.

The technology of mining is treated further in Percy Fritz's Colorado: The Centennial State as well as in many articles in The Colorado Magazine.

Claim maps, and maps produced by USGS, Forest Service and promotional/guidebooks are useful for site location and identification. Mining Directory of San Miguel, Ouray, San Juan and La Plata Counties (1899) is invaluable.

Number/Condition

Many hundreds of sites have been recorded relative to this theme because this phase of the mining frontier included more emphasis on permanent workings and settlements. Extensive degradation, however, is evident due to neglect, vandalism, abandonment and the natural elements. This situation is particularly serious, of course, in terms of remote sites such as mills and abandoned towns; the current emphasis appears to be on the preservation of

town districts. The present data is insufficient to determine the number of sites associated with this theme, although, again, the data base must be refined to make it more usable for cultural resource management decisions.

Data Gaps

Because so many associated sites have been recorded, data gaps are not a significant consideration. Nevertheless, the following should be considered:

- Precious metal mining sites in remote locations where the activity was established, but inadequately recorded.
- Mining stock exchange buildings.
- Clearly discernable ethnic neighborhoods.
- Identification of sites related to specific technological advancements in mining.

Future Needs

Other than the above listed data gaps, future surveys are not a high priority matter. Rather, current efforts should emphasize protection of existing representative but endangered sites. Current survey projects, such as the Main Street Program and City Centennial surveys should provide significant information. Representative remote sites (mills, boarding houses, tramways, etc.) should be surveyed and recorded. An additional need exists with regard to upgrading site descriptions and location for inventory records on file at the Colorado Preservation Office. In many cases where mining sites associated with the theme have been recorded, the information is inadequate. The upgrading of site information may require resurvey in selected areas. Such a survey would require the skills of an historian trained in Colorado mining and economic history.

Important Resources

The major precious metal mining camp in the Plateau Country which operated during this period are the focus of the important resources for the theme. To the extent that the buildings, sites, and structures retain their integrity demonstrating the original condition and setting (as either an entire camp, a portion of a camp), they are important. Individual structures may also be considered important if they are associated with important people or events connected with the theme, or exemplify construction or architectural style important in conjunction with this theme.

Important resources also include representative and unique examples demonstrating the growth or development of precious metal mining as an industry. This may include examples of the development of towns which grew into major camps from early placer operations, examples of camps which began during this era, examples of mining consolidation, examples of various stages

of development as towns became more permanent. Portions of the camps or towns may be important as districts exemplifying unique or representative examples of the configuration of mining facilities, residential neighborhoods (displaying social or ethnic stratification) or business districts. In addition, resources demonstrating important technological developments or representative or unique examples of technological developments are important.

RESEARCH QUESTIONS

1. What cultural resources, if any, can reveal information about social life in now abandoned small mining towns (such as Iron-ton, Sneffels and Parrott City)?
2. What cultural resources exist which can provide new information about the mining-related business activities and technology of mining communities?
3. Can cultural resources provide new information about ethnic and class spatial arrangements and social structure in mining communities?
4. What resources, if any, remain that can provide information on the technologies of mining in the Plateau Country?

PHYSICAL CONDITION

Structures, neighborhoods, and equipment: should be intact to the degree that design and function are apparent and documentation is possible. Due to the abundance of representative examples, structures (homes, commercial buildings, etc.) should be in good exterior physical condition.

REFERENCES

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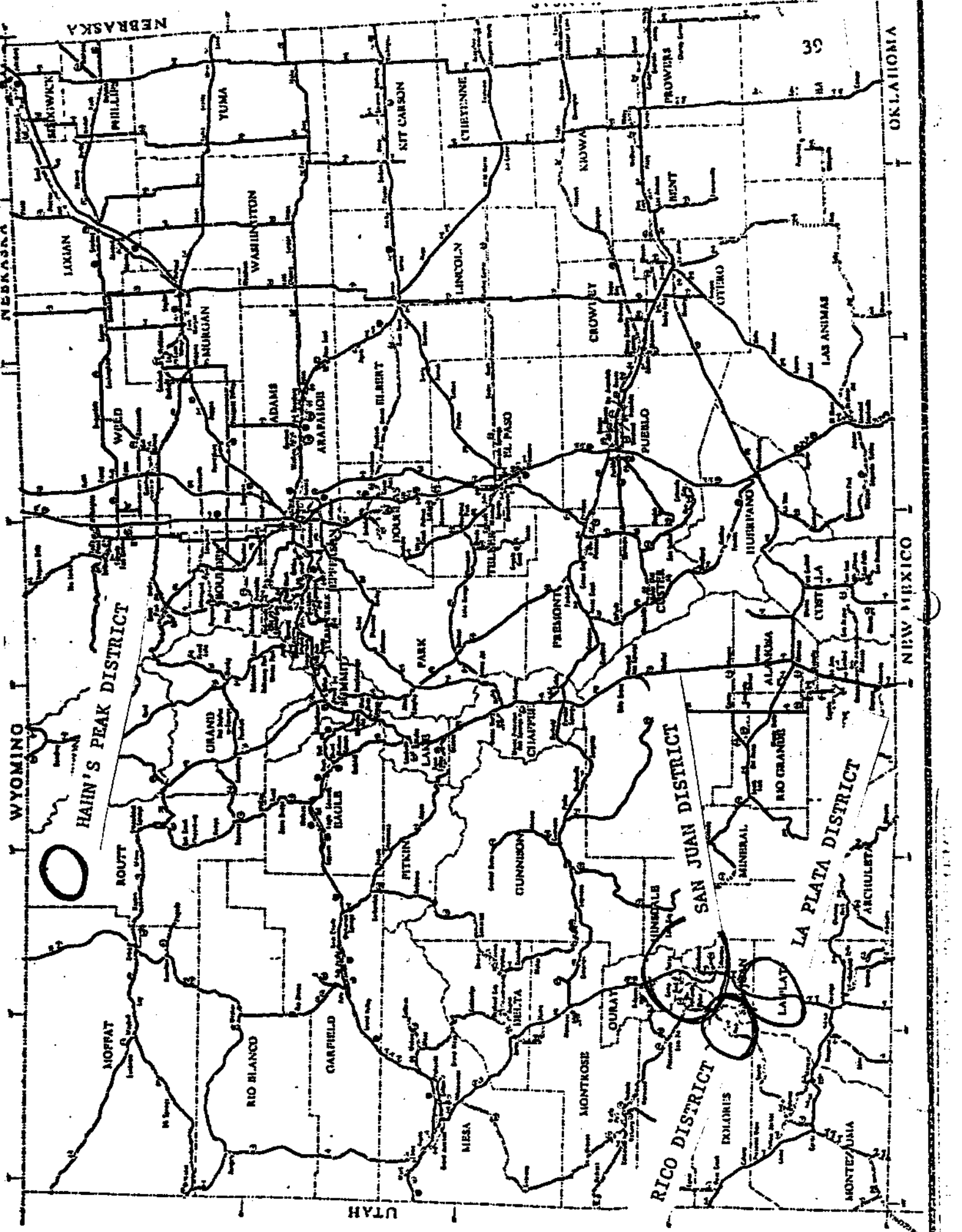
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PLATEAU COUNTRY

5. MODERN MINING (1890-1945)

NARRATIVE

Gold mining and the mining of certain other minerals including zinc, lead, and copper, prospered in the final decade of the nineteenth century and early twentieth century in Southwestern Colorado. The industry remained vital until World War I. Until the early 1890s, there was only nominal gold production in the San Juans. Previous to this, there had been a general failure of gold placer operations in the region due to the low grade ores. Gold production developed at this time due to several factors. The most important was the use of new ore reduction processes that could extract metal from low grade ore. The availability of the railroad made shipment of the ores to the processing plants feasible. A third factor was the collapse of silver prices brought on by the depression of 1893. Although many businesses went under and several towns famous for their silver production were deserted, those areas where silver had previously been extensively mined in many cases saw renewed mining activity based on new gold discoveries. In the northwestern Plateau region, gold mining was revitalized during the latter years of the nineteenth century, but the venture never developed into a paying industry.

The gold mining centered primarily in San Miguel, San Juan, and Ouray counties in the already established mining centers of Telluride, Silverton, and Ouray. These centers produced millions in gold annually. The Tomboy Gold Mining Company, the Liberty Bell Gold Mining Company, and the Smuggler Union Mining Company, all in the Telluride District of San Miguel County, dominated gold production in the Southwestern Region after 1898. Gold mining caused some stories of great success. Thomas Walsh's famous Camp Bird Mine, located above Ouray, averaged a million dollars or more per year in production from 1901 to 1911. The Camp Bird Mine, a huge operation, included over one hundred mining claims, twelve mill sites, and encompassed nearly one thousand acres.

Crucial to the success of San Juan mining during this last great gold mining era was the development and implementation of efficient, new ore reduction processes including cyanidation, concentration and amalgamation, and the establishment of localized mills and smelters at the mining complexes. The latter development, of course, challenged the previously favored regional position of the New York Smelting Company plant at Durango. But increasingly effective milling methods, which facilitated the recovery of more low grade ore, caused the smelter industry to suffer from the mid-1890s to World War I. Prior to this time, during the 1880s and early 1890s, large quantities of rich ore kept area smelters busy. The large American Smelting and Refining Company plant in Durango was permanently closed in 1930.

Other technological innovations employed during this period included

hydroelectric power and improved tram systems for transporting ore from the mines to the mills. The miners experimented with the use of hydroelectric and steam power, which were in their early stages of development. In 1890, a hydroelectric plant at the Caroline mine near Mount Sneffels used higher volt tension that previously used to power the mine. The Ames Power Plant at the Gold King Mine (1890-91) was one of the first in the country to generate high voltage alternating current for commercial purposes. Additional plants included the Bridal Veil Powerhouse outside of Telluride, built in 1907, and the hydroelectric plant for the Animas Power Company completed in 1906.

Although placer gold mining accounted for a very small percentage of the region's output during this phase of the industry, at least one remarkable engineering feat, the San Miguel "Hanging Flume," merits mention. The wooden structure, attached along eight miles of the vertical walls of San Miguel Canyon, carried water for hydraulic mining from the San Miguel River, twelve miles away, to the Mesa Creek Flats claims of the Montrose Placer Mining Company. The flume was completed in mid-1891, but was ineffective because of the nature of the ore deposits and was abandoned shortly after its completion.

The extension of railroad service to the mining districts, of course, had a dramatic impact on the industry. The Denver and Rio Grande reached the San Juans in 1881, and spurs, feeder lines and additional main lines stimulated both the growth of the mining districts and the expanded settlement of the region.

Throughout this era, the rise of corporate control within the mining industry was evident in the socio-economic conditions among miners and in mining towns. Unionization gained acceptance in the San Juan district, and by 1898, several locals combined to form the San Juan District Union of the Western Federation of Miners (WFM). The region did not escape the violence associated with labor/management relations; there were several bloody strikes centered in Telluride, for example, during the opening years of the twentieth century. Corporate control was manifested, as well, in the living conditions (and the associated physical facilities) of miners. Worker's housing, in many mining communities, took on a decided character of its own; living conditions at some of the larger operations could be relatively elegant, as indicated by the well appointed boarding house at the Smuggler Union.

Other minerals were profitably extracted during the pre-World War I period. Zinc was mined in both San Juan and San Miguel Counties, and zinc production increased dramatically in Dolores County after 1898. In the Rico District, lead and zinc, and the attendant concentration mills, were emphasized. By 1915, following a five or six year slump, the zinc, lead, and copper industry demand increased for five years or so. In response, the Black Bear Mine, near Telluride, and the Yankee Girl and Guston Mines, in the Red Mountain District, experienced a brief revitalization, while the famous Cashin Mine, in the Paradox Valley, and mines in Mesa County's Unaweep District produced copper in relatively small amounts prior to World War I.

For all practical purposes, Plateau mining fell on hard times during the

twenties because of high production costs and low grade or deposits. Gold and silver mines closed or sharply curtailed operations, and the industry did not make a significant comeback until the 1960s.

CHRONOLOGY

- | | |
|------------|---|
| 1881 | - The Denver and Rio Grand Railroad reaches the San Juans. |
| 1893 | - The silver panic causes decline in silver production. |
| 1893- 1915 | - Last great era of large scale mining of precious minerals prior to World War II. |
| 1901- 1904 | - Labor unrest centered in Telluride. |
| 1915-1920 | - Increased demand for precious metals stimulates a brief industry resurgence. |
| 1920-1945 | - Slump in large scale mining in region; limited coal production and interest in uranium. |
| 1930 | - American Smelting and Refining Company plant in Durango closes down. |
| 1942-1963 | - American Smelting and Refining Company plant in Durango reopened. |

LOCATION

Gold mining was concentrated in the San Juan District and was principally centered in the established mining areas of Telluride, Silverton, and Ouray. Additional gold placer mining occurred in the Blue Mountain area in northwestern Colorado. Non-precious metal mining occurred in the southwestern and west central portions of the Plateau Country in the San Juan District as well as the Rico, Paradox, and Unaweep Districts. See map for locations of mining districts and regional mining networks.

CULTURAL RESOURCE TYPES

Types include, for the most part, those indicated with the precious metals theme. An expanded list, however, should include the built remains which reflect the advanced mining technology/developments of this later period. Such structures and sites include: hydroelectric plant (at the Caroline Mine near Mt. Sneffels, for example), additional localized smelter plants, man-made lakes and pumping stations built to bring water to steam powered (backup- machinery in electrically powered mills, and more sophisticated cable tram support networks, and such town/village sites as Bedrock and Pearl. Building types should include new styles in worker's homes, boarding houses, and other company buildings as reflected in the trend toward corporate control of the industry; the growth of the industry during this period created not only new mining districts, but distinct neighborhoods in mining towns, wherein a recognizable trend in housing types, based on

pay scale and position, was seen. Additional sites include areas of labor strife related to mining and transportation districts/networks.

THE QUANTITY AND QUALITY OF EXISTING DATA

Historical Documentation

An excellent overview of this era of mining gold and other metal ores in southwestern Colorado is presented by Paul O'Rourke in Frontier in Transition: A History of Southwestern Colorado, the Bureau of Land Management Class I overview of the region. In addition to the basic reference sources on Colorado prospecting and mining referred to in the previous theme, consult, for this later period, such volumes as James Fell, Ores to Metals, George Suggs, Colorado's War on Militant Unionism, as well as state, county, and local histories which can give insights into the business, industrial, and social aspects of mining and the local growth, socially and economically, pertaining thereto. (Two examples are Jessie Moore Crum's history of Ouray and the four volume D.A.R.-sponsored Pioneers in San Juan Country).

For the business of mining, see Joe King's A Mine to Make a Mine, as well as the Engineering and Mining Journal and local newspaper files. A number of Colorado research libraries include information on specific companies and personalities. In addition, the extensive photo archives of the State Historical Society, the Western History Collection at the Denver Public Library, and the University of Colorado's Norlin Library and Western History collections are replete with documentation relative to associated sites.

The technology of mining is treated further in Percy Fritz's Colorado: the Centennial State, as well as in many articles in The Colorado Magazine.

Claim, USGS, Forest Service, promotional/guidebook, and other maps are useful for site location and identification. The Mining Directory of San Miguel, Ouray, San Juan, and La Plata Counties (1899) is invaluable.

The archives of the Museum of Western Colorado have photographic and documentary materials relative to the Cashin Mine and the famous "Hanging Flume." Otis Young's Western Mining deals with mining techniques and machines and Duane Smith's works, particularly Colorado Mining... and his Durango history deal with smelting. Basic railroad studies (Athearn's Rebel of the Rockies, Jessie Moore Crum's The D. & R.G. in the San Juan, and Ferrel's Silver San Juan: The Rio Grande Southern) provide insights into the early extension of lines into mining districts.

As permanent towns became well-established during the 1880s, promotional literature, with photographs and maps, were developed: these are useful for early site location and identification. It is suggested that researchers consult the local history section of the Colorado Bibliography for appropriate citations.

Studies of the Walsh family are useful. See, for example, Evelyn Walsh McLean's Father Struck it Rich. Finally, Charles Henderson's Mining in Colorado is a basic and valuable reference.

Number/Condition

Many hundreds of sites have been recorded relative to this theme because this phase of the mining frontier included more emphasis on permanent workings and settlements. Extensive degradation, however, is evident due to neglect, vandalism, abandonment, and the natural elements. This situation is particularly serious in terms of remote sites including mills, abandoned towns and the like. The current emphasis appears to be on preservation of town districts. The present data is sufficient to determine the number of sites associated with this theme, although, again, the data base must be refined to make it more useable for cultural resource management decisions.

Data Gaps

Because so many associated sites have been recorded, data gaps are not a significant consideration. Nevertheless, the following should be considered:

- * Representative, intact smelter.
- * Representative water network for hydraulic mining.
- * Representative, intact small period mills.

Future Needs

Because of the large numbers of resources already recorded, further surveys to specifically locate additional resources associated with gold mining in southwestern Colorado may not be a high priority. However, it will be necessary to first assess the present knowledge about inventoried sites before it is possible to decide whether more survey is needed. Rather, the highest priority should be to continue current survey projects, such as the Mainstreet Program and city centennial surveys that provide significant information about the theme in areas where those resources may be most threatened. Immediate efforts should emphasize recordation and protection of existing representative, but endangered sites.

The recording of mining resources in the more remote portions of West-central Colorado (i.e. the Cashin Mine area and the Unaweep copper district) have been rather neglected. Future surveys should address mining activities in these and other mountainous districts.

Important Resources

The major mining camps and mines for gold, zinc and other metals are the focus of important resources for this theme. To the extent that the buildings, sites, and structures retain their integrity demonstrating the original condition and setting (as either an entire camp or a portion of the original camp) they are important. Individual structures may also be important if they are associated with important people or events connected with the theme (such as Thomas Walsh or major labor strikes); if they exemplify construction or architectural styles representative or unique to the era; or if they display representative or unique examples of mining technology or the develop-

ment of new mining technology. In addition, examples of the "remote sites" or sites outside of the major mining districts that may have had only minor success during the period, as well as examples of mining attempts that did not succeed may also be significant as examples if they retain integrity.

Currently recorded sites form the basis of a representative, comprehensive resource inventory base. This base includes a broad range of important resources, from mines to mills to residences to districts. The theme in short, is well-documented and well-represented by important historic resources.

RESEARCH QUESTIONS

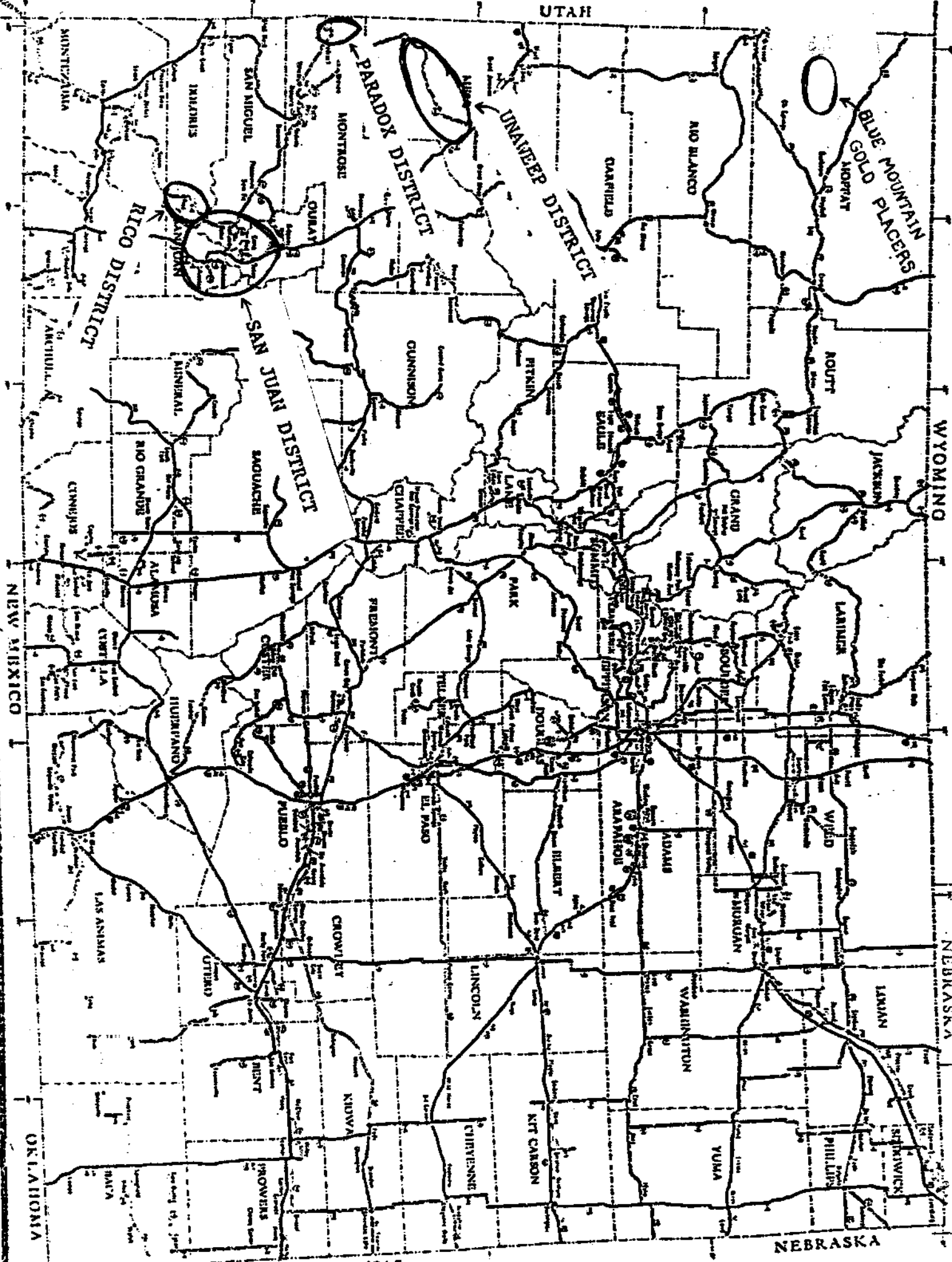
1. Can cultural resources provide new evidence as to commercial and social links between regional mining communities?
2. Can cultural resources provide information about mining operations (such as the Camp Bird, the Smuggler Union and the Yankee Girl) as self-contained isolated communities?
3. Can cultural resources provide new clues as to the impact of corporate control, unionization, and "hard times" on the social and economic lives of miners, their families and communities in which they lived?
4. What physical evidence exists to document the change in general living conditions and styles which occurred during this period?
5. What conclusions can be drawn, on the basis of historic resources, regarding differences in mining activities in the San Juan districts and, for example, similar activities in Montrose and Dolores counties?
6. What, if any, unique mining and/or processing techniques were developed in Western Colorado?
7. What role did such mining magnates as Thomas Walsh play in the development of Ouray and other mining towns?
8. What were the environmental impacts of modern mining to 1945 on the basis of material evidence?

PHYSICAL CONDITION

Structures, neighborhoods, and equipment: should be intact to the degree that design and function are apparent and documentation is possible due to the abundance of representative examples. Structures (homes, commercial buildings, etc) should be in good exterior physical condition.

REFERENCES

See the bibliographies of the aforementioned basic regional references as well as B.S. Wynar (ed.), Colorado Bibliography (Libraries Unlimited, Inc. 1980). For all mining themes see Duane Smith's Colorado Mining: A Photographic History (Albuquerque: University of New Mexico Press, 1977), and C. Eric Stoehr Bonanza Victorian: Architecture and Society in Colorado Mining Towns (Albuquerque: University of New Mexico Press, 1975.)



PLATEAU COUNTRY

6. COAL MINING (1872-1945)

NARRATIVE

The extensive coal deposits of the Plateau Country have been recognized since the early 1870s. The industry developed, on a grand scale, during the 1880s and 1890s, reaching its peak by World War I. Coal production declined, thereafter, except for a brief revival during World War II.

The largest coal region in the area is the Uintah field, which encompasses portions of eastern Montrose, Delta, and Mesa Counties. Although the bulk of the activity occurred in Gunnison County, dozens of small coal mines operated from Somerset to Palisade. The largest mine in this coal district was located at Somerset. It was first operated in 1903, and shortly thereafter was connected to nearby coal markets at Paonia, Hotchkiss, Cedar-ridge, and Delta when the Denver and Rio Grande extended its line up the North Fork of the Gunnison River Valley.

The high demand for coal, particularly by the Colorado Fuel and Iron Company, stimulated the development of other small coal towns (Cardiff, Sunlight, Marion, and Spring Gulch) south of Glenwood Springs in Garfield County. These coal and coke towns were all established in 1887, and soon became the center of an active coal/coking industry. 240 coke ovens were constructed at Cardiff, and, until the latter town came to dominate the coking industry, there were coke ovens at Spring Gulch as well. North and east of Grand Junction, extending from Cameo in the east to Loma in the west, are the huge Bookcliffs coal deposits. Two coal towns, Carpenter and Cameo, established in 1890 and 1907 respectively, and several mines- the Cameo, Mount Lincoln, Garfield, Palisade, and Riverside- formed the basis of an active industry. Carpenter had its own railroad, the Little Book Cliff Railway, that ran twelve miles from the mine to Grand Junction.

A second major coal producing region, the LaPlata field, extends through La Plata, Montezum, and parts of Dolores and San Miguel Counties. With the arrival of the Denver and Rio Grande Railroad and the creation of a vigorous smelting industry in the area, coal became an extremely important commodity. Smelters required fuel, and this gave birth to the coke industry. Coke ovens were built at Durango and Rico, and toll roads were used to bring coking coal from the mines near the latter town to the nearby coke ovens. The completion of the Rio Grande Southern Railroad to Ridgeway, Telluride, and Rico opened up new markets near area coal deposits. Despite the Panic of 1893, the coal industry expanded in the San Juan Country, and coal towns such as Porter, Hesperus, and Perins prospered.

Coal was discovered in Northwestern Colorado in 1890 near the town of Coalmont. But only after the Laramie, Hahn's Peak and Pacific Railroad reached Coalmont in 1911 were the reserves tapped. Large scale mining, however, did not occur in the region, although a few coal towns, Phippsburg,

Oak Creek, and Yampa, did exist. Coal mining in the Yampa Valley was developed from 1910 to 1920. Until the arrival of adequate and increased railroad service, the vast coal deposits of the region, noted by Hayden as early as the 1870s, could not be economically worked. The arrival of the Moffat line in 1908 gave the industry a boost, but the area, nevertheless, could not claim to be a major coal producing region until nearly one hundred years after Hayden's survey.

CHRONOLOGY

- | | |
|-------------|---|
| 1870 | - Hayden notes huge coal reserves in northwestern Colorado. |
| 1800s- 1915 | - Era of large scale coal and coking industry in the Plateau region. |
| 1889 | - Active coal prospecting in the Yampa River and White River country. |
| 1903 | - Somerset Mine opened. |
| 1920 | - Coal surpasses gold and silver in value of production. |
| 1923- 1945 | - General industry depression. |

LOCATION

See map for locations of coal districts/fields, towns, and mines.

CULTURAL RESOUC E TYPES

Coal mining (single-industry) townsites, including existing towns (Hesperus, Newcastle, Cameo, etc) and those abandoned towns (Perins, Bowie, Spring Gulch, Carpenter, Porter, etc) are significant cultural remains, as well as the associated houses and public buildings in such towns; structures related to coal extraction and processing, such as mines, and appurtenant structures, and/or coke ovens are located throughout the aforementioned historic coal districts; cemeteries are located in most of the coal towns and are significant resource sites providing valuable ethnic information; machinery related to the coal industry, such as coal cutters, hoists, coal loaders and conveyor systems, timber trucks and man trips, drill rigs and ore cars, as well as connecting railroads and roadbeds are located sporadically throughout the coal mining districts; coal mining districts are identified on the thematic map.

Additional sites should include company towns, such as Sunshine (now called Sunlight), which achieved that status after the Grand River Coal and Coke Company sold its mines and coke ovens to the Colorado Fuel and Iron Company. Other sites/districts include ethnic communities in coal mining towns (the Austrian and Italian miners, for example, in Cardiff in the 1890s).

THE QUANTITY AND QUALITY OF EXISTING DATA

Historical Documentation

Basic references include the Bureau of Land Management's Class I overviews by Athearn, Mehls, and O'Rourke and the Colorado State Coal Mine Inspection Reports. For Northwestern Colorado, see William Weston's The Yampa Coal Fields of Routt County, a 1907 government publication, and a similar study (1906) by Nevin Fenneman, which describes the region. Richard Holt's 1972 bibliography, Coal Resources in Colorado, is useful. For the vast Grand Junction Coal district, Mary Rait's M.A. thesis, entitled Development of Grand Junction and the Colorado River Valley to Palisade from 1881 to 1931, University of Colorado, Boulder, 1931, is basic. Charles Edmann's 1934 study, The Bookcliffs Coal Field in Garfield and Mesa Counties, Colorado should be consulted as well. See also The Bookcliffs Coal Field in Garfield and Mesa Counties, Colorado (U.S.G.S, 1934).

For information on the towns of Cameo and Carpenter, and the history of the Little Bookcliff Railway, the archival holdings of the Museum of Western Colorado and the Mesa County Oral History Project are useful. The North Fork Historical Society in Paonia has important holdings relating to the industry in that region. James Fell's Ores to Metals deals with the smelting industry. Donald Gedde's A Short History of the Orchard Valley Mine (MS, Colorado Westmorland, Inc., Paonia) and Willis Lee's Coal Fields of Grand Mesa... should be consulted.

It should be noted, finally, that the definitive history of the Western Colorado coal industry has yet to be completed, although Jerome Morse's recent Energy Resources in Colorado: Coal, Oil Shale and Uranium (Colorado School of Mines) is a significant addition to the literature.

Some cultural resource management studies have produced information relative to the theme. Steven Baker's (Centuries Research, Inc.) survey for the Orchard Valley Mine contains site-specific data regarding the Converse and Cowan Mines, and is illustrated with photographs from the North Fork Historical Society. In addition, the Northwest Colorado Coal Environmental Impact Statement, 1976, has some historical data relative to coal mining in that region and the Green River-Ham's Fork Regional Coal Environmental Impact Statement, 1980, has information about historic sites.

Number/Condition

The data are currently insufficiently developed to determine the number of associated resources that exist or may have existed. Since the coal industry has been a relatively continuously operating industry in the region, some historic sites are still operative. These include towns, structures, and mines. In addition, roadbeds, rail grades, coke ovens, and other associated remains are in evidence, but considerable upgrading of the data base will be required if an accurate resource inventory is to be accomplished.

Data Gaps

- * Well documented coal market networks.
- * Remains of early coal mining, loading and processing operations.
- * Representative examples of early company stores and housing in coal towns.

Future Needs

Future historic inventories and archaeological surveys of the West-Central Colorado region, including the Coal Canyon site, Cottonwood Creek, and other areas, are probably justified in order to produce a more comprehensive and accurate resource inventory. It should be noted, however, that some Western Colorado coal mines that have continued in operation since the 1930s are among the last mines developed. This may have some bearing on their historic significance.

Important Resources

Any representative resource discernable associated with early coal mining is significant. Coal remains a major regional resource, and survey and preservation efforts should reflect the industry's durability and its impact on the Plateau Country. Because inventories of the industry are incomplete, examples of aforementioned resource types in the Northwestern, West-Central, and Southwestern (La Plata) coal districts should be considered significant. Until a comprehensive data base for coal resources in the region is developed, representative resource types, except perhaps mines, which meet integrity standards, should be considered eligible for preservation.

RESEARCH QUESTIONS

1. Can cultural resources provide additional information on the ethnic dimension in coal towns?
2. Can historical resource surveys provide concise data as to the economic and social composition of such coal towns as Carpenter?
3. What, if any, unique coal mining and/or processing methods were developed in the Western Colorado coal regions?
4. What social/economic role did coal magnates enact in Western Colorado? What material evidence exists to substantiate these roles?
5. What, historically, has been the environmental and social impact of the coal industry in the region, based on the material evidence?

PHYSICAL CONDITION

The condition of any coal related resource is acceptable to the degree that the resource can be identified and dated. Rail grades, for example, should be in such condition as to allow inferences as to location and distribution; structures should be as free from alterations as possible,

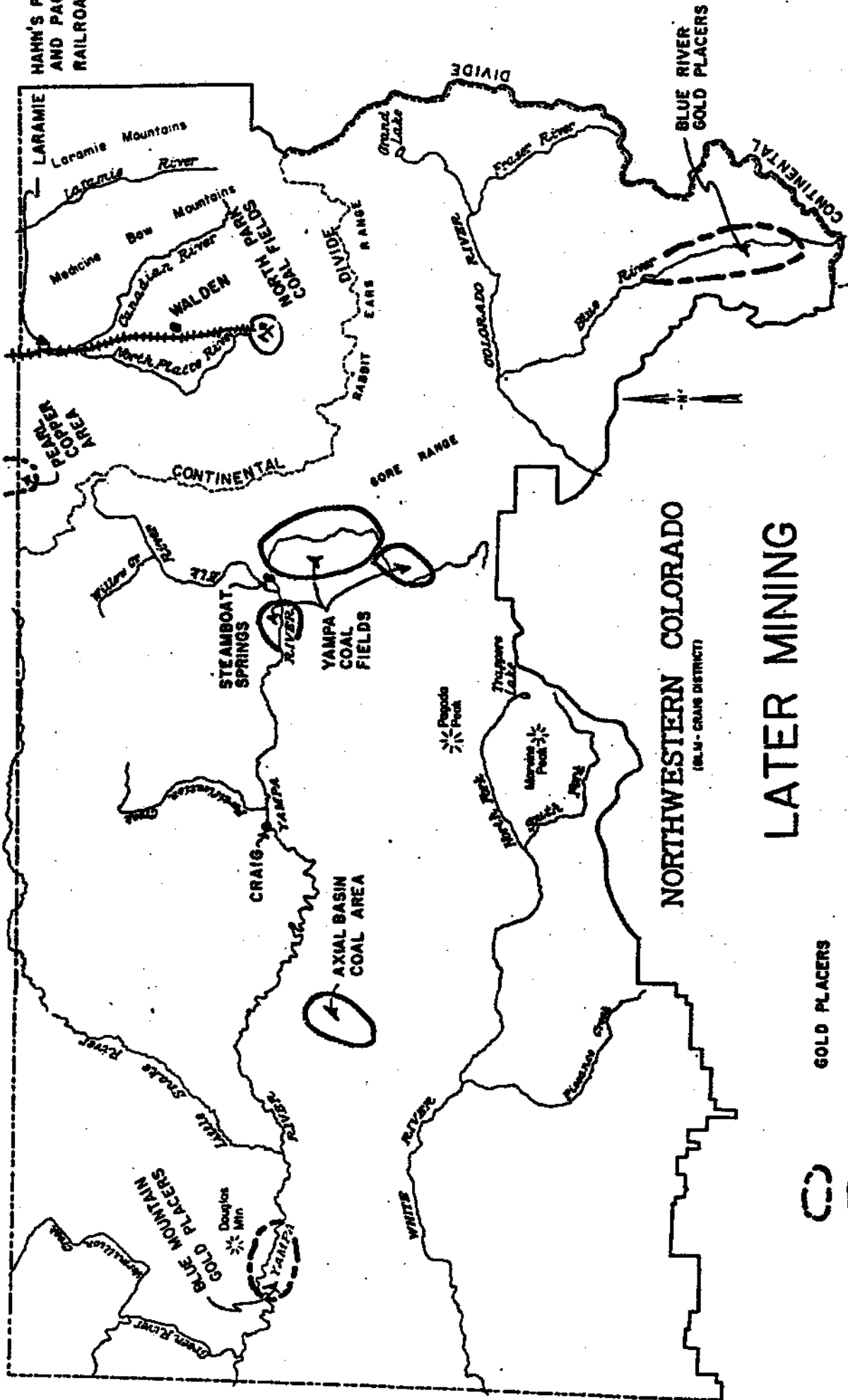
equipment should be at least recognizable and restorable and enough of a smelter should remain to understand the process.

REFERENCES

- Frederic J. Athearn. An Isolated Empire: A History of Northwest Colorado.
Denver, Bureau of Land Management, 1981. 3rd ed.
- Steven F. Mehls. The Valley of Opportunity: A History of West-Central Colorado.
Denver, Bureau of Land Management, 1982.
- Paul M. O'Rourke. Frontier in Transition: A History of Southwestern Colorado.
Denver, Bureau of Land Management, 1980.

WYOMING

HAMM'S PEAK
AND PACIFIC
RAILROAD



60

LATER MINING

AND TRANSPORTATION

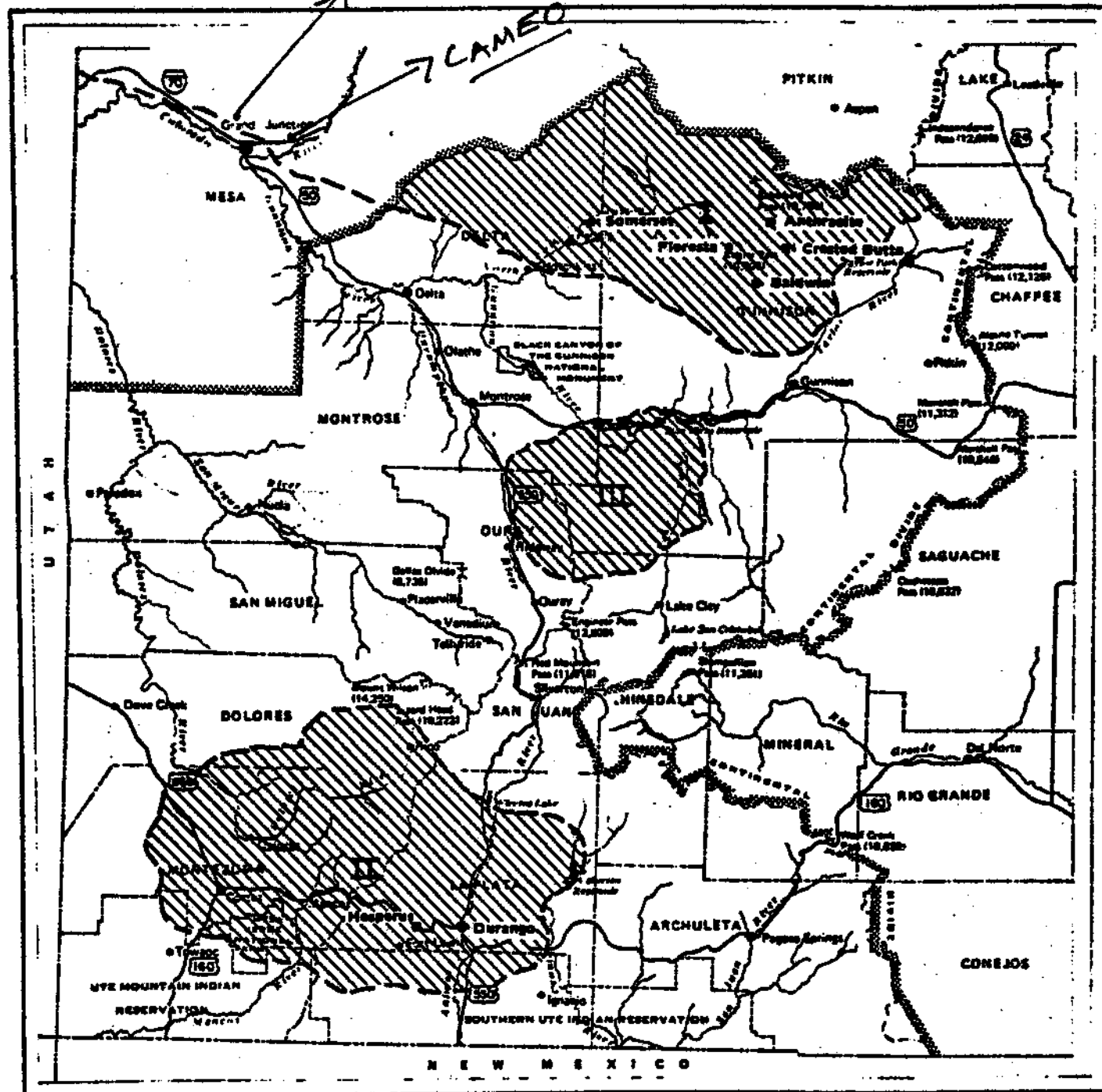
1890-1920

Atheism-AN ISOLATED EMPIRE

MAP 8

GOLD PLACERS
COAL FIELDS
COPPER AREA
TOWN SITE
RAILROAD

000 •



----- DISTRICT BOUNDARY

0 10 20 30 40 miles

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

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

7. NON-METALLIC MININGNARRATIVE

Although most oil resources remained undeveloped until after World War II, the preserve of oil in Northwest Colorado was known quite early. Attempts to develop oil fields on Oil Creek as early as 1893 failed, however, and no significant oil production occurred until 1902, when an oil boom centering around the Poole well, near Rangely, developed. Again, due to the high cost of tapping the reserves, the rush was short lived. The Rangely fields continued to produce, however, albeit on a modest basis, until they were overshadowed by new finds in the 1920s. During the 1920s and 1930s, several fields were brought in, including the Iles, the Hiawatha, and the Thornburgh field, which have been producing since 1925. The White River field, in Rio Blanco County, has produced moderate amounts of oil since the 1890s. Other fields have been discovered and worked since the discovery of these earlier fields, but the real boom came during and after World War II in response to the tremendous demand for oil. Production remained low until that time.

The excitement over the possible development of shale oil during the 1920s reached fever pitch. Mountains of oil bearing shale, located in Rio Blanco, Garfield, and Moffat Counties, encouraged many speculators to experiment with oil recovery methods, particularly as World War I and the attendant demand for oil loomed on the horizon. The small town of DeBeque, located on the Colorado River northeast of Grand Junction, was referred to at that time as the shale oil capital of the United States, and by 1920, more than one hundred oil shale companies were heavily involved in land purchases, staking claims and selling oil stock. Despite the excitement, the promotions, and the federally funded experiments, however, no economically feasible process for retorting shale and recovering the oil was discovered. By the late 1920s, the infant industry, unable to compete with the abundance of cheap oil, was dormant. The United States Government never gave up on the idea, however, and began construction of the Anvil Points shale oil plant near Rifle, in 1945. A test plant was built there in 1928. The real boom in oil shale development did not occur until the 1970s.

Even more exotic was gilsonite, a black hydrocarbon used in paints, asphalts, beer keg linings, and numerous other products. Discovered in the late 1870s by Samuel Gilson of Salt Lake City, and mined near Dragon, Utah since 1886, gilsonite posed some perplexing transportation problems owing to its bulk and highly flammable nature. But in 1903, the Barber Asphalt Company, a subsidiary of General Asphalt of New Jersey, financed the construction of a sixty-two mile long railroad line from Watson, Utah, to Mack, Colorado. The line, which negotiated the treacherous Baxter Pass, completed in 1906, was called the Uintah Railway, and was the first north to south railroad in Western Colorado. Small settlements and towns sprang up along the route. The line was abandoned in 1938, when better highways and the advent of the trucking industry made the railroad obsolete, and the

old railbed became a county road.

Other significant non-metallic mining included building stone quarrying. In Southwestern Colorado, some granite was quarried near Durango, and the remains of a granite quarry, worked in the 1930s, may be found in Unaweep Canyon, south of Grand Junction.

Uranium and vanadium, which were to play a major role and cause a tremendous boom in the 1950s on the Plateau, were subjects of exploration and exploitation in the Paradox and Gypsum Valleys long before that boom hit. As early as the 1870s, carnotite ore had been discovered in Southwestern Colorado. When the medical and scientific uses of radium, a uranium derivative, became known, uranium became the source of considerable activity. Most of the uranium came from the Standard Chemical Company's Paradox Valley operation; in 1914 its mill shipped more than one half the total of the nation's output. The existing towns of Bedrock, Nucla, and Naturita were transformed when uranium reduction plants were built in the area by Standard Chemical, General Vanadium Company and the Radium Company of Colorado. The industry slumped during and after World War I broke out; the general unprofitability of uranium mining led to a complete cessation of mining by the early 1930s. Some companies, such as Union Carbide turned to vanadium; the same situation occurred in the Southwestern portion of the state as well. The uranium industry languished until World War II. In 1915, the vanadium phase of carnotite mining began; the ore was mined primarily by the Primus Chemical Company and the General Vanadium Company in San Miguel County. A large vanadium mill was built near Telluride, and various vanadium compounds were mined on a modest scale along the Dolores River after the 1920s. The U.S. Vanadium Corporation eventually came to dominate the industry. The Depression caused an industry slump, but in 1936, U.S. Vanadium resumed operations. The company built a mill at Uravan (it eventually became the world's largest); the town itself was a model company town.

CHRONOLOGY:

- | | |
|------------|--|
| 1881 | - Uranium attracts early Paradox Valley pioneers. |
| 1898- 1928 | - High level of uranium/radium mining. |
| 1902 | - The Rangely oil "boom" begins. |
| 1903-1906 | - Construction of the Uintah Railway. |
| 1915 | - The vanadium phase of carnotite mining begins. |
| 1920- 1927 | - Oil shale activity. |
| 1945 | - United States Government begins construction of the Anvil Points oil shale facility. |

LOCATION

The resources associated with non-metallic mining are throughout the north and central portions of the Plateau Country. See map for location of mining centers for specific minerals.

CULTURAL RESOURCE TYPES

Structures include such buildings as houses and public buildings in mining towns, particularly in company towns such as Uravan, in oil shale towns (DeBeque) and in oil towns like Rifle. Many smaller camps and towns in the mining areas indicated on the map have been abandoned. Resources include uranium and vanadium reduction mills, mines and appurtenant structures, shale oil retorts and plants.

Sites include abandoned townsites, cemeteries in mining towns, railbeds (the Uintah railway for example), quarries, tailings/ore dumps.

Objects include isolated/abandoned machinery related to non-metallic mining.

Districts include coal fields and oil, shale oil, and uranium/vanadium districts and neighborhoods in mining towns, particularly company towns.

THE QUANTITY AND QUALITY OF EXISTING DATA

Historical Documentation

The definitive history of oil and radioactive mineral activities on the Colorado Plateau has yet to be written, but there is a slim but useful body of information relating to this and other subjects within this theme. For the Rangely oil boom, see Athearn's An Isolated Empire, as well as the State of Colorado Oil and Gas Statistics and Colorado Mineral, Oil and Shale Resources (Colorado State Board of Immigration). See also Victor Ziegler, Colorado's Future as an Oil Producer (1918), as well as U.S.G.S. and Colorado School of Mines theses and periodical publications.

The literature on oil shale is more extensive. But, as with the oil materials, many reports are technical rather than historical and lack site specificity and the historical perspective. Basic sources include Victor Alderson's oil shale studies published in the Colorado School of Mines Quarterly from 1919 through the mid-1920s, as well as The Oil Shales of Northwestern Colorado (Colorado Bureau of Mines, 1919). Marvin J. Gavin's 1924 study, Oil Shale: An Historical, Technical and Economic Study is very useful as are several oil shale-oriented newspapers, including Oil Shale Outlook (Denver), DeBeque Shale and Shale and Oil News (DeBeque), all published during the shale "boom" of the 1920s. The latter include information and illustrations of sites and processes. Paul L. Russel's recent (1980) History of Western Oil Shale is also important.

The Gilsonite story is well told in Henry Bender, Jr., The Uintah Railway: The Gilsonite Route, and the archival holdings of the Museum of Western Colorado in Grand Junction include a large collection of relevant photographs.

Stone quarries in this region have not been the subject of intense research. Building Stones of Colorado (Colorado School of Mines, 1884), may be useful, and Muriel Marshall, in her recent Uncompahgre, makes reference to a granite quarry, active in the 1930s, in Unaweep Canyon. Denver's City Hall was apparently constructed of stone from this quarry.

Uranium and vanadium are treated, historically and photographically, in the holdings of the Museum of Western Colorado, located in the "Uranium Capitol of the World," Grand Junction. These holdings include numerous reports, papers and photographs from Grand Junction's Atomic Energy Commission/Department of Energy Office. These include invaluable site-specific information and illustrations of historic extraction and processing operations. Back issues of the Grand Junction Sentinel, associated articles in The Colorado Magazine, Mining World, Engineering and Mining Journal and other professional journals. During the uranium boom of the 1950s, much was written on the history of uranium mining in these and other publications. See Al Look's U-Boom: Uranium on the Colorado Plateau, and Taylor's Uranium Fever. Other valuable sources include Uranium Exploration on the Colorado Plateau (Grand Junction, Atomic Energy Commission, n.d.); Coffin, R.C., Radium, Uranium, and Vanadium Deposits of Southwestern Colorado (Colorado Geological Survey, 1921); Gary Shumway's thesis, A History of the Uranium Industry on the Colorado Plateau; and W.L. Dare's (et al) well-illustrated Uranium Mining on the Colorado Plateau (1955). For the uranium story in Northwestern Colorado, see Rifle Shots: The Story of Rifle, Colorado.

Finally, Morses' aforementioned Energy Resources in Colorado... should be consulted for this theme. Additionally, the Hayden and Powell surveys provide important background data to the earliest geographical identification of some of these minerals.

Number/Condition

The data are not sufficient, or sufficiently refined, to determine the number of sites that exist or may have existed. Although there are numerous recorded sites, a comprehensive inventory of oil, oil shale, Gilsonite, stone and radioactive mineral activity sites must be developed if an accurate estimate of the number and condition of material resources is to be accomplished.

Data Gaps

- * Industrial remains of a historic shale oil retort/plant and uranium mill.
- * Documentary records of early oil shale endeavors.
- * Workings associated with early uranium prospectors.
- * Early uranium and shale oil claims and camps.

Future Needs

Comprehensive resource surveys, in view of the tremendous social and economic impact that the theme activities have had and continue to have on the region, are necessary. Interpretive themes should be emphasized over natural resource surveys, and the current data base must be refined and upgraded. These efforts will require the skills of historical archaeologists and research and economic/mining historians.

Important Resources

Due to the absence of a comprehensive inventory relative to this theme, representative resource types that exhibit enough integrity to indicate date and function should be considered significant. Due to the general paucity of recorded associated sites, representative sites should be considered uniquely significant. Some resources, such as the town of Uravan, a classic company town, are unique.

RESEARCH QUESTIONS

1. How did shale oil and oil activities in the 1920s impact the social and economic fabric of towns like De Beque and Rifle?
2. What can material remains tell researchers about early uranium mining and processing techniques and shale oil extraction and retorting?
3. What can material evidence indicate as to social stratification in company towns like Uravan?
4. What environmental impact, if any, occurred as a result of early oil shale and uranium extractive activities?

PHYSICAL CONDITION

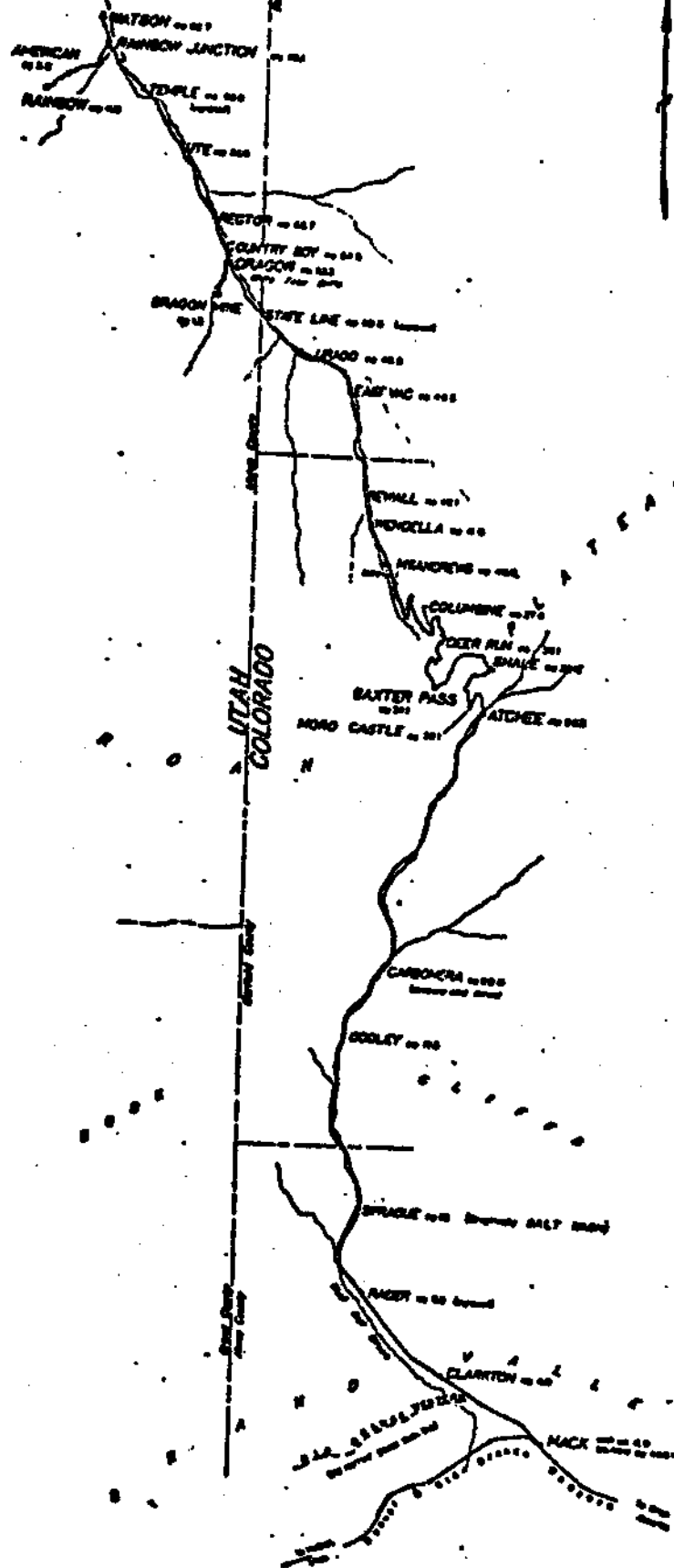
Structural resources: Should be intact to the degree that dating and identification is possible. For mills and appurtenant structures and other technological and industrial associations resources, function must be discernable. Company towns and neighborhoods must exhibit the appropriate spatial and architectural associations. Claims and districts as well as roads and railbeds should be clearly discernable.

REFERENCES

See the bibliographies of the aforementioned basic regional references as well as B.S. Wynar (ed.), Colorado Bibliography (Libraries Unlimited, Inc. 1980).

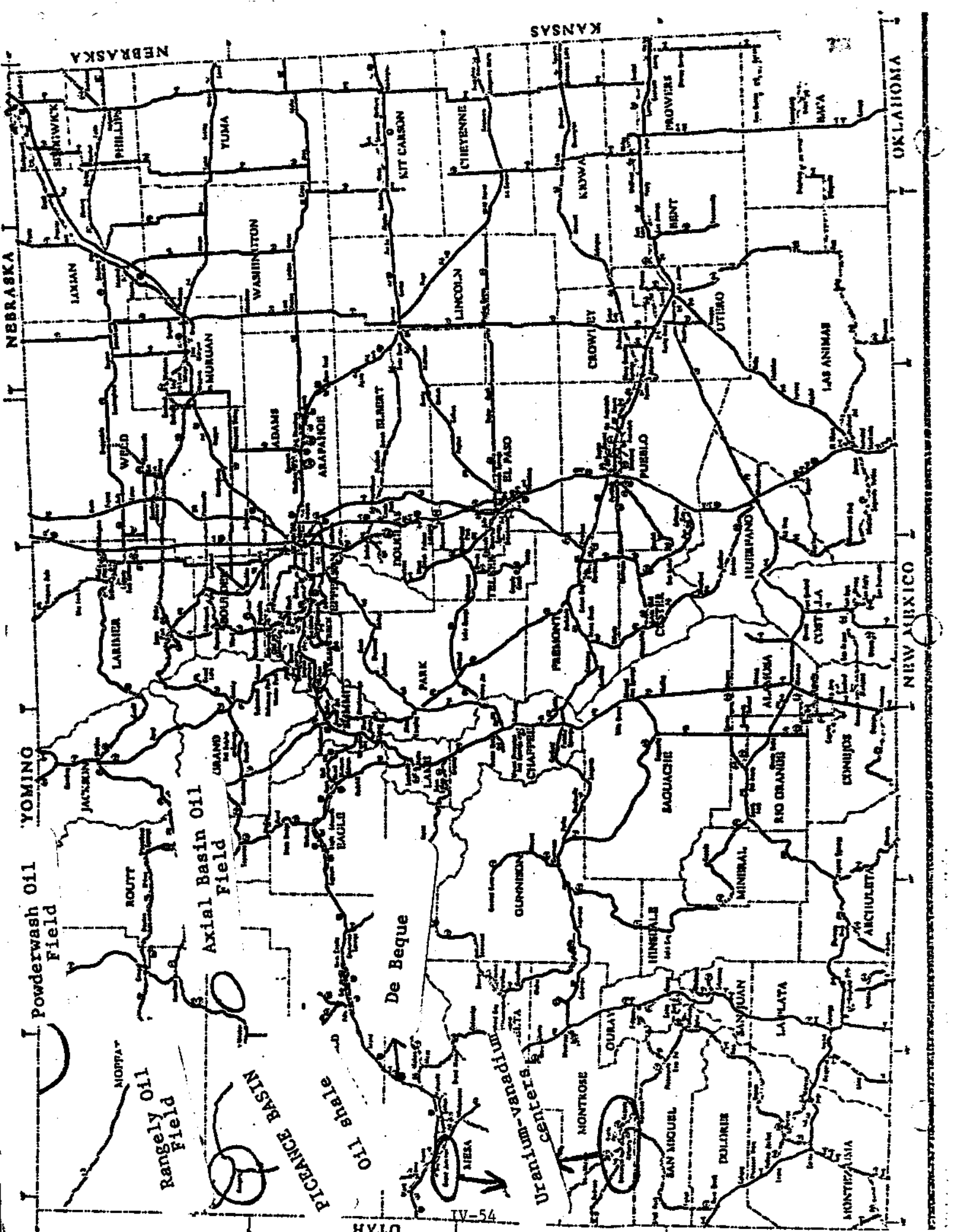
Frederic J. Athearn. An Isolated Empire: A History of Northwestern Colorado. Denver, Bureau of Land Management, 1982, 3rd edition.

Henry E. Bender. The Uintah Railway: The Giltone Route. Berkely, California; Howell-North, 1970.



The Uintah Railway System as of 1935
 From: Bender, *The Uintah Railway: The Gilsonite Route*

Athearn-AN ISOLATED EMPIRE



8. EARLY TRANSPORTATIONNARRATIVE

Early prospectors, miners and settlers frequently followed natural travel routes such as the Grand Valley, or they followed the established Ute trails. But owing to the rugged terrain throughout most of the Plateau Country, it became evident in the early mining period that roads and railroads would be essential to the profitable exploitation of the Plateau's mineral resources. The ground work for location of these routes was laid, to some degree, when such explorers as Edward L. Berthoud and Lt. William Marshall successfully negotiated mountain passes which now bear their names. These and subsequent searches for usable passes played a major role in breaking down the physical barriers to the mining and agricultural riches of the Plateau region.

Although railroads were to ultimately tie the mining camps and districts together, the toll road was the major means of developing transportation routes in the early history of the San Juan area. These early pathways were built by individuals or small companies as toll or private roads for use by freight wagons, stage coaches, or mule trains. Despite the apparent potential for large profits, very few private toll road operators even became wealthy or famous. The best known in the Frontier phase in the Plateau Country was Otto Mears. Otto Mears, called "the Pathfinder of the San Juan's," was a freighter, road builder, railroad builder and pack train entrepreneur. He built several roads, including one from Ouray to Montrose in the mid-1870s, and another, which ran from the Lake Fork of the Gunnison River to present-day Montrose. In the early 1880s, Mears and his associates built, frequently on old road beds, the Dallas and San Miguel Toll Road, the San Miguel and Rico Toll Road, and the Durango, Parrott City and Fort Lewis Toll Road. His most ambitious project, by far, was the construction of a toll road from Ouray to Silverton over Red Mountain, now known as the "Million Dollar Highway." In all, Mears built twelve major toll roads and three railroads, all but one in Western Colorado, from 1870 to 1886. His efforts had an incalculable impact on growth in Southwestern Colorado.

In Northwestern Colorado, the lack of cheap and easy transportation hampered growth. Although freight wagons and stage service existed, the more isolated communities within the region, like Rangely, were visited on only a semi-regular basis. Craig, Meeker, Rangely and a number of small towns were interconnected with stage routes and some freighting service (both of which were costly and slow), but the residents of Northwestern Colorado would have to wait for the coming of the railroad in 1903 to alleviate their transportation woes. Before this, area inhabitants largely depended on wagon roads which met the Denver and Rio Grande at Wolcott and Rifle.

Stage line and freight entrepreneurs continued to prosper until much of the region was interconnected by railroads. The Circle Route Stage, for example, left Ouray each day for the twelve mile trip over Mears' Rainbow Route to Red Mountain. The preeminent figure in the freighting business in

the Plateau region was David Wood, who initiated a passenger and express line from Lake City to Ouray in 1877. He carried freight to mining camps and towns throughout the San Juan mining district and, in 1882, constructed the famous Dave Wood Road in Ouray and Montrose Counties to carry freight to Telluride. In a similar vein, Bradley Barlow and Jared Sanderson operated stages from Northern New Mexico to Pagosa Springs, Durango, Animas City and Silverton. As with Otto Mears, however, the railroad age doomed the freighting and stage business. By 1900, except for a few operations in areas which were not served by railroads, freight wagons and stage coaches had given way to the modern railroad.

Other forms of early transportation such as the Grand Valley Interurban streetcar system (known as the "Fruit Belt Route") which ran from Grand Junction to Fruita and points between during the late nineteenth and early twentieth centuries, should be considered. In addition, there was some river ferry transport in use at Palisade, for example, in the Plateau region.

CHRONOLOGY

1870-1886	Otto Mears built toll roads in the San Juan region.
1881	The railroads enter Southwestern Colorado.
1882	The Dave Wood Road built.
1903	The Railroads come to Northwestern Colorado.

LOCATION

See map for location of toll road routes and connected towns.

CULTURAL RESOURCE TYPES

Structures include: Livery Stables and Stage Barns, Toll Road Keeper's Cabins, Interurban Depots; Car Barns include Toll Gates, Bridges on Toll Roads, Generating Stations/Transformer Facilities and Reversing Loops for Interurban Systems.

Sites include: Toll Road Beds, some of which are used today for more modern roads, Freight and Stage Roads/Trails, Stage and Freight Wagon Stops and Way Stations, the site of Dave Wood's Ranch and the Dallas Townsite. Additional sites might include such natural sites as Berthoud and Marshall Passes which were, of course, highly significant to the opening of the region to permanent settlement.

Objects include: Wagons and Stagecoaches, and the Interurban Line/Road Bed.

Districts include: Mining Districts with connecting roads.

THE QUANTITY AND QUALITY OF EXISTING DATA

Historical Documentation

The Bureau of Land Management Class I overviews by Athearn, Mehls and O'Rourke, including the bibliographies, are basic references; each includes chapters on transportation. For the early pass explorers, see the works by William Goetzmann Army Exploration in the American West and Exploration and Empire: The Explorer and Scientist in the Winning of the West, and such works as Thomas Dawson, "The Godfather of Marshall Pass," in The Trail (1920). Otto Mears' career is well covered in Michael D. Kaplan's "Otto Mears: Colorado's Transportation King," a 1975 University of Colorado Ph.D. thesis; staging and freighting information may be found in Josie Moore Crum's Ouray County, Colorado (and in numerous other local and county histories), and in Morris Taylor's fine article, "Barlow and Sanderson Stage Lines in Colorado, 1872-1884," in The Colorado Magazine (September 1973). Dave Wood's career may be followed in Frances Wood, I Hauled These Mountains in Here. Muriel Marshall's Uncompahgre offers site-specific information on the Dave Wood Road. An excellent recent work on early urban transportation is William McGuire and Charles Teed, The Fruit Belt Route, a study of the Grand Valley Interurban streetcar system. Photo documentation for this theme, due to the popularity of the subjects, is extensive, and may be found at the State Historical Society, the Denver Public Library's Western History Department, as well as at local/county historical societies and museums. The Mears Toll Roads, for example, as well as Dave Woods' lines, the Interurban and the Palisade ferry, are well-documented in the collections of the Ouray County Historical Society and the Museums of Western Colorado. Researchers will find Steven G. Baker's (Centuries Research) Dallas Creek Project Inventory (1978) most useful as he analyzes the Dallas townsite, the home and business center of Dave Woods' freighting operation. The report provides considerable historical background and perspective; site descriptions are valuable.

Number/Condition

Passes, of course, as natural resources, still exist, as do the remains of many of the toll stage/freight roads. These were well mapped, in most cases, and many original roadbeds are still used as modern roads. A portion of the interurban tracks still exists in Grand Junction; again, the system has been traced. The data base, however, is not yet developed to the point to be able to identify the number and condition of stage and freight stops and structures, depots and similar associated resources that currently exist, or more probable, that may have existed.

Data Gaps

Business Records for some stage and freighting operations.

Urban transportation patterns in Plateau towns other than Grand Junction, whose interurban system is well documented.

Physical remains of stage stops and depots relative to early Plateau transportation.

Future Needs

Since the location of many of the early transportation routes are known and/or mapped, surveys to locate these routes are not needed. However, future efforts should include the location of structures related to the transportation routes such as stage and freight stops and depots. The identification of such resources should be considered during recording of resources in Main Street surveys and other regional or area surveys. A comprehensive archaeological investigation of the Dallas Townsite seems appropriate owing to the great significance of the Dave Wood freighting operation to the region.

Important Resources

The predominant role transportation played in the development of the Plateau counties makes documentation of this role significant for explanatory or interpretive purposes. Also, because most of the resources that once existed are generally deteriorated or destroyed, those resources in good condition or even in an identifiable condition are important.

Because few are known to exist, any building or structure with integrity which is associated with the development, growth or operation of the early roadways of the Plateau Country is important. Those early transportation resources, including roads or structures associated with important people (such as Otto Mears, Dave Wood, or others) or with important events in the history of early transportation are important. Roads displaying significant technological innovation or techniques are important. Representative and unique examples of transportation resources are important. A road or corridor district may be of local significance if it influenced the location and growth of the town.

Such resources as the Ouray Livery Stable, structures and associated facilities related to the Interurban system, and discernable freighting and stage resources should be considered important. Roadbeds and trails are low priority resources; most have been mapped and recorded, and preservation is not a matter of immediate concern. Dallas townsite remains are, collectively, of great significance since the town was located in the heart of the Uncompahgre Ute Reservation and on the periphery of the San Juan mining district.

RESEARCH QUESTIONS

1. What information can physical resources provide regarding life and work in Dallas?
2. What material resources remain for Plateau cities?
3. What roles did stage and freight entrepreneurs play in the social and economic lives of Plateau region cities and towns? Does the material evidence substantiate this role?

PHYSICAL CONDITION

Structures should exhibit architectural and functional integrity. Roads and trails should be clearly discernable and supported by the documentary sources. Sub-surface sites should evidence minimal surface disturbance in order that the archaeological data retains integrity.

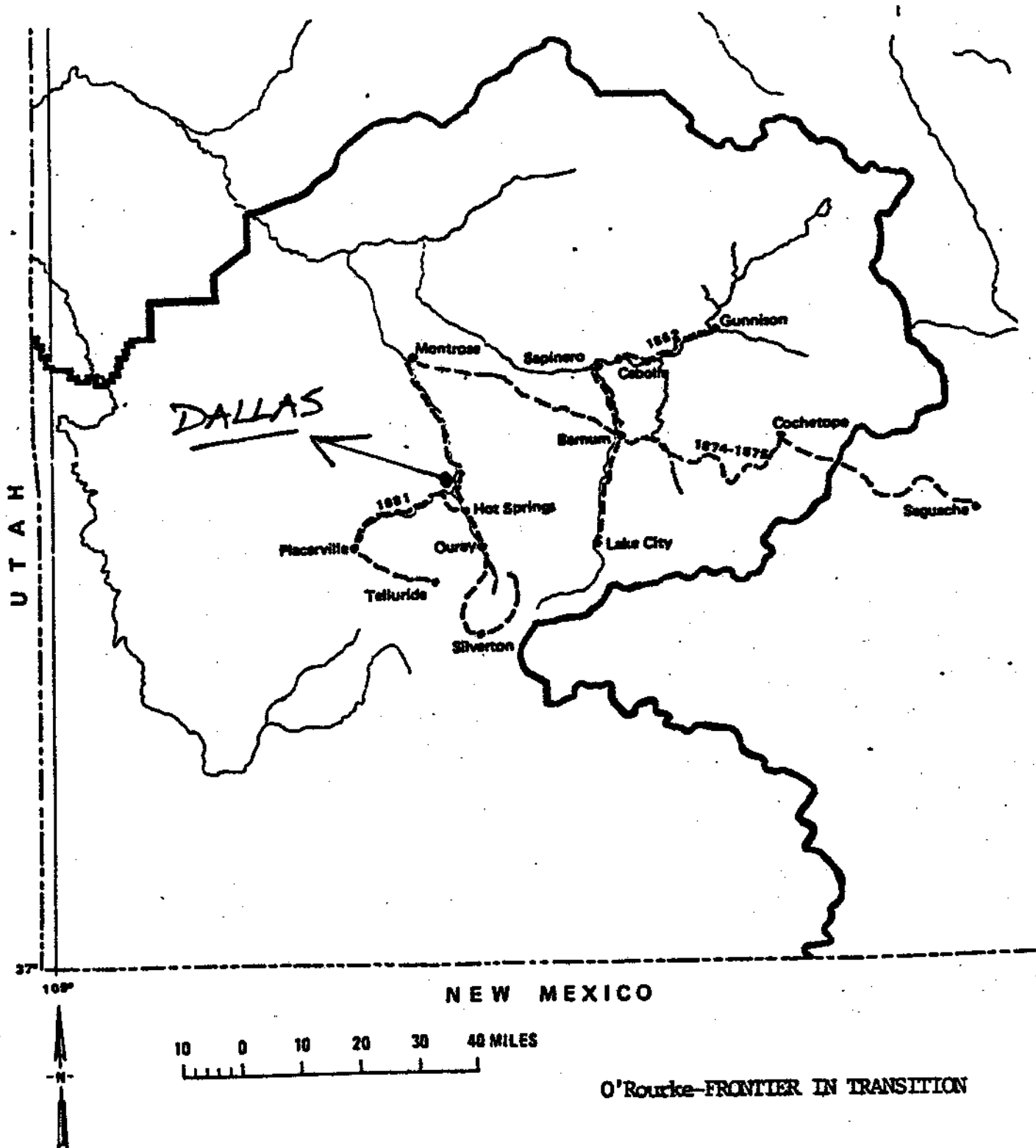
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See the bibliographies of the basic regional references as well as B.S. Wynar (ed.), Colorado Bibliography (Libraries Unlimited, Inc. 1980). See HISTORICAL DOCUMENTATION section.

Frederic J. Athearn. An Isolated Empire: A History of Northwest Colorado. Denver: Bureau of Land Management, 1982, 3rd edition.

Paul M. O'Rourke. Frontier in Transition: A History of Southwestern Colorado. Denver: Bureau of Land Management, 1980.

Steven F. Mehls. The Valley of Opportunity: A History of West-Central Colorado. Denver: Bureau of Land Management, 1982.



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

9. THE RAILROADSNARRATIVE

The Plateau Country remained a relatively isolated region until the railroads created the effective link between the region and the world on the other side of the Continental Divide. Beginning in the 1880s, a multitude of standard and narrow gauge lines infiltrated Western Colorado, and these strengthened the infant mining, ranching, and farming industries. In 1880, as the Gunnison country mining district boomed, William Jackson Palmer, owner of the Denver and Rio Grande Railroad (D & RG), bought Otto Mears' Marshall Pass Toll Road and began laying track. The line reached Grand Junction in late 1882. The Western Slope was now open and accessible to the hordes of new settlers.

In 1881 and 1882, the D & R G made its way from Antonito, in the San Luis Valley, through Pagosa Springs and on to Durango and Silverton, thus opening the San Juan mining district to prospector, rancher, and merchant alike. Five years later, in a frantic race against the Colorado Midland Railroad, the D & R G laid track from Leadville to Aspen through Glenwood Springs. The next year, the D & R G connected Glenwood Springs and Rifle with the tracks. In 1890, a standard gauge track was built between Rifle and Grand Junction; to settle their rivalry, the track was made available to both the D & R G and the Colorado Midland.

In the San Juan Country, Otto Mears controlled four railroads (the Silverton Railroad, Silverton Northern, Silverton, Gladstone and Northerly, and the famous Rio Grande Southern). Mears discovered that his toll roads could no longer handle ore profitably, and he began to build short feeder lines. The Silverton Railroad headed north to Ouray from Silverton, but Mears could go no farther than Albany Park. Not to be discouraged, Mears began construction of his Rio Grande Southern line (RGS) in 1890. The line ran from Ridgeway to Durango, via Dolores, and linked up with the D & RG line to Silverton in Durango. Financial difficulties, however, plagued the RGS, and in 1895, it was taken over by the D & RG. The Great Depression, like the earlier Panic of 1893, hurt the RGS, and although automobile rail buses for passengers replaced regular train service in 1931, the tracks were pulled up in 1952.

Despite Mears' set back in the 1893 panic, he nevertheless went to work on another short line, the Silverton Northern Railroad, in 1895. This line, which ran north from Silverton to Animas Forks, served the area mines until the Depression sealed its fate. The line closed down in 1939. Mears' third short line, the Silverton, Gladstone and Northerly, was constructed in 1899. It ran to the Gold King Mine at Gladstone, nine miles north of Silverton. The line suffered financial difficulties, however, and was lost through foreclosure in 1915.

Another railroad saga came to life in 1886-1888, as James J. Hagerman, determined to build a standard gauge railroad across the Continental Divide to Western Colorado, organized the Colorado Midland Railway. After some remarkable high country railroad engineering feats, the Midland

reached Glenwood Springs. Another standard gauge line, the Denver, Northwestern and Pacific (Moffat Road) built by David Moffat, was begun in 1902. He planned to run his tracks from Denver, through Northwestern Colorado, to Salt Lake City. By the time the line reached Steamboat Springs, however, Moffat was broke. In 1913, the line was reorganized as the Denver and Salt Lake Railroad, and was extended to Craig. The Denver and Rio Grande Railroad bought the majority interest in the Moffat Railroad in 1932 in order to complete a transcontinental route for Denver. The Bond to Dotsero cutoff was accordingly completed in 1934.

A number of smaller railroads operated in the Plateau Country. The narrow gauge Aspen and Western ran from Carbondale to the Thompson Creek coal mines in 1886 to 1892, while the Crystal River and San Juan ran its standard gauge track from Marble to Carbondale. The Little Book Cliff Railway was built to haul coal from the Brook Cliff Coal Mine to Grand Junction, and the narrow gauge Uintah Railway carried gilsonite from Utah's Uintah Basin to a processing plant at Mack, Colorado.

The Uintah Railway experience demonstrates the difficulties of mountain railroad building. High elevations, inclement weather, steep grades, and sharp curves stimulated the new science of railroading. Narrow gauge technology was vital to mountain railroading. Authorities on the subject argued that narrow gauge track was more adaptable to mountains, cheaper and faster to build and maintain and could negotiate sharp curves and steep grades far better than standard gauge lines.

The impact of the railroad networks on towns and growth in the Plateau region was tremendous. The region, previously inaccessible as far as cheap, easy transportation was concerned, was now open to all. According to Vandenbusche and Smith (A Land Alone...), "The mining, cattle, and farming industries on the Western Slope owe their lives to the railroad... Economically, they could make or break a town; politically, they dominated communities; socially, they provided excitement and optimism..."

CHRONOLOGY

- 1871 - Initial building of the Denver and Rio Grand Railroad west from Denver.
- 1880-1940 - The golden age of railroading in the Plateau Country.
- 1881 - D & RG built from Pagosa Springs to Durango.
- 1882 - The D & RG reached Montrose, Delta, and Grand Junction.
- 1882 - D & RG built from Durango to Silverton, and from Gunnison to Montrose.
- 1887-1905 - Construction of Otto Mear's short lines.
- 1891 - The Rio Grande Southern built from Ridgeway to Durango via Dolores.
- 1934 - Bond to Dotsero cutoff completed.

LOCATION

See map for location of railroads, appurtenant towns and major railroad construction.

CULTURAL RESOURCE TYPES

Buildings include: Passenger/freight terminals/depots, (many in the Victorian style); roundhouses/locomotive shops (in Ridgway and Durango, for example) and car barns/shops; structures include: Water towers; bridges and trestles, showsheds, coal chutes/loaders and tunnels.

Sites include: Roadbeds; rights-of-way and car and freight yards. Additional sites include locations of railroad accidents and disasters.

Objects are numerous and include: Cars and locomotives, helper and passing sidings; tracks; highway crossing signals and towers; signs and signals and switching equipment.

Districts railroad loops and railroad districts (encompassing Yards and appurtenant buildings and equipment).

THE QUANTITY AND QUALITY OF EXISTING DATA

Historical Documentation

Research on Colorado's railroads, and the resultant historical literature, has been and is extensive and there is little need to list the voluminous source material here. Basic resources include: Robert Athearn's Rebel of the Rockies: A History of the Denver and Rio Grande Western Railroad; Josie Moore Crum, The D. & R.G. in the San Juan; Mallory Hope Ferrell, Silver San Juan: The Rio Grande Southern Railroad; Morris Cafky, Colorado Midland; Henry E. Bender's Utah Railway and M Clarence Poor's Denver, South Park and Pacific Railroad.... In addition, numerous period promotional publications were issued by the railroads themselves, including the Laramie, Hahns Peak and Pacific Railway System (1911) and Horace Bird's History of a Line (Colorado Midland, 1889). These are generally lavishly illustrated. Additional sources include the Denver and Rio Grande Railroad System Construction and Map Filing Records (Colorado Historical Society); Edgar C. McMechen, The Moffat Tunnel of Colorado and Annual Reports of the Denver and Rio Grande. See also various publications of the Colorado Railroad Museum.

Manuscript and photograph collections abound. The Colorado Railroad Museum at Golden, The State Historical Society of Colorado, The Museum of Western Colorado, to name just a few, have extensive railroad material collections. The theme is immensely popular; local and country historical societies generally have valuable associated resources.

Number/Condition

The data are insufficient to determine the number, type, and condition of the resources that once existed or may have existed for this theme. However, if each depot, water tank, switch building and other structures along the rail lines are included, the number undoubtedly goes into the hundreds.

Part of the confusion about the possible number of resources comes from the multiplicity of resources on reroutings, short cuts, or tunnels, as well as inaccuracies in interpretations of data. Also, many companies that were chartered were never built or put into operation, often leaving partially completed roadbeds that were later used by wagons or highways. The condition of existing resources varies from intact and still operating to completely destroyed. Weather, reuse for highways or recreational roads, vandals and souvenir hunters have been the greatest threats to cultural resources associated with this theme.

Data Gaps

- * Diversity of types of sites and their wide array of conditions make identification of significant data gaps virtually impossible at this time.
- * Representative camps and resources associated with minorities who worked for the railroads.
- * Identification of all routes and proposed routes for railroads in the mountains.
- * Identification of all facilities, sidings and the like that could or have been misidentified.

Future Needs

Comprehensive surveys to properly identify and classify all railroad resources in the region should be conducted at some future date. These should include extensive research of the documentary records, serial photography and field work and would require the special skills of historians, historic archaeologists and serial interpreters. Some representative resources, such as the Ridgeway shops and roundhouse require immediate attention for preservation.

Important Resources

Because of the large number of sites associated with this theme and the relative importance of railroads in the region's development, the number of resources that substantiate this role is large. However, since many are deteriorated, the ones in good condition should be given special consideration. Also, those sites that have unique engineering features that represent the role Colorado rail designing played in national rail evolution are important. Railroad resources located in cities such as depots or roundhouses generally have local economic and historic importance, as well as their regional significance. Representative and unique resources in good condition are important, and resources associated with important events or people connected with the theme are also important.

RESEARCH QUESTIONS

1. Can cultural resources provide new information for the reinterpretation of the role of railroads in the social, political and economic development of the Plateau region?
2. What resources remain, if any, to clarify/verify the role of ethnic groups and minorities in the building and operation of Colorado Plateau Railroads?
3. What resources, if any, remain that provide information about engineering and technological developments on Plateau region Railroad?

PHYSICAL CONDITION

Structures: should have physical and locational integrity to make historic function and dimensions readily apparent. Roads and trails: should be clearly discernable and supported by the documentary sources. Subsurface sites: should evidence minimal surface disturbance in order that the archaeological data retains integrity.

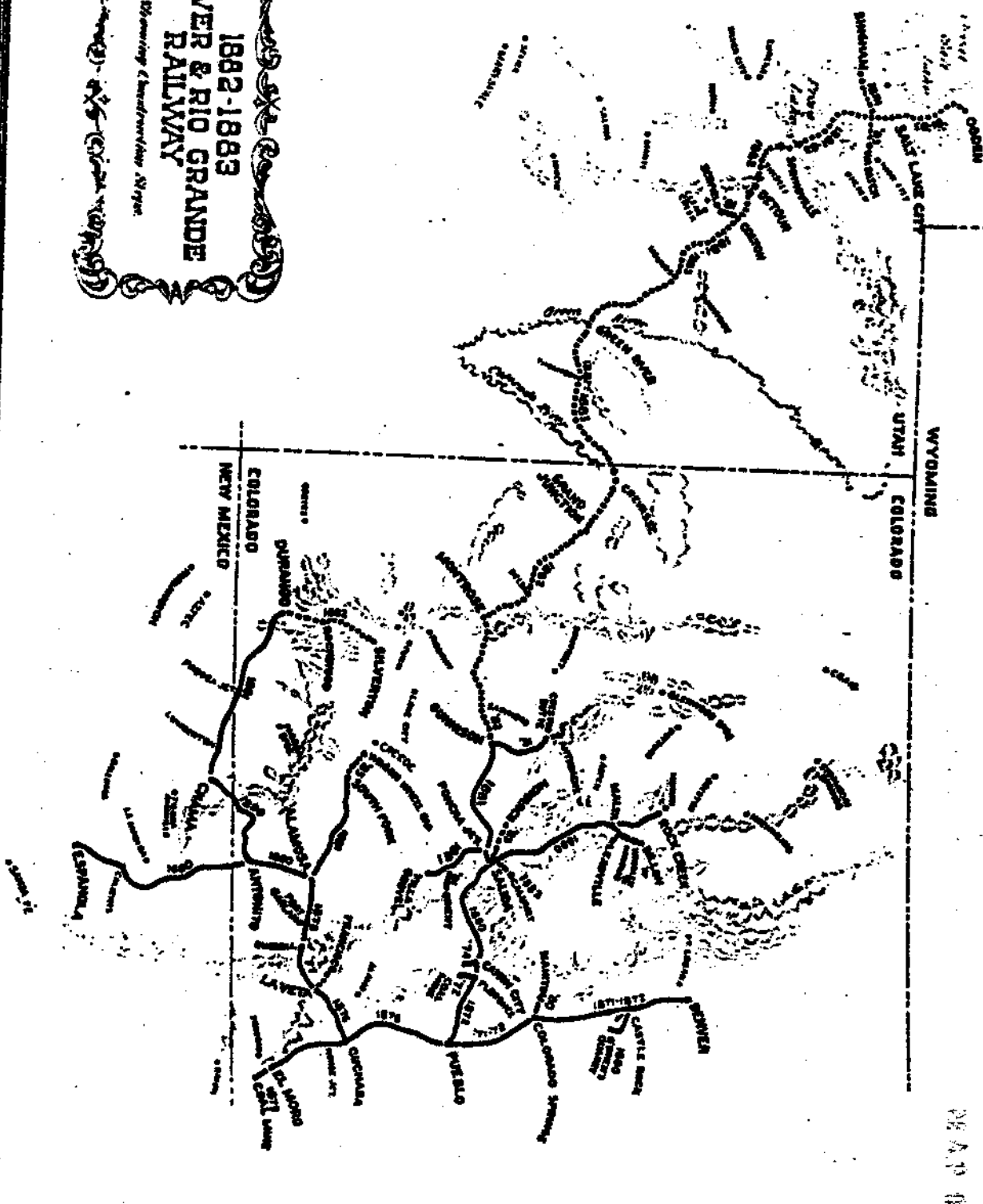
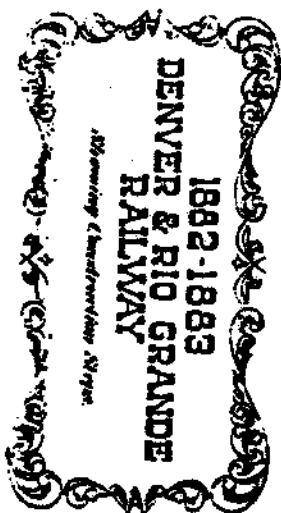
REFERENCES

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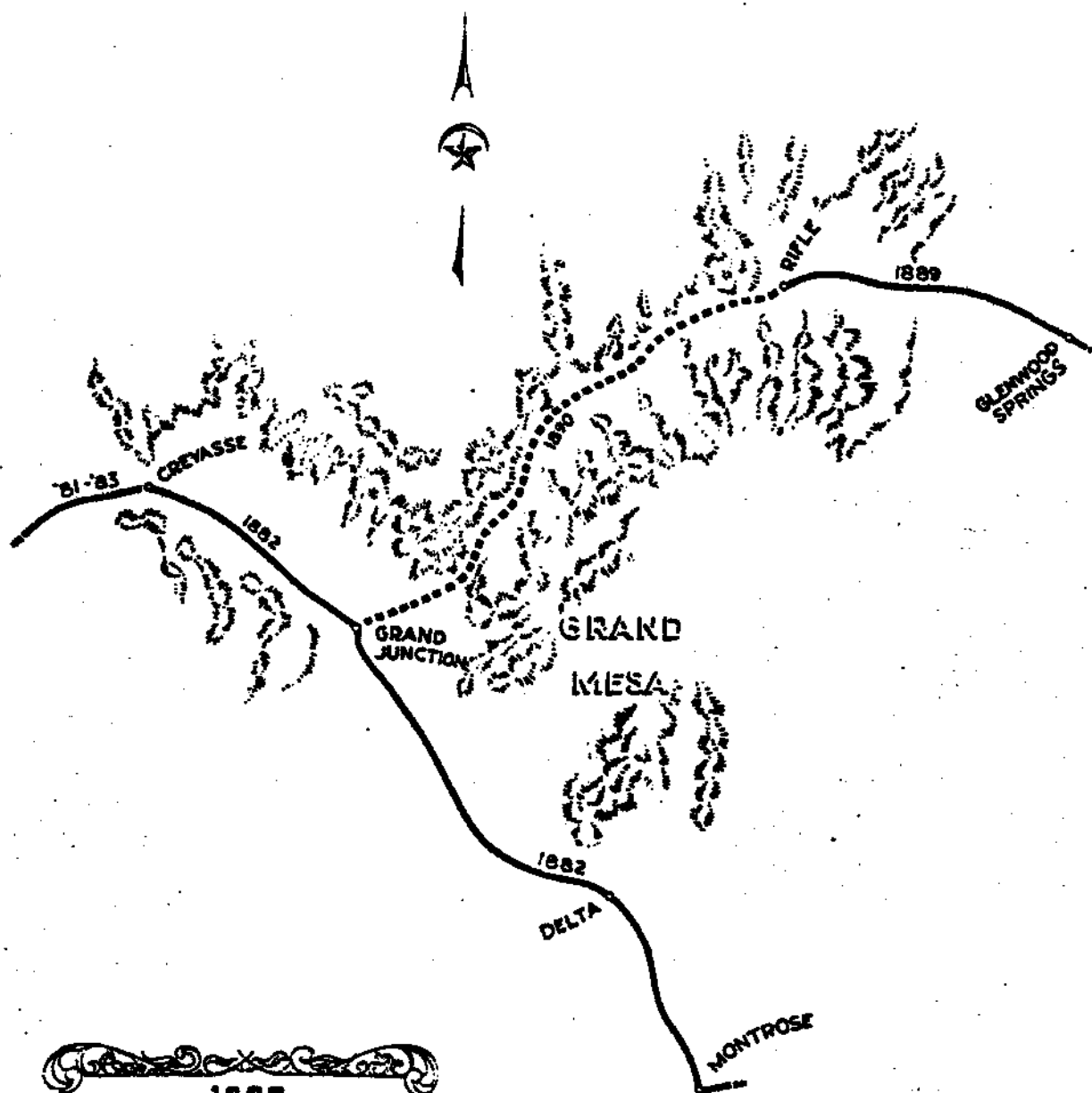
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Morris Lafky. Colorado Midland. Denver: Rocky Mountain Railroad Club, 1965.

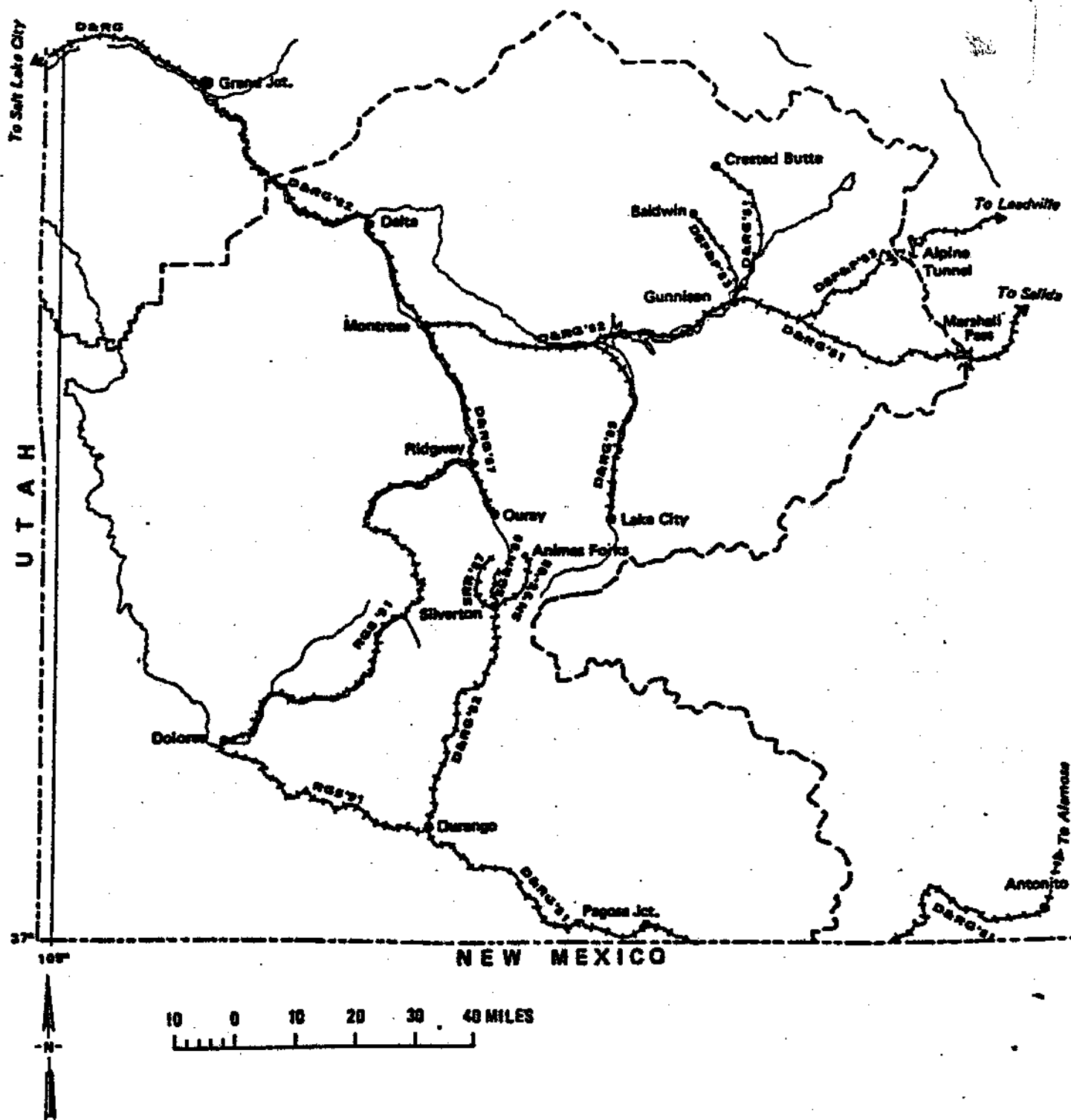
Henry E. Bender, Jr. Uintah Railway, The Gilsonite Route. Berkeley: Howell-North Books, 1970.



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Athearn-REBEL OF THE ROCKIES

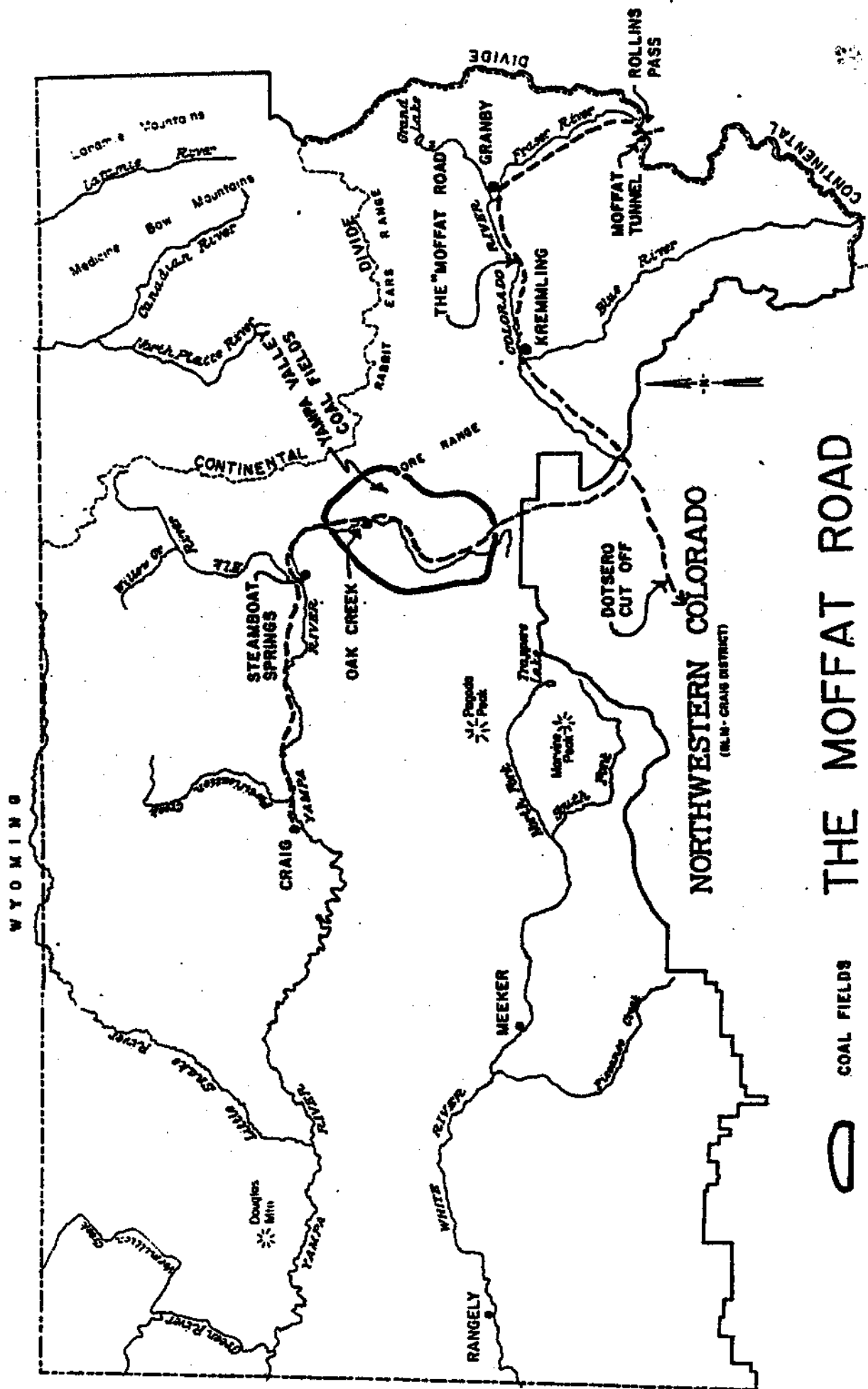


KEY TO RAILROADS

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

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

O'Rourke-FRONTIER IN TRANSITION



Archean - AN ISOLATED EMPIRE

MAP 9

10. RANCHINGNARRATIVE

Cattlemen entered the Western Colorado scene in the late 1860s and early 1870s. Fernando James and Frank Wadsworth brought Shorthorn cattle to present day Montezuma County. By the late 1870s, large herds grazed in the Montezuma, Paradox and San Miguel Valleys. Large herds were introduced to the North Fork Valley in the 1880s. These Shorthorn herds (later replaced with more hardy Herefords) wintered in the valleys near Crawford, Paonia and Hotchkiss. In the fall, the herds were driven from their summer ranges to Delta, Glenwood Springs or Sapinero, from where they were shipped to Denver and eastern markets. In Northwestern Colorado, the first cattle arrived in the late 1860s. The Brown's Park area, along with the White River, Little Snake and Yampa Valleys became major cattle centers.

These early years of ranching were based on open range methods, and throughout the early 1880s, the industry boomed. The harsh winter of 1885-1886, as well as falling beef prices during the latter part of the decade and combined with overgrazing, taxed the industry. However, it managed to recover, and in some areas, Delta County's cattle industry, for example, the industry boomed.

Concern for timber stands and watershed led to the creation, in 1891, of several national forest reserves, including the White River Forest, and the subsequent permit and quota system for grazing. This marked the end of open range ranching. After the establishment of National Forests, open range ranching was replaced with more centralized and controlled operations to increase output. This was furthered when regulations for grazing on federal lands were established requiring permittees to own proportionate amounts of land in relation to the number of animals they sought to keep on the forest. This was followed by the Taylor Grazing Act of 1934, promulgated to further protect the dwindling range lands, other than forest withdrawals.

High country ranching required technological innovations, and some of these special adaptations may still be seen (snake log fences, line camps and machinery, such as overshot stackers and doodlebugs used to harvest wild hay). The railroads, of course, had a great impact on the cattle industry as towns like Durango became shipping centers for cattle growers in their regions. In Northwestern Colorado, the cattle industry boomed with the arrival of rail transportation in the Yampa Valley. "Cattle Kings," such as Sam Hartman, who had one of the largest herds in Western Colorado in the North Fork of the Gunnison River Valley, and Jesse and Valentine Hoy, who were the dominant cattlemen in Brown's Park by 1876, were representative industry giants.

A major problem which manifested itself quite early in the cattle era on the Plateau was the arrival of hordes of homesteaders and the

threat of fences: feuds and range wars ensued. In addition, there was constant cattle rustling in the Brown's Park area. Equally troublesome was the constant conflict between cattlemen and sheepmen in the Plateau region. Sheep and sheepherders (usually Mexican or Basque) were killed, and violent wars occurred near Craig on the Yampa River in 1896, along the White River in 1894 and at Collbran from 1892 until 1894. Sheep killings continued in the North Fork and Uncompahgre Valleys and in Rio Blanco County until after World War I. Many Western Colorado cattlemen, in fact, turned to sheep raising prior to World War I in response to a depressed beef and strong sheep market.

The impact of the cattle industry on town building and growth was significant. As cattlemen entered the region in the 1880s, ranching communities like Mancos, Steamboat Springs, Craig, Meeker, Yampa, Paradox, Toponas, Rifle, Hayden, Lay and Norwood sprang up. But, by shortly after World War II, the bottom fell out of the cattle and sheep business as prices failed to keep up with costs.

CHRONOLOGY

1870-1950	Era of profitable high country cattle raising.
ca. 1871	First cattle driven into Northwestern Colorado.
1885-1886	Severe winter devastates the Western Colorado cattle industry.
1888-1920	Cattle/sheep wars in the Plateau Country.
1891	White River Forest Reserve law enacted; end of open range ranching.
1934	Taylor Grazing Act enacted.

LOCATION

See map for locations of cattle raising centers and appurtenant towns and relevant sites.

CULTURAL RESOURCE TYPES

Buildings include: Homesteads (including Farmsteads, Homesites), Sheep Camp Buildings, Ranch Buildings/Houses, Hay and Livestock Barns, Loafing Sheds, Shops; Line Shacks/Cabins; and Machine Sheds.

Structures include: Corrals, Windmills, Haystack Enclosures and Fences.

Sites include: Cattle and Sheep Campsites, Sites of Cattle/Sheep Wars and Livestock Trails, Aspen Tree Carvings.

Objects include: Haying Machinery (Stackers, Derricks, Fakes, Mowers, Balers, Hay Wagons, and Doodlebugs) Squeeze Chutes, Dipping Vats,

Railroad Cattle Cars/Lines, Sheep Wagons and Chuckwagons.

Districts include: Ranching Districts (several Ranches in a given area with a community identification), Irrigation Districts and Grazing Districts.

THE QUANTITY AND QUALITY OF EXISTING DATA

Historical Documentation

Statewide studies of Colorado agriculture are presently the best sources of information about ranching in the Plateau region, and this will probably continue in the foreseeable future. Basic sources include Alvin Steinel, History of Agriculture in Colorado; David McComb, Agricultural Technology and Society in Colorado; Richard Goff and Robert McCaffree's Century in the Saddle. The 100 Year Story of the Colorado Cattleman's Association; the Western Range Cattle Industry Series at the Colorado Historical Society; Ora Peake, The Colorado Range Cattle Industry, and various issues of Westerner's Brand Books.

For Northwestern Colorado, see Athearn's An Isolated Empire..., and his bibliography as well as the previously cited Rifle Shots. For West-Central Colorado, see Wilson Rockwell, Uncompahgre Country, Mary Rait's M.A. Thesis (University of Colorado, Boulder) Development of Grand Junction...; two recent centennial histories--Deborah V. Doherty, Delta, Colorado: The First 100 Years, and Dona Freeman (ed.), 100 Years: Montrose, Colorado; and the interview files of the Mesa County Oral History Project (Grand Junction). In addition, consult Mehls' The Valley of Opportunity... and bibliography, and John Rolfe Burroughs, Where the Old West Stayed Young.

For Southwestern Colorado, see O'Rourke's Frontier in Transition... and his bibliography; D. H. Cummins' thesis, Social and Economic History of Southwestern Colorado, 1860-1948, and Wilson Rockwell, New Frontier.

In addition, consult the records, where available, of county stock-growers' associations, numerous privately published reminiscences by ranchers and pioneers and numerous relevant articles in The Colorado Magazine.

The sheep industry has not been particularly well documented, but such publications as Edward N. Wentworth, "Sheep Wars of the 90's in Northwest Colorado" (Denver Westerner's Brand Book, 1946), are useful.

The manuscript and photograph holdings of state and local historical societies, museums and institutions of higher learning throughout the state include extensive materials relating to ranching. In particular, one should endeavor to peruse, where available, the papers and records of cattlemen such as Ora Haley and Farrington Carpenter (see Daniel Tyler's M.A. Thesis, "F. R. Carpenter, Routt County, 1900-1920," CSU).

Finally, it would be advisable to go to the "real source"--the high-country cattle grower him/herself. There are many left, of course,

throughout the region; many operate their ranches in the "old way," and can provide invaluable historical perspective and information. Two cultural resource management reports of particular interest are the Colorado Westmoreland and Dallas Creek Project Resource Reports by Stephen Baker (Centuries Research). The former records cow camp/homesteads and a large stock ranch in the Paonia vicinity; the latter study, based in the heartland of high-country ranching, describes and records several significant homesteads and ranches.

Number/Condition

The data are insufficient to determine the number and condition of associated sites which exist or may have existed. Although numerous sites have been recorded, both in surveys and on the National Register, the current data base must be refined and a more comprehensive inventory is required. As with some other themes, eligibility recommendations depend on further investigations and additional data.

Data Gaps

Records of some operations such as those of Ridgway-based Maire Scott, who operated a huge ranching empire until her death.

Physical remains of early cow camps.

Future Needs

Comprehensive archaeological investigations of such ranching service centers as the Dallas townsite are needed, as well as a similarly comprehensive survey of ranches and associated structures and objects (haymaking machinery and devices, for example). Future work needs to be done with the current data base to clarify and properly identify sites such as cabins to their historic use and purpose. In some cases, the sites may need to be resurveyed in order to provide adequate data.

Important Resources

Owing to the vital significance of the ranching industry to the region, representative sites, structures and objects which exhibit enough integrity to allow a determination of date and function should be considered important for research and interpretive purposes. Several historic ranches, for example, in Ouray County will be impacted by the Dallas Creek Project; these merit consideration for National Register eligibility. Additional surveys and manipulation of current inventory forms would provide an accurate estimate of the number and condition of important theme resources. Sites that substantiate the thesis that Plateau Country agriculture required special adaptations of methodology and technology are important as are those that reveal information about settlement and land use patterns in the region. Resources associated with minority groups and with important people and events in conjunction with ranching in the region are important.

RESEARCH QUESTIONS

1. Can physical remains provide information as to the local/regional development of specific ranching technologies (haymaking, for example)?
2. What information can material remains provide regarding the social and economic dimensions of homesteading in the ranching country of Western Colorado?
3. What interrelationships existed between the Plateau ranching communities and the early San Juan urban mining frontier? Does the material evidence substantiate these roles?
4. What is the relationship between the cattle industry in the Northwest and the impact to southern Wyoming's economy?
5. What resources, if any, remain to verify or explain early federal involvement in grazing, irrigation, and conservation?

PHYSICAL CONDITION

Structures: should be well maintained, and the architectural integrity should be such that an understanding of the building's function and operation is possible.

Technological expressions: should be recognizable as to function, and should be clearly associated with the appropriate operational environment.

Districts: must be clearly definable as to boundaries, and should be corroborated by documentary evidence.

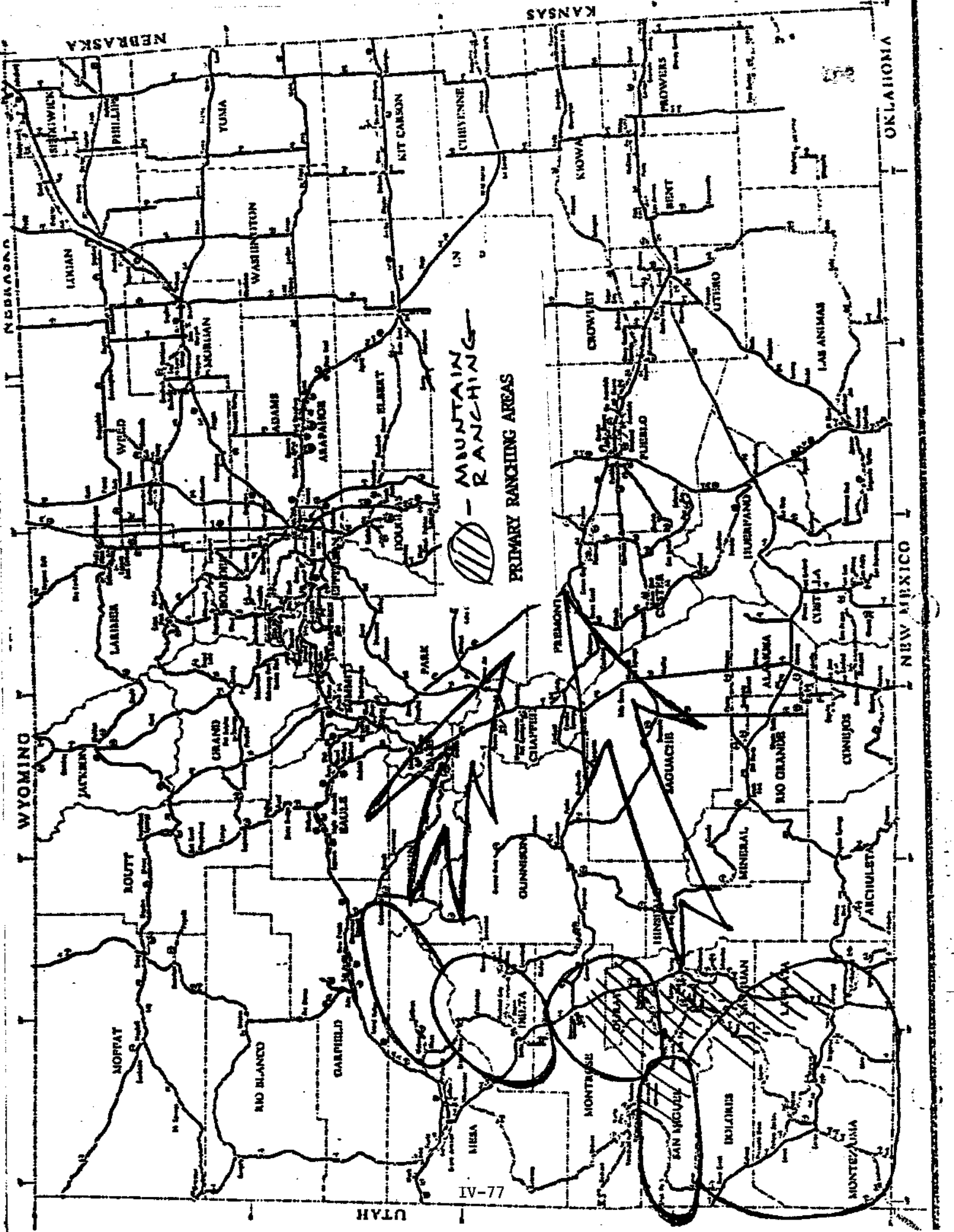
REFERENCES

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Ora B. Peaks. The Colorado Range Cattle Industry. Glendale: The Arthur H. Clarke Co., 1937.

Alvin Steinel. A History of Agriculture in Colorado. Fort State Board of Agriculture, 1926.

Goff and McCaffree. Century in the Saddle. Denver: Colorado Cattlemen's Centennial Commission, 1967.



11. FARMINGNARRATIVE

Many of the first farming efforts were aimed at supplying mining camps and towns in the Plateau region. Some farming occurred in the Elk River Valley following the discovery of gold at Hahn's Peak in the early 1860s. In another example of the importance of mining and farming to each other, two entrepreneurs established a dairy farm near Silverton in 1874 and sold the milk in area mining camps. Miners paid well for fresh fruits, vegetables and hay. Farming, however, did not proceed as rapidly as it might have--isolation, arid lands, a brief growing season and the Ute Indians posed difficult problems for early agriculturists, and experimentation with a variety of crops and methods was necessary during the 1880s and 1890s.

One early experiment which yielded positive results centered on fruit growing. In the North Fork Valley, Sam Wade and Enos Hotchkiss planted a variety of fruit trees in 1881 and 1882 near the present day towns of Paonia and Hotchkiss. The results were remarkable, and by 1885, the valley was widely recognized for its fruit growing potential. The area enjoyed fertile soil, water for irrigation and a mild and warm climate, and the fruit industry soon spread to other parts of Montrose and Delta Counties. Pioneering farmers, however, soon discovered that the Uncompahgre Valley, unlike the North Fork and Grand Valleys, had only a limited supply of water, and many who rushed in following the arrival of the Denver and Rio Grande in 1882 were bitterly disappointed when their land did not have adequate water. In Northwestern Colorado, such areas as the White River and Yampa Valleys proved to be too cold, too high or too arid for successful farming; as a result, this area became known for its cattle and quality hay. Fruit raising was a low altitude endeavor.

Once the Utes were removed, fruit dominated the agricultural industry on the Western Slope, and the North Fork and Grand Valleys rivaled each other as major fruit raising areas. Elam Blain planted peach seeds between Grand Junction and Palisade in 1882; William Pabor planted fruit trees near present-day Fruita during the following year. Palisade, laid out in 1893, and protected by Grand Mesa and the Palisade's cliffs, became the peach capital of Colorado. Pears, peaches, apples, cherries and apricots stimulated the rapid growth of the Grand Valley and were responsible for the birth of Fruita and Palisade.

To the south, in Montezuma and La Plata Counties, high altitudes made fruit raising a risky business, but apples, cherries, peaches, pears and plums were grown by the turn of the century. These were raised primarily for local use; the distance from markets and the high freight costs acted to limit growth of the fruit industry there. In 1904, nevertheless, McElmo Canyon peaches were awarded national prizes at the St. Louis World's Fair. In 1920, Mesa County ranked first in Colorado for the number of productive peach and pear trees while Delta County took the honors for apple and apricot trees. Despite the vagaries of insects and weather, the fruit

industry in the Plateau Country prospered throughout the period of this study.

Other crops succeeded in the region as well. Strawberries were raised in great abundance around Glenwood Springs after the turn of the century, but ceased to play a significant role in regional agriculture. Wheat was introduced to the Montezuma Valley in the early 1880s, and to the Uncompahgre Valley shortly thereafter. Alfalfa was grown as early as the mid-1880s, particularly in the cattle raising regions. Sugar beets were first raised in Mesa County in 1887, and the first sugar beet processing plant was built in Grand Junction in 1899. With very few exceptions, the lion's share of the beets were grown around Delta and Olathe. In 1920, a Holly Sugar Company processing plant was built in Delta. Both factories eventually shut down, and the sugar beet industry in the Plateau region came to an end. Potatoes, another important crop, were planted in the Uncompahgre Valley, Carbondale, Fruita, Loma and the Garfield-Eagle region. Early potato growers sold their produce to mining camps in their areas. The Silver Panic of 1893 seriously damaged the industry as closed mines and high transportation costs brought potato production to a standstill, but production of this crop, as well as onions and peas, picked up by World War I, particularly in the Uncompahgre Valley. Shortly after 1883 and the removal of the Utes, Delta County became known for honey production, and honey became a major industry in both Delta and Mesa Counties. Pinto beans, which do not require irrigation, became major agricultural products in Dolores and Montezuma Counties in the early twentieth century. The growing of table grapes, never a dynamic industry, did flourish near Palisade in the late nineteenth and early twentieth century.

After the turn of the century, it was apparent that irrigation was the key to successful agricultural pursuits. Most of the Plateau Country is arid; the Grand Valley, for example, was nothing more than desert prior to the development of irrigation systems. Water, in this region, has been the most valuable resource.

CHRONOLOGY

1867	Some farming in Hahn's Peak area.
1874	McGrew-Downey dairy farm established near Silverton.
1881	Fruit trees planted in North Fork Valley.
1882	Fruit planted in Grand Valley.
1904-1909	Glory years of the fruit industry.
1910	Depression in the fruit industry.
1911-1945	The fruit industry recovers.

LOCATION

See map for location of major agricultural districts and appurtenant towns and sites.

CULTURAL RESOURCE TYPES

Buildings include: Fruit Packing Sheds; Migrant Worker Quarters, Coolers, Fruit Stands, and Machine Shops.

Structures include: Root Cellars, Hay Barns, Sugar Beet Plants, Apiaries, Loading Docks, Irrigation Supply Systems (Water Wheels, Weirs, Flumes, Diversion Dams, Canals, etc.).

Sites include: Ranches, Farmsteads and Homesteads.

Objects include: Orchard Machinery such as Wind Machines and Iced/Refrigerated Railroad Cars.

Districts include: Fruit Districts; Irrigation Districts, Networks and Systems.

THE QUANTITY AND QUALITY OF EXISTING DATA

Historical Documentation

For basic references on farming in the region, in addition to the Bureau of Land Management Class I overviews by Athearn, Mehls and O'Rourke, consult the state agricultural studies by Alvin Steinel, History of Agriculture in Colorado and David McComb, Agricultural Technology and Society in Colorado.

For the first industry in the North Fork and Grand Valleys, see Mary Rait's M.S. thesis (University of Colorado, Boulder) on the history of the Grand Valley ("Development of Grand Junction..."); Wilson Rockwell's Uncompahgre Country; Herbert L. Bacon, The Peach Industry of the Grand Valley of Colorado (University of Colorado thesis); Maude Butler, Study of the Values of Peach Farms in the Palisade District, Mesa County, Colorado (Western State College thesis); Walter Olin, Story of the Colorado Apple; William E. Pabor, Fruit Culture in Colorado: A Manual of Information (1883) (Pabor was a leading Grand Valley fruit pioneer); Peter Sandsten, A Fruit Survey of Mesa County (1917), and Orchard Survey of the Western District of Colorado; Mabel Evers, The History and Development of Palisade, Colorado (MS, Mesa County Public Library); Walker D. Wyman, "Grand Junction's First Year," The Colorado Magazine (July 1936); Erlene Durrant Murray, Lest We Forget: A Short History of Early Grand Junction, Colorado...; Merton Nolen Bergner - The Development of Fruita and the Lower Valley of the Colorado from 1884 to 1937 (University of Colorado thesis); James H. Rankin, "The Founding of Early Years of Grand Junction," The Colorado Magazine (March 1929) and Len Shoemaker, Roaring Fork Valley: An Illustrated Chronicle.

In addition, one should consult the considerable body of early promotional literature touting the fruit-growing virtues of the region. (See the "Local History" section of Colorado Bibliography for a representative listing.) These are generally lavishly illustrated. Researchers should also peruse the interview files of the Mesa County Oral History Project and the photographic and documentary collections of the North Fork Historical

Society, Paonia. The Museum of Western Colorado has a large continuing manuscript and photographic collection related to the theme, including the records of the Western Colorado Horticultural Society, the Peach Administrative Committee (Palisade), and relevant photographs from United Fruit Grower's Association and the Palisade Public Library Photo Collection. The Grand Junction Daily Sentinel and the Palisade Tribune are basic reference sources for the entire fruit-growing era.

For fruit growing in the Southwestern area, see D. H. Cummins, "Social and Economic History of Southwestern Colorado, 1860-1948" (University of Texas M.A. thesis), and Emil P. Sandsten, Orchard Survey of the Southwestern District of Colorado.

For other listed crops, see the suggested basic references, and: William J. May, Jr., "The Colorado Sugar Manufacturing Company: Grand Junction Plant," The Colorado Magazine (Winter 1978); numerous dry land farming bulletins from the state experiment stations and local newspapers, which treat local agricultural specializations.

Various USDA and Colorado State University/State Experiment Station surveys of agricultural trends in Western Colorado provide useful historical data. The recent Downtown Development Authority survey of Grand Junction provides some useful data for the city that was and is the hub of the Western Slope fruit industry, as does The Four Corners' Regional Commission Final Report (1982), which includes surveys of the following agricultural communities: Delta, Montrose, Cortez and the Grand Valley region.

Again, the Athearn, Mehls and O'Rourke volumes and the bibliographies therein are vital.

Number/Condition

The data base is currently insufficient to determine the number and condition of sites which exist or may have existed. Fruit growing, for example, is a large industry with many architectural and technological expressions, and an expanded inventory is required.

Data Gaps

Accessible records from large fruit growing and processing operations.

Basic historical data relative to the social and economic impact of dry land farming (pinto beans, for example) on such communities as Cahone and Arriola.

Additional information on local technological specializations related to agriculture.

Future Needs

A complete inventory of material resources relating to the fruit industry seems appropriate. The industry remains relatively vigorous, but many

sites and structures are endangered as growers and processors cease operations due to economic conditions. Moreover, there are numerous technological expressions of the industry that remain unrecorded.

processors

Finally, such sub-themes as grape growing and dry land crops have been largely ignored by researchers. And cultural resource investigations of early homesteads/farms are necessary for material culture and site documentation.

Important Resources

Due to the significance of the theme in Western Colorado history and until a comprehensive inventory from which a representative resource sample can be drawn is completed, all resources which exhibit a basic integrity should be considered important.

RESEARCH QUESTIONS

1. What can material resources tell us regarding the impact of agriculture on the social lives of agricultural communities of the region?
2. What important industrial processes, machines and techniques related to specialized agriculture were developed in the region?
3. Midwestern influence in the development of the Grand Valley was extensive. Is this pattern substantiated by cultural resources, architectural styles and the like?
4. How, in terms of material resources, has the migrant/transient worker experience been documented in the region?
5. What information can physical resources provide as to changes in agricultural technology over time?
6. How has the railroad, basic to crop transportation, impacted agricultural communities?

PHYSICAL CONDITION

Structures: should be well maintained, and the architectural integrity should be such that an understanding of the buildings functions and operation is possible.

Technological expressions: should be recognizable as to function, and should be clearly associated with the appropriate operational environment.

District: must be clearly definable as to boundaries, and should be corroborated by documentary evidence.

REFERENCES

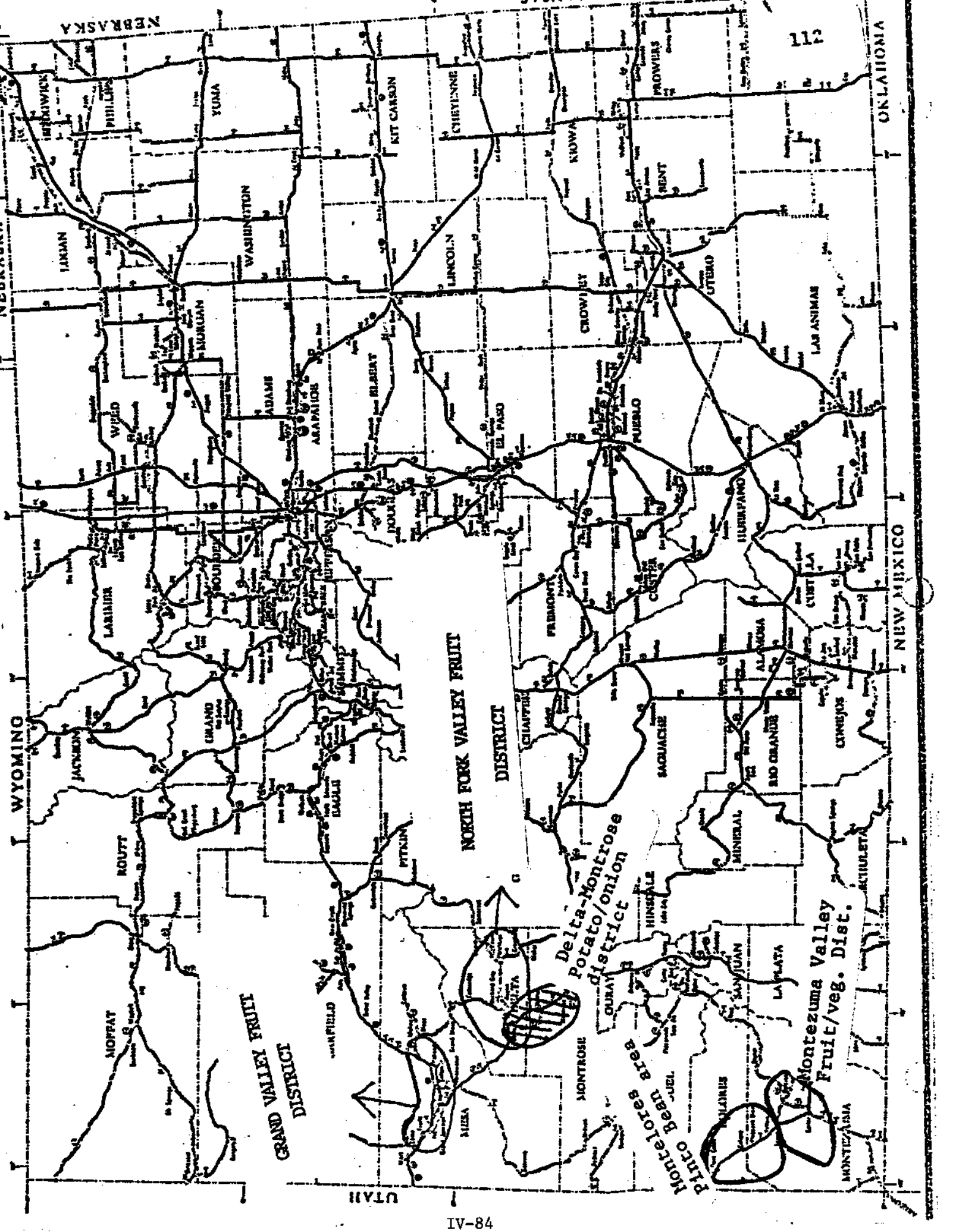
See the bibliographies of the basic regional references as well as B. S. Wynar (ed.), Colorado Bibliography (Libraries Unlimited, Inc. 1980). See HISTORICAL DOCUMENTATION section.

Frederic J. Athearn, An Isolated Empire: A History on Northwest Colorado. Bureau of Land Management, 1982, 3rd addition.

Paul M. O'Rourke, Frontier in Transition: A History of Southwestern Colorado. Denver: Bureau of Land Management, 1980.

Steven F. Mehls, The Valley of Opportunity: A History of West-Central Colorado. Denver: Bureau of Land Management, 1982.

Alvin Steinel. A History of Agriculture in Colorado. Fort Collins: State Board of Agriculture, 1926.



12. WATER AND IRRIGATIONNARRATIVE

Although the Indians, fur trappers, and traders found water plentiful in the Plateau Country, water rights and water shortage problems have been part of the Plateau Country's history since the early period of settlement. The development of irrigation engineering became a necessity before the turn of the twentieth century. The miners learned, in the early 1870s, that the summers and falls in Western Colorado were relatively dry periods, and that sluicing, hydraulicking and dredging required large amounts of water, as did stamp mills, smelters, and tailings ponds. From that point forward, various states and special interests vied for Western Colorado's water. Miners often devised incredible means to bring water to their mines, such as the "Hanging Flume" in the San Miguel River canyon. In addition, water was employed by later miners and towns (Nucla and Cortez) as a source of hydroelectric power. Mills, such as the Crystal Mill between Crystal and Marble in western Gunnison County, were frequently located near streams, rivers, ditches, and canals.

As the agricultural frontier advanced into Western Colorado, some irrigation, usually small diversion ditches, was employed in the 1870s. By the 1880s, irrigation schemes were in full swing. Farmers in the Uncompahgre Valley, which includes much of modern Montrose and Ouray Counties, the eastern half of San Miguel County, and the town of Delta, found that the available water could only irrigate a portion of the valley's tillable acreage, and the dream of diverting the Gunnison River to the valley was born. The Gunnison Tunnel was built between 1905 and 1909, and had a huge impact on production and land value in the Uncompahgre Valley. The Taylor Park Dam, constructed in 1937, another phase of the Uncompahgre Project, increased the amount of arable land available to agriculture.

Other irrigation projects in other parts of the region were implemented as well. In Montezuma County, the Montezuma Valley Water Supply Company, formed in 1885, devised a plan to cut a canal from the Dolores River to the Montezuma Valley. As part of the scheme, the company laid out a townsite (Cortez) hoping that the increased water supply, brought by the new canal to the arid but fertile valley, would create a land rush. It did not, but the Montezuma Valley Project and the Dolores Number Two Canal, completed in 1907, which carried water to the Hovenweep, Yellow-jacket, and McElmo regions, had a significant impact on agriculture in Southwestern Colorado.

In the Grand Valley, irrigation was essential to growth. By as early as mid-1882, shortly after Grand Junction was laid out, the Pacific Slope and Pioneer ditches were completed. The Grand Valley Ditch, a much larger project, was also initiated in the early 1880s, and the Bureau of Reclamation's Grand Valley Project began in 1912. In 1915, the Grand Valley Diversion Dam was constructed across the Colorado River east of Palisade; the diverted water went into the Highline Canal to provide

water for agricultural lands from Palisade to Mack. In 1922, the Bureau of Reclamation built a siphon across the Colorado River in Debeque Canyon up river from Palisade. The water ran through a bench flume and an open canal to a pumping station near Palisade, and from there was pumped to Orchard Mesa, a large fruit growing area south of Palisade. These and similar projects gave the Grand Valley "the most sophisticated irrigation network on the Western Slope." (Vandenbusche and Smith, A Land Alone..., p. 190).

The seven states through which the Colorado River and its tributaries flow signed the Colorado River Compact of 1922. Although the plan was devised to divide the water among the Upper and Lower Basin states, miscalculations as to the flow of the river penalized Western Colorado, and, despite the construction of numerous water diversion projects from 1870 to 1945, water shortages remain a constant threat in the Plateau Country.

In the years following the initiation of major water projects, irrigation promoted the growth and development of Western Colorado, increasing the amount of tillable acreage and the number of farms in the region.

CHRONOLOGY

- | | |
|------------|--|
| 1272-1299 | - Prolonged drought forces Indians to evacuate Mesa Verde. |
| 1874-1880s | - Miners appropriate water for hydraulic mining. |
| 1882 | - First ditches completed in the Grand Valley. |
| 1890-1897 | - Construction of "Hanging Flume" in San Miguel Canyon. |
| 1889 | - Montezuma Valley Project completed. |
| 1905 | - Bureau of Reclamation began work on the Gunnison Tunnel Project. |
| 1917 | - First water ran through the Highline Canal. |
| 1922 | - Colorado River Compact signed. |

CULTURAL RESOURCE TYPES

Buildings include: Irrigation company offices in Grand Junction, Delta, Gunnison, etc.; pumping stations and dam living quarters.

Structures include: Pumphouses, hydraulic pumping stations (e.g. Havemeyer-Wilcox pumphouse site which is on the National Register), rolling crest dams and spillways, earth fill dams, settling ponds/reservoirs, cisterns, water siphons, flumes (concrete bench, wooden), canals (open, gravity flow), headgates, weirs, water wheels (such as the Wellington Water Wheel on the Grand Valley Canal), tunnels.

Sites include: Canal sites, pumphouse sites, etc.

Objects include: Pumps, hydraulic rams.

Districts include: Irrigation districts (The Grand Valley Irrigation District for example) and canal/ditch networks.

THE QUANTITY AND QUALITY OF EXISTING DATA

Historical Documentation

Basic references include the Bureau of Land Management Class One overviews by Athearn, Mehls, and O'Rourke as well as Hayden's Tenth Annual Report of the Survey of the Territories; Rait's M.A. thesis (University of Colorado, Boulder) on Grand Junction history, Development of Grand Junction..., Donald A. McKendrick, "Before the Newlands Act: State Sponsored Reclamation Projects in Colorado, 1888-1902," The Colorado Magazine (Winter, 1975); Alfred A. Golze, Reclamation in the United States; Norris Hundley, Water and the West and Duane Vandebusch and Duane Smith, A Land Alone: Colorado's Western Slope (Chapter 12). See also the Grand Valley Project Collection and other irrigation resources at the Museum of Western Colorado.

In addition, numerous surveys relating to water supply and development, watershed projects, and water management have been conducted by the Bureau of Reclamation, the U.S. Army Corps of Engineers, the Colorado Geological Survey and the U.S. Geological Survey. Some are illustrated, site-specific and offer historical perspective.

For mining and water technology, see the Historical Documentation section of the unit on "Modern Mining." The theme on water and irrigation, as a whole, has not been thoroughly researched.

Number/Condition

The present inventory base is insufficient to determine the number and condition of associated resources that exist or may have existed, except, of course, for landmarks. The inventory should be expanded and the documentary data base should be brought to bear on the development of a sample inventory.

Data Gaps

- * Photo-documentation of the construction of the "Hanging Flume."
- * Physical remains of earliest Grand Valley irrigation projects and objects.
- * Records of early irrigation/water project pioneers/contractors.

Future Needs

Inventory surveys of thematic physical resources are advisable. An expanded inventory should be developed with the aid of associated documentary resources.

Important Resources

Due to the significance of the theme in Western Colorado history, and until a comprehensive inventory, from which a representative resource sample can be drawn, is completed, all resources that exhibit a basic integrity should be considered important.

RESEARCH QUESTIONS

1. Can physical remains, in conjunction with documentary evidence, provide information as to construction techniques for early water projects and devices?
2. What technological/industrial processes related to the theme were developed in Western Colorado?

PHYSICAL CONDITION

Structures: Should be well maintained, and the architectural integrity should be such that an understanding of the building's function and operation is possible.

Technological expressions: Should be recognizable as to function, and should be clearly associated with the appropriate operational environment.

District: Must be clearly defineable as to boundaries and should be corroborated by documentary evidence.

REFERENCES

See the bibliographies of the basic regional references as well as B.S.Wynar (ed.), Colorado Bibliography (Libraries Unlimited, Inc. 1980). See Historical Documentation section.

Frederic J. Athearn. An Isolated Empire: A History of Northwest Colorado. Denver. Bureau of Land Management, 1982, 3rd edition.

Paul M. O'Rourke. Frontier in Transition: A History of Southwestern Colorado. Denver: Bureau of Land Management, 1980.

Steven F. Mehls. The Valley of Opportunity: A History of West-Central Colorado. Denver; Bureau of Land Management, 1982.

13. LOGGING AND THE LUMBER INDUSTRYNARRATIVE

The intensive development of mining and the concurrent growth of towns and railroads during the last three decades of the nineteenth century were dependent, to a large degree, on the availability of lumber. Mine shaft/cribbing timbers, railroad ties, lumber for building homes and business structures, trestles, water tanks, culverts, bridges and flumes were all vital to the process of permanent settlement in the Plateau Country. The demand for lumber, in fact, was so strong, that logging interests prevailed even after the creation of the national forests and the passage of other conservation legislation.

In early 1895, three entrepreneurs, Edgar Biggs, C.D. McPhee and J.J. McGinty of the New Mexico Lumber Company incorporated the Rio Grande and Pagosa Springs Railroad which they hoped to run from New Mexico to the timber regions near Pagosa Springs. By late 1896, the line reached the Colorado border, and the Archuleta County towns of Chromo and Edith were established as lumber towns. In 1899, yet another businessman, one A.T. Sullenberger, incorporated both the Rio Grand Pagosa and Northern Railroad and the Pagosa Lumber Company. The latter enterprise quickly came to dominate the lumber industry in the region; two mills were constructed, one at Pagosa Junction and another at Dyke. In its quest for more timber, the Pagosa Lumber Company, in 1905, built a railroad spur into the timbered hills north of Pagosa Springs. Having depleted the timber resources of the San Juan River region, the Pagosa Lumber Company ceased to operate in 1916. Two years earlier, the New Mexico Lumber Company was forced out of business for the same reason.

Edgar Biggs, however, heartened by the extension of the Rio Grande Southern into the LaPlata and San Miguel Mountain ranges in 1891, bought cutting rights to huge stands of timber north of Dolores. McPhee and McGinnity took over the New Mexico Lumber Company, and by 1913, they had obtained extensive rights to cut timber in the Dolores region. In mid-1924, the logging town of McPhee was laid out four miles north of Dolores, and railroad spurs had been extended into regional timber stands. But fires and the Depression hit the industry hard, and by 1933, the mill at McPhee handled its last log. A few foundations remain.

CHRONOLOGY

- 1870-1933 Era of the timber industry in the Plateau Country
- 1895 The Rio Grande and Pagosa Springs Railroad incorporated
- 1899 The Rio Grande Pagosa and Northern Railroad incorporated
- 1986 Logging towns of Edith and Chromo built
- 1916 The Pagosa Lumber Company ceases operations due to depleted timber resources
- 1924 McPhee established
- 1933 McPhee sawmill ceased operations

LOCATION

Cultural resources associated with timbering operations in the Plateau County can be found throughout the region, especially in proximity to mining, railroads, and settlements. See the map for location of major timbering operations.

CULTURAL RESOURCE TYPES

Buildings include: Houses and public/company buildings in logging towns (Edith, McPhee, Chromo, Pagosa Springs, Sawpit); structures include: Sawmills, planing mills and appurtenant structures, incinerators.

Sites include: Sites of logging towns and mills, logging camps, lumber yards, wagon roads, town cemeteries; objects include: Railroads, timber cars, skids, sleds and other machinery.

Districts include: Timber/logging districts. Additional sites/districts include company towns.

THE QUANTITY AND QUALITY OF EXISTING DATA

Historical Documentation

The logging industry has not inspired much historical research. Rather, researchers must consult county or local histories to piece together what information is available. Paul O'Rourke's Frontier in Transition... deals with the timber theme in his chapter IX; see also Gordon Chappel's Logging Along the Denver and Rio Grande, as well as the records, where available, of major lumber operations. Because logging was essential to the mining industry and railroads, reference sources associated with these themes, as well as records of the mining and rail companies, may be useful. See also U.S. Forest Service reports such as The Ouray Mountains of the Uncompahgre National Forest (1919) and History of the Routt National Forest, 1905-1972. Also, some studies and records of the local conservation movement in Colorado are useful, such as McCarthy's Hour of Trial. County tax and land records are reliable sources

and the manuscript collections in Norlin Library at the University of Colorado, The Colorado Historical Society, the Denver Public Library, and the State Archives all have documents which might be useful. The HABS-HAER report on the Dolores River Project has an historic archaeological report on the town of McPhee.

Number/Conditions

The data are insufficient to determine the number and condition of associated sites which exist or may have existed. Because of the portable and self destructive nature of many of the resources associated with this theme, large numbers of cultural items were not always left to mark the industries presence in the region.

Data Gaps

Other than the foundation at McPhee, physical remains of early timber/lumber operations.

Records of early timber/lumber operations.

Future Needs

Archaeological surveys of abandoned logging towns, as well as a comprehensive material resource industry inventory are required, if a resource sample is to be developed. Resource inventories should be accomplished in conjunction with a review of the documentary evidence.

Because logging was and is an important industry, and because it has been frequently ignored by history, this would appear to be a priority matter.

Important Sources

Due to the significance of the theme in Western Colorado history, and until a comprehensive inventory, from which a representative resource sample can be drawn, is completed, all resources which exhibit a basic integrity should be considered important.

RESEARCH QUESTIONS

1. What can material remains tell researchers about the social and economic lives of logging towns such as McPhee and Sawpit?
2. What industrial processes/techniques relative to the industry were developed in the Plateau region?
3. What information can resources provide as to the interrelationships between miners and loggers?

PHYSICAL CONDITION

Structures: Should be well maintained, and the architectural integrity should be such that an understanding of the buildings' function and operation is possible.

Technological expressions: Should be recognizable as to function, and should be clearly associated with the appropriate operational environment.

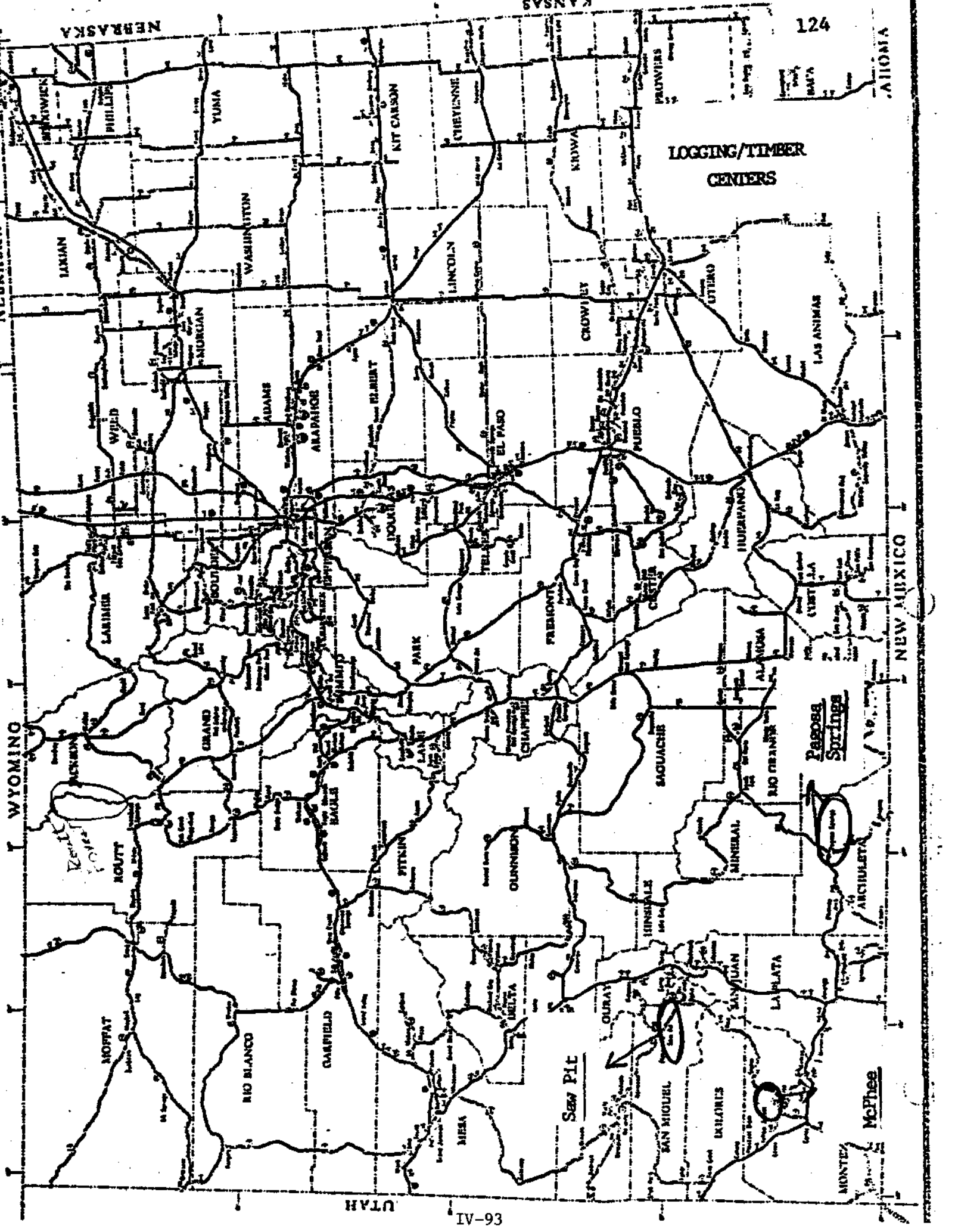
Districts: Must be clearly defineable as to boundaries, and should be corroborated by documentary evidence.

Railroad spurs and logging trails: Should be clearly discernable;
townsites: Should give a clear indication of spatial arrangements vis-a-vis houses and public/company buildings.

REFERENCES

See the bibliographies of the basic regional references, as well as B.S. Wynar (ed.), Colorado Bibliography, (libraries Unlimited, Inc. 1980).
See HISTORICAL DOCUMENTATION section.

Paul M. O'Rourke. Frontier in Transition: A History of Southwestern Colorado. Denver: Bureau of Land Management, 1980



14. RECREATION, TOURISM, AND THE DEVELOPMENT OF HIGHWAYSNARRATIVE

Tourism in the Plateau Country actually began as soon as explorers and early miners and traders perceived the economic potential and immense natural beauty of the region. Skiing (called "snowshoeing" and often a necessary mode of transportation in very deep snow) and outdoor recreation were among the earliest forms of amusement in the region, and more than one mining town turned to skiing for income after the mines ceased operations. In Northwestern Colorado, skiing clubs were organized by 1921; other Plateau towns held winter carnivals which frequently involved skiing. The sport enjoyed rapid growth, thanks in large part to a strong Scandinavian influence, although the real skiing boom came after World War II.

Hunting and fishing also provided necessary subsistence as well as an appealing form of outdoor recreation. By 1914, there were at least ten private and state fish hatcheries in Western Colorado, and the state Game and Fish Department was involved in restocking game birds and animals in the early twentieth century. Northwestern Colorado received considerable publicity for its fine hunting when Vice President Theodore Roosevelt bagged a mountain lion near Meeker in 1901. By the 1930s, the human pressure on Western Colorado's fishing and hunting resources had reached a disturbing level.

As early as the 1860s, explorers, journalists and artists recognized the recreational possibilities of the Plateau region for tourists, be they people of leisure, tubercular patients seeking the "fresh air" or merely adventurers. The railroads brought both tourists and national promotion to the region's recreation areas. During the 1890s, the Denver and Rio Grande Railroad made a concerted effort to attract the business of well-off tourists by promoting its "Around the Circle Tour" from Denver to Durango, Silverton, Ouray and back to Denver. The Durango to Silverton and return line still operates. Along the way, tourists could take advantage of the miraculous curative powers of the many natural hot springs enroute.

Early miners had recognized the soothing powers of the region's natural hot water springs; the Ute Indians had visited the springs for centuries to take advantage of their therapeutic and medicinal values. With railroad service to the pool, and a fabulous Victorian hotel, Glenwood Springs became a famous "spa," attracting visitors from around the nation. Before World War I, the town found it necessary to promote other recreational possibilities as well--resorts, outfitting for sportsmen and the like-- but the hot springs remained a leading tourist attraction. Pagosa Springs, although also blessed with one of the largest hot springs in the state, faced the problems of isolation and poor promotion, and never achieved Glenwood's prominence as a

"spa" community. The hot springs at Ouray flourished until the mining activity declined, but revived in the 1930s and 1940s. Other spas existed at Trimble Springs, north of Durango; and the Lopa hot springs, between Ridgeway and Ouray..

At a time when mining was declining and agriculture was suffering from the same problems which plagued the rest of the nation in the early twentieth century, tourism seemed to be a potentially profitable alternative to more traditional sources of revenue. A bill establishing Mesa Verde as a national park was signed in 1906. Dinosaur National Monument was created in 1915 and expanded to include the Green and Yampa Canyons in 1938. In 1933, the Black Canyon of the Gunnison National Park was created, followed by the Colorado National Monument in 1911 and Hovenweep National Monument in 1923.

These developments, of course, coincided with the enormous popularity of the automobile, in the Plateau Country. This, in turn, led to the establishment of the State Highway Commission in 1910. A state Highway Department was created in 1917 in response to the federal government's "Good Road Bill" of 1916, which provided matching funds for the construction of a national highway system. A state highway system gradually developed, and, with the increasing popularity of the automobile, road building had a life-or-death impact on Plateau communities.

Cortez, for example, in Montezuma County, grew slowly until its roads were improved; not until 1923 did the county have its first gravel road. Once improvements came, Cortez prospered, due in large measure to its proximity to Mesa Verde. Dove Creek, in Dolores County, virtually owed its growth to the construction of a road from Cortez. In Northwestern Colorado, roads were extended into the Yampa Valley, and new roads were built from Wyoming south. Another highway was constructed from Meeker to Rangely and into Utah, and U.S. 40 crossed the entire region. But, as before, and despite some road building and the benefits provided thereby, Northwestern Colorado remained an isolated area by 1940, and the impact of highways, like the railroads, was limited.

Finally, considerable recreation centered on local/regional products or traditions. Grand Junction and Palisade have their "Peach Days" and "Iowa Days"..Iowans formed a significant element of the Grand Valley's pioneering population. Glenwood Springs celebrated its Strawberry Day, Durango hosted the Colorado-New Mexico Fair, while Montrose had its Western Slope Fair.

CHRONOLOGY

- | | |
|------|---|
| 1859 | - Captain J. N. Macomb's official report predicts fame for the hot springs at Pagosa Springs. |
| 1906 | - Creation of Mesa Verde National Park. |
| 1910 | - State Highway Commission established. |
| 1911 | - Creation of Colorado National Monument. |

- 1915 - Creation of Dinosaur National Monument.
- 1917 - State Highway Department established.
- 1923 - Creation of Hovenweep National Monument.
- 1933 - Creation of the Black Canyon of the Gunnison National Monument.

LOCATION

Tourism and recreational activities occurred throughout the Plateau region. See map for specific districts and sites.

CULTURAL RESOURCE TYPES

Buildings include: Tourist camps and courts, resort hotels and cabins (Glenwood Springs and Grand Lake for example), hunter's/fishermen's cabins, lodges, bath houses, and ski lodges.

Structures include: Early service stations (automobile), highway maintenance shops, ski lifts, hot springs pools/baths (outdoor and indoor), hunter's/fishermen's shelters.

Sites include: Roads and roadbeds (such as the "Rainbow Route"), municipal parks associated with hot springs and fair grounds.

Objects include: Railroads and machinery associated with road building.

Districts include: Hunting and fishing areas and tourist towns/districts.

THE QUANTITY AND QUALITY OF EXISTING DATA

Basic sources include: Robert B. Murray, Colorado Recreation Guide (1975); such promotional literature as the Denver and Rio Grande's (1917) Outdoor Life in the Rockies...; the Colorado Legislative Counties' Parks and Recreation Reports to the General Assembly and numerous reports and promotional literature on regional parks and monuments (See B.Wynar, ed. Colorado Bibliography, pp. 419-ff.)

There are several publications relative to hot springs, including E.A. Thayer's Glenwood Springs... (1894) and Lena M. Urquhart's 1970 Study, Glenwood Springs: Spa in the Mountains. Sandra Dallas' No More Than Five in a Bed: Colorado Hotels in the Old Days is well-illustrated and useful. Fishing is treated in such publications as T.E. Fisher's Trouting in Colorado, a 1911 promotional piece published by the Colorado and Southern Railway, and in numerous publications of the Colorado Department of Game, Fish, and Parks. Colorado Bibliography includes a number of references to sources relative to hiking, camping, and mountaineering. Skiing is treated in William L. Henser's Tourism and Skiing in the San Juan Basin Area and Curtis W. Casewit's Skiing Colorado... In addition, local histories (Duane Smith's Rocky Mountain Boom Town... Durango and Richard L. and Suzanne Fetter, Telluride: From Pick to Powder, for example) are useful. Highways and automobile transportation are discussed in such publications as the State Highway Commission's Highways of Colo-

rado: Official Guide and Tour Book (1912) and John P. Dod's One Thousand Miles Through Colorado, published in the same year.

Local and state historical societies, museums and major state documentary repositories (Denver Public Library, Western History Collection, for example), are replete with photographs and documentary resources of early automobiling and various forms of tourism and recreation.

In addition, there have been numerous cultural resource management surveys related to aspects of the theme. These include; A Survey of Skiing Among the Adult Population of Colorado (Field Research Corporation, 1978); various reports from the Colorado Department of Highway's Survey and Plans Division; Page Dabney's An Impact Study: The Colorado Ski Industry... (1974), as well as numerous state and federal agency surveys on parks and recreation. Some of these are resource-oriented and provide historical perspective.

Finally, see David Lavender's The Rockies and Colorado Division of Commerce and Development reports for views and information relating to the theme.

Number/ Condition

Aside from the obvious landmarks (Hotel Colorado in Glenwood Springs, Radium Hot Springs in Ouray and national parks and monuments, for example) the overall data for the theme is still insufficient (and insufficiently synthesized) to determine the number and condition of sites that exist or may have existed. The theme is a broad one and despite intense popular and scholarly interest the resource data base is inadequate.

Data Gaps

* Physical remains of early tourist camps and courts, ski facilities, dude ranches, and lodges.

Future Needs

A comprehensive thematic resource inventory is required if a representative sample is to be determined. While it will not be necessary to survey some of the more permanent and apparent material expressions of this theme, others (early service stations, abandoned hot springs pools and bath houses, municipal parks, for example) do require attention. Owing, however, to the large number of recorded/known sites, this may not be an immediate priority, although some sites are undoubtedly endangered.

Important Resources

Other than the landmark resources, the data base is insufficient to determine the number of important resources for all aspects of this theme. Until a comprehensive inventory is developed, and because recreation and tourism has been and is a vital, dynamic aspect of the region's history, any resource that exhibits enough integrity to allow identification should be considered important.

RESEARCH QUESTIONS

1. What resources remain to indicate the Eastern/Midwestern and/or European influence in the development of recreation and tourism in the region?
2. What information do material remains provide as to the social and economic activities/organization of Plateau "tourist" towns?
3. What was the impact of the automobile and railroads on tourism in the traditionally isolated Western Slope? How does material evidence substantiate this role?

PHYSICAL CONDITION

Structures: Should be well maintained, and the architectural integrity should be such that an understanding of the building's function and operation is possible.

Technological expressions: Should be recognizable as to function, and should be clearly associated with the appropriate operational environment.

Districts: Must be clearly defineable as to boundaries, and should be corroborated by documentary evidence.

REFERENCES

See the bibliographies of the basic regional references as well as B.S. Wynar (ed.) Colorado Bibliography (Libraries Unlimited, Inc. 1980). See Historical Documentation section.



PLATEAU COUNTRY

15. COMMUNAL SETTLEMENTS AND COLONIES

NARRATIVE

The Plateau Country attracted a number of individuals who perceived the economic potential of the region in communal terms. The Webber community, for example, just north of Mancos, was settled exclusively by members of the Church of the Latter Day Saints (Mormon). These emigrants from Utah established the community in 1882. They prospered, and the settlement still survives.

Another communal settlement, this one located in the San Miguel River Valley, was an outgrowth of the Colorado Cooperative Company, incorporated in 1894. The aim of the Denver organizers was to develop an utopian, cooperative community. They first settled about five miles north of Naturita. When they outgrew this location, they established the town of Pinon in 1896 near the junction of the San Miguel River and Cottonwood Creek. They built a sawmill, and constructed, in 1903, the "Cottonwood Trestle," at that time the world's longest and highest irrigation flume. In the following year, having completed their irrigation system, which brought water to Tabeguache Park, the colony moved back to their original townsite in the Park. The new town was named Nucla, and survives to this day.

A third communal experiment was a dry land farming venture created by Volney T. Hoggatt, who was a Colorado Land Board Commissioner and was associated with F. Bonfils. He established the Great Divide Colony thirty miles northwest of Craig in 1916. A train-load of immigrants arrived that year, and the "homesteaders" fenced in more than 100,000 acres of grazing land. By 1917 the colony was in full operation, but a lack of water brought only marginal success to the colony, and it ceased to exist as such after the mid-1930s.

CHRONOLOGY

1881	Webber community established.
1894	The Colorado Cooperative Company incorporated.
1896	Town of Pinon established.
1904	Town of Nucla established.
1915	The Great Divide Homestead Colony established.

LOCATION

See map for locations of Plateau communal settlements.

CULTURAL RESOURCES TYPES

Buildings: Houses, barns, shops, public and communal buildings, churches, and agricultural outbuildings, including privies at communal townsites.

Structures include: Townsites, farmstead/homestead sites, irrigation networks/systems, town cemeteries and orchard sites.

Objects include: Sawmill machinery, irrigation equipment and fences/fencelines.

Districts include: Communal neighborhoods main streets. and communal districts within towns.

THE QUANTITY AND QUALITY OF EXISTING DATA

Historical Documentation

For the Colorado Cooperative Company, see Paul O'Rourke's Frontier in Transition..., Ellen Peterson, "Origins of the Town of Nucla," Colorado Magazine (October 1949), and Duane Mercer, "The Colorado Cooperative Company, 1894-1904" Colorado Magazine (Fall 1967).

For the Great Divide Colony, see Athearn's An Isolated Empire... and John Rolfe Burroughs' Where the Old West Stayed Young.

The literature on this theme is sparse.

Number/Condition

The data is insufficient to determine the number and condition of cultural resources associated with this theme.

Data Gaps

- * Records relative to the Colorado Cooperative Company.
- * Records indicating the number of settlers who hoined the Great Divide Homestead Colony.

Future Needs

A comprehensive inventory of resources/sites associated with the theme would be useful for the interpretation of this aspect of Western Colorado's history, but it should probably not be a high priority item due to the minimal likelihood of locating credible resources. Documentary searches/research may prove more fruitful. The Webber community is undoubtedly well-documented by the LDS church.

Important Resources

The data are insufficient to develop an inventory of representative samples.

RESEARCH QUESTIONS

1. Can material remains give some indication of the size and organization of the Great Divide Colony and Pinon during their heyday?
2. Does material evidence provide information as to specialized agricultural techniques employed in the theme communities?
3. Does the present town of Nucla include material resources or spatial arrangements that reflect the influence of the original colonizers?

PHYSICAL CONDITION

Structures: Should possess sufficient integrity to allow dating and identification of function.

Townsites and Irrigation Structures: Should be clearly discernable and corroborated by documentary evidence.

REFERENCES

See the bibliographies of the basic regional references. See Historical Documentation section.

Paul M. O'Rourke. Frontier in Transition: A History of Southwestern Colorado. Denver, Bureau of Land Management, 1980.

Frederic J. Athearn. An Isolated Empire: A History of Northwest Colorado. Denver, Bureau of Land Management, 1982, 3rd edition.

John Rolf Burroughs. Where the Old West Stayed Young. New York: Morrow, 1962.

16. FEDERAL ACTIVITY IN THE PLATEAU COUNTRYNARRATIVE

As early as the 1890s, the federal government, mindful of the overuse and exploitation of the mineral, timber, and grassland resources of the Plateau Country, expanded its administration of the public lands to include conservation of natural resources. The White River Forest Reserve, for example, was created in 1891, the first lands set aside under the General Revision Act of 1891. The Battlement Mesa Forest Reserve was set aside in the following year. And, despite opposition from those who did not welcome conservation measures that restricted access to forest reserves, the Gunnison, Cochetopa, San Juan, Montezuma, and Uncompahgre forest reserves were established in 1905. Mesa Verde National Park was established in 1906; Colorado National Monument was created five years later.

The problem of overgrazing on unappropriated public lands was addressed with the Taylor Grazing Act of 1934. Grazing districts were established, and grazing was authorized by permit. Eventually, cattlemen came to realize that such a step was necessary if there was to be any range land at all for their livestock. After 1946, grazing supervision was handled by the newly created Bureau of Land Management. Western Colorado's water, timber, and grassland resources were not infinite; gradually, Plateau Coloradans recognized this fact and accepted federal land regulations and conservation policies.

The reclamation of the arid portions of the Plateau Country provided another example of federal intervention in land use policy. Although a huge amount of land was brought under irrigation on the Western Slope between 1880 and 1890, there was, by 1900, a critical lack of water for additional irrigation projects. The Gunnison Tunnel was built under the direction of the Bureau of Reclamation. The Bureau also assisted with the construction of the Grand Valley Ditch.

Federal activity in the Plateau Country was extensive during the New Deal. The Public Works Administration, for example, was responsible for modernizing the water systems of Ouray, Montrose, and Grand Junction. In addition, La Plata County received PWA assistance for the construction of Lemon and Vallecito reservoirs, the Ute Indian Reservation received help for road building and other projects and Glenwood Springs received funds to update its hospital. PWA funds also funded repair and stabilization efforts at Mesa Verde and the Black Canyon. The Civilian Conservation Corps built camps throughout the region, and the Rural Electrification Administration brought electricity to many rural areas.

Other than the government explorers who traversed the Plateau Country prior to settlement, military activity in the region was limited to forays against the Utes and protecting settlers from them. Fort Lewis, near Hesperus, was established as a military post in 1880, and was garrisoned

with troops from moved from Fort Garland to protect early white settlers in the area. After the removal of the Utes to reservations, the complex became an Indian school and, later, an agricultural college.

CHRONOLOGY

- 1891 - Creation of White River Forest Reserve.
- 1892 - Creation of Battlement Mesa Forest Reserve.
- 1902 - Reclamation Act.
- 1905 - Establishment of Gunnison, Cochetopa, San Juan, Montezuma, and Uncompahgre Forest Reserves, and Routt National Forest.
- 1906 - Antiquities Act passed, Mesa Verde National Park established.
- 1911 - Creation of Colorado National Monument.
- 1915 - Dinosaur National Monument established.
- 1923 - Hovenweep National Monument established.
- 1933 - Black Canyon of the Gunnison National Monument established.
- 1933-1934 - PWA, CCC, NYA, AAA programs implemented in Western Colorado.
- 1934 - Taylor Grazing Act.
- 1946 - Bureau of Land Management created.

LOCATION

Consult historic and current Forest Service/BLM maps for relevant Plateau district and forest locations.

CULTURAL RESOURCE TYPES

Buildings include: Federally funded (PWA, CCC) buildings and Forest Service buildings.

Structures include: Bureau of Reclamation and PWA funded tunnels, canals, ditches, municipal water systems, dams and reservoirs, water diversion and storage projects, and electric transmission facilities.

Sites include: CCC camps, National Forest parks/camps, trails and military posts.

Objects include: Markers at CCC camps, Forest Service trail markers.

Districts include: Forest reserves and grazing districts.

THE QUANTITY AND QUALITY OF EXISTING DATA

Historical Documentation

Mehl's Valley of Opportunity... and O'Rourke's Frontier in Transition... include excellent chapters on the theme, and Athearn's An Isolated Empire... contains useful information as well. Additional basic references include E. Louise Pepper's The Closing of the Public Domain; Wesley Calef, Private Grazing and Public Lands; G. Michael McCarthy, Hour of Trial: The Conservation Movement in Colorado; James E. Wright, The Politics of Populism: Dissent in Colorado; Len Shoemaker, Saga of a Forest Ranger... and a Historical Account of the U.S. Forest Service in Colorado; Elmo R. Richardson, The Politics of Conservation: Crusades and Controversies, 1897-1913; Al Look, John Otto and the Colorado National Monument; George W. James, Reclaiming the Arid West: The Story of the U.S. Reclamation Service; Jack Hurley Smith, The Economic Impact of the Development of the Upper Colorado River Basin in Colorado (M.A. thesis, University of Colorado, 1949); L.A. Gleyre, History of the Civilian Conservation Corps in Colorado... Grand Junction District; That the Work of Young America May be Recorded; and U.S. Atomic Energy Commission (Grand Junction Operations Office, Background Information... a Description of the Physical Characteristics and Functions of the U.S. Atomic Energy Commission's Grand Junction's Operations Office (1959).

See also, U.S. Bureau of Reclamation, The Colorado River... a Comprehensive Report on the Development of the Water Resources of the Colorado River... (1946), as well as numerous official reports and congressional hearings on water projects (listed in Wynar's Colorado Bibliography. See also History of the Routt National Forest, 1905-1972, Walter Voss, Colorado and Forest Conservation (M.A. thesis, University of Colorado 1931) and U.S. Forest Service, National Forests of Colorado (as well as separate U.S.F.S. publications on each forest). For the military aspect, see Donald T. Brandes, Military Posts of Colorado.

State and local historical collections include extensive documentary resources relative to federal projects. Publications resulting from the Colorado Writer's Project, federally-funded State Historical Society interviews and similar sources are valuable.

Because much of the land in the Plateau region lies in the administration of the federal government, either through the Bureau of Land Management, the U.S. Forest Service, or the National Park Service, the hundreds of surveys emanating from these offices (Resource Management Plans, Environmental Impact Statements, and the like) are relevant, in many cases, to the cultural resources associated with the theme. These publications, however, are not theme-oriented resource histories.

In addition, Main Street surveys and the Four Corners Regional Commission Communities report are useful for data on such resources as federal buildings and other federally funded projects. City surveys, such as Grand Junction's Downtown Development Authority resource survey, are helpful as well.

Number/Condition

Although many associated sites are recorded in federal publications and on U.S.F.S., U.S.G.S. and BLM maps, the absence of a comprehensive, thematic resource inventory makes it difficult to determine the number and condition of associated historic resources.

Data Gaps

- * Physical evidence of Depression-era federal work programs in the region.

Future Needs

A comprehensive theme-oriented resource inventory is required. Although the data exists, the information must be synthesized into a useable, interpretive resource history/inventory.

Important Resources

Until a comprehensive inventory is developed and because federal activity in this region has been extensive over time, sites/structures that can be identified should be considered significant. A representative sample can be assessed when the number and condition of existing resources is tabulated.

RESEARCH QUESTIONS

1. Does the material evidence indicate local architectural and/or technological influences/specializations in federally funded/sponsored structures/projects?
2. What was the social and economic impact of the heavy federal funding and planning in the Plateau region? How do resources indicate this impact?

PHYSICAL CONDITION

Structures: Should be well maintained, and the architectural integrity should be such that an understanding of the building's function and operation is possible.

Technological expressions: Should be recognizable as to function, and should be clearly associated with the appropriate operation environment.

Districts: Must be clearly defineable as to boundaries and should be corroborated by documentary evidence. All appropriate resources must be identifiable as federally-sponsored projects/buildings and/or sites.

REFERENCES

See the bibliographies of the basic regional references as well as B.S.Wynar (ed.), Colorado Bibliography (Libraries Unlimited, Inc. 1980). See Historical Documentation section.

Steven F. Mehls. The Valley of Opportunity: A History of West-Central Colorado. Denver: Bureau of Land Management, 1982.

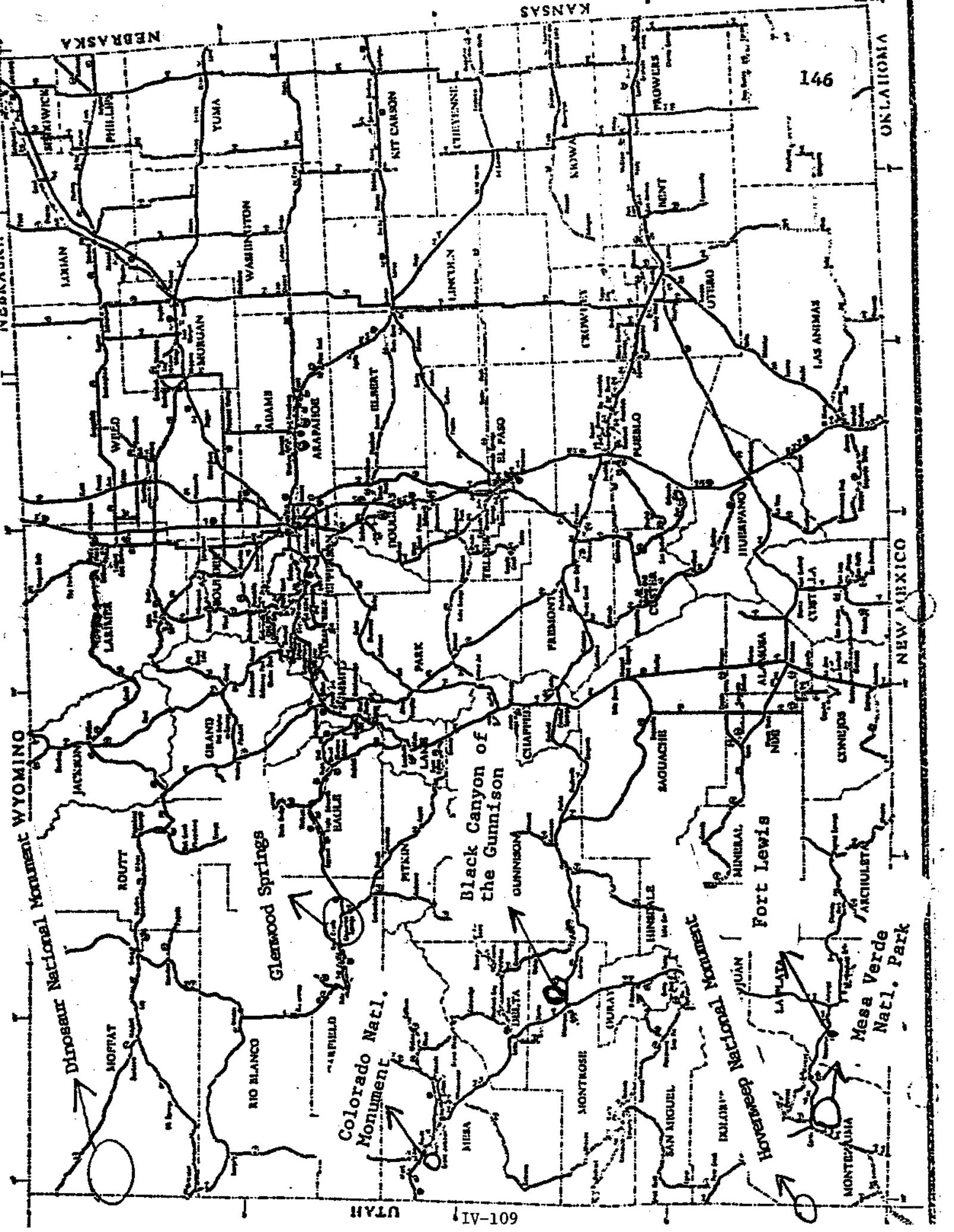
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Frederic J. Athearn. An Isolated Empire: A History of Northwest Colorado. Denver. Bureau of Land Management, 1982. 3rd edition.

E. Louise Pepper. The Closing of the Public Domain. Stanford: Stanford University Press, 1951.

Wesley Calef. Private Grazing and Public Land. Chicago: University of Chicago Press, 1960.

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Black Canyon of the Gunnison

Colorado Natl. Monument

Glenwood Springs

Fort Lewis

Mesa Verde Natl. Park

17. SOCIO-CULTURAL DEVELOPMENTSNARRATIVE

Other than the Ute people, ethnic enclaves in the Colorado Plateau Country were not as prevalent as they were in other regions of the state. The ethnic dimension and the cultural manifestations thereof, however, were there. The Italian influence in the mining town of Ouray, for example, was strong, and descendants of the early miners still reside in that community. Other examples include the significant contingent of Cornish families in Ouray; the Episcopal church in that town is a good example of the Cornish stone mason's art. Cemeteries in San Juan mining districts indicate a significant number of Scotch-Irish individuals as well. Other ethnic groups which have enacted a significant role in the history of the region include the Basques, who excelled as sheepherders, and the Mexican-Americans and alien Mexican migrant workers who play a vital part in the fruit harvests in Mesa and Delta counties. The Scandanavian influence was also pronounced in many mountain mining camps and towns and also in Routt County and along the Little Snake River in Northwest Colorado. The Mormon community at Webber, several largely Hispanic communities in Archuleta and southern La Plata Counties and, of course, the two Ute reservation enclaves centered in Towaoc and Ignacio should be included in any ethnic study of the Plateau region.

Cultural offerings and entertainment were eminently apparent in most "permanent" mining towns and in many camps as well. The well-known communities--Ouray, Silverton, Telluride--boasted opera houses as did other early Western Slope towns. Grand Junction, for example, which was not a mining community, had its Park Opera House which, during its late nineteenth and early twentieth century career, hosted a variety of vaudeville, drama, melodrama, classical music and light opera. Fraternal organizations were much in evidence as well. The elaborate B.P.O.E. (Elks) building in Ouray, for example, stands as a testament to the strength and permanence of that order.

Entertainment on a lower, or at least different, level abounded, particularly in mining and ranching communities. Saloons and/or billiard rooms, be they tents or elaborate Victorian structures, were standard fixtures in Plateau pioneer communities, and dance halls were prominent in rural ranching areas as well as in mining towns. Red light districts, such as the infamous "cribs" of Telluride, flourished in ranching and mining districts.

Higher education, while not as pervasive as it might be in more urbanized regions, is a vital theme in the Plateau Country. Colorado State Normal School, later renamed Western State College, was established in Gunnison in 1911, and, in later years, the nearby deserted mining town of Gothic was utilized as the Rocky Mountain Biological Laboratory. Mesa College, in Grand Junction, became a state junior college in the 1930s; it had previously been a private institution. Fort Lewis, the site of the former military post, became an Indian school, a high school and, finally, Fort Lewis Agricultural

and Mechanical College. The Grand Junction Indian School, also known as Teller Institute, operated from 1886 until it became the State Home and Training School in 1911.

CHRONOLOGY

1886-1911	Teller Institute in operation.
1910	Fort Lewis College established.
1911	Colorado State Normal School established.
1925	Mesa Junior College established.

CULTURAL RESOURCE TYPES

Buildings include: school and college buildings, sheepherders/migrant labor housing, opera houses, saloons, billiard halls, dining rooms/cafes/restaurants, grange and dance halls, bandstands, fraternal buildings, cribs and bordellos.

Sites include: cemeteries (as clues to ethnic diversity), town parks, sheep campsites and campuses.

Objects include: sheepherder's wagons and town and campus statuary.

Districts include: red light districts, ethnic neighborhoods, main streets (as entertainment centers).

THE QUANTITY AND QUALITY OF EXISTING DATA

Historical Documentation

Robert Athearn's The Coloradans is a leading social history of the state, and local histories such as Smith's Durango and Crum's Ouray studies, as well as C. Eric Stoehr's Bonanza Victorian: Architecture and Society in Colorado Mining Towns offer information on social life and appurtenant buildings and districts. Such volumes also provide what scant information there is on the immigrant influence in the region. (See The Colorado Magazine indexes for articles regarding the ethnic dimension.) Hispanic influence has been well documented: see, for example, Jane M. Talbot and Gilbert Cruz, A Comprehensive Chicano Bibliography and Matt S. Meier and Feliciano Rivera, The Chicanos: A History of Mexican Americans. Photographic collections of both state and local historical societies provide extensive information; major research institutions also have considerable documentary resources relating to the theme. The ethnic experience in the Plateau region has not been thoroughly researched; this aspect of Western Colorado's history still awaits an author. For the higher education aspect of the theme, see the Teller Institute collection at the Museum of Western Colorado in Grand Junction, and various regional college publications.

Number/Condition

The data, although probably more complete than that for many other Plateau themes in terms of recorded sites and structures, requires refinement into a comprehensive resource inventory in order to determine the number and condition of associated sites and structures which exist or may have existed. Probably because of the mobile native and illegal or socially unacceptable nature of the activities associated with this theme, documentary evidence and cultural resources will never be found to reach an absolute number. The present condition varies from destroyed to still in use or preserved in museums.

Data Gaps

Material evidence as to the location and organization of ethnic neighborhoods in early Plateau towns.

Future Needs

Future surveys, due to the large number of recorded sites, are not a high priority matter. An expanded data base relative to the ethnic experience in Plateau regional history, however, should be accomplished through material and documentary research. Reevaluation and possibly rerecording of some sites with consideration of this theme, especially to include women and minorities, should be undertaken. In addition, the Main Street program of surveys should be continued and expanded to be more comprehensive and complete in their consideration of social themes in the Plateau region.

Important Resources

These resources that substantiate, document or offer interpretations of the role of ethnic groups, racial minorities, or women in the historic development of the Colorado Plateau region should be considered important. Cultural resources that help clarify social mobility and/or stratification patterns in the region are important also. Beyond those two rather broad categories, many resources of importance may also have associations to other themes as well, and this should be considered when evaluating resources. The resources associated with this theme may also have local significance, and this should be considered in assessing importance.

RESEARCH QUESTIONS

1. What evidence can material resources provide regarding the social organization and spatial arrangements of ethnic neighborhoods in early Plateau towns?
2. What specific material evidence is there to indicate European influence in the development of Plateau towns and cities?

PHYSICAL CONDITION

Structures: should be well maintained, and the architectural integrity should be such that an understanding of the building's function and operation is possible.

Districts, neighborhoods and commercial-entertainment blocks: should be clearly discernable and corroborated where appropriate with the documentary/photographic evidence.

REFERENCES

See the bibliographies of the basic regional references as well as Wynar's Colorado Bibliography. See HISTORICAL DOCUMENTATION section.

Robert G. Athearn. The Coloradans. Albuquerque: University of New Mexico Press, 1976.

C. Eric Stoehr. Bonanza Victorian: Architecture and Society in Colorado Mining Towns. Albuquerque: University of New Mexico Press, 1975.