

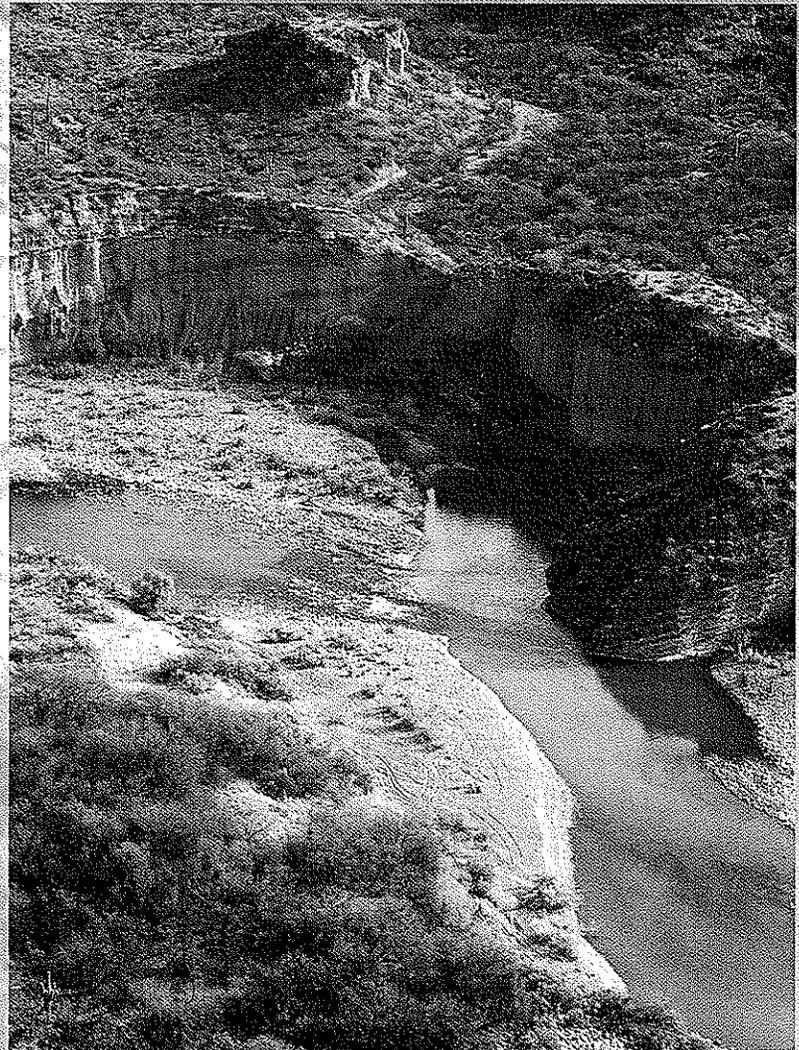
120

vanishing river

Landscapes and Lives
of the Lower Verde Valley

The Lower Verde Archaeological Project

edited by Stephanie M. Whittlesey,
Richard Ciolek-Torrello,
and Jeffrey H. Altschul



Vanishing River

Landscapes and Lives of the Lower Verde Valley

THE LOWER VERDE ARCHAEOLOGICAL PROJECT
Overview, Synthesis, and Conclusions

edited by Stephanie M. Whittlesey, Richard Ciolek-Torrello, and Jeffrey H. Altschul

Water Rights Adjudication Team
Civil Division
Attorney General's Office



SRI Press • Tucson, Arizona • 1997

Euroamerican History, 1540 to the Present

Stephanie M. Whittlesey, Teresita Majewski, John R. Welch,
Matthew C. Bischoff, and Richard Ciolek-Torrello

This chapter discusses processes and events that have shaped the history and use of central Arizona since A.D. 1540, the year in which Coronado's expedition brought southwestern prehistory to a close. We take a chronological and thematic approach, in which specific dates and incidents are considered as milestones of broader, regional-scale processes. The focus is on land-use patterns and what these patterns can tell us about environmental and social variability: trends in economic activities and the political, cultural, and environmental factors that appear to have stimulated or discouraged certain uses of the land. Because Chapters 5, 6, and 7 focus on Yavapai and Apache culture histories and adaptations of indigenous populations to central Arizona, this chapter primarily concerns Euroamerican history. Because the interaction of Euroamericans with Native Americans is an important part of Arizona history, the chapter includes profiles of Yavapai and Apache reservations by Teresita Majewski, along with discussions of patterns in Euroamerican and Native American relationships and their impacts.

The seventeenth-century expansion of New Spain's northwestern frontier had minimal impact on central Arizona north of the Gila River. As a result, there are few documentary references dating before about 1860, a period representing virtually the entire span of Spanish and Mexican possession of the area. For compelling reasons that will emerge in this chapter, Euroamerican settlement of central Arizona was sparse, and was particularly so in the lower Verde valley. Stone and Ayres (1984:36) observe that "the area was essentially devoid of significant non-Indian cultural activity before 1900," a statement echoed by Douglas et al. (1994:181) who write, "The Verde Valley in the vicinity of Horseshoe Dam can be described as an area of marginal historical development." Perhaps its most populous period was during the construction of Horseshoe and Bartlett Dams. More people, Indian and non-Indian alike, lived in

the temporary camps that supported dam construction—700 people at Bartlett Dam alone—than during any other time in history.

The lower Verde region was often peripheral to the major economic, social, and political developments that characterized Arizona history, and affected more by events unfolding in the administrative centers of Mexico, Washington, D.C., and Phoenix than any local policies and processes. Yet, the lower Verde region was not completely isolated, but was linked by various economic and political ties to the major centers of the state. The history of the lower Verde region, even more so than its prehistory, must be understood in the context of larger, regional processes. We view the specific events and processes of lower Verde history as examples of more encompassing trends.

Periods and Themes in Lower Verde Regional History

This review is structured by temporal periods and historical themes. We recognize four broad periods defined by shifts in political and administrative control (Table 8.1). Eight general land-use themes further subdivide each period (see Table 8.1). By comparison, Macnider and Effland (1989:10–15) divide history into four periods: (1) protohistoric (1400–1800), (2) early historical (1700–1860), (3) late historical (1860–1940), and (4) recent (after 1940). They also develop a number of thematic categories for Tonto National Forest as a whole. Because this review is temporal and thematic, we

Table 8.1. Periods in the Euroamerican History of the Lower Verde Region

Approximate Dates (A.D.)	Dominant Administration	Prevailing Land-Use Themes
1540–1848	Spanish, Mexican	exploration
1849–1874	federal (U.S) territorial (Arizona)	exploration native subjugation mining government
1875–1945	federal	homesteading agriculture hydraulic engineering government
1946–present	federal	recreation government

have chosen to review central Arizona north of the Phoenix Basin as a single entity, although Chapter 4 treats its history of research and archaeology by geographical area.

The exploration theme characterizes the initial three centuries of non-Indian use of the region north of the Gila River as well as the first period. That this theme dominated the documentary record so long reflects the tenuousness of Spanish, Mexican, and early American control over the study area, as well as the marginal nature of the region with regard to most of the primary forces driving frontier history.

The initial non-Indian use and settlement of central Arizona during the second period was constrained significantly by resistance from indigenous populations. The clash between Euroamerican and Native American cultures was inevitable, created by the fundamental differences between their world views (Martin 1978). As Americans expanded into the territories of indigenous people, they encroached into what they perceived to be unoccupied lands. The inescapable conflict eventually led to war and the need to create reservations (Zedeño et al. 1997).

The four themes that define the period initiated by the signing of the Treaty of Guadalupe Hidalgo in 1848 reflect the United States' attempts to assert control over the region, and America's interest in the area as a transportation corridor, place of settlement, and source of wealth. Once native peoples were confined to small portions of their former homelands, Americans turned to face the challenges posed by central Arizona's exacting landscape, and struggled to control its land and water. This period ends with the establishment of centralized reservations and the abandonment of military posts around 1874.

Newcomers' efforts to wrest a living out of a rugged and unforgiving country, and subsequent attempts to develop an effective land-management policy, are represented by the four themes defining the third period. A critical issue

concerns the efforts by land developers, agricultural interests, and government agencies to augment and safeguard the domestic and agricultural water supply for the ever-thirsty Phoenix Basin.

The recent history of central Arizona in general, and the lower Verde region in particular, differs fundamentally from the previous periods. Concern has shifted from its environmental potential to management of what has become predominantly a recreation area and primarily a land under National Forest management. The two themes dominating the final period reveal the contemporary use of the region as a recreation area for city dwellers, while underscoring the constraints on small-scale farming and ranching efforts.

The Period of Exploration, 1540–1848

The earliest documentary records pertaining to central Arizona were produced by Spanish expeditions. In a series of adventures that can be characterized as quests for glory, gold, and God, parties led by Coronado, Espejo, Farfán, and Oñate traversed areas north of the Gila River. In general, these explorations left little trace on either the central Arizona landscape or its people. The expeditions reconnoitered northern Arizona for the most part, and although Coronado crossed central Arizona en route to Cibola, his trail remains obscure. The region was largely a passage to elsewhere, and if any of these expeditions traveled through the lower Verde area, it was not reported. No unambiguous documentary references to places in the study area have been identified, and no indisputable material traces of Spanish explorers have been found in central Arizona. Almost from the beginning of recorded history, central Arizona and the lower Verde region were marginal, peripheral to the economic and population centers in southern Arizona, largely only a place in which to pause briefly.

Although several of his interpretations of documentary evidence remain controversial, Schroeder's (1974b:77–103) summary of Spanish exploration of central Arizona is useful, particularly in its attention to observations concerning the identities, locations, and lifeways of the indigenous peoples encountered by the explorers. Schroeder contends that Fray Marcos de Niza passed through Southeastern Yavapai territory on his way to Zuni in 1539, and that he led Coronado along a similar route the following spring (cf. Hammond and Rey 1928). Schroeder (1955) identifies the native people encountered by Niza as Yavapai, and the place of their encounter as Tonto Creek. Undreiner (1947) routes Niza through Tonto Basin and identifies the Tonto National Monument cliff dwellings as Chichilticale. Following Undreiner

(1947), Wood (1989:24) also maintains that the most probable location of Chichilticale is in Tonto Basin. He identifies the people encountered by the Spanish as Sobaipuri, not Yavapai. Wood suggests that many Classic period sites may eventually prove to date to the protohistoric or early historical period. Other reconstructions of the Coronado route place Chichilticale much farther south, in Eagle Pass between the Piñaleno and Santa Teresa Mountains (e.g., Bolton 1949:105–106). If the Bolton route to Cibola is followed, the Coronado expedition traveled across the present-day Fort Apache Indian Reservation. The Spanish chronicles referred to the region north of Chichilticale as *tierra despoblada*, an unpopulated land, and no indigenous populations were encountered. This certainly accords with archaeological evidence for abandonment of the central mountains in the late A.D. 1300s (Reid 1989). Whittlesey and Reid (1989) review the Coronado expedition route; they find little supporting evidence for the Bolton route, although it has generally been the accepted alternative (see Di Peso 1974; U.S. Department of the Interior 1991).

The route taken by Antonio de Espejo in his search for mineral prospects south and west of the Hopi country has prompted less controversy. In May 1583, after descending Beaver Creek from the east, the Espejo expedition probably was the first party of non-Indians to ascend the Verde River. Colton (1939b) much later borrowed the Spanish name for the river, *El Río de los Reyes* (River of the Kings), to label the Sinagua culture of the Verde valley. In her discussion of the route taken by Espejo, Bartlett (1942) suggests that the party followed a route from the Hopi villages through Winslow to Jerome (Figure 8.1). Byrkit (1988) labels this route the Palatkwapi trail, after the Hopi clan migration story (Courlander 1971; Waters 1963). The route began at First Mesa, then extended to the south-southwest past Comar Spring and Chandler Springs to Sunset Crossing on the Little Colorado River near modern Winslow. The trail turned to the west-southwest, ascending through Sunset Pass and Chavez Pass to Pine Springs and over a 7,000-foot crest. The trail then descended to the Verde valley by way of Stoneman Lake (Colton 1957) and Rattlesnake Canyon down to Beaverhead (Figure 8.2). A series of late-prehistoric pueblos marks this route. From the Verde River north to the Hopi mesas, they are Montezuma Well, Chavez Pass Pueblo (Nuvakwewtaqa), Homolovi, and Sibabi, near Comar Spring. Byrkit (1988:7) writes that “the route is remarkably level and free from obstruction,” with springs every 15–30 miles along the way. Byrkit’s account details the landmarks along the route and the account of Espejo’s expedition.

According to most historians (e.g., Hammond and Rey 1928), Espejo encountered a number of different groups of ranchería-dwelling, forager-farmers, who were probably Northeastern Yavapai. The party may have visited the ruins at what later became known as Montezuma Well. There they contacted groups that Schroeder renders from the Spanish as

“peaceful rustic people.” The Indians were working mines near present-day Jerome. Schroeder (1959:51) writes,

Obregon called these people Querechos. . . . He stated they wore crosses. . . . They went about naked and used copper and blue stones from the mines to paint blankets, houses, pottery and themselves.

Luxan, who accompanied Espejo, said these people lived in houses of Branches, that they wore crowns of painted sticks on their head and had baskets of mescal and pinyon nuts as well as a bread made from them. They also planted maize. . . . Espejo referred to these people as Tiburans or Seranos.

In 1598, Marcos Farfán de los Gados apparently followed Espejo’s route to Jerome (Byrkit 1988:13; see Figure 8.1) and encountered similar native populations. According to Schroeder (1959:52–53), near the headwaters of Dry Beaver Creek,

Farfán reached another group of Indians and he referred to the place as Ranchería de los Cruzados. . . . From here their chief led them . . . [to] another ranchería where the Indians had ore, mescal and venison. On November 24, seven leagues (league = 2.65 miles) further, they reached the mine in which vicinity there were Indians from several rancherías. . . . Farfán stated these people, who wore crosses, extracted ores from the mine and used them for personal adornment and for coloring their blankets . . . brown, black, blue and green. . . . [S]ome wore shells, obtained from the sea thirty days travel away.

Schroeder indicates that Farfán observed venison, mescal, and maize along with dried lizard meat as food items.

Oñate’s 1604 effort to travel west from Hopi to the Pacific Ocean also must have crossed the Verde River. Schroeder (1974b) suggests that Oñate’s party forded the river near present-day Cottonwood. The records for Oñate’s venture refer to middle Verde natives as “Cruzados,” mention the importance of mining, and suggest that the Indians encountered were not farming peoples (Schroeder 1974b:83).

Between Oñate’s journey and the 1850s there are few specific, reliable references to central Arizona, and none to the Verde valley. The focus of Spanish colonization and missionization efforts was indisputably south of the Gila River (see Bolton 1919, 1936). There is little information about the native occupants of the area north of the Gila River in contemporary Spanish accounts, but the weight of the evidence indicates that it was a strong Apache presence there that precluded intensive Spanish occupation. Padre Kino, the extraordinary Jesuit who traveled throughout Sonora and Pimería Alta from 1687 to 1711, alluded to occupants of the uplands north of the Gila as “Apache,” making no referential discrimination between the various distinct peoples

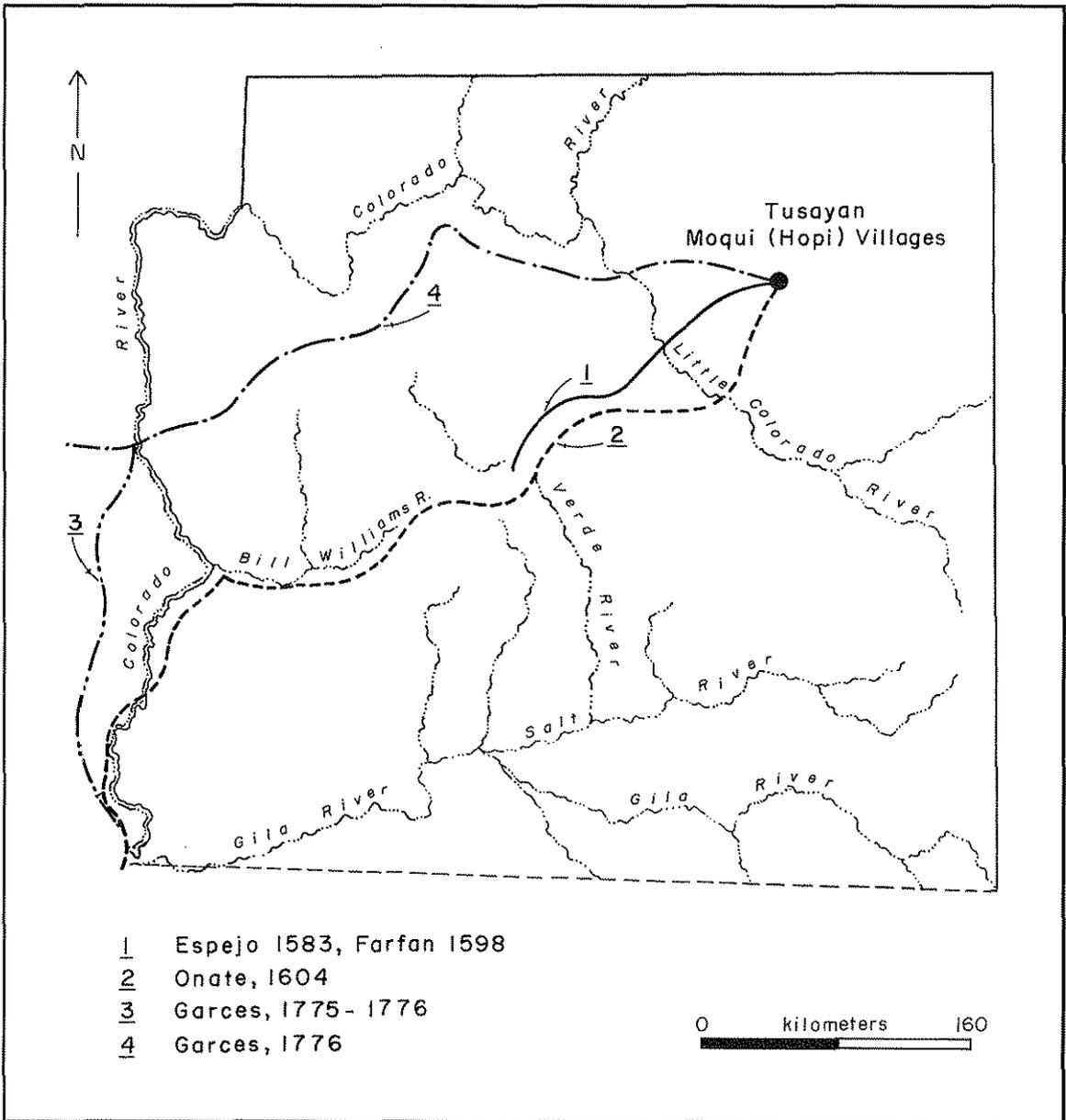


Figure 8.1. Routes of Spanish explorers (after Walker and Bufkin 1979:13).

inhabiting the region (Bolton 1936). During an attempt to reach Hopi from Pimería Alta around 1743, the Jesuit priest Sedelmayr was attacked near the mouth of the Verde River by a group he referred to as Apaches, and was obliged to retreat (Schroeder 1974b:95). Padre Pfefferkorn, another Jesuit missionary, referred to groups residing north of the Gila River in 1767 as Nichoras (Schroeder 1974b:97).

Padre Garcés, who during the 1770s was the first Franciscan priest to acquaint himself with the indigenous peoples of the Gila River basin (see Figure 8.1), also was the first to refer to the people he encountered between the Havasupai and Hopi settlements as Yavapai (Schroeder 1974b:97). Garcés

initially used the term "Noraguas" to refer to groups living north of the Gila River. Spanish accounts imply that the three subdivisions of the Yavapai recognized by E. W. Gifford (1932, 1936) were in place at that time in central Arizona. Far less certain are the history, linguistic affiliation, and territory of people today identified as Tonto Apache (Ferg 1992).

Whether because the prospects for colonization were brighter in Pimería Alta, or because of the limiting effects of Apache populations in the north, no Spanish missions or substantial settlements were established north of Tucson until the 1860s, about a decade after the assumption of administrative control by the United States.

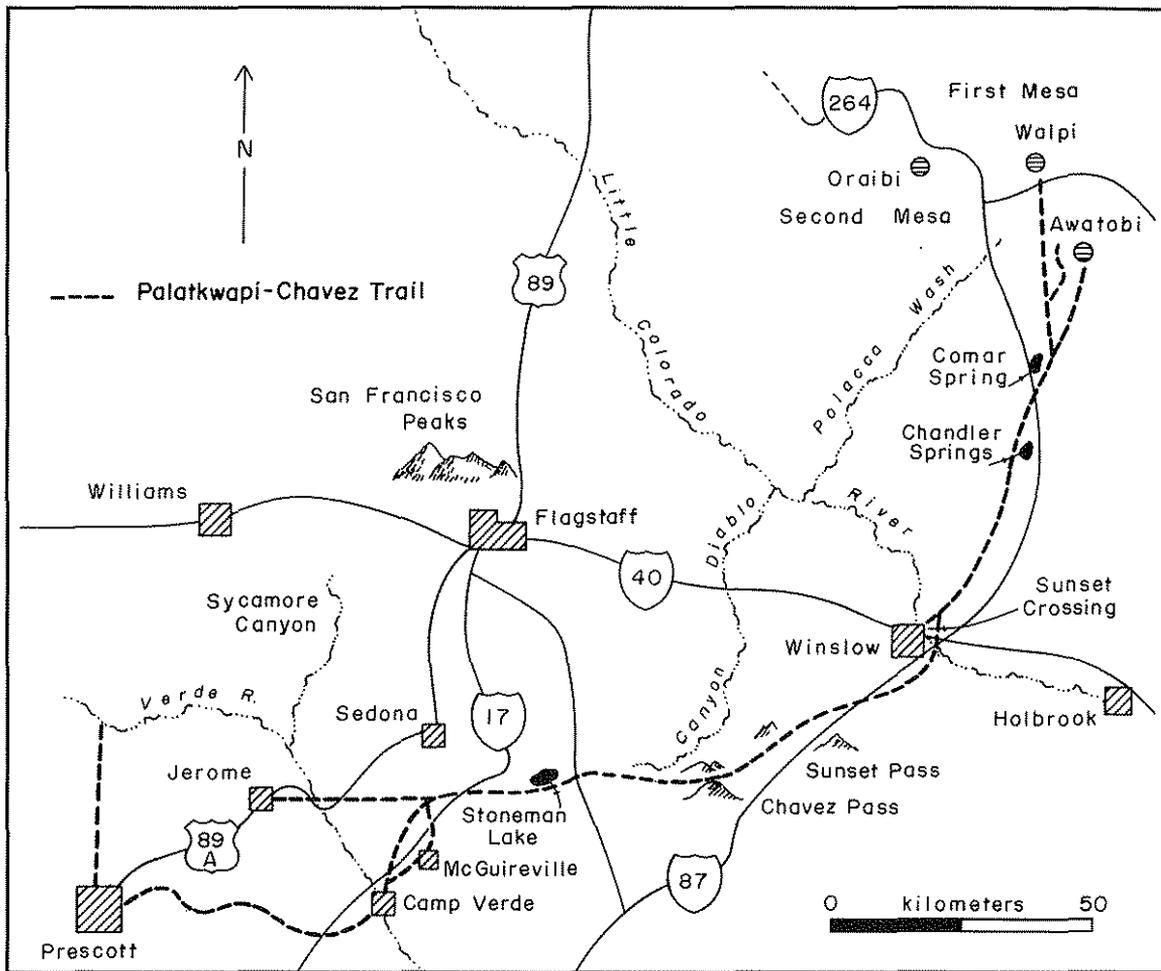


Figure 8.2. The Palatkwapi Trail (after Byrkit 1988).

The Assertion of American Control, 1849–1874

During the period of Spanish and Mexican control, there was little to attract attention to the Verde valley. After its initial lure of gold and silver had faded into myth, the valley lapsed into obscurity. Its native peoples remained isolated and, as long as there was no substantial Euroamerican settlement in the region, there was little conflict between cultures. During the years when the United States began to establish its control of the Southwest, this situation changed. Following the earliest English-language accounts of trapping expeditions along the rivers of central Arizona, the record pertains largely to military explorations, conflicts with Indians, and construction of forts. Miners, ranchers, and farmers were increasingly threatened by displaced native peoples who viewed non-Indian ranches and herds as a resource to exploit.

Trappers and U.S. Military Explorers

American use of central Arizona began even before the treaty of Guadalupe Hidalgo transferred the region north of the Gila River to the United States, making it legal for American citizens to explore and exploit it. Unlike the organized and government-sanctioned Spanish expeditions, the earliest American explorations in the 1800s were ventures undertaken by private parties of beaver-trapping mountain men. The first group of North Americans known to have traveled through central Arizona in 1826 included James Ohio Pattie (1984; Figure 8.3). Unfortunately, the entourage that traveled up the Verde River, which they called the San Francisco River, was led by Ewing Young; the diarist Pattie remained with the party that ascended the Salt River (Byrkit 1978:34–35), so there is little information about the Verde. Young returned three years later, trapping down the Salt and

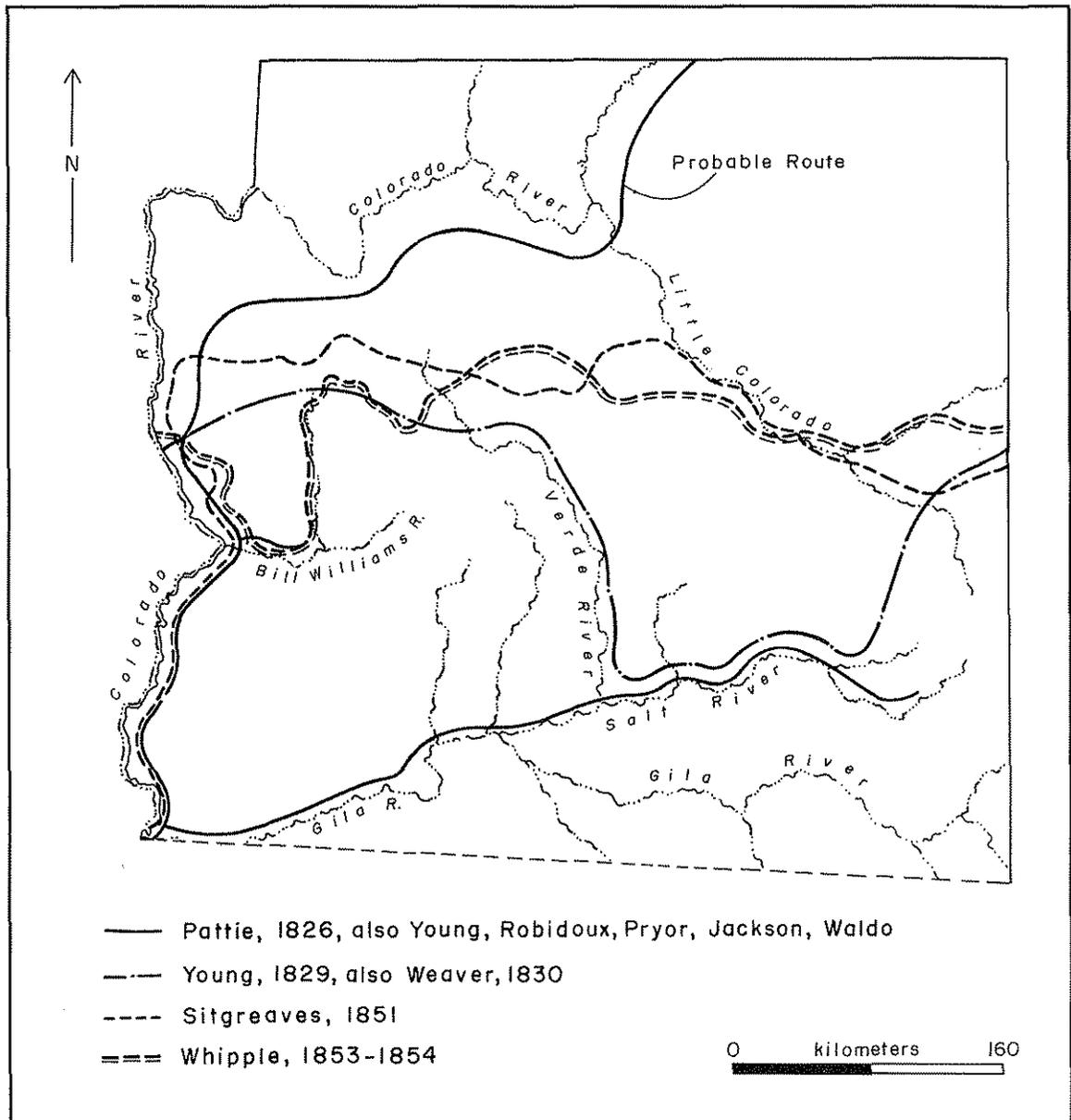


Figure 8.3. Routes of early explorers (after Walker and Bufkin 1979:17).

up the Verde Rivers with roughly 40 men, including Kit Carson (Schroeder 1974b:106) (see Figure 8.3). Around 1830, William Wolfskill, George Young, Pauline Weaver, and others were trapping along the Verde River, but details of their activities are scarce (Faulk 1970).

Early U.S. Army expeditions established baseline topographic, hydrographic, and biotic information that became the foundation for future exploration and use. Captain Lorenzo Sitgreaves of the U.S. Army Corps of Topographic Engineers was responsible for the first systematic scientific study conducted in Arizona. He was sent west in 1851 to locate a wagon route through present-day Arizona and New Mexico. Sitgreaves's route through Arizona followed the Little Colorado River west to the San Francisco Mountains,

departing from the Little Colorado River and continuing west to the Colorado River (see Figure 8.3; Goetzmann 1979). This route took Sitgreaves, like others before and after him, north of central Arizona and the Verde valley. The expedition referred to the indigenous peoples encountered between the Little Colorado River and the northern flanks of the San Francisco Mountains as Yavapai or Tontos, continuing the confusion among indigenous peoples begun by the Spanish. Schroeder (1974b:107-108) writes,

The women and children were gathering pinyons and grass seeds. They had baskets of close weave that held water, a wicker jar coated with pine gum, mesquite bread, a cake of mescal, and pieces of kaolin in their lodge. . . .

Sitgreaves' report illustrates the bow of these people as recurved and also shown are coiled baskets with a lid, breech clouts, arrows in quivers, skin moccasins, low-necked wide-mouthed jars and vases with handles on each side.

Lieutenant Amiel Whipple was charged with finding a practical railroad route along the 35th parallel. Whipple's 1853 expedition entered Arizona from the east, following the Little Colorado River westward—roughly the same course as modern Route 66 (see Figure 8.3). Unlike Sitgreaves, Whipple's route followed the Bill Williams River to the Colorado River (Goetzmann 1979). Whipple's expedition also encountered native peoples in or near the upper Verde River watershed, but like Sitgreaves, Whipple did not distinguish between Yavapai and Apache peoples. The expedition fell prey to the confusion over Southeastern Yavapai and Tonto Apache that would persist for decades, confusing even anthropologists. For example, Whipple relates an attack below the East Verde River by a group he calls "Tontos of the Yampais nation" (Schroeder 1974b:112).

When the United States took formal possession of the Gadsden Purchase in 1856, Yuma was the only sizable non-Indian settlement in the vast tract (Farish 1915:321). The land acquisition was added to the Territory of New Mexico, but proposals soon were being developed to create an independent Arizona territory. The U.S. Congress initially evinced little interest in such proposals. In a strange historical twist, following the Confederate invasion of southern New Mexico Territory, Jefferson Davis signed on January 13, 1862, an act dividing New Mexico at the 34th parallel, the area of the Gadsden Purchase (Faulk 1970:102–104). Had this situation persisted, the LVAP study area would span two states, with modern Horseshoe Reservoir divided between them. Confederate influence quickly waned, however, and the close brush with the loss of Arizona seems to have prompted congressional action. Less than a month after the Confederate Territory of Arizona became official, the Chairman of the House Committee on Territories, J. M. Ashley of Ohio, introduced and successfully shepherded H.R. 357, a bill dividing New Mexico along the 109th meridian (Faulk 1970:113–114). Following protracted debate in the House and the Senate, the act was signed into law by Abraham Lincoln on February 24, 1863.

In part because of Lieutenant Whipple's report on the hospitable Verde River headwaters, federal officials appointed by President Lincoln, who were sent west to organize Arizona's Territorial administration, established the seat of government in the Chino Valley, naming the outpost Fort Whipple after the lieutenant (Coggin 1987:179). In 1863, General Carleton ordered Lieutenant Colonel J. Francisco Chaves to escort the officials to Arizona using the route established by Whipple. His route to New Mexico from Fort Whipple followed the Palatkwapi trail to present Stoneman

Lake. Reaching a fork in the trail, Chaves chose the north-easterly fork instead of continuing along the Palatkwapi trail to Sunset Crossing. The series of tribulations the party encountered along this route are depicted by Byrkit (1988), who notes that three separate attempts to follow the trail along its entire route were stymied. This route became known as the Chaves Cut-off or the Chaves Trail, although ironically Chaves never passed through Chavez Pass (Byrkit 1988:19).

These explorations tended to bypass much of central Arizona. As Wagoner (1975:363–364) writes, "Like the Spaniards and Mexicans before them, the frontiersmen from the States were attracted to that part of Arizona which lies south of the Gila." Trails that had been established during the war with Mexico were regularized by military and civilian expeditions, such as Kearney's march across Arizona. Because the goal was to establish an overland route to California, these trails followed the Gila River; none were established to the north (Whittlesey, Ciolek-Torrello, and Sterner 1994:306–307). The Gila Trail, first established by trappers, was unsuitable for wagons; a more southerly route was adopted by the Butterfield Overland Mail and other stage lines, also avoiding the dangerous Apache Pass (Whittlesey, Ciolek-Torrello, and Sterner 1994:306–307). The Palatkwapi trail between Sunset Crossing and Camp Verde was used less frequently after the establishment of the Atlantic and Pacific Railroad across northern Arizona in 1883 (Byrkit 1988:31). Wagoner's (1975:298) map of early American routes through Arizona is telling. Central Arizona—the Agua Fria, Verde, and Salt Rivers—was unexplored and uncrossed, sandwiched between the Gila Trail through the Pima Villages and the northern routes of Whipple, Sitgreaves, and Beale. The isolation of central Arizona and the Verde valley continued. In part, this can be blamed on what Sheridan (1995:113) labels Whipple's "damaging error": he overestimated the cost of the railroad route by a whopping \$75,000,000. Consequently, his 35th-parallel route, perhaps the most practical of the four alternatives, did not receive the attention it deserved.

Mining

Much of the initial impetus for the non-Indian settlement of Arizona came from mining interests. From the *planchas de plata* to the Lost Dutchman Mine, it was the lure of gold and silver that drew the Spanish, Mexicans, and Americans. Silver was discovered by a Yaqui Indian in 1736, creating Arizona's first mining boom (Sheridan 1995:31). The *planchas de plata* were found near a camp near modern Nogales called Arizonac, which in Sheridan's words "bequeathed both its name and its legend to the territory." It was largely Juan Bautista de Anza's declaration of silver as a buried treasure, not a natural deposit, that sent Arizona's tales of mineral wealth into legend and mystery rather than reality. The lure became part of Arizona's

myth (Sheridan 1995:31–32). But legends persisted: Byrkit (1978:34) retells one of Arizona's many lost-mine legends, related to a pure gold vein supposedly located in the middle Verde region east of Perkinsville. The mine was allegedly seized by adventuresome Spaniards around 1765. But the Apache harassed the soldiers-turned-miners to the point that the survivors abandoned their bullion cache and fled to Tubac. Its location, of course, has yet to be found (Byrkit 1978).

As Greeley (1987:18) observes, the early centers of population in Arizona and its mines were concentrated along the Butterfield route and the fertile southern Arizona drainages. In 1860, there were no mining centers north of the Gila, a situation that soon would change. After the market for beaver pelts on the Continent had diminished, former trappers turned miners and guides. They would assist in the discovery of north-central Arizona's mineral riches. Gold was found first in California, sending thousands of prospectors, miners, and dreamers along the Gila Trail pell-mell after untold riches. A few, Sheridan (1995:53) notes, also observed the mineral riches of southern Arizona and the Apache threat to its exploitation. The first big strike was made in 1857, along the Gila River upstream from its confluence with the Colorado. So sprang to life Arizona's first boom town, Gila City (Sheridan 1995:63). "A year later," Sheridan writes, "more than a thousand people were panning for coarse grains in placers or preying upon those who did." Heintzelman and Mowry built mines and company towns in southern Arizona, relying heavily on Mexican labor. It was Heintzelman who helped push the Arizona Organic Act through Congress in 1863 (Sheridan 1995:70). The initial effect of the Civil War was to increase mining exploitation in central and western Arizona as a means to finance the war (Greeley 1987:18–19). The creation of Arizona as a territory separate from New Mexico was largely a product of the Union's need to prevent the mineral wealth of Arizona from falling into Confederate hands (Wagoner 1975:469–470).

By the 1860s, the upper Verde River was becoming reputed as an unexplored area likely to be rich in gold and silver (Farish 1916). In the wake of the California gold rush, the lure of a vast, unexploited region of rich mineral deposits in central Arizona was a powerful magnet. In 1861, Joseph R. Walker led 18 companions on an incredible journey of prospecting in Arizona, New Mexico, and Colorado, discovering placer deposits on Lynx, Humbug, and Turkey Creeks south of present-day Prescott. Two years later, the Big Bug gold, silver, and copper deposit was discovered by members of the original Walker party (Pape 1987:77). The Walker mining district was established on May 10, 1863. In 1864, the Territorial capital at Fort Whipple was moved south to a new town named after William Hickling Prescott, author of *History of the Conquest of Mexico*.

An aggressive community of miners, merchants, and territorial officials sprang up in the middle of Yavapai and

Apache country, and one bonanza generated ripples of exploration that led to other bonanzas. Soon mines tunneled into some of the driest country in North America, and names like Hassayampa, Harquahala, and Castle Dome entered the legendary geography of the mining frontier [Sheridan 1995:70–71].

The gold on Lynx Creek would be the single richest placer drainage in Arizona (Greeley 1987:19).

There were discoveries elsewhere in central Arizona in the 1860s. In 1863, ex-trapper-turned-guide Pauline Weaver led a party organized by Abraham H. Peeples from California to a site near modern Wickenburg that became known as the Rich Hill deposit. It produced thousands of dollars in gold during the first few months of operation (Wagoner 1975:469; Figure 8.4). The Vulture mine also was located in 1863 by Henry Wickenburg near the modern town of that name. Within a year, two hundred people were living in the new town where the ore was hauled to the Hassayampa River (Wagoner 1975:469). Prospect holes were opened near modern Payson and Pine, and several mining camps were founded on the East Verde River, including Mazatzal City in 1869.

The attraction of untold potential wealth was maximized by sensational publicity. Charles D. Poston, "The Father of Arizona," paid his friend J. Ross Brown \$5,000 to publicize the mines of Arizona (Wagoner 1975:475). Because of the lack of an accessible legal system for registering claims and protecting valuable ones, miners tended to be secretive. As a result, the reality of the extent and richness of the gold and silver deposits spread slowly, and was no match for the myths propagated by Poston and others.

At the same time, clashes among non-Indians, Yavapai, and Apache had increased, and the mines were at the heart of much conflict. Wagoner (1975:465) indicates that one of the main objectives of General Carleton's extermination policy was to encourage prospecting parties to develop the placer gold deposits discovered in the 1860s and to protect them, which was the explicit purpose of Fort Whipple. The following excerpt from a speech delivered to the U.S. House of Representatives by Poston (1865:3–5) reveals the explicitly commercial motive behind the propagation of much anti-Indian sentiment:

The history of man is here distinctly marked by the struggle between civilization and barbarism. . . . The Spanish explorers found a very interesting race of Indians . . . a people bearing evidences of European origin and practicing many of the arts of civilization. . . . In antagonism to these interesting people we have the barbarous Apaches. . . . [From] Time immemorial their hand has been against every man and every man's hand against them. . . . For three centuries they have stayed the progress of civilization. . . . Their subjugation would open to our hardy miners an unexplored gold field north of the

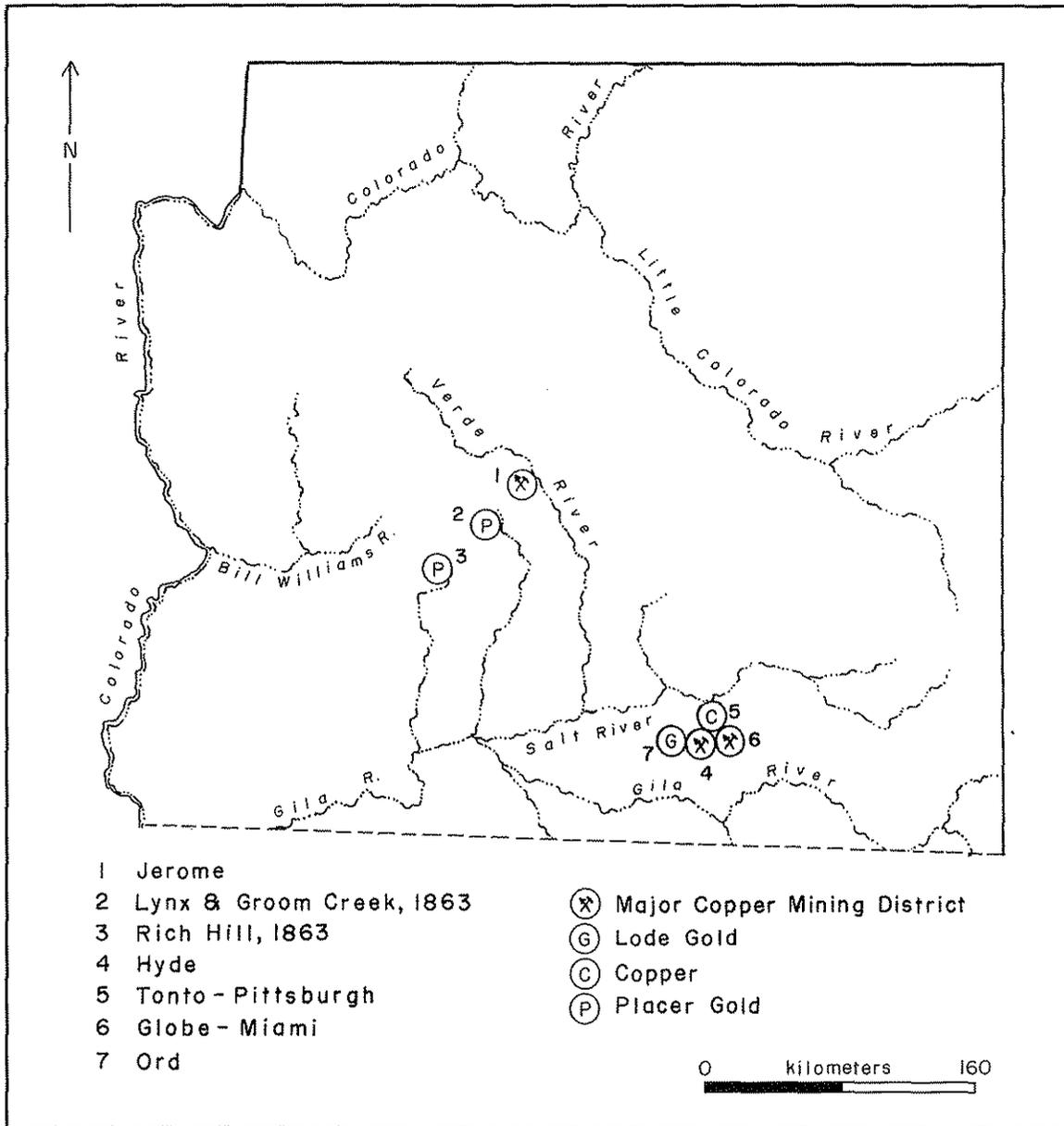


Figure 8.4. Central Arizona mines (after Walker and Bufkin 1979:49).

Gila. . . A sickly sympathy for a few beastly savages should not stand in the way of the development of our rich gold fields, or the protection of our enterprising frontiersmen.

As Irvin (1987) makes clear, Arizona's railroads were driven by its mining operations. Because railroads were necessary to ship ore inexpensively from the mines to the smelters, the expansion of mining in central Arizona was dependent on the network of railroads. Copper mines flourished along the middle reaches of the Verde River, where Jerome emerged as a boom town in the heart of a mining district, and in Tonto Basin (see Figure 8.4). When the Jerome mines showed signs of long-term productivity, they attracted the Montana copper magnate William Andrews

Clark. When Phelps Dodge dropped the option on the Jerome mine, Clark picked it up, buying 70 percent of the stock in the United Verde Copper Company (Sheridan 1995:166). The company's original investors went broke because it cost them \$20 per ton to haul ore from Jerome to Ash Fork, the nearest station along the Santa Fe Railroad. Clark financed the construction of a 26-mile-long, narrow-gauge railroad to link the mines to the smelting center that came to be called Clarkdale (Walker and Bufkin 1979:46). The first train on the United Verde and Pacific (UVP) line ran to Jerome on January 24, 1895 (Byrkit 1978:37). It was this "crookedest line in the world" that allowed Jerome to develop into one of the major copper towns of the West (Sheridan 1995:166).

Copper and other minerals drew settlement in Tonto Basin and its perimeter. The first formal claim in Tonto Basin was filed by famed Indian scout Al Sieber in 1878 (LeCount 1976). By 1882, Marysville was an important mining camp, with over 100 citizens (Macnider and Effland 1989:230). The settlement established by William Burch and John Hook, owners of the Golden Waif mine, had grown into a mining camp and livestock center called Union Park. The name of this settlement was changed to Payson in 1884 to honor a U.S. congressman from Illinois who had been responsible for the appointment of the Union Park post office (Granger 1960:110; James 1991c:39; Macnider and Effland 1989:230). Copper emerged as a commercial mineral success in the 1890s. Prospectors began to file claims along Gun and Hardt Creeks in Tonto Basin (LeCount 1976:7). By the turn of the century, more than 200 claims had been filed. These claims were bought by Tonto River Copper Company, and became known as the Tonto-Pittsburg mine.

The success of this first productive mining venture in Tonto Basin brought many new prospectors into the region (LeCount 1976:7). The Globe-Miami district materialized as United Verde's rival in the 1890s, with the Old Dominion Mine at its heart. The Gila Valley Globe & Northern Railway joined the Old Dominion and other Globe-Miami mines to the Southern Pacific Railroad at Bowie between 1894 and 1898 (Sheridan 1995:168). These mines witnessed Arizona's first bitter labor struggles in the 1890s. The Hyde gold mine, also known as the Sunnyside Mine, operated between 1901 and 1908 along Reno Creek, and eventually included a mill (LeCount 1976:7; Macnider and Effland 1989:93). One of the largest mining operations in Tonto Basin, the Ord Mine (see Figure 8.4), extracted cinnabar or mercury (LeCount 1976:7–8). Salt, a principal component of the amalgamation process, was found in quantity along Tonto Creek (McClintock 1985:157–158), and a small deposit of good sodium chloride in the upper Salt River area was mined for the stamp mills in Globe. Other mineral targets included asbestos, tungsten, uranium, and fluorspar (LeCount 1976:9–10; Stebbins 1987).

One portion of central Arizona that witnessed less-intensive mining activity was the lower Agua Fria River. Mining never achieved the success it reached along the upper reaches in the Prescott area, the middle Verde valley, or Tonto Basin. A hydraulic gold mining operation was established in 1890 along Humbug Creek, which drains into Lake Pleasant. Miners built a 35-foot-high masonry dam on the creek. The venture was short-lived, however, because of either poor management or the poor quality of the placer (Ayres et al. 1992:42; Fenicle et al. 1994:5). Lime kilns were located along the Agua Fria River near Frog Tanks (Stone and Ayres 1984:28). According to Ciolek-Torrello (1981b:32), an old gold mine, the Sunrise-Relief mine, is located among unnamed hills lying between Calderwood Butte and Pitcher Hill along New River. Another hardrock

mining settlement upstream from the Humbug Creek placer operation, Columbia, was successful enough to warrant a post office from 1894 to 1915 (Granger 1983). Prospects along the Agua Fria drainage soon were played out, and agriculture became the economic mainstay (Ciolek-Torrello 1981b:32).

Yavapai and Apache Struggles

As opportunities for mining in the newly established Arizona Territory were promoted, and as the rush to California subsided, settlement of the region escalated. The rapid growth of the American population and their insistence on controlling lands and resources within the boundaries of what was perceived as their domain created unprecedented dilemmas for central Arizona's native peoples. Sheridan (1995:66–67) catalogues the conflicts in Apache and American world views. Both belonged to aggressive and expansionistic societies, but those societies were based on radically different political, economic, and cultural premises. Private property and market exchange confronted the Apachean kin-based society, where resources were shared and accumulation of personal wealth was limited. "Thus, a kin-ordered society confronted a market-ordered society in a region ideally suited for guerilla warfare" (Sheridan 1995:66–67).

As Sheridan points out, one of the main but often overlooked reasons behind Apache-American conflict was curtailment of raiding. As indigenous patterns of seasonal movement for hunting and gathering were interrupted, raiding increased in compensation. "Accustomed to preying off their enemies for the good of their kin, Apaches were not about to accept the restrictions on raiding imposed by the invaders" (Sheridan 1995:67). Lacking the resources that initially drew settlement, however, the lower Verde valley remained peripheral for the most part to the intensive conflicts and the military actions against Native Americans that were concentrated in the middle Verde valley, the Prescott area, and Tonto Basin.

In October 1862, General Carleton ordered all Indian men to be killed whenever and wherever they could be found. The dangerous situation created by Carleton's extermination policy was exacerbated by some extraordinary examples of military misunderstanding and actions taken by vigilantes (see Terrell 1972:244–245). In 1863, although Major Edward B. Willis was negotiating a peace treaty with a local band of Tonto Apache in the Prescott vicinity, soldiers attacked and killed 20 of the bewildered Tonto Apache. The slaughter sent a shock wave of retaliation that "threatened to end the white occupation of the territory. Ranches were swept bare of stock and miners were killed at work as the Indians made raids through the Peoples, Hassayampa, and other valleys of north-central Arizona" (Wagoner 1975:465).

King S. Woolsey was a prominent rancher, businessman, and local leader who had traveled with the Walker party. His ranch was located near Prescott along Lynx Creek (Nicolson 1974). In 1864, Woolsey led a party of Maricopa, Pima, and settlers in pursuit of Apache who had stolen livestock in the Peoples Valley, crossing the Agua Fria and Verde Rivers after descending Copper Canyon from the west (Farish 1916:258–259). They encountered a large party of 200 Indians—Sheridan (1995:72) says “Apaches or Yavapais”—in Fish Creek Canyon along the Salt River. Deep in Yavapai territory, these people likely were not Apache, with which Yavapai people concur (Khera 1978). Woolsey arranged a sham peace council, a treacherous episode in which numerous Indians were killed (Wagoner 1970:21–22).

Sheridan (1995:72) cogently observes that the Indian-American alliances of the time paralleled the old pattern forged by the Spaniards of southern Arizona, which pitted Pima, Maricopa, Americans, and Mexicans against their common Apache enemies in short, savage campaigns, of which the Camp Grant massacre is perhaps the most infamous. Woolsey’s “Massacre at Bloody Tanks” merely “stoked the flames of blood vengeance among the kinsmen of the dead” (Sheridan 1995:72).

The Yavapai, whose homelands were virtually overrun by the late 1860s, resisted intruders as tenaciously as did the Apache. Moreover, their lack of overarching political authority made it extremely difficult for the U.S. military to locate or negotiate with more than one Yavapai group at a time (Sheridan 1995:79). Yavapai and Apache raiding in central Arizona accelerated with the establishment of larger and more-permanent settlements. Soon, fear of Indian attacks became a major factor influencing activities (Goodwin 1942; Terrell 1972). It became clear that even if the Yavapai were to surrender, the Apache threat would not easily be overcome without federal assistance (Ogle 1970). The Legislature of the Territory of Arizona (1871:3–4) soon embraced Poston’s approach to anti-Apache propaganda as part of a solution:

The Territory is covered with the ruins of cities and towns once undoubtedly inhabited by a people of industry and enterprise. . . . The cause of their destruction was undoubtedly the ravages of the implacable Apache, and our people now begin to realize, that unless assistance is given them . . . they only await a similar fate.

These exaggerations convinced Washington that the population of the Gila River basin was next in line to succumb to the nomadic Apache. The federal approach to assisting the Territory entailed the development of a network of cavalry outposts to protect established settlements and to provide bases for launching assaults against pockets of Indian resistance (Spicer 1962; Uteley 1988). Following the outbreak of the Civil War, most military outposts in Arizona Territory

were abandoned. Moreover, military outposts were plagued by desertions of homesick soldiers who found Arizona Territory a godforsaken wilderness (Sheridan 1995:79). By the end of the Civil War, Arizona was designated a military district within the Department of California, and its commanding officer, General John S. Mason, began in 1865 to assert military control over Arizona.

Camp Verde, originally named Camp Lincoln, was established at the mouth of Beaver Creek by New Mexico Volunteers in 1864. It was renamed Camp Verde in 1868 (Walker and Bufkin 1979:37), and in 1871 moved a mile to the south, onto a bluff west of the river below the confluence of the Verde River and Oak Creek (Figure 8.5). It was renamed Fort Verde in 1878, and eventually abandoned in 1890 (Walker and Bufkin 1979).

Five companies of California Volunteers who had marched from Yuma and two companies of Maricopa and Pima scouts commanded by Lieutenant Colonel Clarence Bennett were ordered to establish a base of operations in Tonto Basin. General Mason’s plan was to contain the Apache east of the Verde River and south of the San Pedro River. In September 1865, nearly 500 men and officers marched up the Verde River, establishing what they thought would be a temporary camp across from the mouth of Sycamore Creek, seven miles from the confluence with the Salt River. Later in the month it was decided to make the camp permanent, and it was named Camp Verde (see Figure 8.5). The location was selected because of the availability of arable soil and reliable water, as well as the proximity of several well-used Indian trails and a substantial Yavapai encampment (Ryden et al. 1992). The regiment immediately began scouting expeditions into Tonto Basin and other areas, while constructing buildings for the camp. The fort was renamed for the commander of the California department, Major General Irvin McDowell. Camp McDowell afforded the struggling communities below the Verde-Salt confluence some protection by means of the guarded travel corridors along the rivers, and provided a staging area for Army scouting parties and campaigns (Reed 1977; Byrkit 1978:49). The post straddled an important travel route between Tonto Basin and the Salt River Basin, and was designed to disrupt Apache travel and raiding along the trail (Hackbarth 1992c:411). The camp became Fort McDowell in 1866, the year in which the post’s namesake, during an inspection tour visit, ordered the construction of irrigation works to exploit the rich alluvial terraces.

The post consisted of a compound of adobe buildings focused on a large parade ground. The camp’s property included all land five miles north and south of the parade ground, and two miles on both sides of the Verde River. By 1870, the fort consisted of 8,960 acres of land. It served as a base of operations throughout the Apache wars and the nucleus of the Fort McDowell Reservation until its final abandonment in 1890.

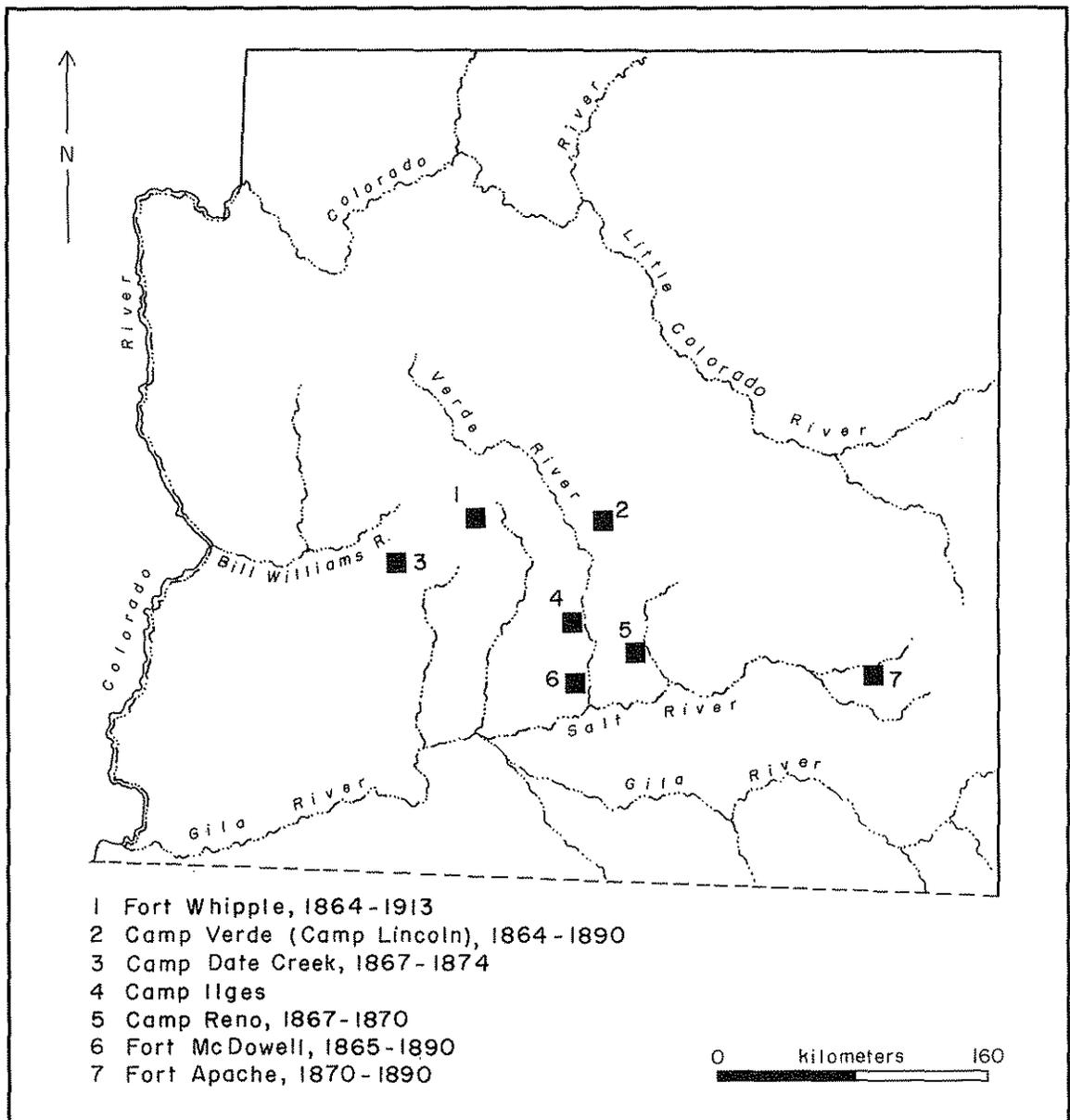


Figure 8.5. Military posts in central Arizona (after Walker and Bufkin 1979:37).

Once the Fort McDowell and Camp Verde footholds were established, a series of subsidiary and parallel posts were set up to gain further control of central Arizona. Following the protracted Indian conflict of the mid-1860s, the U.S. Army determined that the greatest source of Apache resistance lay in Tonto Basin. Although there were several nearby camps, there were no outposts in the basin itself. The military reasoned that a post in Apache-held territory would prevent the Apache from retreating and force surrender (Schreier 1992a). Captain Sanford, commander of Camp McDowell, ordered the new camp to be located along Tonto Creek. Camp Reno was established in 1867 (see Figure 8.5). The camp became practical only after the construction of a difficult road through the Mazatzal Mountains from the lower

Verde River (Hoff 1984). The road followed Sycamore Creek into the mountains, and was punctuated with several temporary outposts. The original camp site was abandoned because of Apache raiding, and a temporary stockade was used. Despite continued Apache depredations, the 67-mile-long wagon road from Fort McDowell to the new site of Camp Reno was completed in 1868 (Hoff and Nearing 1992; Schreier 1992a:22).

Camp Reno was located far from other posts, required extensive travel to reach, and was situated in hostile country. The soldiers who built the camp, according to Schreier (1992a), were unclear of their mission, and a strategy was never fully articulated. After repeated conflicts with the Indians, the post was abandoned in June 1870 (Schreier 1992a).

For the brief time of its operation, the Army used the road and Camp Reno to maintain communications, to launch and supply operations against the Southern Tonto Apache, and to persuade Apache and Yavapai populations to place themselves under Army jurisdiction (Corbusier 1969:135).

In February 1867, during an outbreak of influenza, detachments of the 32nd Infantry from Camp Grant established Camp Ilges as a temporary, quarantined outpost to house sick soldiers. The camp was located southwest of modern Horseshoe Reservoir (see Figure 8.5). Camp Ord was established in 1870. It was renamed Camp Mogollon and then Camp Thomas; in 1871 the name was changed to Camp Apache and in 1879 it became Fort Apache (Walker and Bufkin 1979:37) (see Figure 8.5). Camp Pinal was established in November 1870, and was originally known as Camp Infantry. The camp was first located in what was referred to as Mason's valley at the headwaters of Mineral and Pinal Creeks. In May 1871, the camp was renamed Camp Pinal, and was moved to Picket Post Mountain in July of the same year. Soon thereafter the post was renamed Camp Picketpost, and remained so until its abandonment in August 1871 (Hoff and Nearing 1992).

The 1870s were characterized by a federal policy of concentrating Indians on a few reservations, not unlike the much earlier Spanish *reduccion* policy and with similar consequences. In 1871, a number of camps were established as headquarters for reservations, including Camp Apache, Camp Verde, and Camp McDowell (Walker and Bufkin 1979:42–43), as the Indian Bureau sought alternatives to the incessant and mutually harmful hostilities. During his crusade to demilitarize federal Indian policy on the western frontier, Vincent Colyer, the Secretary of the Department of the Interior's Board of Indian Commissioners and an avowed Quaker, visited central Arizona in the late summer and fall of 1871. In an October 3 letter to the Camp Verde Commander, Brevet Major General C. Grover, Colyer recorded some observations and conclusions regarding the situation on the middle Verde River:

Having personally inspected the country and condition of the Apache Mojave Indians on the Verde River above the post, and finding the Indians to be in considerable numbers, destitute and in starving condition, having no boundaries defining their homes, their country overrun by hunters who kill their game, and not infrequently kill the Indians . . . agreeably to the powers conferred upon me . . . and in harmony with the humane action of Congress. . . . I have concluded to declare all that portion of country adjoining on the northeast side of and above the military reservation of this post on the Verde River for a distance of 10 miles on both sides of the river, to the point where the old wagon road to New Mexico crosses the Verde . . . to be an Indian reservation, within the limits of which all peaceably disposed Apache Mojave Indians are to be protected, fed, and otherwise cared for.

Yavapai groups, as well as some Apache (primarily Northern Tonto), were rounded up and restricted to an area north of the post at Camp Verde. Smith and Smith (1990) report that, during confinement and prior to relocation to San Carlos, the Yavapai generally occupied the west bank of the Verde River, and the Apache stayed east of the river. This boundary behavior may have reflected long-held notions of territoriality, or may have been adopted simply to exercise a measure of control over a difficult situation.

Colyer's reservation "peace policy" was contested by the War Department, and many officers working in the field resisted the shift to "set aside" as a means for dealing with the "hostiles." The dispute was played out at the highest levels of government, with native peoples trapped in the cross fire (Utley 1988:171). The Camp Grant massacre, Sheridan (1995:81) observes, was "a stunning indictment of U.S. Indian policy." Although money, time, and lives had been spent in attempting to pacify the indigenous people, the army exercised little actual control over either civilians or Indians. It was General George Crook, who skillfully wrought a change in America's policies, that would bring about the desired end.

Crook realized that the Yavapai and Apache had to be pursued into every corner of their territory before they would accept confinement on reservations. He also recognized that only Apache knew Apacheria well enough to pursue them successfully (Sheridan 1995:82). His fabled Apache Scouts were no small measure of his eventual success. Soon after assuming command of the Department of Arizona in 1871, Crook issued General Order 10, instructing all roving bands of Apache and Yavapai to surrender at one of the reservations established for their benefit, or to expect pursuit as an enemy of the U.S. government (Wagoner 1970:135). The first of Crook's famous Arizona crusades, the Tonto Basin Campaign of 1872–1873, resulted in the surrender of all but the most recalcitrant Western Apache and Yavapai groups.

Two battles in this conflict are particularly infamous (Utley 1988:179). The first is Skeleton Cave. On December 28, 1872, an advance army of troops encountered a large band of Yavapai camped in an alcove on a rocky cliff high above the Salt River on the southern slope of the Mazatzals. The soldiers fired on the Yavapai, who retreated into the security of the cave and refused to surrender. The Army proceeded to kill 75 Indians, including women and children, by firing bullets into the cave and by dropping huge boulders that inflicted fearful casualties. Wagoner (1970:140) reports that only 18 women and children survived to be taken captive. This place of carnage came to be known as Skeleton Cave and is discussed by Ferg in Chapter 7. Farish (1916:288–355), Corbusier (1969), and Khera (1980) present the story of Mike Burns, a Yavapai who was captured by the U.S. Army, lived through the years of conflict between non-Indians and Native Americans, and in adulthood was able to return to his

people. Burns's graphic account is one of the few Yavapai narratives of the bloody 1860s and 1870s.

The second was the battle of Turret Peak. On March 27, 1873, detachments of the 5th Cavalry and the 23rd Infantry engaged Indians at Turret Peak, west of the Verde River in today's Pine Mountain Wilderness. There is some ambiguity concerning the identity of the Indians who fought this battle. Thrapp (1967) and Wagoner (1970) identify them as Tonto Apache; other authors (e.g., Waterstrat 1992) refer to them as Yavapai. Yavapai believe it was Yavapai people who were killed in this battle (Khera 1978).

According to Wagoner (1970:141), at Skeleton Cave and Turret Peak the Indians had been caught by surprise in strongholds previously considered impregnable. By the spring of 1873, Yavapai and Western Apache resistance had begun to crumble. "After months in the saddle—and agonizing days on foot after an epidemic devastated army horse herds—Crook's cavalry had driven the Indians from the Bradshaws, Mazatzals, Sierra Anchas, Superstitions, and Pinals, and the foothills of the Mogollon Rim," as Sheridan (1995:83) writes. The last war chief to surrender was Delshay. By April, the Indians began to assemble at Camp Verde to beg for amnesty. The peace lasted through Crook's tenure until he was transferred elsewhere in 1875.

Utley (1988:172) observes that two departures from conventional Army strategy contributed to Crook's success against the Apache and Yavapai. First, Crook replaced columns of supply wagons, cumbersome and slow, with far faster, more mobile mule pack trains. Second, Crook recruited Native American auxiliary troops to match the specialized knowledge and skills of his enemy. Because the Pima and Maricopa peoples had long been enemies of the Apache, approximately 100 men from these nations were hired as Fort McDowell scouts. Although Crook also tried using Navajo as scouts, it is the Apache scouts who remain the most famous. Moreover, hunger was on Crook's side. As Sheridan (1995:83) observes, the Army confiscated or burned Yavapai and Apache winter stores of cornmeal, dried meat, and roasted mesquite. Winter campaigning, a legacy of the Civil War, was as effective against the Indians as it was for Generals Sherman and Sheridan.

In 1874, the government decided to consolidate many of the smaller reservations where the Indians could be isolated and controlled. Camp Verde was annulled on April 23, 1875, by an executive order signed by U. S. Grant; the Camp Grant Reservation, established in 1871, was "restored to the public domain" by an executive order signed by R. B. Hayes on March 31, 1877. Wagoner (1970:144) writes that the abolishment of Camp Verde was achieved by corrupt politicians and merchants who did not want to lose money supplying the reservations if the Indians became self-sustaining. The San Carlos Reservation was the target of the government's consolidation objectives. It established the reservation on a bleak spot along the Gila River, largely because it was sufficiently

close to Tucson to achieve the goals of powerful freighters and merchants, and because the terrain was open and the Army could easily watch the Indians confined there (Sheridan 1995:85).

In 1875, approximately 1,400 Yavapai and Tonto Apache living near camps Verde and Date Creek were forced to leave their newly established farms and march to San Carlos. The eight-day trek, detailed by Bourke (1971) and Corbusier (1969), covered 180 miles of the roughest country in Arizona Territory, crossing Tonto Basin. It also took the lives of more than 100 Indians (Byrkit 1978:42), some in a battle between the two Indian groups (Sheridan 1995:85). This "outrageous proceeding," in Bourke's words, heralded an experience on the reservation that would prove unpleasant for the Yavapai and Apache alike (Perry 1993).

Later, groups from Camp Apache and also a number of Chiricahua and Warm Springs Apache were transferred to the reservation. This short-sighted policy congregated traditionally hostile bands together. Sheridan (1995:92) observes that "The Apaches at San Carlos . . . were thoroughly demoralized. Hungry, poorly clothed, wracked by disease and intertribal conflicts, they were also convinced that their agent, John Tiffany, was selling their rations to Anglos off the reservation." The subsequent rise and fall of the Apache medicine man Noch-del-kinne in the 1880s and its tragic consequences were unfortunately predictable.

In the end, Crook and Colyer triumphed, but the victory was bitter. Indigenous populations were decimated, the fabric of their cultures was unwoven, and they were destitute. Crook himself faced moral and personal failure. In 1886, hearing that peace talks with Geronimo had collapsed and that the Apache had slipped away, General Sheridan concluded that the Apache scouts had allowed Geronimo to escape and ordered Crook to use regular troops from that point. He also ordered Crook to remove the Chiricahua to Florida, with no promise of return. "In the face of Sheridan's criticism—and a direct order that required him to go back on his word to the Apaches—Crook asked to be relieved" (Sheridan 1995:95). Sheridan (1995:78) notes that it galled Crook bitterly when the U.S. government deported his beloved scouts to Florida.

Events of the bloody period before and immediately after the establishment of the Indian reservation system in 1871 are best understood, if not condoned, as a by-product of the inevitable clash of diametrically opposed world views over land and resources. The subjugation of native peoples was treated by the United States and Territorial governments as a fundamental prerequisite to settlement of a rich region viewed as theirs by right of domain. Indigenous peoples viewed the land as constituting a moral, as well as physical, geography, and to be cut off from the land was to strike at the heart of identity and culture (Sheridan 1995:84–85). There was a profoundly economic element in the activities of extermination and confinement, as many writers have acknowledged. Certainly

little effort was dedicated to strategies for partitioning central Arizona and its resources equitably among the various native and nonnative populations. Khera's (1978) account of the conflict demonstrates the ways in which Euroamericans may have justified their actions. Calling the Yavapai "Apache," deadly enemies, was a convenient excuse to kill Yavapai and take their land, so this account goes. "The white people wanted that land for themselves alone. . . . By calling the Yavapai 'Apache' they felt it was only all right to kill them and push them off their land" (Khera 1978:2-3).

Ranching, Homesteading, Agriculture, and Water Development: 1874-1945

The pacification and reservation confinement of the Native Americans who had inhabited central Arizona removed a major block to settlement, and settlers began to increase in the decades following the 1870s. A new suite of land-use conflicts developed as a result. Many settlers moved west specifically to take advantage of the free land thought to be easily available through the homesteading process with an eye toward farming and ranching. The attractiveness of different parts of central Arizona varied with the abundance and accessibility of resources, but water was then, and is today, the resource that has played the most decisive role in central Arizona's economic, social, and political history. The struggles of non-Indians and Indians over water and land continued. Management of water figures prominently in the discussions that follow.

Homesteading Law

American settlement in central Arizona depended on land tenure as well as the availability of natural resources such as water, commercial minerals, grasslands, and arable soils. As time passed and the once wide-open spaces began to dwindle, the legal framework for obtaining title played an increasingly important role. Stein's 1990 publication, *Homesteading in Arizona, 1862-1940*, provides the basis for much of the following discussion.

The deeply ingrained American philosophy that every citizen possessed natural rights entitling a share of the country was given voice in the National Homestead Act of 1862. The law, which applied when Arizona became a Territory in 1863, allowed individuals to homestead 80 or 160 acres of almost any unclaimed public lands. Heads of households or

persons over the age of 21 could file for claims to 160 acres of land otherwise sold for \$1.25 per acre, or 80 acres of land otherwise sold for \$2.50 per acre. The more desirable and expensive land lay within 40 miles of railroad grant. Lands that were excluded included incorporated land, land intended for business use, and land that was saline or mineral in character (Whittlesey, Ciolek-Torrello, and Sterner 1994:322). Title was obtained after (1) the payment of a nominal filing fee, (2) establishment of residency within six months of filing the claim, (3) continuous residence on the land for five years, and (4) cultivation of a portion of the land during the final four years of the residency requirement. The homesteader also had the opportunity to avoid these regulations by buying the land outright, usually at \$1.25 or \$2.50 per acre. Local newspapers were used to publish claimants' intentions, and the general public was urged to contest dubious claims (Stein 1990:4-5).

The 1862 act was amended in 1872 to allow Civil War veterans to apply Union military service toward residency requirements, a provision that was subsequently extended to other combat veterans, including Indian fighters. An 1881 amendment allowed those who had lived on homesteads prior to claims to apply these years to the residency requirement.

The quarter-section "mythical allotment of land" was settled upon

as the ideal acreage for a Jeffersonian utopia of small farmers. The idea was to carve millions of quarter sections out of the public domain, sell them cheaply to restless Americans and arriving immigrants, and by letting them try to scratch a living out of them, develop the nation's resources and build up its character [Reisner 1993:41].

Stein (1990:3) notes that the first homestead act was designed for a more humid climate than that of the arid west, where it was difficult to eke a living out of 160 acres.

Reisner (1993:41) has a less tolerant view. The success of the program east of the Mississippi River had less to do with administration or settlers' perseverance than with the forgiving nature of the climate. "In the East, virtually every acre received enough rainfall, except during years of extraordinary drought, to grow most anything." Not so in the West, where chronic frost danger, saline soils, relentless winds, hailstones, tornados, high altitudes, and breathtaking thunderstorms could be added to the list of impediments to successful farming. Reisner notes some of the fanciful thinking that accompanied the rush of settlers to the west. The years following 1865 were blessed by above-average precipitation, such that the boundary of the "great American desert" appeared to have retreated. This spectacular climatic transformation was not a fluke, but explained by a newly emergent school of meteorology that combined divine intervention with American perseverance. Because the rains

coincided with the westward wave of settlement, the two must somehow be related. "As population increases," wrote noted climatologist Cyrus Thomas, "the moisture will increase"—or, put more simply, "rain follows the plow" (Reisner 1993:35–36). "The notion that settlement was changing the climate on the flat, loamy, treeless plains rang irresistibly true to the subsistence farmer from the East who spent more time clearing his land of rocks and stumps than plowing and harvesting" (Reisner 1993:36).

Irrigation and homesteading were linked by the Desert Land Act of 1877. It permitted settlers to obtain title to 320 acres of desert land (480 after 1909) provided that one-eighth of the claim was irrigated within three years. The land, although not free, was cheap at \$0.25 per acre, and the filer did not have to live on the land. There were required expenditures for the irrigation system, and after four years the claimant was required to "prove up"—fulfill the ownership requirements—or risk losing the claim to a later applicant. After 1912, a three-year extension of these requirements was possible (Stein 1988:7–8). This new regulation also allowed the homesteader to be absent from his property for up to five months per year, thereby allowing filers to maintain additional employment to supplant their farming operations. As Reisner (1993:42) observes wryly, this was absolutely essential: "Unless you owned reasonably flat land immediately adjacent to a relatively constant stream which did not, as most western rivers do for much of their length, flow in a canyon, complying with the Desert Lands Act was almost out of the question." A related piece of legislation was the Carey Act of 1894, which allowed states to make contacts with promoters who would sell land for irrigation and cultivation (Waddell 1969:39).

The Forest Homestead Act of 1906 disallowed homestead claims containing less than 40 acres of arable soils in the ponderosa pine belt or less than 80 acres of farmland in the piñon-juniper zone (Stein 1990:4–5). The act was designed to encourage farmers to settle in areas surrounded by forest reserves, land that had typically been used only to headquarter ranching operations. The net effect of the 1906 law was to discourage ranching-oriented homestead claims on National Forest lands, a need created by widespread problems with overgrazing and land grabbing. The law also required land classification studies. On Tonto National Forest, such studies resulted in useful data pertaining to prevailing environmental conditions and land uses (see Forbes 1916). The next change in homesteading law came with the 1909 Enlarged Homestead Act, also known as the Dry Farming Homestead Act. This act recognized the agricultural exigencies of the semiarid west by doubling the maximum size of a claim to 320 acres of land. The claimant was required to live on the land and cultivate it in nonnative grasses for five years (Stein 1988:7–8).

In 1912, Congress lowered the residency requirement to three years and allowed the claimant to be absent from the homestead for up to five months of each year. This

amendment was welcomed in extremely hot and cold parts of Arizona, where claimants typically spent the summers or winters elsewhere. Stein (1988:8) states that, in archaeological terms, the act resulted in changing many homestead sites from year-round habitations to seasonal habitations.

The Stock Raising Homestead Act of 1916 allowed would-be ranchers to claim as much as a section of land (640 acres) classified as nonmineral, nonirrigable, and nontimbered. The U.S. Geological Survey (USGS) was delegated the responsibility for classifying lands available for this type of claim. Improvements on the claimed land, such as wells and fences, were required with a minimum investment of \$1.25 per acre. Land claimed under the Stock Raising Homestead Act could also be added to any land claimed under the original Homestead Act, allowing claimants to make a living off the land in a variety of ways (Ayres and Seymour 1993). The 1916 act was designed to promote settlement of remnant lands valued chiefly for their grazing and forage potential. It was difficult to implement, however, largely because of the USGS classification requirement, and according to Stein (1988:9) nearly 61,000 claims were disallowed and canceled in 1917 before a single acre of land had been classified. Cattlemen criticized the act, deploring the fragmentation of open range. Stein (1988:9) states that in practice this act may have decreased carrying capacity of rangeland. The act was replaced by the Taylor Grazing Act of 1934, which provided for much larger tracts for grazing purposes and withdrew these allotments from entry by homesteaders. In November of the same year, President Roosevelt withdrew virtually all public lands in the western states from settlement, sale, or entry pending their classification as to most beneficial use. This change meant that homesteaders had to petition for classification prior to entry, and the number of homestead claims dropped immediately (Stein 1990:7).

Ranching and Homesteading

The Cattle Industry in Central Arizona

The cattle industry in Arizona had long been hampered by Apache raiding. With pacification and confinement, cattle ranching exploded. The first herd of American cattle grazed in the Salt River valley was turned out in 1868. Cattle from Texas, New Mexico, and Sonora were brought into Arizona in increasing numbers (Mabry 1991; Wagoner 1952). In southern Arizona, American cattlemen purchased Mexican ranches and accumulated large tracts of land and wealth. Incorporated business enterprises controlled the industry, which operated on an enormous scale. Cattlemen attempted to improve the herds and the range through crossbreeding and introduction of new vegetation. Eastern breeds began to replace the Texas longhorns and Sonoran cattle. The primary

customer was the U.S. Army, and the cattle industry expanded during the years of military post establishment of the Civil and Indian wars.

North of Phoenix, the cattle industry grew more slowly, and settlement developed and eventually endured as a combination of desultory mining, small cattle ranches, homesteading, and small-scale farming (Ciolek-Torrello et al. 1990). Livestock were first introduced into Tonto Basin with the establishment of Camp Reno in the 1860s. Word spread of abundant grass and water, and ranchers began to arrive in the early 1870s. Pigs, cattle, and sheep were among the first livestock raised. The first large-scale cattle ranching venture was begun by Christian Cline in 1876 (LeCount 1976:12). That ranching was a risky business is indicated by Cline's story; his first attempt to put 400 head of cattle into Tonto Basin a few years earlier failed, the herd lost to drought and Indians (LeCount 1976:12). Bandelier (1890:429) mentioned Cline Ranch, which he located nine miles north of Salt River on Tonto Creek. According to LeCount (1976:13), thousands of cattle grazed the open range by the turn of the century, run by homesteaders scattered along Tonto Creek. The unfenced, open range made common cattle roundups necessary. Each year the community herd would be driven to Salt River, and then individual ranchers would drive their cattle to market in Globe or Phoenix (LeCount 1976:13). Cattle ranching also was the primary draw for settlers moving into the Payson region in the late 1870s (James 1991c:38). Andrew and Samuel Houston introduced Durham cattle from California into Star Valley and Houston Mesa.

Ranching began in the 1870s in the lower Agua Fria region and remained its most consistent historical use. The region was used to graze sheep in the winter from the turn of the century until the 1940s. Goats were introduced in the 1940s (Fenicle et al. 1994:6).

The vicissitudes affecting the southern Arizona cattle industry—drought, overgrazing, tariff increases, and fluctuating beef prices (Wagoner 1952)—also took their toll on cattle ranching north of Phoenix. The completion of the railroad across the state, foreign investment, and other factors contributed to a rapid expansion of the cattle industry in the 1880s and 1890s that was ripe for disaster. This was the time of open ranges. Sheridan (1995:131) points out that, although the Desert Land Act had increased homestead allotments, “a section of land was still hopelessly inadequate to maintain a successful cow-calf operation in arid country.” Stockmen developed a system of unwritten regulations and rights to control grazing on public lands. Sheridan notes that whoever controlled water also controlled land; springs, seeps, and streams were the headquarters of vast ranches.

By 1882, however, the once-infinite land suddenly became limited; “the wilderness was transformed into a gigantic cattle ranch in less than 20 years” (Sheridan 1995:131). There was a tremendous surplus of beef on the national market, which cattlemen attempted to meet by increasing

stock. The impacts on the range were disastrous, exacerbated by severe droughts in 1891 through 1893 (see Chapter 3). The end result was a decline in the number of cattle as rapid as its rise has been; throughout the state, cattlemen lost as much as one-half to three-fourths of their herds. “It was,” Sheridan (1995:141) writes, “a disaster of biblical proportions.” The combination of small herds brought about by drought and the drop in the price of beef in eastern markets proved fatal to many small ranchers (Hantman and McKenna 1985:14; Sheridan 1995:142). Although losses were great over the entire state, northern and central Arizona escaped the worst.

Droughts, competition for range, and overstocking created a situation ripe for conflict between cattlemen and sheepmen. The encroachment of sheep on cattle rangeland was exacerbated by the influx of sheep driven into Arizona from other states. The first sheep to arrive in an area depleted new grass, causing erosion. The open range policy resulted in brutal range wars (Dedera 1988). Conflicts between sheepmen and cattlemen erupted in the 1890s, and the Pleasant Valley War was one famous episode. It lasted five years and the sheep were driven out of Tonto Basin, but at a cost—29 men, representing all the males on the Graham side of the Graham-Tewksbury feud (Faulk 1970:162). McClintock (1985:175) observes, possibly apocryphally, that “No Mormon participated.” Sheridan (1995:139) maintains that the Pleasant Valley War was an “appalling aberration,” which “unraveled the social fabric that rural families were working so hard to weave.” He notes further that simple economic explanations for this feud do not suffice. It was not a simple range war, but something more primal.

The conservation movement of the 1890s threatened sheepmen and cattlemen alike. In 1894, all grazing was prohibited on public land; in 1897, cattle were permitted to graze on the forest reserves but sheep were not, sending the sheep ranchers into panic. Hantman and McKenna (1985:13) observe that cattlemen and sheepmen finally united when they realized that their common foes were the federal government and homesteaders. LeCount (1976:16) states that the sheep-cattle conflict was one of the issues leading to the establishment of Tonto National Forest. Certainly, grazing rights and land management were among the paramount issues (Baker et al. 1988:92).

With the deterioration of rangeland and the horrendous toll on the cattle industry, the federal government attempted to take control. In 1887 it required stockmen to obtain a permit for each animal run on public land. In 1895 a fee was established to pasture animals on forest reserve lands (Stubblefield n.d.). Eventually, barbed-wired fences were put up, permitting greater control of pasturage. By 1910, there were over 40,000 miles of barbed-wire fences across Arizona. Animals grazing on public land remained largely unrestrained by fences until the 1930s, however. Damage to public lands continued until range improvement measures were taken.

The end of droughts, new breeds of cattle, and the prospect of new markets brought with the proposed Salt River Project energized the cattle industry at the turn of the century. Between 1902 and 1908, cattle increased by many thousand head in central Arizona (Hantman and McKenna 1985:14). By 1902 a plan to graze cattle and sheep on the reserves was developed, giving preference based on residence. In 1905 Congress passed the Transfer Act that moved the jurisdiction of the forest services from the Department of the Interior to the Department of Agriculture. The professional management of the nation's forests began at that time (Baker et al. 1988:40). Tonto Reserve became Tonto Forest on October 3, 1905.

Cattle ranchers using public lands were usually based at small, private inholdings surrounded by public land. All those who had made legitimate homestead entries prior to the creation of the forest maintained their property as inholdings. The Forest Service granted permits to individuals or organizations to use portions of Forest land for grazing. It was divided into allotments, each permitting a specific number of animals, for better management. Ranchers paid for permits to use the surrounding land, and many of the permits were based on prior use. The first Tonto National Forest permit was issued to George Cline in 1908. To manage the permitting system, the first ranger station was constructed in 1909 (LeCount 1976:16). During the 1910s and 1920s ranchers increasingly bought up nearby inholdings (Mabry 1991). Further range deterioration resulted, as more and more cattle were run on the public land and cattle companies increased in size.

Homesteading, Farming, and Mormon Settlement

Homesteading in Arizona was no easy task. To be successful, it required significant insight and subsequent perseverance. No homestead in Arizona was "proved up," or fulfilled the residency requirements for ownership, until 1878, and the number of claims that were relinquished or abandoned was far greater than the number of titles granted (Stein 1990:8–10). Despite these obstacles, there was a steady increase in prove-ups over the turn of the century, and successful homesteading peaked in Arizona in the early 1910s. A total of almost five million acres passed out of federal ownership as a result of the homesteading laws (Bureau of Land Management 1962).

Homesteading began in the late 1800s throughout central Arizona, and small communities eventually emerged around some homesteads. Locations of post offices—established, moved, and reestablished—indicate the dispersed and shifting nature of the settler population. LeCount (1976:28) lists the Reno post office as the first in Tonto Basin; later, the Cline post office became the main office. James (1991c:39) lists

eight different post offices in the Tonto–Payson–Pleasant Valley area. With greater settlement density, schools were established (LeCount 1976:29). Ten schools were established at communities or ranches in the Tonto, Payson, Pleasant Valley, and East Verde areas between 1881 and 1915 (James 1991c:39).

Lacking rich mineral resources, the lower Agua Fria region did not draw the settlers that were attracted to Tonto Basin or the middle Verde River. Not until the Depression years would homesteading become more than sparse. A single homestead was filed under the Desert Land Entry Law in 1891, and was canceled in 1894 (Ciolek-Torrello 1981b:31). Small communities were established in the 1880s, including Beardsley and Peoria, agricultural communities that were founded in 1888. Glendale was founded in 1891, and other small towns in 1897, 1912, and 1920 (Fenicle et al. 1994:6). Small-scale irrigation began in the 1890s. An 1892 General Land Office (GLO) map shows a small *acequia* that watered three fields covering about a quarter-section (Fenicle et al. 1994:6).

The Agua Fria region differed from Tonto Basin and the lower Verde valley in having major transportation routes pass through it. The Phoenix–Wickenburg stage route and the Phoenix–Prescott wagon road were established in the 1870s and 1890s. Frog Tanks, near modern Lake Pleasant, was a stopping place settled in 1889 or 1890 by William Pratt, a miner. It consisted of a stage stop, hotel, corrals, a post office, and a general store (Stone and Ayres 1984:31). Stone and Ayres (1984:31) locate only four homesteads, all dating to the 1910s to 1920s. The Mitchell Springs Ranch (AZ T:3:13 [ARS]) was established in the 1920s.

According to Ciolek-Torrello (1981b:31), the federal government pursued a policy of preventing use of the lower Agua Fria River drainage. As sections of land were transferred to the state of Arizona, however, the land was opened up to sheep and cattle grazing. The policy of blocking private use of lands may have been a product of the rights-of-way granted to the Paradise-Verde Irrigation District and Agua Fria Water and Land Company (Ciolek-Torrello 1981b:32). Numerous attempts to patent land in the area were rejected, but squatters were common. Midvale observed the tent camp of one such squatter in 1940 (Ciolek-Torrello 1981b:32).

The Great Depression proved a paradoxical boon to settlement north of Phoenix. Settlement in these environmentally uncertain and marginally productive lands became a viable alternative to unemployment in more-populated areas (Stein 1981a:100–101). Claimants often stayed on their land only long enough to fulfill the residency requirement, and then sold the land as the economy improved and land values rose (Stein 1988:85). Ayres and Seymour (1993) describe one such depression-era homestead on the middle Agua Fria River.

Mormon settlement was sparse in the region north of the Phoenix Basin, which itself held the most sizable settlements

in Arizona. No settlements are known to have existed in the lower Verde valley or the Agua Fria drainage (Walker and Bufkin 1979:27–28). There were some tentative and unsuccessful efforts to settle the upper Verde area and Tonto Basin. The first explorations with an eye for settlement of the basin were in the 1870s. In 1878, John H. Willis drove stock into the upper Verde basin and took the first wagon into the East Verde valley. Price W. Nielson (Nelson) settled on Rye Creek in the same year. In 1879 the Pine settlement, located about 20 miles north of the East Verde settlement, was founded by Riel Allen (Granger 1960:111; McClintock 1985:174). Most of the East Verde settlers moved to Pine in 1879, although McClintock (1985:174) writes of a prosperous settlement at East Verde that he visited in 1889, called Mazatzal City, with alfalfa, fruit trees, and livestock. Mazatzal City and Marysville are settlements of ambiguous location. Some identify them as separate settlements in different areas (Granger 1960:99, 108; James 1991c:38, 41), and Granger (1960:108) suggests that McClintock actually visited a settlement called East Verde rather than the Mazatzal City settlement. Wood et al. (1987:25) are of the opinion that Marysville and Mazatzal City are the same settlement.

Other settlements were at Pleasant Valley, founded in 1877, and at Milk Ranch Point east of Pine on the Mogollon Rim, named for a Mormon dairy ranch (Granger 1960:109). A settlement on Tonto Creek was in existence as late as 1899, although most of the people had previously moved to Strawberry and Pine (McClintock 1985:174–175).

Indigenous people proved the major block to intensive Mormon settlement in Tonto Basin. McClintock (1985:175) writes that

There was good reason for the delayed settlement of Tonto Basin, for it was a region traversed continually by a number of Indian tribes. It was a sort of No Man's Land, in which wandered the Mohave-Apache and the Tonto, the Cibicu and White Mountain Apaches, not always at peace among themselves.

The lack of water, the rough terrain, and the isolation of the area were other factors (Granger 1960; Rogge and Myers 1987). The land holdings in the basin remained small, and the settlers typically moved southward where agricultural prospects were better. The Tonto Basin Mormon settlements were formally abandoned by authorization of Mormon leaders in 1890 (McClintock 1985:176).

Welch and Ciolek-Torrello (1994) document the history of Mormon settlement in Tonto Basin and contrast it with the success of ranching and farming in the Little Colorado valley. They note that the failure of Mormon settlement in central Arizona was attributable to the absence of a regional system of redistribution that offset the destabilizing impact of local environmental variation (Abruzzi 1989:652). The presence of such a system in the Little

Colorado valley permitted successful adaptation to the environmental exigencies of that region (Welch and Ciolek-Torrello 1994:4–20).

Water Resources Development

From 1865, when the first reports of the irrigation potential were circulated, until shortly after World War II, when markets and groundwater levels began to drop, Phoenix's growth was due first and foremost to agricultural development. The type of farming that fueled the growth of the Valley of the Sun was water-intensive: cotton and citrus were the most important, and most water-consumptive, crops. The appeal of transforming sere desert land into a lush and fruitful oasis was irresistible, and was fueled by effusive newspaper articles and advertisements, and investment schemes that proved too good to be true (Ciolek-Torrello 1981b:22–24; McClintock 1985:229–231).

Although betraying some archaeological bias, Rogge and Myers's (1987:11) statement—that Phoenix owes its initial settlement and sustained success to the Hohokam, who not only demonstrated that irrigation agriculture was practical, but even left behind a network of canals to show how it worked—is not much exaggerated. The early settlements were concentrated on the lower Salt River and, indeed, the first grew up around Swilling's Ditch, which is widely believed to have reused a section of prehistoric canal. John W. (Jack) Swilling has been credited with recognizing the vast potential of irrigation canals in the Phoenix Basin. Swilling was a member of the Peoples prospecting party who found gold in 1863 in the Bradshaw Mountains (Barnes 1988:434). He was also a morphine addict and a violent drunk who died in Yuma prison in 1878 after being accused of robbing a stage (Sheridan 1995:199). In 1867, while working for John Y. T. Smith of Smith's Station on the Fort McDowell Road, he developed the idea of excavating an irrigation ditch from the Salt River to carry water to Smith's hay fields. Swilling founded the Planters' Irrigation Company with the financial backing of Wickenburg investors. Its name changed to the Swilling Irrigation and Canal Company, Swilling's group completed the ditch, which was located on the northern bank of the river, in 1868.

According to McKenna and Doyel (1984:9), the ditch was an immediate success and illustrated the potential of the valley to investors. Swilling's Ditch served as the prototype for other joint-stock canal companies that proliferated across the valley, with Swilling himself often involved in the newly formed companies (Sheridan 1995:199). Many shareholders leased their water and sold their land, promoting land speculation from the beginning. By 1872, Sheridan (1995:200) reports, farmers were cultivating 8,000 acres of barley and wheat along with vegetables, grape vines, and fruit trees. The

Salt River valley was developing into an important agricultural area that supplied the military and the mines.

Unlike the canal companies that developed in the Salt River valley, which were private business propositions, the Mormon irrigation efforts were communal endeavors (Sheridan 1995:199). Irrigation agriculture would prove the enduring components of the success of Mormon settlements along the Salt River. Mesa was founded in 1877 by Mormons from Idaho and Utah (McClintock 1985:212). They incorporated a prehistoric canal in their first irrigation project, the 11-mile-long Montezuma Canal (McClintock 1985:212–213). Lehi also was founded in 1877 by Mormons from Utah. Their first action was to construct an irrigation canal, known as late as 1921 as the Utah Ditch (McClintock 1985:204). The Mormons' understanding of the contribution of ancient Hohokam irrigation canals to their agricultural pursuits is clear. "Nothing short of Providential was considered the finding of the canal, dug by a prehistoric people into the edge of the mesa," McClintock (1985:213) writes of the Mesa canal. Indeed, McClintock (1985:226) published a version of Patrick's (1903) map of Hohokam irrigation canals along the Salt River, on which the Utah Ditch appears. The prosperity of the Mormon communities stemmed largely from cotton, a crop with high water requirements. According to McClintock (1985:211), the Mesa community was one of the first to join the association securing water storage at Roosevelt, and farmlands were extended southward almost to the Gila River by means of pumping irrigation water. Subsequently the success of Mesa was linked to the development of Pima long-staple cotton (McClintock 1985:211).

At first, the non-Indian settlement of central Arizona was a boon to the Pima. Their wheat, corn, and forage crops supported the livestock used by the stage lines and by government troops as well as the soldiers. Poston wrote in 1865 that it would have been "impossible for government troops in Arizona Territory to subsist without supplies furnished by these Indians" (DeJong 1992:368). As more and more Mexican and American settlers came to the Gila River, however, water issues and water rights rapidly became the Pima's paramount concern. Non-Indians settling above the reservation opened canals and used large amounts of water. The construction of Swilling's Ditch exacerbated the Pima's fears that their water would be appropriated. Copper mines newly opened in the mid-1870s in the upper Gila River watershed also consumed considerable water. The Pima soon found themselves without water, and on the verge of starvation because of crop failure.

Politics and economic competition played no small role in the resolution of water rights issues. Among the first opportunities exploited by the early non-Indian irrigators of the lower Salt River valley was to supply hay to Camp McDowell (Rogge and Myers 1987:27). Two government agents assigned to represent the confederated tribes cornered the

Pima wheat market and speculated in land. Congress's refusal to recognize Indian water rights was not offset by the enlargement of the Pima-Maricopa Reservation in 1869 (DeJong 1992:373–375). Whether it was deliberate or not, the robbing of Pima water rights effectively removed them as economic competitors.

Having gobbled up the Pima share of Gila River water, Americans turned their eyes to other sources of water. The northern tributary valleys of the Gila and Salt Rivers remained largely vacant, government-owned land. Ambitious projects were developed to water the margins of the Salt River valley. Among these was the "immense" Arizona Canal, excavated across the northern portion of the valley in 1885 (Fenicle et al. 1994:7). The canal was 58 feet wide at the top and 36 feet wide at its bottom. The diversion dam built by the Arizona Canal Company below the confluence of the Salt and Verde Rivers was the most substantial diversion structure of that time (Zarbin 1984). Sheridan (1995:200) observes that the Arizona Canal did not follow Hohokam blueprints, but envisioned bringing water where no one had farmed. When it was finished, promoters claimed that 100,000 acres of "unproductive desert of no value for any purpose" would bloom under its waters (Sheridan 1995:200).

Other projects included A. J. Chandler's Consolidated Canal of the late 1880s, which brought Salt River water to Chandler's lands. Eventually, the city of Chandler grew up there (Luckingham 1989). The Grand Canal of 1878 crossed the desert all the way to New River. By 1900, 264 miles of canals had been constructed with the potential of irrigating 161,360 acres in the Salt River valley. In the meantime, the valley population had grown from 240 in 1870 to nearly 20,000 (Fryman et al. 1977:9–10).

Beginning in 1889, a grandiose irrigation project that would have dwarfed central Arizona's existing irrigation systems was in the works (Introcasso 1990; Rusinek 1989; Williams 1934). A group of investors formed the Agua Fria Water and Land Company in 1888 as a first step toward developing the water resources of that area (Introcasso 1988). By 1891, the vision had grown to include three proposed water storage dams upstream of Frog Tanks. Fifty miles of main canal and 200 miles of lateral canals were envisioned to irrigate 160,000 acres (Agua Fria Water and Land Company 1895).

As Fenicle et al. (1994:7) note, the publicity brochure accompanying this project exemplified the boosterism of the last decades of the nineteenth century. It was, however, the personal determination of William Beardsley that kept the project alive. Initial construction began in 1892 (Fenicle et al. 1994:8), and almost from its inception, the project was plagued with problems: torrential cloudbursts that destroyed construction, bankruptcy, continuous litigation, and the stymieing effects of the Reclamation Act of 1902. The new law provided for the withdrawal from sale of public lands that might benefit from federal reclamation projects, including

much of the Salt River valley (Fenicle et al. 1994:8–9). Beardsley continued his ceaseless efforts to seek funding and to promote his project, including a land exchange deal with the Santa Fe Railroad that was accepted in 1910, and the sale of land for cotton farming as part of the World War I effort. Beardsley formed the Beardsley–Agua Fria Water Conservation District in 1925 to finance the project himself, taking advantage of a 1921 Arizona State law encouraging the formation of water districts (Introcasso 1988:56). The name of the district was changed to the Maricopa County Municipal Conservation District No. 1, a name it retains today. By 1925, the design for the multiple-arch dam on the Agua Fria River was completed, and Beardsley signed a construction contract with engineer Carl Pleasant. Five days later, Beardsley died (Fenicle et al. 1994:10–11).

Beardsley's death left Pleasant in control of the project. Donald Waddell, one of the partners of the New York firm Pleasant secured to underwrite the project, moved to Arizona to personally supervise the project. The second episode of construction began in 1926 to complete the downstream diversion dam that had remained unfinished since 1895, build the larger water storage dam, and excavate an additional 28 miles of the Beardsley Canal (Fenicle et al. 1994:12). The water storage dam was variously known as Frog Tanks Dam and Carl Pleasant Dam. Lake Pleasant Dam was completed in 1927, although work on the canal system continued (Introcasso 1988:63).

The celebration was marred by the appearance of cracks in the dam, and the rival Salt River Valley Water Users Association prodded safety hearings in 1929. Problems continued during repairs ordered by the Arizona Water Commission, not the least of which was Carl Pleasant's death in 1930 at the age of 43. The third major phase of construction activity was completed in 1935, enabling the water district to finally store and deliver water, ending more than "40 years of frustration, litigation, engineering controversy, and most significantly, financial difficulties" (Fenicle et al. 1994:15). In 1964 the name was officially changed to Waddell Dam to honor Donald Waddell's role. The water district operated Waddell Dam, the Dyer Diversion Dam, and the Beardsley Canal system until New Waddell Dam was constructed (Introcasso 1988). Stone and Ayres (1984:31) suggest that the perimeter served by Waddell Dam and the Beardsley Canal is the largest privately funded irrigation district in Arizona.

The northern valleys were not abandoned during the long, litigious history of the Agua Fria Water and Land Company, or in spite of the collapse of land values that followed the demise of the Paradise-Verde Irrigation District. Certainly many homesteads in the region failed and lands were given up (see Ciolek-Torrello 1982:12–13). Other small communities obtained their water supply from a new source: groundwater drawn from deep wells (Karie 1973). Deer Valley became an important area for fruit production, cattle grazing, and, to a lesser degree, mining, all based on groundwater (Ciolek-

Torrello 1981b:30). Development of the northern valleys eventually took place, but without the benefit of irrigation until William Beardsley's long-delayed dream was realized.

The Era of Dam Building

Throughout the course of the political and financial power plays for water, the Phoenix boom continued. In 1887, the Maricopa and Phoenix Railroad connected Phoenix to the outside world, and in 1895 the Santa Fe, Prescott, and Phoenix line provided access to northern Arizona. The completion of the Arizona Canal in 1885 opened a vast irrigation perimeter north of the Salt River. With a superb agricultural climate, extensive canal networks, and a transportation link to large markets in place, a reliable water supply was the only missing ingredient in the formula for enduring success. The importance of reliability was graphically demonstrated to farmers in 1891, when devastating floods obliterated virtually all irrigation works in the southern part of the Territory, a disaster repeated elsewhere in the Southwest (Reisner 1993). The response to floods was quick and certain: big dams were needed for flood control, and they were needed in many places. In 1902 Congress passed the National Reclamation Act, also called the Newlands Act. For central Arizona, the law initiated—and has sustained—the development of an extensive surface water storage system. The act withdrew federal lands from public settlement until decisions could be reached on reclamation project locations.

The role of national forests in watershed management was a critical factor in water storage designs. According to Baker et al. (1988:34), 40 percent of the surface and subsurface water originates on the 14 percent of National Forest land in Arizona and New Mexico. One of the paramount reasons for establishing Tonto National Forest in 1905 was to protect the Phoenix metropolitan watershed (Baker et al. 1988:38). Tonto Forest consolidated administration over the majority of the Salt River's nonreservation watershed (Marcus 1983). Growth and boundary change have resulted from Reclamation Service acts and through a long series of land transfers (Macnider and Efland 1989:94).

In 1889, everyone agreed that the Salt River needed to be dammed. The best location was discovered when the Maricopa County Board of Supervisors sponsored a surveying expedition to the Salt and Verde watersheds. About 70 miles north of Phoenix they found a "wing-shaped double valley" where Tonto Creek flowed into Salt River. USGS engineer Arthur Davis reported that "It would probably be impossible to find anywhere in the arid region a storage project in which all conditions are as favorable as this one" (Sheridan 1995:207). Yet Sheridan also reports that another decade would pass before private investors attempting to dam the Salt River finally admitted failure. Despite the pleas of Akimel O'odham to intervene in usurpation of Gila River water by

non-Indian farmers, pressure from the Salt River population resulted in plans proceeding to dam the Salt River, and the Gila River dam project would be shelved for thirty years (Sheridan 1995:208).

Theodore Roosevelt Dam was constructed under the National Reclamation Act and began the large-scale impounding of water in the United States (Baker et al. 1988:38). Much more than simply the construction of a dam was involved. It was, Sheridan (1995:209) notes, a colossal endeavor. A supply road between Apache Junction and the dam site (the Apache Trail) was required to connect it with the outside world. Additional support facilities—telephone lines, timber mills, lime kilns, employee housing, and a massive canal and power plant—were required. Because labor was scarce, the community of road builders, stone masons, workmen, and associated personnel was multiethnic, including several hundred Apache workers (Stone and Ayres 1984:46). To reduce costs, the engineers took over a private sawmill in the Sierra Ancha and deposits of limestone and clay north of the Salt River to produce their own lumber and cement (Sheridan 1995:210).

Construction began in 1905, the wettest year in memory (see Chapter 3). Floods hampered construction that first year and prevented it from resuming until 1906. Incredible toil created a partial dam sufficiently high in 1908 to repel floodwaters. The last block was laid February 5, 1911 (Sheridan 1995:211). The filled reservoir inundated 16,000 acres. Although nearly four years behind schedule and costing more than three times the original estimate of \$3,000,000, the Reclamation Service hailed it as a “monumental triumph of the skill and genius” of its scientific creators (Sheridan 1995:211). President Theodore Roosevelt proclaimed it one of the two greatest triumphs of his administration, the other being the Panama Canal (Sheridan 1995:211). For many years Roosevelt Dam was the largest and tallest dam in the world (Baker et al. 1988:38). The social and economic impacts of construction have been the focus of Reclamation-sponsored studies of dam construction (Ayres et al. 1994; Douglas et al. 1994; Rogge et al. 1994).

Because the Salt River overflowed Roosevelt Dam four times during the dam’s first eight years of service, the Salt River Valley Water Users Association built three new dams downstream. Mormon Flat Dam was completed in 1925, forming Canyon Lake; Horse Mesa Dam was put into service in 1927, creating Apache Lake; and Stewart Mountain Dam was finished in 1930 to form Saguaro Lake. According to Sheridan (1995:217), the main purpose of the dams was to control floods and generate hydroelectric power. He notes, however, that Mormon Flat Dam alone brought about 34,000 acres into cultivation near Chandler. Construction on the Granite Reef diversion dam below the mouth of the Verde River, built to serve the Arizona and South Canals and to replace the Arizona Dam destroyed in 1905, began in 1906 and was completed in 1908.

Mining, Ranching, Farming, and Water in the Lower Verde Region

As early as 1896 Mindeleff observed that settlement was sparse in the lower reaches of the Verde River. The areas around Prescott and Granite Creek were settled relatively densely, but in the lower reach down to Fort McDowell “there are hardly a dozen houses all told” (Mindeleff 1896:190). He observed that there were “no roads and few trails, and the latter are feebly marked and little used” (Mindeleff 1896:190). The hardy souls wresting a living from the rough terrain were “cowmen,” and even the impermanent “cow camps” were sparsely distributed. Bandelier (1892) writes little of ranches, cattle, or settlement in the regions he visited between 1880 and 1885, but his lack of observations are also telling. In general, the lower Verde valley was not intensively settled, which can be attributed in part to poor soils, lack of irrigable land, and rough country. Even then, as documented in Chapter 3, overgrazing had already caused substantial damage to the landscape.

Mining

Compared to the middle and upper portions of the Verde valley, or to Tonto Basin, mineral resources were a weak foundation for settlement and economic development in the lower Verde region. A few isolated mines were established north of the Salt River in the 1880s. A map of Maricopa County (Chamber of Commerce 1889) depicts a number of gold mines in the area, including the “Winifred Mining District,” and gold mines along Cave Creek (Figure 8.6). There was a barite mine on Coon Bluff along the Salt River (Macnider and Effland 1989:189). The memoirs of Clyde P. Moose (1965), a Tonto National Forest Ranger from 1940 to 1948, indicate that the Cave Creek area was “spotted with mines, some abandoned and some still in operation.” One of the oldest copper mines, the Red Rover, was located near the Ashdale Ranger Station along Cave Creek; it is depicted on the 1889 map (see Figure 8.6). The mine came into and went out of operation from year to year with the vicissitudes of strikes and mineral prices. Moose (1965:69) writes,

it would be active then for years it would shut down. . . . He would make another strike, then business would pick up again. . . . The lone prospectors would strike a little “color,” build a shack and stay there for years. They lived on some kind of pension or “grub stake” from someone.

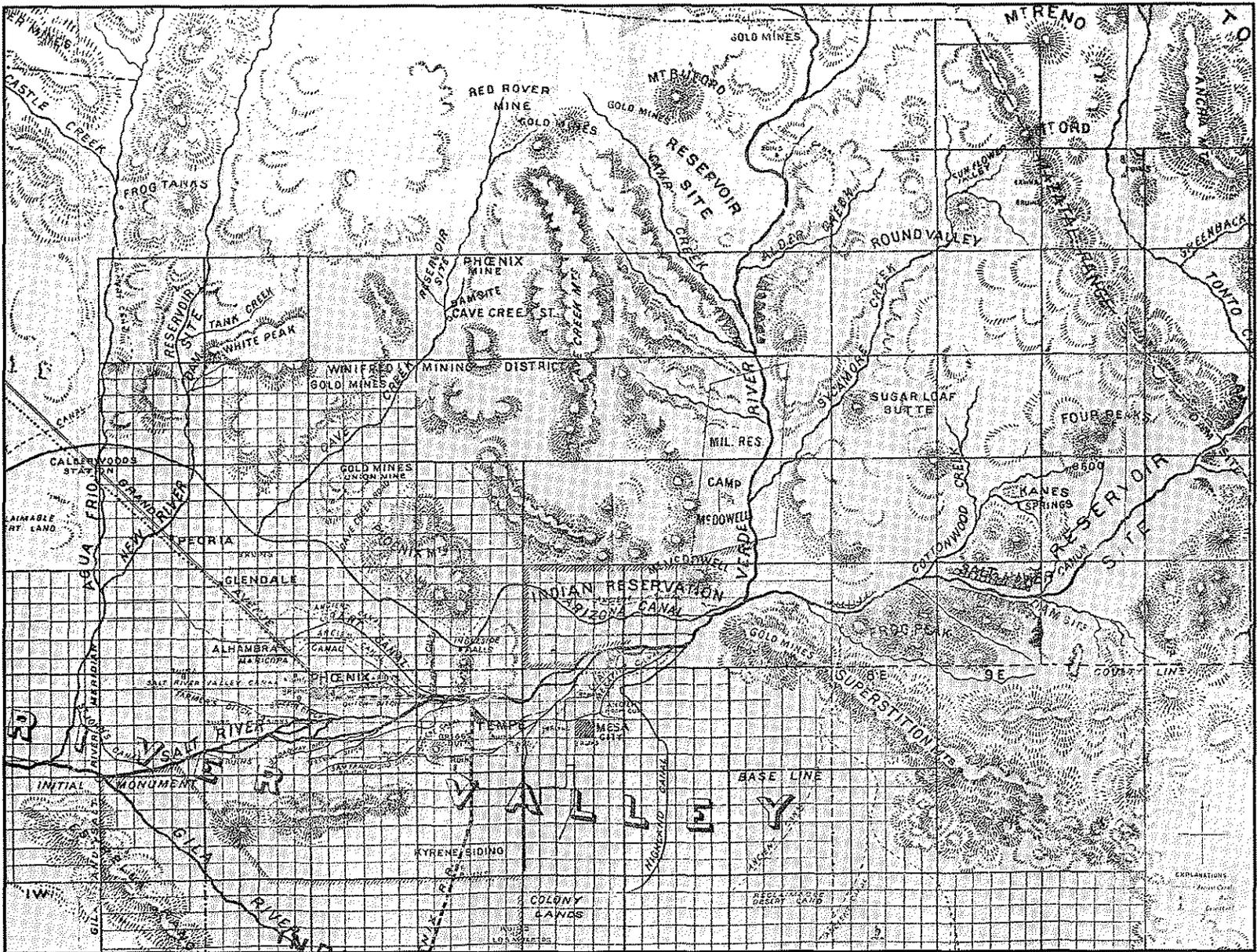


Figure 8.6. Early map of Maricopa County showing settlements, rivers, and the proposed irrigation, proposed water storage, and distribution system (Maricopa County Chamber of Commerce 1889).

There also are gold mines in this area and near "Mount Buford" (Humboldt Mountain) (see Figure 8.6). Without the incentive provided by the richer mines and their wealthy financiers, railroad development also bypassed the lower Verde region.

Ranching

As elsewhere in north-central Arizona, the removal of the threat of Apache depredations created an influx of settlement into the lower Verde region. Settlers began to move in the 1880s, intent on raising cattle, as many had been stockmen in Texas. Although the first cattle were brought into the Verde in 1875 by Pete LaTerreatte, who established the OK outfit at the mouth of the East Verde River, the lower river was not well stocked for another decade or so. The range was fully stocked by about 1890, with a peak cattle population in 1900. The primary market for beef was initially Fort McDowell, but, with its abandonment, ranchers turned to supplying the growing community of Phoenix and the mining towns of Globe and Miami. The railroad allowed cattle to be shipped to markets and distribution points in the Midwest and the East, where they were fattened at feed lots before slaughter (Wood et al. n.d.).

Sheep Ranching

Sheep were brought into the area in the 1870s, and often competed directly with cattle for pasturage. Sheep ranching in Arizona depended on seasonal migration between summer and winter pastures, to remove the sheep from the winter cold of the Colorado Plateau and away from the encroachment of cattle on the northern ranges. Sheep were pastured on the Mogollon Rim country in summer, and brought into the lower Verde region in the winter. Sheepmen rapidly discovered that winter migrations permitted early shearing and realized higher profits (Barstad 1988:19).

Sheep wintering on range already overgrazed by cattle exacerbated problems of environmental deterioration. Some accounts claim that there were 15–20 head of cattle on the range where only one or two graze today (Tonto National Forest 1985). In 1896 Mindeleff observed the environmental changes that had been caused by cattle ranching (see Chapter 3). Feuds like the Pleasant Valley War were spurred by a common problem: overstocking of Arizona ranges. "For two decades, cattlemen and sheepmen alike had followed one overarching principle: Be fruitful and multiply . . . there were just too many animals for the land to sustain" (Sheridan 1995:139–140). One of Tonto National Forest's first decisions was to restrict winter grazing of sheep on its lands.

An 80-mile sheep driveway was established from Blue Point on the Salt River to Spring Creek in the Sierra Ancha

Mountains (Figure 8.7). The driveways were established by the Forest Service to regulate grazing on forest lands and to maximize its pasturage (Wood et al. n.d.). Driveways in use since the 1880s were recognized permanently and were acknowledged in the Livestock Homesteading Act of 1916 (Barstad 1988:21). According to Barstad (1988:22), the Arizona driveways remain the only legalized stock driveways in the United States, and he attributes them to the combined efforts of the Arizona Wool Growers Association and the U.S. Forest Service. The Arizona Wool Growers Association listed eight driveways still in existence in 1970. Two of these, the Heber-Reno driveway and the Tangle Creek driveway, crossed the lower Verde area (see Figure 8.7). These driveways, Sheridan (1995:138) observes, helped transform the Salt River valley into one of the largest agricultural oases in Arizona.

One of the first permits issued in the Chalk Mountain Allotment northeast of Horseshoe Reservoir was to H. L. Gray in 1910. His sheep preference (nearly 1,300 head) was acquired by Dr. Ralph O. Raymond in 1926. The Howard and Lockett sheep companies traded preferences and range with Raymond to consolidate their holdings, and then converted to sheep. The total preference was nearly 5,000 sheep.

In 1942 there were three allotments grouped along the Verde River near Tangle Creek, including Raymond's allotment and that of the Howard Sheep Company located near Horseshoe Dam, of which Raymond was part owner. These allotments were on both sides of the river, creating problems in moving sheep between pastures. The existing Horseshoe Bridge was not useful for this purpose. Moose (1965) writes that at times it was dangerous and difficult to ford the river, and during extremely high water it was impossible to cross. Consequently Raymond applied to Tonto National Forest to build a bridge for the sheep to cross the Verde River. The bridge was constructed north from Ister Flat, just below the mouth of Sycamore Creek (see Figure 8.7). A road had to be built first, primarily with pick and shovel, to reach the bridge site (Moose 1965:66). The first sheep crossed in 1943 (Barstad 1988:28–32).

The bridge was a boon to sheep ranchers, facilitating access to grazing lands on both sides of the river. It provided a critical link in one of the legally sanctioned sheep driveways (Barstad 1988:22). Moose (1965:66) writes that "The swinging bridge was a wonderful improvement and life saver." The bridge was used primarily by the Flagstaff Sheep Company. Jose Antonio Manterola was a Basque shepherd who bought Raymond's Flagstaff Sheep Company in 1945. From 1956 until 1980 the Sheep Bridge remained in use by the Manterola Sheep Company. The historic Sheep Ranch site (AZ O:14:2 [ARS]) consists of two vandalized buildings and associated features and trash in an area used by Jose Manterola's sheep grazing operation. In 1984 the Manterola's sheep preference was converted to cattle and the allotment reassigned to the Johnson Ranch Partnership, which had the

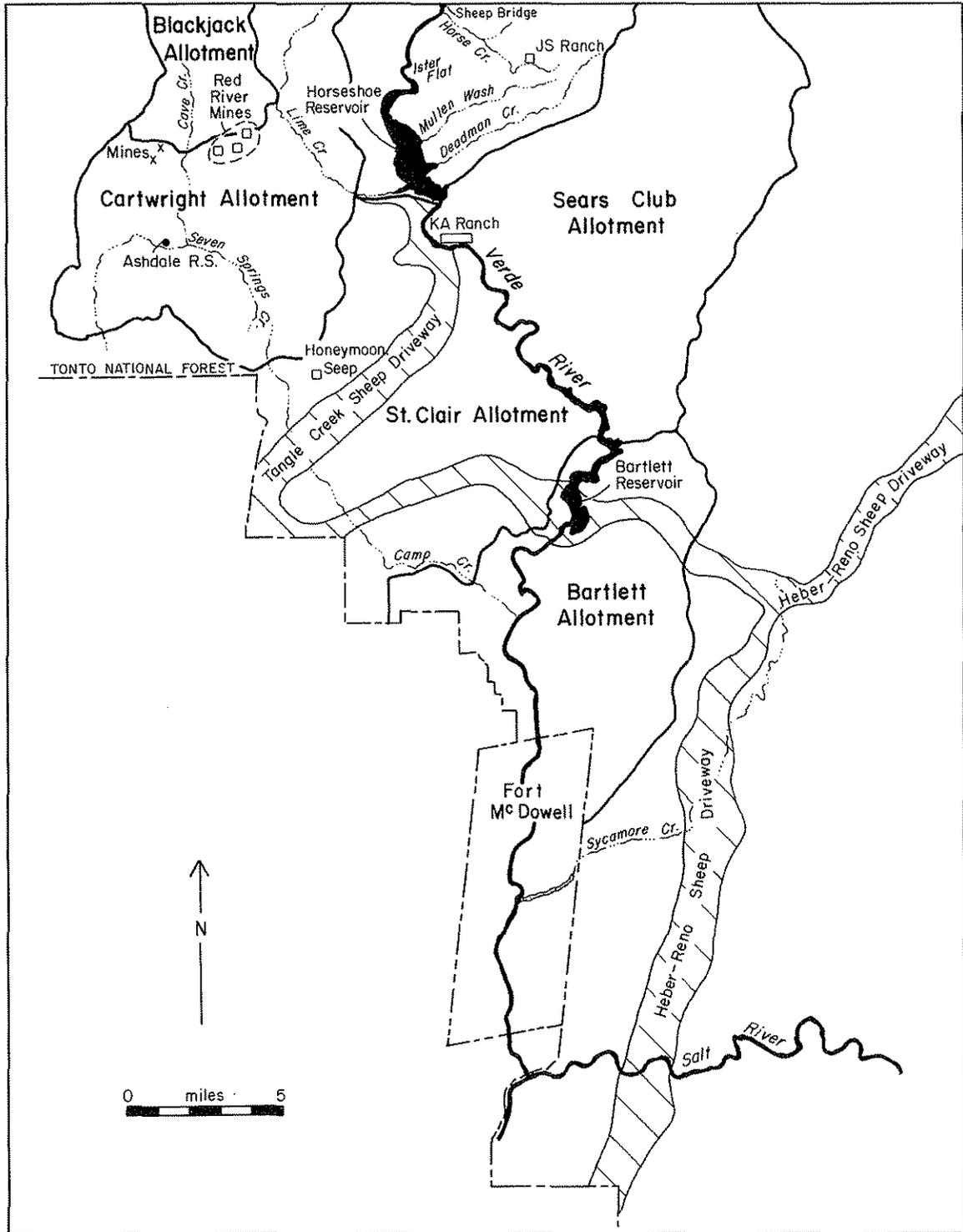


Figure 8.7. The lower Verde River region, showing Tonto National Forest allotments, sheep driveways, and other important areas of land use (information from Tonto National Forest, Cave Creek District).

bridge removed from its maintenance agreement with Tonto National Forest. The wooden suspension bridge was placed on the National Register of Historic Places in 1978. The original bridge was demolished in 1988 because of its deteriorated condition, and reconstructed the same year by the Forest Service (Macnider and Effland 1989:189). A Historic American Engineering Record (HAER) was prepared by Doyle and Associates (Barstad 1988) before the bridge was demolished.

The Arizona sheep industry declined sharply after World War II, when rising labor costs and the development of synthetic fabrics began to affect wool prices. The use of sheep driveways also declined. In 1987, Barstad (1988:42) states, only two remained in operation. Several of the lower Verde Forest allotments, such as the St. Clair allotment (see Figure 8.7), continued to be devoted to sheep. Its peak in the years between 1951 and 1974 was in 1952, and its low usage in 1972. Between 1927 and 1940 the entire Sears-Kay allotment, which encompasses today's Sears-Club allotment to the east and southeast of Horseshoe Reservoir and adjacent areas (see Figure 8.7), was grazed by sheep during winter. In the 1960s cattle replaced most sheep grazing, and graze the area today. Some sheep are grazed on the Chalk Mountain allotment, although in greatly reduced numbers.

Cattle Ranching

General Land Office maps of the lower Verde region dating to the first decade of the 1900s indicate that the area was virtually devoid of even small settlements and ranches at that time. Earlier maps, however, plotted a handful of small ranches along the lower reaches of the Verde River. An 1880 "Official Map of the Territory of Arizona" (Eckhoff and Reicker 1880) places the Davenport, Hopkins, Sheep, and Frenchman ranches in the region.

Perhaps best illustrating ranching enterprises in the lower Verde region is the saga of the Cartwright family, who became one of the best-known ranching families in Arizona. The Cartwrights moved to central Arizona from a small farming and ranching town in northern California in 1874. Redick Jasper Cartwright brought his family to the Territorial capital of Prescott with few possessions and little money. In Prescott, Redick worked in the sawmills, and eventually moved to Phoenix. The family decided to try farming and ranching, and traded some land for 50 head of cattle. The original herd was driven from Phoenix to near the present-day Horseshoe Dam in 1887. Land was acquired in the Cave Creek and Bloody Basin regions, and by the 1890s the ranch had expanded considerably and was known as the "51" Ranch (Hurlbut 1970).

Redick's son, Jackson Manford ("J. M.") Cartwright, developed his own herd. With that and 150 head of his father's cattle, J. M. moved his operation to Seven Springs around the

turn of the century. In 1908, C. E. Cartwright received a permit to run 125 head of cattle based on prior use. The exact location of his ranch is not known. In 1924, J. M. Cartwright, E. A. Cartwright, and the J. M. and R. J. Cartwright permits were consolidated into the firm known as the Cartwright Brothers (Tonto National Forest 1963). The J. M. Cartwright homestead entry was filed in 1914, although there is no record of receipt of a final patent. The ranch property was located near Schult Spring along Cave Creek (Table 8.2). J. M. Cartwright eventually served as the president of the Arizona Cattle Growers Association from 1932 to 1935. J. M. retired in 1938, turning the operation of the ranch over to his son, J. M. Cartwright II (Carlson et al. 1990). In 1948 the grazing permit was transferred to Allen R. Cartwright, son of C. E. Cartwright. In the 1940s, the Cartwright Ranch was running cattle in the Columbine Spring area, immediately north of the Camp Creek summer home area.

The Cavness Ranch, also known as the 51 Ranch, centered on 69 deeded acres and was located near the head of Lime Creek. It was operating prior to the establishment of Tonto National Forest, which in 1908 issued a permit to T. J. and H. C. Cavness to run 500 cattle. In 1918, the partnership between the Cavnesses was dissolved, with a waiver going to T. J. Cavness. The Cavness allotment was fenced and cross-fenced for better range control (Tonto National Forest n.d.a; see Table 8.2).

In 1915, Frank Asher and W. W. Moore obtained permits for the use of 92,000 acres of grazing land. Their Tonto National Forest allotments extended from what was to become the Bartlett Dam site to the Fort McDowell Yavapai Reservation boundary, and from the McDowell Mountains on the west to the Mazatzals (Stein 1984). In 1919, Asher homesteaded a plot located roughly two miles above the Fort McDowell Reservation boundary (Sharlot Hall Museum Place Name File, Prescott), which would become the Box Bar Ranch headquarters (see Table 8.2). Like many of the early ranchers in the lower Verde region, Asher's sons managed the operations of the ranch (Mason n.d.). Moore purchased Asher's interests in the Box Bar around 1920, and the ranch remained in the Moore family until 1955. Moore (1965:79) notes the employment of Apache cowboys at the Moore Ranch.

The Sears-Kay Ranch was established in 1913, when W. P. Sears filed a homestead entry. The patent was received in 1919 (see Table 8.2). In 1927, Colin Campbell bought out the Sears-Kay Ranch, and began running sheep on the allotment. It eventually became known as the Ashfork Livestock Company (Tonto National Forest 1985).

Additional ranches in the region included the JM and Lower OK ranches. In 1942, there were at least eight outfits on the Verde, in addition to the Cavness, Box Bar, and Cartwright ranches. These included the JS Ranch, below Horse Mountain; the HK Ranch on Sycamore Creek; the LX

Table 8.2 Patented Land Claims in the Lower Verde Region

Claimant Name	Acreage	Location	Homestead Entry	Date
Lopez, Frank	51.25	T7N R6E, Section 2	Survey 316	10/19
Sears, J. M.	159.87	T7N R6E, Sections 1, 2	Survey 312	4/19
Rosenberger, H. V.	18.06	T8N R7E, Sections 15, 16	Survey 334	6/19
Asher, J. F.	157.37	T5N R6E, Sections 30, 31, 32	Survey 512	9/19
Cavness, W. E.	107.29	T9N R6E, Section 29	Survey 160	6/19
Dugan, E. F.	54.41	T9N R6E, Section 7	—	9/19
Hughes, H. B.	—	T5N R8E, Sections 23, 26	Survey 153	—
Wilson, W. W.	—	T5N R8E, Sections 1, 11, 12	Survey 445	—
JM Ranch	—	T7N R6E, Sections 11, 12	—	—
Lower OK Ranch	—	T8N R6E, Section 27	—	—
Sears-Kay Ranch	60.14	T6N R5E, Section 2	—	10/19
HK Ranch	—	T9N R7E, Section 29	Survey 160	1915
Cartwright Ranch	56.78	T7N R5E, Section 8, 17	—	1914
Jones, S. R.	320	T5N R5E, Section 34	—	6/33
Norman, James	320	T5N R5E, Section 34	—	10/33
Ballard, J. H.	—	T5N R5E, Section 35	—	11/33
Christian, Samuel	320	T5N R5E, Section 29, 33	—	1/39

Bar Ranch in Bloody Basin; the Diamond Ranch, located east of the Verde River below Diamond Mountain; the Circle M Ranch, located southeast of the Diamond Ranch; the Dugan Ranch on Tangle Creek; the Six Bar Ranch on Jacks Creek; and the Cross F Ranch, east of the Verde River, near Black Ridge on the slopes of the Mazatzal Mountains (Russell 1994). Other ranchers did not actually own property in the region, but instead ran cattle on the open range. During the summer, the cattle would generally be run in the mountains on both sides of the Verde River (Mason n.d.).

Before the range was fenced, cattlemen relied on hired hands, roundups, trail drives, and the chuck wagon. Roundups were made during the spring to brand and tag stock, and to ship culled cattle. Each ranch had one or more wagon bosses who served as the leader of the hired cowboys. The wagon boss planned the day's work and assigned tasks. A cook was hired to run the chuckwagon, and he supplied all the food needed for the roundup. The wrangler was in charge of the horses. Each horse had to be rested after a day of riding the range, meaning that cowboys needed at least seven. Roundups were difficult because of the rugged character of the lower Verde terrain. Dogs helped the cowboys round up strays.

After roundups, cattle were shipped to market in the fall. Line camps and work areas were used by several ranch outfits cooperatively, as springs were widely separated. The

Box Bar Ranch drove their cattle south to the nearest rail-head, a drive that took about four days. The cattle were moved first to the Fort McDowell Reservation, and then to stockyards at the railroad, destined for Omaha or Kansas City (Mason n.d.).

Moose's (1965) memoirs provide a sense of what ranching life was like in the lower Verde region for much of the twentieth century (Moose 1965:63–69):

The cattle were wild, spoiled and hard to handle, especially in Lime Creek. . . . Most of the cowboys were Mexicans. . . . They could rope a cow in brush or on a rock hillside. . . . This country was in a lower altitude and the cattle . . . were permitted to stay year long. By this arrangement it was necessary to ride with the cattlemen during roundup to get a count on the number they were actually grazing. . . . I never found enough excess to cause much alarm. . . . The range looked good because it was grazed only in winter and had all summer to grow. . . . Most of the outfits had a cabin that served as headquarters and for a base of supplies for the herders. . . . When the different herders needed supplies, the camp tender would come with his burros. . . . At the beginning of deer hunting season each fall . . . hands stopped all ranch work and put in full time hunting until they had killed four or five buck deer.

Moose indicates that the sheep allotments were not fenced individually but were separated by tin markers. There were several allotments inside this vast enclosure of about 210,000 acres and some 36,000 sheep were permitted. Moose writes that rangers were dependent on ranchers' and herders' estimates of their herds, but that most were typically honest. The sheep would come on the district in the fall, coming down from the high country where they had summered.

Soon after the turn of the century, population in the entire Verde valley decreased considerably, perhaps because of the effects of overgrazing that made cattle ranching a hazardous proposition. Most settlers had departed from the tributary streams. In the 1880s, for example, there were at least six ranches on Clear Creek, but only one settler remained in 1900. The estimated population for the entire valley in 1901 was only 1,500 people. A report by the Tempe Canal Company in 1901 (Turney 1901) described the country as a desert, noting that there were less than 200 cattle in the region, where the land had previously supported thousands of head. More than 15,000 sheep were reported grazing on the Black Forest reserve north of the study area, by contrast.

Regional trends are mirrored in the use histories of specific allotments. The use of the Cartwright Allotment to the west of Horseshoe Reservoir (see Figure 8.7) peaked in the late 1910s. An extremely large increase in cattle in 1918 stemmed from the forester's decision to allow stock to be added to the permit. In cooperation with the war effort, the Forest Service encouraged livestock permittees to put more cattle and sheep on the ranges. In 1919 prices fell; the ranges became overgrazed, the ranchers on the verge of bankruptcy. Overgrazing was a severe problem, and by 1923 a policy to severely reduce the numbers of livestock on forest lands was initiated (Baker et al. 1988:96). Despite attempts at stock reduction in 1940 there still were problems with overstocking and overgrazing in this area, according to Moose (1965:65). Use dropped dramatically after the war until 1955, and has remained more or less the same since that time.

Tonto National Forest has attempted to control the problems caused by overgrazing in the latter nineteenth and early twentieth centuries. Before the 1940s, range management was poor, with few cross fences and "wild" cattle. Pasture rest areas were established to alleviate the damage. These plots were fenced off to prevent cattle from grazing on them, allowing the natural vegetation to return (Tonto National Forest n.d.a). A range inspection in 1944 for the Black Jack Allotment showed that the range was suffering a substantial decline in density, composition, and vigor. The permittee on the allotment was given several options to alleviate the damage, illustrating the active role taken by the Forest Service in range management (Tonto National Forest 1957).

Farming and Homesteading

To track the role played by homesteading in the study area's settlement history, GLO plat books archived at the Arizona State Office of the Bureau of Land Management were inspected. The resulting list of homesteads (see Table 8.2) is incomplete; many of the GLO maps for the study are missing, and existing maps often do not provide much information. The master title plats, on file at the Bureau of Land Management offices in Phoenix, remain a better source of information and were consulted to fill in missing data. It is likely that at least some of the initial settlement of the lower Verde region occurred outside the legal framework for homestead acquisition.

That farming suffered in central Arizona relative to ranching is revealed in a Tonto National Forest land classification study to define land eligible under the Forest Homestead Act (Forbes 1916). At that time less than 6,000 acres of land were in cultivation within the Forest. Forbes writes that the annual agricultural product would be valued at \$150,000, which is less than half the cash value of the stock annually sold. At least three quarters of the farm products were used in the cattle business itself, so that "the relative unimportance of farming as an independent industry is at once apparent," and "The ranchers in the very great majority of cases are stockmen first of all and only secondarily farmers" (Forbes 1916:8).

Cultivation-oriented homesteading was much less extensive than ranching, with outfit locations confined to the vicinity of sources of abundant water (Stone and Ayres 1984:31). Several factors restricted homesteading in the early years. Fort McDowell maintained control over a large share of the region's arable land. Another vast portion was withdrawn on December 14, 1901 for inclusion in the Rio Verde Forest Reserve, a forerunner of Tonto National Forest, and three years later, Salt River Project took control of mile-wide strips along the east and west banks of the river for water supply conservation. Despite the many impediments, some ranchers maintained a feeble hold on farming as well as cattle and sheep, and homesteads were patented throughout the lower Verde region. A handful of these prospered.

The post offices serving the region were at Fort McDowell and at a hamlet on Cave Creek called Overton, although Granger (1960) reports that Washington's Postal Service archives contain no record of an Overton post office. There was virtually no settlement around present-day Bartlett Reservoir. This was also true of the Camp Creek area, and there were no documented settlements between the KA and the Box Bar ranches. Not all homesteads were documented in the official land records, however. The Cavalier homestead, for example, and a cabin on Sheep Creek still standing today has no recorded history. These may represent illegal squatter settlements, or the records may have been lost or destroyed.

Settlement was more intensive along the lower reaches of the river near the confluence, particularly in the Fort McDowell area. A school operated there as early as 1876 (Reed 1977:136), and by 1895, there were more than 50 children living in the area who needed schooling (Hackbarth and Taylor 1992:396). As Hackbarth (1992c:412) observes, the military fort served as the nucleus for a domestic community; it stimulated farming, cattle ranching, and illegal squatters alike. The 1870 U.S. census shows a "Rio Verde" community in the area. It was a white, male population employed in farming or labor, and more than half were foreign born (Hackbarth 1992c:412). With the abandonment of the military post and subsequent establishment of the Indian reservation, the community changed drastically in ethnic composition. The history and archaeology of the Cuba School established at the abandoned Fort McDowell, and historical-period habitation there, are discussed by Hackbarth and Taylor (1992) and Hackbarth (1992c).

All of the places that served as the headquarters for working ranches had a reliable water supply and a piece of flat land, but only a few of them were cultivated. As an example of a typical outfit, the Homestead Entry Survey (HES) Plat (dated May 28, 1914) for Rosenberger's homestead shows dwellings, two sheds, a shop, and a cultivated area. Located to take advantage of a good spring on a tributary of Horse Creek, the place became known as the JS Ranch. Forbes (1916) found about three acres irrigated here, and notes that cultivation was limited to fodder crops for the livestock. Another homestead along Sycamore Creek, east of Horseshoe Reservoir, had two dwellings along with a barn, shop, storehouse, and wagon shed, according to the HES Plat of 1913. This outfit may once have had about 10 acres of cultivated land, but lost the irrigation entitlement as a result of the Reclamation Act (Forbes 1916). Forbes suggests that these two small parcels of arable land are indicative of the limited agricultural opportunities above the KA (Johnson) Ranch. Moose (1965:63) wrote that until 1940, when CCC workmen built a new road to the ranch, all supplies had to be packed in.

The Menard Ranch (AZ U:2:301 [ASU]), until recently known as the KA Ranch or Johnson Ranch (Sharlot Hall Museum Place Name File, Prescott), is located immediately below Horseshoe Dam, on the east bank of the river (see Figure 8.7). J. Marion Sears was apparently the initial occupant of this parcel. Sears took possession of the place beginning in 1887 and successfully patented his claim on April 7, 1919 (see Table 8.2). The 1915 map of the Sears homestead indicates a windmill, hay shed, well, shops, two houses and two additional outbuildings. An irrigation system providing water to fields south and west of the ranch buildings was recorded by archaeologists. A prehistoric habitation site apparently has been obliterated by the historical-period activities

(Stone and Ayres 1984). Francisco Harques earlier unsuccessfully attempted to complete requirements on a 51-acre homestead in the same area (AZ U:2:300/40 [ASU/ASM]). Frank Lopez assumed control of the property, filing in 1919 (see Table 8.2). The homestead was patented on October 11, 1922. The 1915 map of the Lopez homestead shows a house, well, and shed (Stone and Ayres 1984).

The Lopez and Sears homesteads were combined into the KA Ranch, known as the Johnson Ranch since the mid-1970s. In his land classification study, Forbes (1916) states that the 37 acres of cultivated (dry-farmed) land around the Sears and Lopez homesteads made use of a "fertile alluvium of five to ten feet in depth, with the water table . . . 15 to 20 feet from the surface, which is too great to have any large effect upon farming possibilities." Forbes (1916) recorded the recent history of the hay crop: 1913, one-third ton per acre; 1914, negligible. He anticipated a crop of three-quarters ton per acre in 1915. Forbes further notes that about one crop in three years was successfully dry farmed, and these were crops grown on the most-favorable sites. Forbes observed that other 5–10-acre parcels of bottomlands probably could be farmed along the major Verde tributaries in Township 7N, Ranges 6E and 7E, but none were as promising as the Sears-Lopez lands. Douglas et al. (1994) report the results of recent archaeological documentation of the Lopez homestead.

An interview with ranch manager Wes W. Kuefer provided additional information on the history and use of the Johnson Ranch, the largest expanse of alluvium in the Horseshoe vicinity, as well as some data on the Seven Springs Ranch (Russell 1994). The Johnson place has 250 acres of deeded land that serves as the foundation for a cattle operation. At some time subsequent to Forbes's visit in 1915, the irrigation potential has been developed, and six fields covering about 150 acres are now irrigated to produce alfalfa and sudan grass fodder crops. The best fields typically yield 4.5 tons of hay per acre, showing the tremendous increases in production that can accompany irrigation in the lower Verde region. By comparison, Forbes's (1916:9) yield data indicate average production of one ton per acre of wheat hay. In addition to the deeded acres, Johnson and Kuefer run cattle on approximately 200 square miles of Forest Service land. Their permit allows 746 head, and some of the stock are moved to Johnson's ranch in Williams after the spring roundup. Using five hired hands, Kuefer completes the roundups in 30–45 days.

Two unpatented homestead sites are located on Ister Flat, north of Horseshoe Reservoir. AZ O:14:127 (ASU) consists of a 15-by-20-foot house foundation, depression, and associated trash dating to the 1920s. One mile north is AZ O:14:128 (ASU), a foundation of similar size and associated trash (Stone and Ayres 1984:37).

Irrigation Agriculture and Water Resources Development

Water and irrigation, like elsewhere in central Arizona, are crucial themes in lower Verde history. Neither ranching nor farming was a viable pursuit without supplemental water. Low precipitation, high temperatures, and high evapotranspiration rates prohibit dry farming in all but exceptionally moist years, and in certain areas high on the western flanks of the Mazatzals. Rugged topography creates complex patterns of air circulation that make precipitation unpredictable and spotty (see Volume 2, Chapter 2). Homestead and settlement locations suggest that water for irrigation was the *sine qua non* for farming and ranching; small tracts of land with a dependable water supply were far more desirable than large tracts without water (Forbes 1916:8). Livestock will remain within easy reach of perennial water and natural springs, destroying pasturage unless forced to adopt more wide-ranging habits. In addition to other pressures on the limited and variable water supply, the Verde River flow attracted substantial interest from the populations attempting to make the Phoenix Basin grow, bloom, and produce.

Irrigation Agriculture

The history of farming enterprises at Fort McDowell reflects many of the social, economic, and political processes that shaped irrigation agriculture along the lower Verde River. Agriculture at Fort McDowell significantly influenced the economic trajectory of the region by offering protection for farming populations downstream, and setting the pace for irrigation agriculture during and after the military occupation. The U.S. Army at Fort McDowell at first tried to feed themselves and their animals by hacking 200 acres out of the dense mesquite bottomland along the river, but their farm failed. Thereafter, it was civilians in the Salt River valley who supplied the soldiers and their horses. "The U.S. military gave birth to Phoenix," Sheridan (1995:199) writes.

In the summer of 1866, "An *acequia* was dug about four miles north of the post, and a hundred acres were plowed and planted with sorghum, sugar cane, and corn" (Myres 1974:28; Corbusier 1969). The original 1877 map of Fort McDowell in the National Archives (Schilling 1959) shows the *acequia* (Figure 8.8). A newly arrived cavalryman, Camillus C. Carr (1889:12) described the farm:

A piece of bottom land lying on the river, near the post, containing about half a section, was selected, an irrigation ditch several miles in length, and, in places, ten or twelve feet in depth, was dug; the land cleared of its dense growth of mesquite trees, bull brush and cactus—mainly by the labor of the three companies . . . constituting the garrison.

The *acequia* was the "Government Ditch" (AZ U:6:15), one of two important canals that supplied water to the fort for domestic and agricultural uses. An early Reclamation Service "Map of Gila and Salt River Valleys" locates only one irrigation feature above the Salt-Verde confluence, the "HG Diversion Dam" on the Verde River about 4 miles upstream from Fort McDowell. This dam was probably the intake for the Government Ditch. Schreier (1989:147) found evidence to suggest that, like other canals constructed in the Gila-Salt valley to the southwest, the Government Ditch followed the path of a prehistoric canal. By contrast, Stein's (1984) careful study found no evidence suggesting that the Government Ditch reused a prehistoric canal. Khera (1980) states that the evidence is inconclusive. The 4-mile-long Government Ditch (capacity of 391 miner's inches) was irrigating 160 acres in the late 1800s (Stein 1984).

In the first farming season, the post farm consisted of 120 acres of spring sorghum and corn, as well as an additional 120 acres of winter wheat and barley. In response to civilian protests that the military was there to fight Indians rather than garden, the farm was leased to private contractors beginning in 1868. Post payroll records show year-round distributions to civilian farmers, presumably indicating double cropping (Stein 1984:30). The irrigated agriculture regimen established during the early years at the fort involved November or early December plantings of hard grains for harvest in April or early May, followed immediately by sowing softer grains and vegetables for harvest in late October or November. A similar post farm was established at Camp Verde in 1874 that irrigated 57 acres.

The second of the two most important canals of the four serving the Fort McDowell fields was the Jones Ditch (AZ U:6:2) (Figure 8.9; Stein 1984). The Government Ditch and the Jones Ditch were built on the west side of the Verde River; both were served by rock-reinforced brush diversion dams, and both had to be frequently relocated or otherwise reengineered in response to flood-induced changes in floodplain morphology. The 7.5-mile-long Jones Ditch (capacity approximately 500 miner's inches) was the larger. It was built between 1896 and 1899, and proved to be the most reliable and long lived. The Government Ditch was linked to the Jones Ditch in 1904. There were two smaller ditches that went out of service in 1915.

Nonmilitary settlement and use of the post's grounds began even before its formal abandonment in 1890. In 1875, an enterprising Hispanic man named Benjamin Velasco began constructing an irrigation canal along the east side of the Verde River, continuing some five miles south of the fort (see Figure 8.9). Velasco claims to have diverted 2,000 miner's inches of water, 500 of which he used for irrigation (Hackbarth and Lancaster 1992:424). The diversion dam was about one mile below Fort McDowell. Although Velasco was not alone—squatters on the reservation were a persistent problem—in 1886 he was ordered by "officers of the United

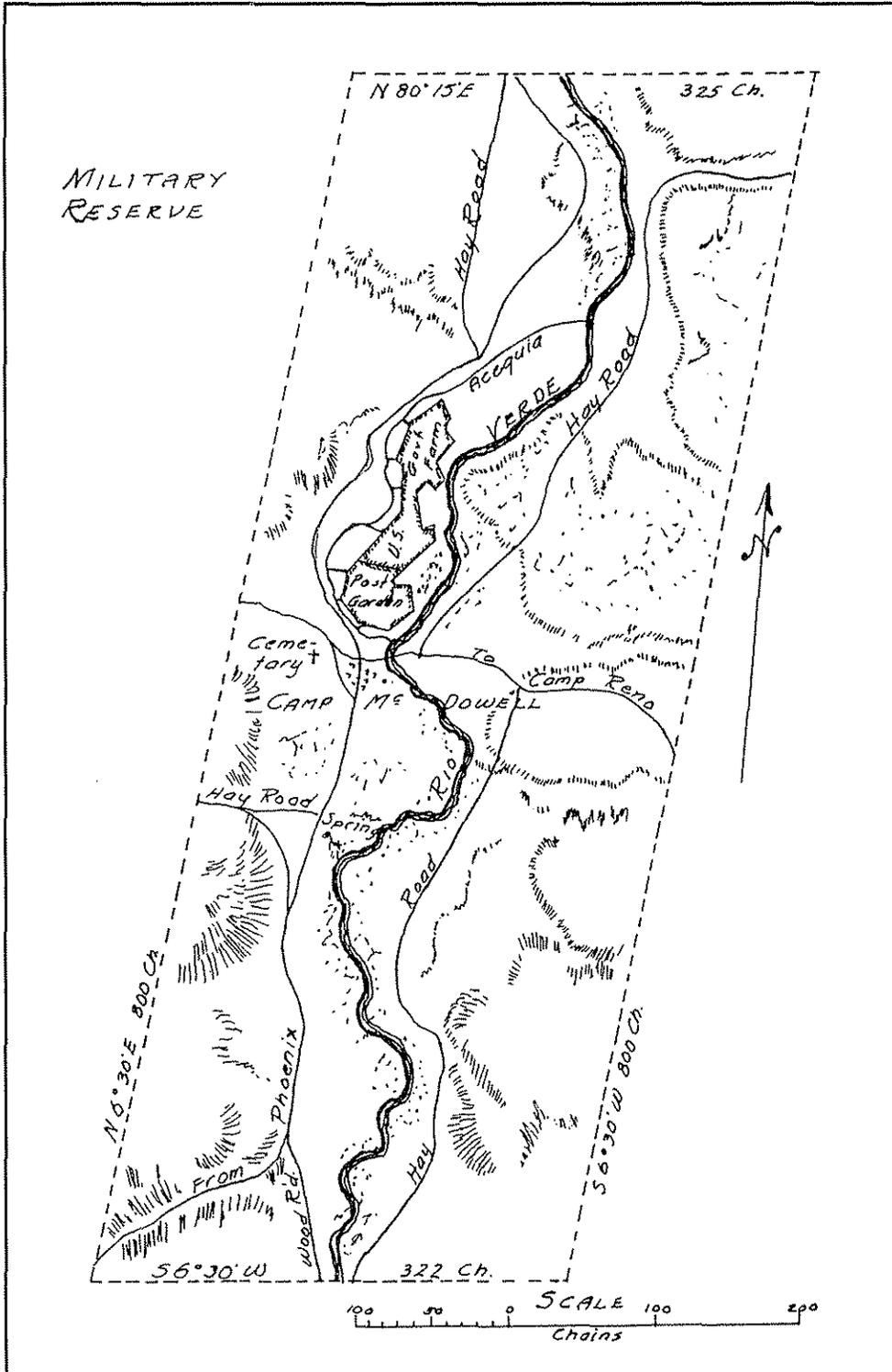


Figure 8.8. Map of Fort McDowell made in 1877 by Frank Schilling (1959), from the National Archives, Washington, D.C. Ditch labeled "acequia" is the Government Ditch.

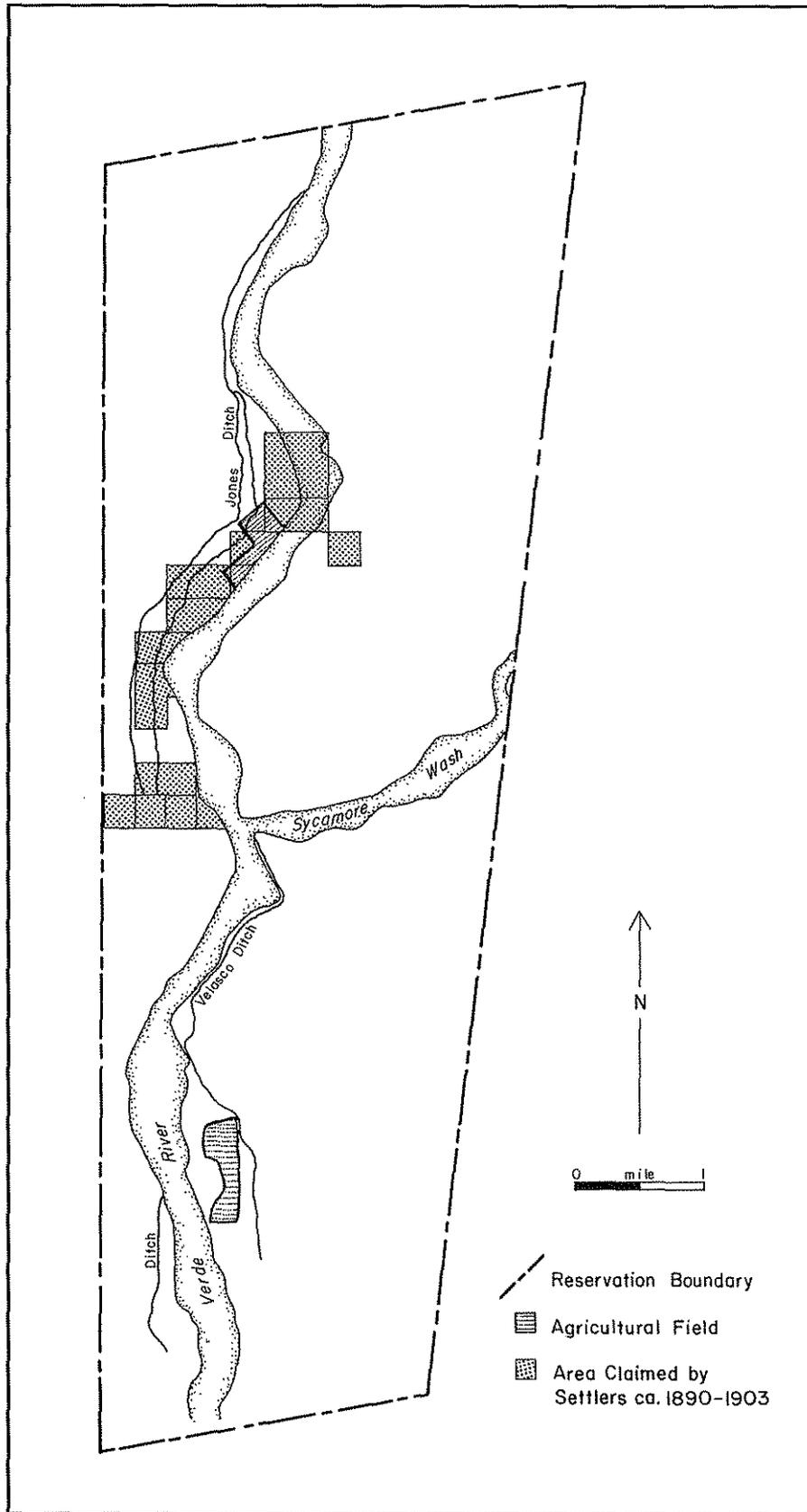


Figure 8.9. Map of Fort McDowell Reservation showing agricultural fields, areas claimed by settlers, and irrigation ditches.

States" to abandon the canal (Maricopa County Recorder's Office 1894). Although Velasco's removal was reportedly "for military purposes" (Maricopa County Recorder's Office Misc. Records Book 5:588, cited in Hackbarth and Lancaster 1992:426), Hackbarth and Lancaster (1992:426) suggest that it was financial difficulties and failure to pay his debts that caused Velasco's forced removal from the military reservation. Other claims on the Verde River water were made in 1877, for 20,000 miner's inches of water and 5,000 inches, both on the west bank of the river. In 1886, Mrs. A. White claimed 1,000 inches along the west bank near the confluence, according to records at the Arizona Department of Water Resources, and in the same year, J. B. Montgomery filed a claim for 1,000 miner's inches on the east bank near the confluence. Mrs. White made a repeat claim in 1888.

Following the Army abandonment of Fort McDowell in 1890, settlers descended on the property to take advantage of the improvements made during the military occupation (Stein 1984). The subsequent history of the fort's use illustrates conflicts between Indian and non-Indian farmers over water rights and land. Some of the settlers filed claims on lands that Congress had never restored to the public domain, and others occupied and cultivated land without pursuing legal title. Hackbarth (1992c:413) observes that the 1894 act approved appropriation only of unimproved sections of abandoned military land, a provision conveniently forgotten by many of the settlers at Fort McDowell.

This process took place at Camp Verde as well as Fort McDowell. Ted Smith, Sr., a Northern Tonto Apache, was told by his parents that Yavapai as well as Tonto Apache (including his parents) farmed areas along the middle Verde River and its tributaries (Smith and Smith 1990). These farmsteads were the first areas to be taken over by non-Indians after the indigenous peoples were moved to the San Carlos Reservation. Soon after the Army withdrawal from the Verde post, Apache and Yavapai refugees returned to find their lands inhabited by non-Indian settlers (Macnider and Effland 1989:230). The Camp Verde Reservation established for the Indians returning home from the San Carlos Reservation consisted of only 640 acres.

At Fort McDowell, Benjamin Velasco reclaimed his surrendered ditch in 1894 (Hackbarth 1992c:412), the same year that unimproved, abandoned military lands were opened to settlement. Robinson and Woolf (1895, cited in Hackbarth and Lancaster 1992:426) reported that Velasco's ditch was 4 feet wide at the bottom, capable of carrying an 18-inch water depth and having a capacity of 500 miner's inches. Settlers repaired the Government Ditch in 1895, cleared the old government farm, and began irrigating fields at Fort McDowell. Canouts (1975:118) claims that four new canals were opened at this time. A water-use study by Robinson and Woolf (1895) reports seven ditches along the west side of the lower Verde River and two more ditch segments on the east.

Hackbarth and Lancaster (1992:426) observe that the rush to claim water rights at this time was probably created not only by the 1894 act permitting settlement on unimproved, abandoned military land, but also by the intention of the Rio Verde Canal Company to dam the river, thereby threatening downstream water users such as Benjamin Velasco. They needed to officially lay claim to the water or lose it. Four claims for Verde River water were filed in the Fort McDowell area between 1894 and 1898 (Hackbarth and Lancaster 1992:427). According to the Arizona Department of Water Resources, a claim was made for 500 miner's inches of water for the Garden Ditch, possibly the Velasco Ditch, and for 5,000 miner's inches for the use of the Government Ditch.

In 1899, Benjamin Velasco sold his water rights to six individuals (Maricopa County Recorder's Office Deed Book 46:516, cited in Hackbarth and Lancaster 1992:426). The Vilasco [*sic*] Ditch Company was described as having seven subscribers and a capacity of 250 (Arizona Water Company 1899, cited in Hackbarth and Lancaster 1992:427). The seven users were cultivating only 130 acres. As Hackbarth and Lancaster caution, however, the report was filed by an antagonistic water user that wanted to increase its Verde River allotment.

Controversy over the disposition of Fort McDowell lands erupted when 28 Yavapai obtained permission to move from the San Carlos Reservation to the area around the abandoned fort in December 1899 (Chamberlain 1975). The best lands were already being used by the settlers (see Figure 8.9), however. Responding to the Yavapai's plight, the U.S. Indian Service, precursor to the Bureau of Indian Affairs (BIA), sought to obtain the abandoned military post for use as a Yavapai reservation. Theodore Roosevelt set aside approximately 25,000 acres for the Indian's exclusive use and occupancy, creating the Fort McDowell Indian Reservation (see Figure 8.8) through an executive order dated September 15, 1903:

It is hereby ordered that so much of the land of the Camp McDowell abandoned military reservation as may not have been legally settled upon nor have valid claims attaching thereto under the provisions of the act of Congress approved August 23, 1894 (U.S. Statutes at Large, vol. 28, p. 491), be, and the same is hereby set aside and reserved for the use and occupancy of such Mojave-Apache Indians as are now living thereon or in the vicinity and such other Indians as the Secretary of the Interior may hereafter deem necessary to place thereon.

The lands so withdrawn and reserved will include all tracts to which the valid rights have not attached under the provisions of the said act of Congress, and in addition thereto all those tracts upon the reservation containing Government improvements which were reserved from settlement by the said act of Congress, and which consist

of (1) the immediate site of the old camp, containing buildings and a good artesian well, (2) the post garden, (3) the U.S. Government farm, (4) the lands lying north of the old camp and embracing or containing the old Government irrigation ditch, and (5) the target practice grounds.

The land was procured in two stages. Non-Indian settlers on the west side of the Verde River using the Jones Ditch were bought out by the federal government in 1903; the remaining lands were procured in 1904 (Hackbarth 1992c:413). According to Hackbarth (1992c:413), this in part resulted from the segregationist tendencies of the settlers who did not wish to be located near the Yavapai. In 1903 the government evicted 14 squatters and 21 others engaged in farming the fort's lands (Stein 1984). Although not obliged to do so, the government reimbursed some of the squatters for improvements made on the land; among the improvements was the Jones Ditch (AZ U:6:2). In 1904, during the second buyout, some of the squatters' claims were found invalid, either because claimants never settled on the land or because they were not eligible for homesteading (Stein 1984:45). Velasco's ditch was sold to the federal government for the reservation in 1904 (Hackbarth and Lancaster 1992:426). All of what had been Fort McDowell was later reassigned to the Yavapai (Stein 1984:32–46; Stone and Ayres 1984:7).

A list of properties sold to the government when the Fort McDowell Reservation was created (Stein 1984:42) suggests that cattle, horses, mules, and hogs were being raised as well as farm produce. Hackbarth (1992b:497) notes the disparate ratio of hogs to cattle, indicating that "cattle ranching was not the main industry in the lower Verde valley at this time."

In 1903, Mead described the Velasco Ditch as 5 miles long, capable of carrying 500 miner's inches of water, and having water rights along with the land. Hitchcock (1904) provided a similar description. The land irrigated by the ditch was noted to be "excellent land and in a fair state of cultivation" (Hackbarth and Lancaster 1992:428). Before the reservation was created, the ditch irrigated eight family farms, a total of 291 acres, on the east side of the river (Hackbarth and Lancaster 1992:423).

Soon after gaining control of the abandoned military reservation, the Indians were obliged to cope with the damaging flood of 1905 (Stein 1984:30). The Yavapai moved from a former pattern of dispersed farmsteads along canals near the confluence, to concentrate in the vicinity of Fort McDowell (Hackbarth 1992b:489). The Velasco Ditch also was damaged by the 1905 flood (Larrabee 1905). At that time it was irrigating more than 1,300 acres. An anonymous report filed in 1911 indicates the vagaries that the ditch was subjected to: arroyo cutting, filling of the canal with sand, and such a slow fall that the canal would fill with moss and weeds.

Hackbarth and Lancaster (1992:429) discuss the acrimonious debate over moving the Yavapai to the McDowell Tract on the Salt River Reservation, which would effectively deprive them of water and simultaneously increase the amount of water available downstream to non-Indian communities. The government's 1910 Kent Decree gave the Fort McDowell Indian Community title to 390 miner's inches of Verde River water (sufficient to irrigate 1,310 acres) and the nearby Salt River Pima title to 700 inches (for irrigating 2,333 acres of established fields located in T2N, R5W) (Williams 1934). Although ensuring regular water delivery, the decree actually reduced the amount of water that was provided to the Indian farms. Prior to this time, water was delivered by means of a straight 12-hour flow, regardless of whether it was used or allowed to run off (Coe 1912). According to Hackbarth and Lancaster (1992:424), water was delivered once each month on the 12-hour basis. Reclamation Service engineers estimated that the soils and topography of the Fort McDowell Reservation could support irrigation of several thousand acres, and that the irrigated fields on the Salt River Reservation (below the Verde-Salt confluence) could be augmented by about 7,500 acres (Williams 1934). The proposed move to the Salt River Reservation failed in the 1920s, largely because of the efforts of Carlos Montezuma (Iverson 1982). The smaller allotment of water due to the 1910 Kent Decree and the degraded lands caused by flooding, however, reduced the Yavapai's ability to rely on farming, which was partially offset by an increase in ranching and off-reservation wage work.

The Velasco Ditch ceased to operate by 1911, possibly as early as 1905–1907 (Hackbarth 1992b:499–500). Hackbarth (1992b:500) suggests that, through time, the Velasco Ditch irrigated increasingly less land, in spite of repairs to and extension of the canal system. Political factors, particularly struggle for water rights, were probably important in this situation. In 1916, Olberg described the difficulties for irrigation east of the Verde River stemming from permeable soil and erosion resulting in damage to headgates. He summarized irrigable lands as consisting of 2,250 acres west of the river and 1,345 acres on the east side, and also noted that previously irrigated land had been abandoned and overgrown (Olberg 1916a, 1916b, 1916c, cited in Hackbarth and Lancaster 1992:430).

The Yavapai at Fort McDowell seem to have been successful farmers until about 1920. Estimates of actual irrigated acreage from the time of reservation establishment until the 1990s vary significantly. The Arizona Commission of Indian Affairs (1960) reported that, at the height of Native American farming, 267 acres on 20 farms were in production at Fort McDowell. Stein (1984:56–58) estimates that, around 1915, as much as 1,300 acres were simultaneously cultivated by 57 farmers with holdings ranging from 5 to 15 acres. Most Yavapai also ran small numbers of cattle by 1917. Regardless

of which figure is correct, by 1958 the Fort McDowell fields were scarcely used, except as pastures.

The Government and Jones Ditches were in need of major repairs by 1930, when CCC labor was used to construct a concrete intake for the Jones Ditch, allowing the Government Ditch to be permanently retired (Stein 1984). Unlike the more recently used Jones Ditch, the Government Ditch is scarcely discernible on the surface in many areas and has been breached by even minor side drainages (Stein 1984).

As in the rest of agriculturally dependent America, the drop in markets that accompanied the conclusions of both world wars put many farmers out of business. The Great Depression was also apparent on the Fort McDowell Reservation, but the tragedy was mitigated by infusions of WPA and CCC projects, many of which focused on repairs and improvements to water works (Ryden et al. 1992:5), such as Jones Ditch repairs (Hackbarth and Lancaster 1992:424).

The field notes from Karl Heider's 1955 ethnographic survey of Fort McDowell include details about Yavapai farming. A June 24 visit to what was, according to a BIA official, the "best" farm on the Reservation revealed "about 30 acres in barley, unharvested, and another 7 or so irrigated into green pasturage" (Heider 1955:25). Although most of the Yavapai at Fort McDowell consulted by Heider claimed that the corn present in the prereservation diet of their parents and grandparents came from trade with the Navajo and Hopi, one elderly man insisted that his people had maintained farms in the general vicinity of the reservation long before Euroamerican contact (Heider 1955:108). Most of the people Heider consulted had either decreased their involvement in farming or had quit altogether. The decline apparently began about 1920 and was attributed to opportunities for wage labor, to greater access via automobiles to consumer goods and entertainment in Phoenix, to problems with the water supply for irrigation, and to laziness. In any case, it was clear that the majority of the land irrigated in 1955 was devoted to barley and cattle pasture. The apparent expansion of barley over wheat may signal increasing soil salinization.

The Fort McDowell Indian Community Water Rights Settlement Act of 1990 (Title IV of the Arizona Desert Wilderness Act, Public Law 101-628 [104 Stat. 4480]) resolved 80 years of uncertainty over the reservation's agricultural systems by guaranteeing 12,000 acre-feet of water for irrigation, and providing for the rehabilitation and expansion of field systems. By early 1994, several hundred acres of land had been returned to production. Outside of Fort McDowell, there was virtually no irrigation farming in the lower Verde region. An "Industrial Map of Arizona" (Clason 1908) highlights several areas in Tonto Basin and in the Gila-Salt valley as supporting irrigation agriculture, but offers no information on the lower Verde River. The political factors that permeate the history of water resources development in central Arizona explain this lack for the most part. In

tightening their grip on the Salt-Verde watershed, the Salt River Valley Water Users Association obtained title to virtually all non-Indian surface water for the drainage basin. This forced small farmers exploiting the scattered pockets of irrigable alluvium out of business. Only those farmers whose water derived from springs or preexisting groundwater pumping were permitted to continue to irrigate. Welch and Ciolek-Torrello (1994) discuss parallel processes in operation in Tonto Basin.

Another serious impediment involved the water supply. As the range became overpopulated, and more and more fences were constructed, livestock no longer had free access to the Verde River. Fodder, especially grass following rainy periods and mesquite pods in the fall and early winter (a particularly critical feed during dry years), was most reliable on the terraces along the river. The entire lower Verde region away from the river is extremely dry, but springs and other water sources are especially scarce west of the river. The Mazatzal Mountains, which are larger, higher, and more rugged than the McDowell Mountains, support many more springs.

Water surpluses were probably as important as water scarcity in determining agricultural patterns. Ditch maintenance seems to have been at the core of problems facing the region's farmers. Stein (1984:48) suggests that the temporary brush structures serving the irrigation ditch intakes washed out from four to five times each year, but this may be an exaggerated estimate. On the other hand, as channel entrenchment and migration proceeded throughout the Southwest after 1880, irrigators were forced to move intakes farther upstream and to regrade ditches away from the river (Stein 1984). The damaging flood events of the late 1800s and early 1900s are discussed in Chapter 3.

The Arizona Department of Water Resources claims database indicates a number of small water claims that were made between 1883 and 1889. These primarily concerned springs in the area of Cave Creek, the Verde's water having already been appropriated by Fort McDowell and the emerging canal companies. For example, M. E. Clanton filed for 50 miner's inches of water from Cave Creek to below Seven Springs in September, 1883. A substantial claim for 10,000 miner's inches was made by G. W. Marlar for Camp Creek falls in 1889. Other claims include an unknown amount from Cave Creek and "all available water" from Hackberry, Rogers, and Grapevine Springs. In addition to the contentious and private nature of water rights claims, many users no doubt failed to register, and some claimants probably failed to construct water works or to otherwise use their entitlements. As Hackbarth and Lancaster (1992:427) suggest, claims no doubt increased when unregistered water users became aware of plans to tap into their source. In addition to the claims filed for agricultural and ranching purposes, there were numerous claims filed for mining operations along Cave Creek. Claims

by organized canal companies are considered in the following section.

The Eyes of Phoenix on the Verde

As early as 1888, William H. Beardsley's inspired and vast plans for irrigation water supply included a dam and reservoir, known as Horseshoe Reservoir because of its location just above a horseshoe bend in the Verde River. This reservoir was to supply a canal with Verde River water that, in turn, would supply a system of smaller reservoirs along the Agua Fria and New Rivers to irrigate the northern valleys of the basin (McKenna and Doyel 1984:10). By 1889 a group of Salt River valley pioneers led by A. C. Sheldon, Captain Prosper P. Parker, and Major Symonds began an alternative scheme, initially called the Citrus Belt Canal Company. Two years later, on June 11, 1891, seven local citizens headed by Sheldon formed a corporation called the Rio Verde Canal Company (RVCC) (Ciolek-Torrello 1981b:22; Karie 1973). By 1892, Sheldon had chosen his project areas, arranged for the government surveys of rights-of-way, hired an engineering firm, Campbell and Anderson of Denver, to assess the project's potential success, and filed a claim for Verde River water (Ciolek-Torrello 1981b:24; McKenna and Doyel 1984:11). Unlike the schemes proposed for the upper Salt River at about the same time, the RVCC sought commercial agricultural development.

The RVCC planned to divert the Verde River flow to irrigate an ambitious 400,000 acres of the fertile, but parched, expanse to the west—the then-barren desert that RVCC Manager Frank Conkey named Paradise Valley (Introcaso 1990). The plan for irrigating the valley centered on a 140-mile-long canal fed by the proposed Horseshoe Reservoir along the Verde River, and three other reservoirs along Cave Creek, New River, and the Agua Fria River. A map of Maricopa County made in 1889 (Chamber of Commerce 1889) depicts the waterworks in detail (see Figure 8.6). The reservoirs and proposed dam sites for what would later become Roosevelt Lake, Horseshoe Reservoir, Bartlett Lake, and Apache Lake were portrayed, along with additional reservoirs on New River and Cave Creek (see Figure 8.6). Howard and Huckleberry (1991:2.1) present a portion of this map. These authors believe that the map is a copy of an earlier one, made by General James E. Rusling, that was prepared to secure federal aid for the water storage and distribution system (Howard and Huckleberry 1991:2.2). It was an attempt to demonstrate the workability of irrigation systems by showing the ancient Hohokam system. According to Turney (1929:7), the map became a Senate document.

By 1890, the RVCC had filed claims, made surveys, and secured capital sufficient to begin work. Multiple claims on the Verde River water amounting to 250,000 miner's inches were made between April 1889 and April 1893. A number of

promotional strategies were used to secure investors. One such strategy involved contrasting their visionary approach with that of previous Verde irrigators:

The pioneers only carried small ditches out of the main stream, and without the necessity of dams or reservoirs were enabled to irrigate the few acres that they cultivated. Under this regime, where an acre was redeemed a thousand were left to the desert growth of mesquite, cactus and palo verde (*San Francisco Chronicle*, April 23, 1893).

The engineer's report to the RVCC (Campbell 1893:4) indicated that the land was "first class irrigable land" and the "very best citrus land." Campbell claimed that the lands of the northern valleys of the basin were even more frost-free than the warm lands of the Salt River valley, because they were 200–500 feet higher in elevation and sheltered by basins from cold air currents. Plans for the irrigation project were ambitious (Campbell 1893:6–7) and included the reservoirs depicted on the 1889 map (Chamber of Commerce 1889), other reservoirs, and canals (summarized by Ciolek-Torrello 1981b:24–25). The planned capacity of Horseshoe Reservoir was 205,000 acre-feet. Additional reservoirs were planned along the river to enlarge this storage capacity. Also planned were a diversion dam and a canal along the Verde River to carry water over the McDowell Mountain pass and then westward to the Agua Fria River and beyond. The total cost for construction was estimated at \$3,000,000–\$4,000,000, with an estimate of \$1,600,000 for Horseshoe Reservoir and associated features (Schuyler 1897:718). Campbell (1893:7,23), however, recommended that the RVCC build only Horseshoe Dam, the diversion dam, and main canal, which alone would irrigate about 310,000 acres of land. He further recommended that the New River Reservoir and other features of the plan be carried out only after the Verde River construction was completed and put into use.

Despite the renown of agricultural opportunities in the "Valley of the Sun" and this promotional campaign, the RVCC abandoned its plans by 1895, presumably because of a lack of investment. Karie (1973) writes that the company experienced many financial difficulties, and that the project lost somewhere between \$600,000 and \$800,000—a considerable fortune at that time. (The University of Arizona Library Special Collections contains the papers of the Arizona Agricultural Experiment Station [AZ 406] and, therein, the lively correspondence between the RVCC's public relations man and the Station Director regarding the project's feasibility. The correspondence is notable because it seems not to have been examined in the otherwise excellent histories of the scheme [i.e., Introcaso 1990; Rusinek 1989]).

In 1895, the company was apparently reorganized under new leadership and its corporate constitution was revised. The second attempt at financing the Verde irrigation project was made by attorney J. K. Doolittle (Karie 1973). Financial

and structural reorganization took place, and by 1895 the name of the company had been changed to the Verde Water and Power Company (Karie 1973). According to the *Arizona Fax Magazine* of December 29, 1933, Doolittle secured the assistance of J. G. Hudson, an “accomplished salesman as well as a religious enthusiast.” Hudson was “one of the moving spirits for the reorganization, and fathered a plan to make Paradise Valley a real paradise for a certain religious sect (Mennonites) of which he was a member.” He was the brains behind the scheme to attract investors, and enthusiastically sold “water rights” that supposedly gave the investor “as much water as he was entitled to be conveyed through the company-owned canals to all lands he owned, from the proposed Horseshoe storage dam.”

By 1897, however, there were indications that the project was in serious financial trouble (Merrill 1975). By this time, the entire project had been surveyed, including the portions that Campbell recommended not to be built. A 715-foot outlet tunnel for diverting the Verde River water during the construction of Horseshoe Dam had been completed, and about 25 miles of main canal had been excavated in Paradise Valley, Deer Valley, and Scottsdale west from McDowell Mountain (Merrill 1975; Schuyler 1897:717). Against Campbell’s recommendation, construction was also initiated on the New River Dam (Ciolek-Torrello 1981b:102–111), demonstrating the financial mismanagement and overly ambitious efforts of the project’s promoters. The \$150,000 expended for this effort had been derived from the sale of water rights for 50,000 acres of land taken up under Homestead and Desert Land Entry laws. Sales continued despite signs of financial trouble; by 1904, water rights had been sold for 150,000 acres, with irrigation planned to begin in 1905 (Merrill 1975). Rights were sold at \$10 per acre, with an initial annual rate of \$1.21 per acre-foot of water and a guaranteed maximum of 2 acre-feet per acre per year (Ciolek-Torrello 1981b:25–26).

The reorganization of the company failed. The project slowed with the silver depression of 1896, and in 1899, bankruptcy proceedings were started against the Minnesota and Arizona Construction Company, the project contractors (Merrill 1975). The hundreds of individuals who had filed were forced to let the lands revert to the government. The owners of the Smith and Green House in the New River valley were among the many hopeful farmers who lost their investments at this time (McKenna and Doyel 1984). In 1904 the U.S. government withdrew most of the Paradise Valley lands from homestead entry, as well as the dam sites and storage sites on the Verde River (Douglas et al. 1994:183; Karie 1973). In 1912, the right-of-way rights were forfeited to the government and the company was liquidated by Doolittle and Parker, who claimed that they had never been able to engage in the business for which they were organized and had no income or accumulations (Ciolek-Torrello 1981b:26).

The RVCC failure is probably attributable as much to the depression of 1893–1897 as to the project’s ambitious nature. The silver crisis virtually stopped payment on the water rights, the company’s sole source of income, although rights continued to be sold until 1912 (Karie 1973). Sufficient water was available to meet the requirements of the project, but conflicts over the use of the water also contributed to the demise of the project. According to Ciolek-Torrello (1981b:26), as early as 1893 rights to the undammed, permanent flow of the Verde River had already been appropriated by the Salt River Valley Water Users Association (SRVWUA), later the Salt River Project. Competition with the Agua Fria Water and Land Company, which under Beardsley’s leadership had planned similar developments in the western part of the project area, also may have been a factor (Ciolek-Torrello 1981b:27). Conflict with SRVWUA, however, was a much more serious problem. Without the permanent flow, the RVCC proposed to impound the seasonal flood waters of the Verde River and make them available to farmers in Paradise and Deer Valleys. But the question of whether the flood waters were sufficient to fill Horseshoe Reservoir and meet the year-round needs of northern farmers was not adequately answered. Following a brief study of floods between 1888 and 1891, Campbell (1893:5) concluded that the winter discharge was in excess of the reservoir requirements.

Campbell’s report did little to allay the fears of Salt River valley users of Verde River water. According to the *Mesa Free Press* (1900) of March 9, “Unless the people of the Salt River Valley take active steps to restrain those who live on the upper course of the streams from using water which belongs here, it is only a question of time until the valley will return to the desert” (cited in Merrill 1975).

Although land had been reopened for homesteading in 1909, the requirement under homestead law to cultivate a minimum acreage proved impossible without irrigation water. It was necessary under the Desert Land Entry Law to cultivate one-eighth of one’s land to get a deed. Many thousands of acres taken out under this law were eventually given up (Karie 1973).

In an attempt to make this new wave of homesteading successful, the old irrigation scheme was dusted off and revived. In 1914, homesteaders in the area formed the Paradise-Verde Water Users Association, a voluntary organization without power to collect assessments. In the same year the Verde River Irrigation District (changed to the Paradise-Verde Irrigation District in 1918) was formally organized as an irrigation district under Arizona law to be able to levy and collect assessments rather than relying on voluntary contributions (Karie 1973). Engineer William H. Bartlett was hired in 1916 and conducted surveys between 1917 and 1920 (Ciolek-Torrello 1981b:28). He is credited with finding the appropriate site for the dam that bears his name (Douglas et al. 1994:138). At the same time they sent J. F. Hart to Washington, D.C., to present their proposals before the

Secretary of Interior, Franklin K. Kane. With the latter's encouragement and advice, they raised \$11,000 for preliminary engineering carried out under the direction of George Sturtevant, a consulting engineer from Chicago (Karie 1973). In 1920, Walter I. Lively, president of the organization, filed with the General Land Office for rights-of-way for the construction of reservoirs and canals at several locations. Bartlett's maps of construction sites were revised by the new chief engineer, A. L. Harris, who had earlier conducted similar work for the Agua Fria Water and Land Company. Two months later, J. D. Bowers and A. N. Hedgpeth, directors of the irrigation district, signed an agreement with the federal government and SRP dividing the rights for the Verde River water and giving the Paradise-Verde Irrigation District the Verde's "unappropriated and floodwaters." The plans of the Paradise-Verde Irrigation District resurrected much of the earlier RVCC's plans (Ciolek-Torrello 1981b:28).

According to Douglas et al. (1994:183), conflicts between the SRVWUA and the Paradise-Verde Irrigation District were temporarily resolved, and the association granted the district access to the dam site and the Verde River water if the district could arrange financing and construct the dam within six years. They missed the deadline, and a new agreement could not be negotiated in 1929.

The conflicts and financial problems that had beset their predecessor continued to plague the district. In 1925, Hubert Work, then Secretary of Interior, after he learned that the district had gathered over \$300,000 in the course of five years but had not begun construction, denied requests for an extension of the 1920 contract because of construction delays and mishandling of funds. In 1926, the new director of the district, H. C. Ludden, brought suit against Work before the Supreme Court. At the same time Ralph H. Cameron, U.S. senator for Arizona, introduced a supporting bill in the Senate. This controversial bill was vigorously opposed by the rest of the congressional delegation from Arizona, composed of Representative Carl Hayden and Senator Henry F. Ashurst. Ashurst presented a minority report to the Supreme Court representing the views of the Deer Valley Protective Association, which was made up of a large number of Paradise Valley land holders who opposed the Cameron Bill and desired cooperative development with SRP. This minority believed that complete control of Verde River water by SRP offered a better chance for development than could be offered by the financially troubled Paradise-Verde Irrigation District (Ciolek-Torrello 1981b:29).

The Paradise-Verde Irrigation District, however, won the decision, and their plans were approved. On June 30, 1930, the Verde River Irrigation and Power District (successor to the Paradise-Verde Irrigation District) was granted canal easements along the Verde River and through the Fort McDowell and Salt River Indian Reservations as consideration for delivering 22,000 acre-feet to Indian lands annually (Williams 1934). After all the delays caused by litigation and

political lobbying, however, the project succumbed to a new problem—the Great Depression. Private sources of funding dried up and great efforts were expended in obtaining federal authorization for a grant of \$18,192,000 to construct the proposed dams and canals to bring water to Paradise Valley. "Jubilant residents of Paradise Valley fired pistols into the air and caused church bells to peal on a sunny December day in 1933" when Franklin D. Roosevelt approved the authorization for the Verde Irrigation and Power District (Karie 1973). The Public Works Administration would fund the construction by Reclamation (Douglas et al. 1994:183). Great economic benefits for the state were envisioned as well as dreams of a true paradise on earth (Karie 1973).

Construction delays caused by new financial difficulties again led to requests for extensions of the new contract. These requests were denied in 1935; but this time, however, appeals presented by Bartlett, now secretary of the district, were rejected in 1937. SRP was unwilling to yield any control over the Salt Basin's effluent; again the government balked and the SRP emerged victorious. Above all else, the valley's ever-increasing need for water and the SRP's demonstrated political authority seem to have decided the issue (Introcasso 1990). SRP claimed that they held prior rights to the Verde River water and worked openly through Congress to block funding of the project (Karie 1973). Despite the great lobbying efforts of Paradise Valley residents and, particularly, many nonresident landowners, SRP officials finally prevailed, when they gained complete support for their position from Arizona's congressional delegation—then Senators Hayden and Ashurst and Representative Isabella Greenway. Secretary Ickes rescinded the loan that would have funded the Verde project, effectively killing it. The final end of the project came when the U.S. Bureau of Interior granted SRP the right to form a second irrigation district, which included all waters from the Verde River (Karie 1973). Following 45 years of vigorous and often acrimonious irrigation scheming, the Verde dams were finally built. Bartlett Dam was completed in 1939 and Horseshoe Dam was finished in 1946. Ironically, the waters impounded by these dams were never used to irrigate the Paradise or Deer Valley farmlands. Instead, all the Verde River waters were carried south of the Arizona Canal to the Tempe area.

Horseshoe and Bartlett Dams

Bartlett Dam was the first dam to be funded primarily by the SRVWUA in conjunction with Reclamation. As soon as the SRVWUA took claim to the waters of the Verde River in 1934, a foothold was established at the construction site to protect the association's interests. Preliminary work on the dam began in 1935 when a road to the dam site and a transmission line were built. In 1936 other preconstruction work was completed, along with a camp for the construction

workers. Dam construction began in 1937 and, despite delays caused by floods, was completed on time and under budget in 1939. Bartlett Dam was the last multiple-arch dam built in central Arizona, and was chosen for its economical use of material. There was no provision for hydroelectric generating in the design (Douglas et al. 1994:139). Bartlett Dam was the largest concrete, multiple-arch dam in the world (Rogge and Myers 1987:57). The dam's price tag was less than \$2,000,000, and the reservoir created holds about 180,000 acre-feet (Douglas et al. 1994:137–139).

Horseshoe Dam, completed in 1945, was constructed by Phelps Dodge Corporation for SRP in exchange for rights to upper Salt River water (Plate 8.1; Rogge and Myers 1987:50). The additional water would permit the mining corporation to increase production to meet the needs of the war effort (Douglas et al. 1994:184). The project was financed as an "emergency war measure" by the U.S. Defense Plant Corporation. The construction camp occupied by the builders, which was near LVAP site Scorpion Point Village, is depicted in Plate 8.2. The original 1893 diversion tunnel was cleaned out and the construction camp built in 1944. Construction was completed in December 1945. The earth-fill dam has no hydroelectric generating capacity, and when full, Horseshoe Reservoir holds about 140,000 acre-feet (Plate 8.3; Jackson and Fraser 1991). The results of archaeological studies of the construction camps associated with the lower Verde reservoir projects are now available (Douglas et al. 1994; Rogge et al. 1994). In addition to archaeological data, these reports contain a wealth of historical information about the projects and their surroundings.

Although the SRP manages the network of Salt and Verde dams primarily to provide water for agricultural and domestic use, Tonto National Forest is the land manager, and is bound by law to provide access to its lands to the recreating public. The reservoirs are immensely popular destinations for urban desert dwellers.

After the Dams

The period following dam construction in central Arizona reflects a shift away from small-scale agricultural and ranching pursuits and toward Forest Service management of recreational lands, and it has witnessed population growth on a permanent and transitory basis. The history of the lower Verde region remained the chronicle of a satellite region generally subservient to the powerful and populous city developing immediately to the south. Like most western population centers, Phoenix grew dramatically after World War II with its agricultural and industrial development, the modern era of sunbelt boom, and concomitant urbanization (Walker and Bufkin 1986:62). In the lower Verde region, limited stock raising, flood control, and recreation are the predominant

activities and themes. The U.S. Bureau of Reclamation and Salt River Project continue to oversee operations of Horseshoe and Bartlett Dams, providing greater safety and more water for the greater Phoenix area. The Bureau of Indian Affairs assures that SRP allows the Verde River to flow at least 10 cubic feet per second (cfs) below the dams (U.S. Department of the Interior 1995). The Maricopa County Highway Department provides construction and maintenance of access roads to the dams.

The National Forest Service manages the land itself. Tonto National Forest remains actively involved in grazing sheep and cattle, and attempting to reverse the problems associated with previous overgrazing. Far fewer animals are permitted on the range today than were run a hundred years ago, and apparently the land is making a strong comeback, according to Patricia Fenner (personal communication 1997) of the Cave Creek District, Tonto National Forest. The Forest provides recreational opportunities as well, including fishing, hunting, camping, boating, and other outdoor activities. A new, privately owned marina was completed at Bartlett Reservoir in 1994, providing further recreational opportunities. Wildlife and fish populations are managed by the Arizona Game and Fish Department.

Historical Profiles of the Apache and Yavapai Reservations in Arizona

Teresita Majewski

In this section, brief reservation histories are presented for Fort Apache, San Carlos, Fort McDowell, the Tonto Apache Reservation (Payson), the Yavapai Apache Reservation (five parcels with headquarters at Middle Verde), and the Yavapai Prescott Reservation (Figure 8.10). These histories will serve as the backdrop for subsequent discussion of the factors that can be used to measure Yavapai-Apache interaction. The actual picture of each reservation painted here is a combination of factual information, such as date of establishment, and interpretation. Most of the sources cited here have the same bias—they contain synchronic information for a particular reservation. The reader should keep in mind, particularly in cases where longitudinal information was not available, that reservations were dynamic entities in the past, and continue to be so.

For purposes of this discussion, Goodwin's (1942) definitions of Western Apache and Yavapai groups is followed (*contra* Perry 1991:7–8). In particular, this means that the

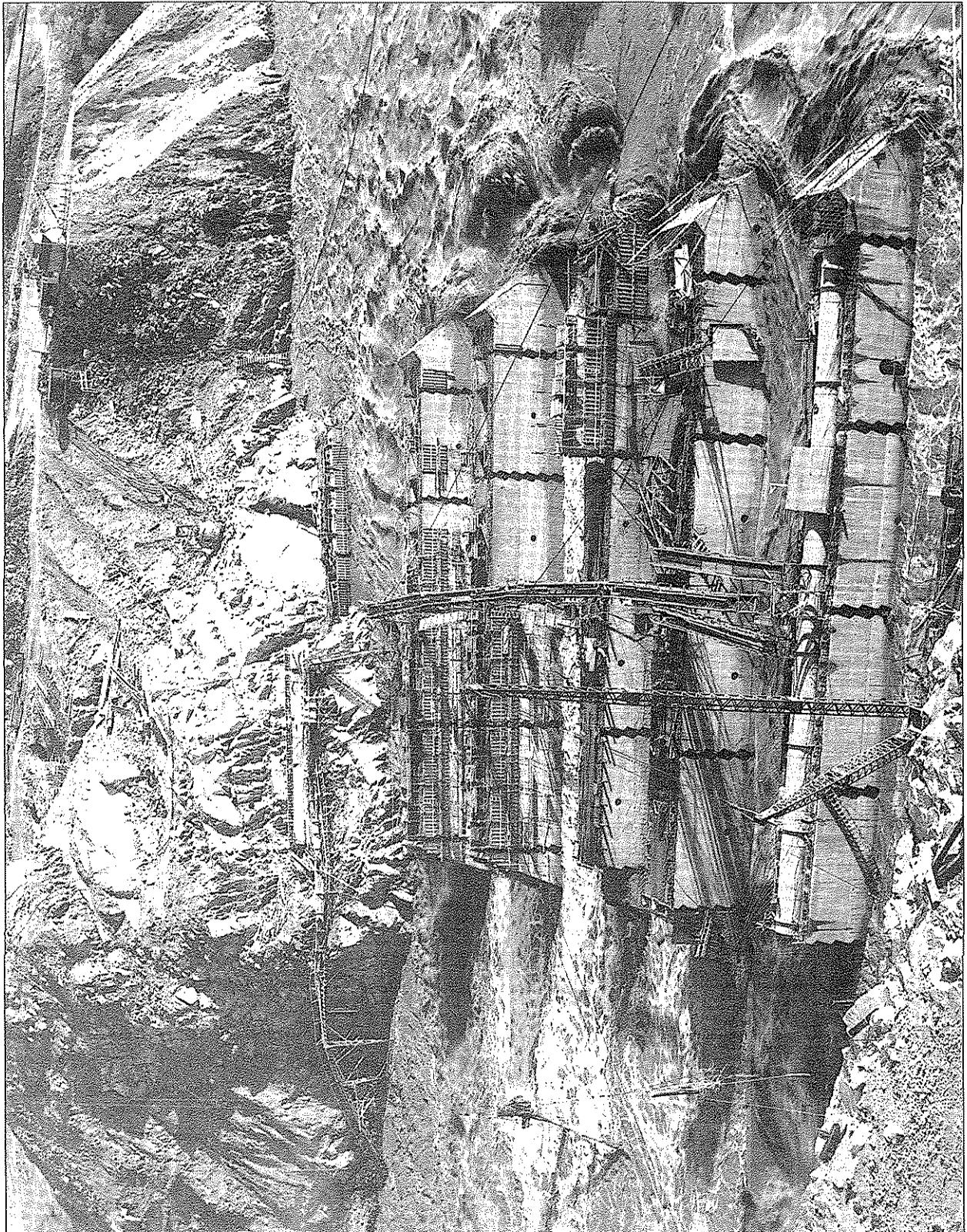


Plate 8.1. Flooding during construction of Horseshoe Dam, March 4, 1938, west view (HAER No. AZ-25-4).

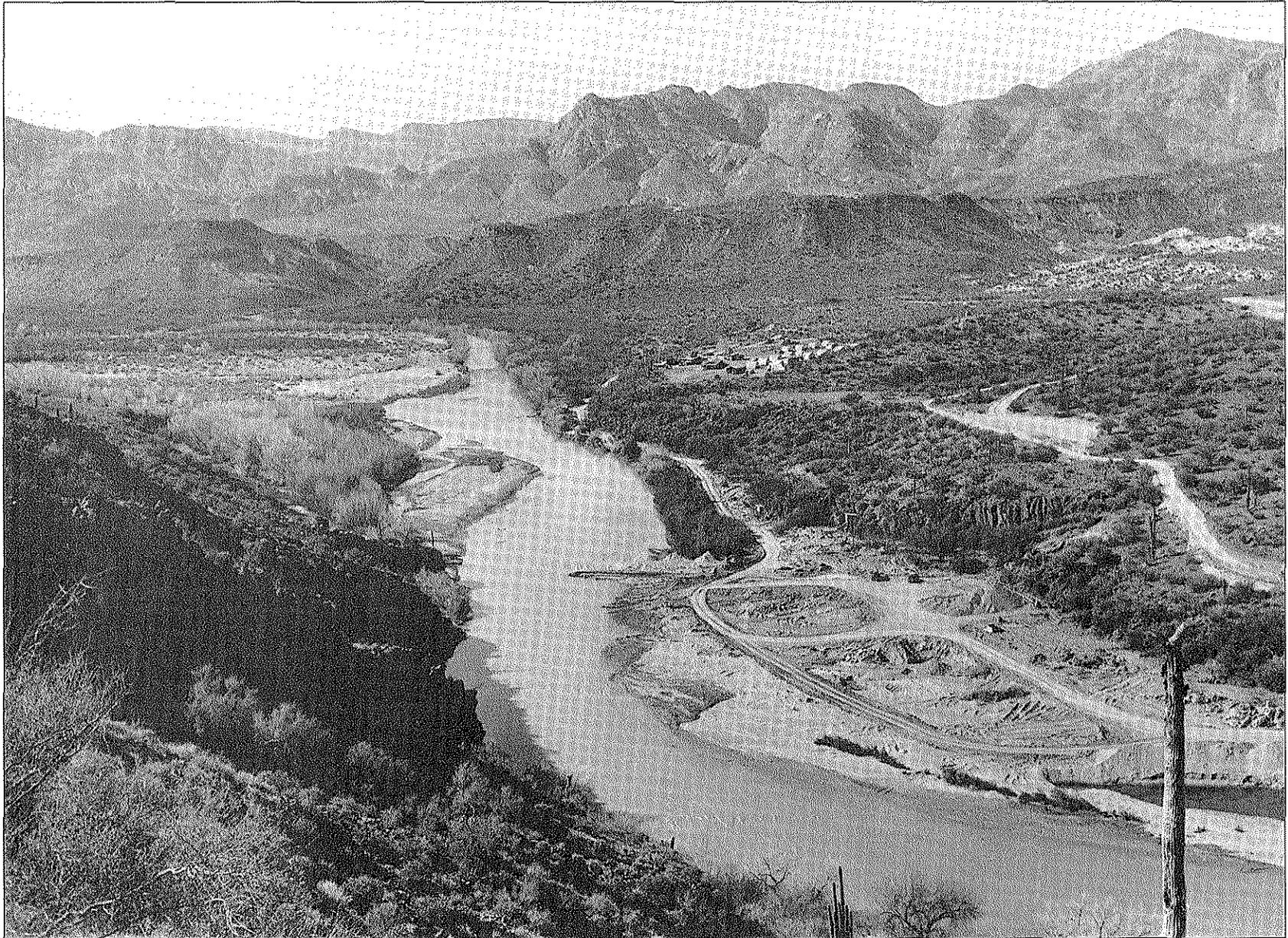


Plate 8.2. Horseshoe Dam construction borrow pits (lower right) and camp at Scorpion Point site (center), February 13, 1944, view downstream to the southwest from above the Horseshoe Dam site (SRP File b-8044).



Plate 8.3. Initial fill of Horseshoe Reservoir at an elevation of 1,926 feet, March 16, 1945, view to the northwest and upstream from dam. Lime Creek is in the upper center (SRP Fotofile #4).

Southern and Northern Tonto are considered to be Apache. Many of the reservation names have changed through time. This discussion uses the most current name for each reservation, as listed in the 1994 profile prepared by the Bureau of Indian Affairs (BIA), Phoenix Area Office.

Fort Apache Reservation

The Fort Apache Indian Reservation is occupied by members of the White Mountain Apache Tribe and is served by the Fort Apache Agency, Whiteriver. According to Basso (1983:480), four Apache reservations were hurriedly designated between 1871 and 1872 as part of the federal government's "peace policy," which was designed to bring closure to a situation in which the military had been unable to control and to curtail the activities of unscrupulous civilian agents. One of these reservations was the White Mountain Reservation, established in 1871 by executive order for the Cibecue people and the northern bands of the White Mountain division. Apparently as early as 1869 the Cibecue and White Mountain peoples made a request to the U.S. Army that a reservation be established incorporating their traditional lands, in hopes of preventing loss of their land to American settlers. An army post was established east of the junction between the north and east forks of the White River in 1870 (CDG Architects 1993:1, 10–11), which variously bore the names Camp Ord, Camp Mogollon, Camp Thomas, Camp Apache, and finally, in 1879, Fort Apache. Control of the reservation shifted over the years from military to civilian hands.

An executive order in 1872 added the San Carlos Division to the reservation (Kelly 1953:23). In 1875, many White Mountain and Cibecue peoples were "removed" to San Carlos as part of the government scheme to concentrate the Western Apache, Chiricahua, and Yavapai on one reservation so that their lands could be freed for American settlement (Basso 1983:481; also see below). Only a small number of Apache scouts from Cibecue were asked to remain at Fort Apache, and some of these joined in the Cibecue Rebellion in 1881, in which a number of American troops were killed. As a result of this incident, General George Crook was returned to command the Department of Arizona. Permitting the White Mountain and Cibecue peoples to return to their traditional homelands was one of his first official acts (CDG Architects 1993:14). Apache settlement ranged from encampments near the fort (particularly for those Apache serving as scouts) to more-isolated locations.

The White Mountain Apache Reservation and San Carlos Apache Reservation were partitioned formally from one another by an act of Congress of June 17, 1897 (Bureau of Indian Affairs [BIA] 1994:76). The name "Fort Apache Reservation" came into use late in the nineteenth century, even though "White Mountain [Apache] Reservation" continued

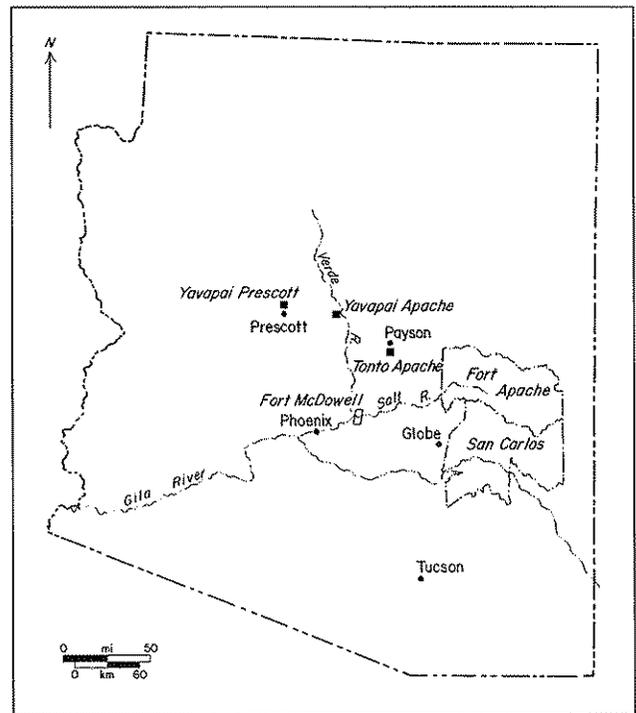


Figure 8.10. Apache and Yavapai reservations in 1994: Fort Apache, San Carlos, Tonto Apache, Yavapai Prescott, Yavapai Apache, and Fort McDowell (after BIA 1994:Indians of Arizona, Project Location map, and IPP 1981:2).

to be used in certain contexts. The latter currently is the preferred usage by the tribe, although use of Fort Apache Reservation persists, even in recognized scholarly sources (see Basso 1983) and documents produced by the federal government (see BIA 1994:77). To minimize confusion in this discussion, Fort Apache is used to refer to the reservation, and White Mountain Apache is used to refer to the tribe.

The size of the reservation was reduced by a series of executive orders and acts of Congress in the late nineteenth and early twentieth centuries, and acts of Congress in 1928 and 1931 authorized "appropriation of tribal funds for purchase of lands for the reservation" (Kelly 1953:23). Today the Fort Apache Indian Reservation comprises 1,664,872 acres in Apache, Gila, and Navajo Counties, which ranges from desert terrain at 2,700 feet elevation to spruce forests at 11,500 feet in the White Mountains of east-central Arizona.

The White Mountain Apache Tribe was organized under a constitution and by-laws approved August 26, 1938 (Kelly 1953:23), and the constitution has been amended and revised since that time (BIA 1994:76). The tribe has no corporate charter and is governed by an elected tribal council (BIA 1994:76; Kelly 1953:23). The tribe currently numbers 12,000 persons, with 10,500 residing on the reservation (BIA 1994:77). Goodwin's (1942:60) prerreservation population estimates for the White Mountain and Cibecue groups were between 1,400 and 1,500 and 1,000, respectively.

Around 1900 the population was estimated at 1,811, and in 1918, it had risen to 2,456 (Basso 1983:482). Kelly (1953:27) reports a population of 3,738 persons on the reservation. Basso (1983:485) provides a breakdown for the different components of the Fort Apache Reservation as of 1972 that totals 5,428 persons, whereas a population estimate from 1980 (probably based on U.S. Census figures) gives a figure of 8,020 (Indian Planning Program [IPP] 1981:Table 1). Although these figures are obviously subject to differing interpretations, it is clear that the population of the groups constituting the White Mountain Apache Tribe has increased and that a substantial percentage of the tribe lives on the reservation.

The White Mountain Apache Tribe is considered to be a leader in economic development (BIA 1994:77), with the tribal economy closely tied to the natural resource base of the reservation. During the early years of the reservation, however, it appears that traditional gathering and hunting continued to be practiced along with some horticulture (Bourke 1971:142). Basso (1983:482) notes that basic subsistence needs were met, and extensive rationing was unnecessary. By the turn of the century, wage labor was becoming more common, and traditional foodstuffs were augmented with flour, coffee, sugar, and beans. Some Apache also worked in "support" functions for the military, one example being to cut hay for the horses stabled at Fort Apache. In 1918, the federal government issued 400 cattle to the tribe to start 80 families in the cattle-raising business. As will be shown subsequently, this experiment almost failed, but today cattle ranching is a major industry on the Fort Apache and San Carlos Reservations.

Kelly (1953:24–27) reports that by the middle of the twentieth century, the reservation was "principally cattle country with added resources in commercial timber, developed and undeveloped farm lands and possibilities inherent in the White Mountain country as a recreation area." At that time the most profitable tribal enterprise was the sale of standing timber (mostly ponderosa pine) to commercial operators. The tribe also was operating its own profitable sawmill in Whiteriver. Stock raising was the next most profitable tribal enterprise. Asbestos was mined by outside interests who paid rent and royalties to the tribe. In 1954 the tribe created a "Recreation Enterprise" to sell hunting and fishing licenses, develop camping areas, and construct summer cabins and homes (Basso 1983:482).

Individual Apache also engaged in the cattle business through participation in cattle associations. Stock were run on ranges assigned to each association. Wage work on the reservation was available through the timber and sawmill operations mentioned above. By this time (the 1950s) farming was of minimal importance (only 2,000 acres were being farmed), and most farms were essentially subsistence gardens with corn as the main crop. Kelly (1953:27) reports that 179 of 1,165 families (15 percent) were receiving some form of

welfare support. Basso (1983:482), reporting on a study published in 1969, notes that unemployment continued to be high, while annual income and standard of living were low.

In 1994, BIA (1994:77–78) sources report that about 3,150 persons were employed on the reservation either by the tribe, the government (federal and state), or the private sector. Present total industrialization of timber, cattle, and tourism yields approximately 800 jobs for tribal members. The most-significant sources of livelihood include timber operations, outdoor recreation, tourism, livestock management, and federal and tribal government employment. The tribe owns and operates two sawmills that distribute wood products by truck to local and regional markets, and a re-manufacturing plant may be built to produce standard and special-order wood products based on market demand. Sunrise Ski Resort is another major industry for the tribe. The entire area is dependent upon the ski resort for its winter economy. Outdoor recreation continues to be another major industry; hunting and fishing are particularly important. Other business ventures include Apache Aerospace (contracts with McDonnell-Douglas to produce materials for the Apache helicopter), Apache Materials (earth materials for construction projects), and Apache Enterprises (convenience and grocery stores, gas stations, restaurants throughout the reservation and campgrounds). Minerals on the reservation are only partially exploited at this time, but are expected to become more important in the future.

San Carlos Reservation

The San Carlos Apache Tribe occupies this reservation, which is served by San Carlos Agency, San Carlos. As mentioned previously (Basso 1983:480), one of four Apache reservations designated in 1871 and 1872 was located at the military's Camp Grant (see entry for Fort Grant No. 1 [Roberts 1988:38]), on the north side of Aravaipa Creek at its junction with the San Pedro River in Pinal County. The reservation at Camp Grant soon was abandoned, and new headquarters were established at San Carlos on the Gila River per executive order late in 1872 (Basso 1983:481; Kelly 1953:16). Civilian administration of Apache affairs was reinstated soon after, and in 1874 John P. Clum was assigned as San Carlos's new agent. Although he was reported to be a well-liked, honest, and efficient administrator, Clum instigated the plan, later approved by the office of Indian Affairs, to consolidate all of the Apache at San Carlos (CDG Architects 1993:12–13). San Carlos rapidly became a "Western Apache melting pot" (Goodwin 1942:5). First, in February 1875, more than 1,500 Tonto Apache and Yavapai were brought to San Carlos from the Rio Verde Reservation; Khera and Mariella (1983:41, citing Corbusier 1969) mention that 115 of the Rio Verde Indians died during this march. Several months

later, White Mountain and Cibecue peoples were moved down from the Fort Apache area, and finally, in 1875, 325 Chiricahua Apaches arrived, bringing the number of Indians "concentrated" at San Carlos to more than 5,000 (Basso 1983:481).

Goodwin (1942:49–50) notes that en route to San Carlos in 1875, hostilities broke out between Apache and Yavapai members of the Northern Tonto bands, among which considerable intermarriage had occurred during the pre-reservation period. Several people from both groups were killed, and others escaped to return to their old homes. Khera and Mariella (1983:41) mention that some Yavapai had actually managed to stay behind in their home territories, and eked out a living by farming and working for American homesteaders.

The Tonto and Yavapai who did arrive at San Carlos were settled in an area separate from the other Apache groups already living there—along the Gila below the mouth of the San Carlos River (Goodwin 1942:50). (Apparently, different groups "removed" to San Carlos generally settled in geographically discrete areas on the reservation, either by choice or as a result of American design [see Goodwin 1942:61].) The Tonto and Yavapai remained in this location until 1898, at which time they were given permission to return to their former homes in the upper Verde valley (Goodwin 1942:50; Spicer 1962:274). According to Khera and Mariella (1983:41), even though the Yavapai and Apache coexisted relatively peacefully, Indian agents at San Carlos allowed numerous Yavapai to leave the reservation as early as the 1880s and throughout the 1890s. Their land at San Carlos, the so-called "Mineral Strip," was then free for leasing to American interests. These authors also note that several hundred Yavapai (also read Tonto Apache) remained on the reservation, intermarried with the Apache, and were integrated into the reservation community. Spicer (1962:274) adds that these remnants participated in the cattle-raising industry that developed among the Western Apache groups at San Carlos.

The San Carlos and Fort Apache Reservations were partitioned from one another in 1897. The size of the San Carlos Reservation subsequently was affected by the series of executive orders and acts of Congress that diminished the Fort Apache Reservation to the north. San Carlos lands were supplemented by an additional 3.5 million acres in 1972 per an executive order. Currently the San Carlos Reservation is made up of 1,853,841 million acres in Gila, Pinal, and Graham Counties (BIA 1994:54). The tribe currently is attempting to restore two separate portions of the southern boundary of the reservation totaling 60,000 acres that were omitted when the reservation boundaries were resurveyed by the BLM in 1975. Reservation lands range from desert terrain to upland, mountainous forested habitats, characterized by ponderosa pine, blue spruce, aspen, and oak. At higher elevations, the forest habitat supports wild turkey, javelina, deer, and elk (BIA 1994:55).

The San Carlos Apache Tribe was organized under a constitution and by-laws approved January 17, 1936, which has since been revised and amended. Governance is by an elected tribal council. A tribal corporate charter was ratified on October 16, 1940 (Kelly 1953:16). Constitutional revisions may have necessitated changes in the tribe's charter, which the BIA (1994:54) notes as having been ratified on March 7, 1955. According to the BIA (1994:55) total enrolled tribal membership currently is approximately 10,500 people. Of these, 7,639 reside on the reservation. The total reservation population numbers about 10,000 people. No breakdown was provided as to the ethnic affiliation of the 2,361 persons residing at San Carlos who are not on the San Carlos tribal rolls. As mentioned above, approximately 5,000 Indians were coresiding at San Carlos in the late 1870s. About 100 years later, in 1972, 2,320 Western Apache resided at San Carlos proper, with 1,094 at Bylas, for a total of 3,414 (Basso 1983:Table 2), compared with 3,971 residents reported by Kelly (1953:20) approximately 20 years earlier. As of 1980, 7,100 persons were reported to be living at San Carlos (IPP 1981:Table 1), which represents an apparent increase of over 50 percent in less than 10 years. Obviously, the population of the reservation has increased, as has that of the Fort Apache Reservation.

The San Carlos Apache Reservation is characterized by the BIA (1994:56) as having a diverse and abundant natural resource base. Samuels (1992) comments that this resource base would be even greater if substantial portions of the original reservation had not been carved out as a result of steady pressure from mining and Mormon farming interests in the nineteenth century. Official policy at the time San Carlos was created and well into the twentieth century called for turning the Apache into "farmers," an American version of the "self-sufficient" peasant.

Spicer (1962:252–260) chronicles economic and social developments on San Carlos beginning with the reservation's creation in the last century, and the discussion of San Carlos before 1950 that follows is based on this work. In the late 1870s, approximately 5,000 Indians were assembled at San Carlos under combined civilian-military control. Many of the groups had never formerly been associated at all, and some were hostile to one another as well as to non-Indians. None were allowed to move freely over reservation borders. The administrative system of the reservation as developed by agent John Clum from 1874 to 1877 was quite unlike any other. He was able to minimize military involvement on the reservation, and encouraged the development of Indian self-government by creating an Indian Police system. The various groups of Apache and Yavapai would elect several individuals to serve as police and as an advisory group to the agent. Clum also maintained Indian courts, and was against rationing, believing that self-sufficiency should be encouraged. Indians were assigned to work (in return for scrip cashable at the agency store) on irrigation improvements and on roads and

other building projects. The foundations for agricultural development were laid during Clum's administration, but rations continued to be distributed for many years.

In 1877, Clum resigned, frustrated by continuing attempts by the military to interfere in the administration of the reservation. The irrigation canals constructed with Apache labor and government funds contributed to successful harvests. American observers were optimistic about the prospects for Apache self-sufficiency. In 1879, however, officials in charge decided that decentralization of the Apache might begin to take place. The large numbers of Indians living in close proximity to the agency was a potentially volatile situation, and many groups had expressed interest in returning to their traditional lands. Beginning at this time, at first slowly, then later accelerated by General Crook and continuing into the twentieth century, "splinter" groups were allowed to leave San Carlos. Although a number of these Indians returned to Fort Apache, most of the others (or their descendants) eventually became incorporated into the other Apache-Yavapai communities/reservations in the state.

Soon after Clum's resignation, the "Anglo invasion pressed on into the Apache reservation" (Spicer 1962:252). Useful ores and precious metals were found on the reservations, and American mines went into operation on Indian lands without intervention from the federal government. To the southeast, Mormon farmers began agricultural development of the Safford area, appropriating irrigation waters from the Gila, a situation that placed the future of Indian irrigation at San Carlos in serious jeopardy. Spicer (1962:254) implicates the agent at San Carlos, as well as the Commissioner of Indian Affairs in Washington, D.C., as major players in this entire affair.

The events just described were some of many contributing to the "Geronimo Campaign," begun when Geronimo and his Chiricahua band left the reservation and managed to elude capture for many months. Geronimo and his followers were, however, captured at last and sent to prison in Florida in 1886. Meanwhile, life changed very little for the non-Chiricahua residents of San Carlos. Attempts to develop the reservation as a sufficient means of support continued, although rationing increasingly was becoming a way of life. Hunting and gathering essentially were prohibited by the Indian agents, yet Indian labor was expended on farming lands of insufficient size to provide self-sufficiency and on irrigation projects that eventually would flounder as a result of the diversion of river waters by American settlers. In the 1880s Indians began to be involved in wage labor off the reservation in towns such as Globe and McMillenville (Spicer 1962:256). Also beginning in the 1880s, Apache worked on American cattle ranches and in railroad construction. In 1902, the last rations were discontinued because it was felt that outside wage labor was supplementing the income of reservation Indians to the point where they could provide for themselves.

By the early 1900s, farming on the reservation was becoming less and less productive. Repeated efforts to encourage the Apache to raise cattle met with little success. Rich grazing lands on the reservation were leased to non-Indian ranchers in exchange for money to develop more farmland for the Apache. This meant digging wells to replace Gila River water no longer available to the Apache. Most Apache either were engaged in wage labor off the reservation or employed by American cattle companies who ran stock on reservation range land. Until about 1920, Indians were excluded from working in the mines because of union opposition. As previously discussed, San Carlos residents also worked on the construction of Roosevelt Dam between 1906 and 1911.

During World War I, the power of the mines was broken, thus permitting more San Carlos residents to work for the mining companies. At this point many Yavapai left the reservation altogether, some following the mining industry (Morris 1971:49) and some returning to the Verde Valley. Euroamerican cattle leases were discontinued in the 1920s, and attempts were made to bring more land under cultivation. Construction of Coolidge Dam on the Gila between 1925 and 1930 provided jobs for most of the San Carlos work force, but after the dam's completion, everyone and everything in the vicinity of the agency had to be moved prior to inundation. The new site was near the Rice School on the San Carlos River, 20 miles north of the old agency. Spicer (1962:258) notes that the move "meant a practical end to farming." The Indians had not been involved in selection or preparation of the land, wondered if the land was theirs any longer, and had grown accustomed to outside sources of income.

The depression of 1929 resulted in an exodus back to the reservation by Indians who had been living and working elsewhere. Meanwhile, the Indian Bureau, using the new policies of the Indian Reorganization Act of 1934 (see Collier 1972) as a guide, began "intensive efforts to lay foundations for a cattle industry" (Spicer 1962:258). Technical advisors were employed, good breeding stock was purchased, and associations of Apache cattlemen were organized as at Fort Apache. During the 1930s, the industry developed, stimulated by the various types of federal funds available during this period (also see Kelly 1953:16). Civilian Conservation Corps crews of Apache worked to improve the range and develop the water supply. By the mid-1940s the major source of San Carlos Apache income was derived from cattle raising, with wage work on farms, mines, and construction as secondary sources of income.

Kelly's (1953:17) profile of the San Carlos Agency in the early 1950s lists stock raising as the most profitable tribal enterprise, and notes that tribal timber resources had not developed beyond small-scale cutting operations for individual use. Principal known mineral resources at that time were asbestos (mined by outside interests for rent and royalties)

and building stone. Tribal income also derived from permits, fees, licenses, interest on tribal funds, and fines. Kelly (1953:20) reports that 175 of 933 families (about 19 percent) were receiving welfare support. Based on Kelly's figures it is clear that at this time there were not enough jobs on the reservation to provide equitable yearly incomes for its inhabitants. A series of feature articles published on San Carlos by the *Arizona Daily Star* between 1973 and 1974 paints a dismal picture of life on the reservation, chronicling failed development ventures such as a proposed industrial park, and off-reservation conflicts with nearby non-Indians in the early 1970s.

The BIA (1994:56) reports that the current available labor force consists of 3,759 males and 3,880 females, and that of those employed, 721 earned over \$7,000 per year. A total of 2,173 was unemployed. The continuing goal of the tribe is to develop a stable economy, resulting in greater self-determination, self-sufficiency, and self-reliance. To this end the tribe has adopted an "Integrated Resources Management Plan" based on the reservation's natural resources. A five-year, short-term economic development effort centers on the enhancement of four major natural resource priorities: San Carlos Apache Timber Products Company (sawmill owned and operated by the tribe), recreation and wildlife (develop potential of San Carlos Lake and build a warm-water fish hatchery); redevelopment of agriculture (irrigation farming, enhance productivity of reservation cattle, and raising working ranch horses), and business development (privatize many of the small tribal businesses). Basso (1983:Figure 14) documents a jojoba nut industry managed by a marketing cooperative in operation on the reservation as of the late 1970s, but no mention is made of it in the 1994 BIA profile for the reservation. The tribe operates a gaming enterprise east of Globe on U.S. Highway 70.

Fort McDowell Reservation

Served by the Salt River Agency, Scottsdale, the reservation is home to the Fort McDowell Mohave-Apache Community. Roberts (1988:42) notes that the military post Camp McDowell, which briefly may have been referred to as Camp Verde (Roberts 1988:42) or Fort Savage (Stein 1984:25), was established in 1865 on the west bank of the Rio Verde, about seven miles above its confluence with the Salt River and 45 miles southwest of Camp Reno. In 1879 the camp was designated a fort. A directive ordered its abandonment in June 1890, and the last troops evacuated in early 1891. Stein (1984:33) notes that the early post-fort years (1890–1895) are poorly documented for various reasons. Sources consulted for this overview contained contradictory information. For example, Roberts (1988:42) claims that the post had become an agency for Yavapai and Pima Indians in October 1890, and

that in March 1891 the last acreage in the military reservation was relinquished to the Department of the Interior for use as an Indian school. Stein (1984:32, citing Mead [1903] and Reed [1977:140]) notes: "Finally, in 1890, Fort McDowell was ordered abandoned and transferred from the War Department to the Department of the Interior for disposal. Much of the moveable property of the fort went to the Indian School in Phoenix. One building was purchased by Maricopa County and used as a school." Nothing is said by Stein about the post being an Indian agency, nor does she speak about the post's last acreage being give up for an Indian school.

Early fort records mention that "Tonto Apaches, Tontos, [and] Coyoters" lived along the lower Verde until the fort was founded (prior to 1865) (Stein 1984:25). Charles Smart (1868) also refers to these groups as "Tonto Apaches." Stein cites Ogle (1970) and Schroeder (1959, 1963) to argue that these groups were made up either entirely or partially of Southeastern Yavapai.

Delshay was a prominent Tonto Apache-Southeastern Yavapai at that time, and he acted as a leader and spokesman for his people during the troubled years following the establishment of the fort (see Stein 1984:25–27). Delshay was one of the few Southeastern Yavapai who successfully practiced agriculture, but after Camp McDowell was established, he and his followers took refuge in the canyons north and east of the Mazatzal Mountains. During these years Delshay and his followers requested a separate reservation near the lower Verde valley in 1866, 1868, and 1869, but each time they were denied. Delshay's people attached themselves to Camp Reno in fall 1868, where some worked in support positions for the military, but by spring 1869 they had retreated back into the mountains.

By 1873 most Yavapai had been brought onto the Rio Verde Reservation near Camp Verde (see following section on Yavapai Apache Reservation; Khera and Mariella 1983:41), but by 1875 they were ordered "removed," and made an arduous winter march to San Carlos (Stein 1984:24), where they were settled in an area separate from the Apache (Khera and Mariella 1983:41). Meanwhile, American and Mexican squatters, some of them land speculators, had begun to occupy all of the arable land around the now-abandoned Fort McDowell. When 28 (8–10 families) Yavapai returned to the area near Fort McDowell in late 1899 after being allowed to leave San Carlos, they were forced to settle on less-desirable land in hills surrounding the fort. They were destitute, having lost their wagons and most of their horses on the trip from San Carlos. In 1900, they again requested a small parcel for a reservation, but were denied by Congress (see Stein 1984:35). In 1903, however, President Roosevelt issued an executive order setting aside a portion of the abandoned Camp McDowell military reservation for "Mohave-Apache" Indians (Kelly 1953:70). Non-Indian settlers were compensated (Stein 1984:35). By designating Fort McDowell a

Mohave-Apache reservation, the federal government fostered the erroneous assumption by the public and some government officials that the Indians living on this reservation were a branch of the Western Apache or a mixture of Mohave and Apache, when in fact they were Yavapai (Khera and Mariella 1983:38).

From the date of its establishment to the present, the history of the Fort McDowell Reservation, not unlike many other reservations, has been characterized by the continuing struggle of its members to maintain rights over land and water resources (Khera and Mariella 1983:42). The history of the Yavapai at Fort McDowell is presented elsewhere in this chapter as a case study to illustrate the centrality of water and land rights in the development of American settlement in the region. Therefore, the remainder of this section on Fort McDowell will focus on reservation history from approximately 1950 to the present.

As shown in Figure 8.10, the Fort McDowell reservation is shaped like a parallelogram. This 24,680-acre reservation is located 13 miles north of Mesa, Arizona, and stretches for 10 miles along the Verde River from north to south, with a width of 4 miles. Elevation ranges from lush river bottom at 1,350 feet to rolling desert up to 1,900 feet (BIA 1994:19). The area receives an average of less than 10 inches of precipitation annually, but the mild winter climate supports double cropping. The bottomlands near the river are characterized by a rich desert riparian woodland (Stein 1984:3, 6). The reservation is bounded to the south by the Salt River Indian Community, and is within the economic sphere of the Scottsdale, Mesa, and Phoenix metropolitan area.

The Fort McDowell Mohave-Apache Community was organized under a constitution and by-laws approved November 24, 1936. A tribal corporate charter was ratified on June 6, 1938. A committee has completed revisions of the constitution. A full-time business manager works for the tribe under contract with the BIA (1994:19). The community is governed by an elected tribal council (Kelly 1953:70). Total tribal membership currently is 850 persons, with 348 Yavapai-Apache Indians living on the reservation (BIA 1994:18–19). In the early 1950s, 62 families were living on the reservation (Kelly 1953:71). A figure of 380 persons is given by IPP (1981:Table 1), whereas Stein (1984:9) reports a population of 389 a few years later. If these figures are correct, tribal membership essentially has doubled since the early 1980s.

Use of reservation lands for farming has decreased steadily since 1903, when approximately 19 percent of reservation land was devoted to irrigation agriculture (Stein 1984:10). In the 1950s, the reservation was characterized as being primarily grazing country with some farming (approximately one percent of arable river-bottom lands under cultivation). A project was in the planning stages at that time to bring under cultivation an additional 950 acres (Kelly 1953:70–71). The

single tribal enterprise at that time was a custom farming operation, where harrowing and farming were done for individual farmers. Archaeological evidence from site AZ U:6:79 relates to a 1950s adobe-manufacturing operation on reservation land, including a kiln (Stein 1984:12). The facility was financed by a non-Indian, Jack Smith, but was managed and operated by the Yavapai. During this period, Kelly (1953:71) reports that of the reservation total of 62 families, 47 were self-supporting (39 engaged in cattle raising and subsistence farming, and 8 supported from off-reservation wage labor). Fifteen families (about 25 percent) were supported totally by welfare.

The specter of proposed construction of the Orme Dam and reservoir (planned to provide flood control and to create a storage basin for the Colorado River water that the Central Arizona Project would bring into the Salt River valley) haunted reservation residents for decades beginning in the late 1940s. Its construction essentially would have inundated all useful reservation land. Rather than build the new dam and reservoir, however, a decision eventually was made to make improvements and raise the levels of three already existing artificial reservoirs at Bartlett, Horseshoe, and Roosevelt Dams. Khera and Mariella (1983:43) cite Orme Dam as the hindering factor in economic developments at Fort McDowell, especially considering that federal aid for improvements in housing, health, and agriculture was withheld because of the proposed dam.

Deliberations over Orme Dam are certainly the reason that the irrigation project being planned in the early 1950s (see above) has yet to come to fruition (Stein 1984:10), although the tribe developed a comprehensive irrigation system plan to receive federal funds for irrigation construction and development of additional acreage for extensive farming. These funds have finally become available (BIA 1994:21). According to the BIA (1994:19–20), in 1980 the potential labor force numbered 120 persons. Of these, 69 were employed, and 52 were not. Currently, Fort McDowell Ba'Ja Bingo is the most lucrative tribal enterprise. Other tribally owned enterprises include sand and gravel operations, a landscape and nursery business, a self-service gas station, and an agricultural development concern. A jobo pilot project is currently underway. Revenue also is generated from recreational uses along the Verde River and right-of-way development along Highway 87-Beeline Highway. The tribe leases a trading post to a tribal member. No industrial development has occurred to date on the reservation. Present average family income is in the \$6,000 range, and per capita payments from the tribal gaming operation increase this. Other sources of family income include wage labor at the City of Phoenix Water Plant and cattle sales. Tribal income is augmented \$72,000 annually by payments for right-of-way access for the City of Phoenix water line.

Yavapai Apache Reservation

The Yavapai Apache Reservation generally is known as Camp Verde Reservation in much of the literature. It is home to the Yavapai-Apache Indian Community and served by Truxton Canyon Agency, Valentine. Occupation of the Verde Valley by the military began around 1864 at a post situated on the west bank of the Verde, near the river's junction with West Clear Creek, east of Prescott. After several moves and a name change from Camp Lincoln to Camp Verde, a new post was built from 1866 to 1871, and this incarnation of the post still exists today as Fort Verde State Historic Park. The post's name was changed to Fort Verde in 1879 to confirm its permanency, but the fort lasted only until 1890, when it was ordered abandoned and transferred to the Department of the Interior (Roberts 1988:48–49).

As early as 1864, friendly Yavapai were sent from the post to inform the Southern Tonto that rations would be given to any who came (Goodwin 1942:42). In November 1871, an executive order established the Rio Verde Reservation near the post, and General Crook mandated that all "roving Apache" were to be on this reservation by February of the next year, or face the risk of being considered hostile (Khera and Mariella 1983:41). By 1873 or 1874, most Southern Tontos were settled there along with the Northern Tonto and various bands of Yavapai (per Goodwin 1942:42; Khera and Mariella [1983:41] say "By 1873 most Yavapais . . ."). According to Stein (1984:27), 2,250 Indians representing five bands of Northeastern Yavapai, two bands of Western Yavapai, and several "Tonto Apache" bands under Delshay were present. Epidemic diseases soon reduced this number by almost one-half.

The Rio Verde Reservation originally encompassed an area 40 by 20 miles in size (IPP 1980:21). Even though the Indian population was decimated by epidemic diseases, the remaining Yavapai and Apache managed to excavate an irrigation ditch and were able to produce several successful harvests (Khera and Mariella 1983:41). Stein (1984:27) notes that 57 acres were brought under cultivation first, whereas Morris (1971:45) mentions 250 acres. Regardless of the size of the acreage, Indian farming efforts were successful ("a good crop of corn, pumpkins and potatoes" [see Morris 1971:45]), possibly because the Indians gathered together on this reservation, such as Delshay and his followers, had prior farming experience (Stein 1984:27). Unfortunately, the Indians' success at farming posed a threat to Tucson contractors who supplied Indian reservations. The "Tucson Ring," as they were known, exerted pressure in Washington, and during the winter of 1875 most of the Indians were forcibly marched to San Carlos, with some loss of life (Khera and Mariella 1983:41; Stein 1984:28). The Rio Verde Reservation was abolished by executive order in 1875 and the land reverted to the public domain (Morris 1971:45).

As mentioned previously, some Indians avoided leaving on the march, and others escaped en route to San Carlos. These Indians remained in the middle Verde region and managed somehow to survive against strong odds (Khera and Mariella 1983:41). By the 1890s, several Yavapai and Apache families were allowed to return to their homes in the Verde Valley. By 1906 nearly 150 Indians lived in small, scattered camps throughout the valley. These camps were often made on land that had been homesteaded by white settlers in the Indians' absence, as at the Fort McDowell situation. The BIA sent an agent to study these camps in 1906 and to evaluate the possibility of opening an Indian school and agency to serve the Indians of the Verde Valley (Morris 1971:46).

The following summary of subsequent development of the "patchwork" Yavapai-Apache reservation is based on Morris's (1971) economic history of the Camp Verde and Middle Verde Reservations and on Khera and Mariella (1983). A BIA day school was opened in 1907, and in May 1910 approximately 40 acres were purchased by the U.S. government for agricultural use by the Indians. Only 18 acres were suitable for farming, and most of the 16 Indian families living there received less than an acre. As this small amount of land per family prevented Indian self-sufficiency based on farming, additional income was obtained through part-time and seasonal work on local ranches and farms. In the early 1900s, wage-labor opportunities began to develop in construction.

Additional blocks of land were purchased (240 acres in 1914 and another 208 acres in 1916) to form the "Middle Verde" reservation. Of these 448 acres, 280 were suitable for agriculture. By 1915, only 50 or 60 individuals (11 families) of a total Yavapai-Apache population of 422 persons chose to move onto the Middle Verde tract. Development of wage-labor opportunities in large copper mining and smelting operations in Jerome and Clarkdale in 1910 lured away many Yavapai-Apache, especially young people, leaving only 8–10 families residing on the reservation. It was at this time that the Clarkdale Indian camps were founded. The elderly men and women who remained on the reservation could not maintain the complex irrigation system necessary to maintain crop productivity. Water rights were of course also an issue, as on the Fort McDowell Mohave-Apache Reservation, even though all of the reservation parcels supposedly had water rights. In addition, changes in landholding and use resulted because the Indian agent used access to land as an inducement to the Indians to abandon customary marriage and divorce practices.

The regional and reservation economy began to decline in the 1920s as a result of fluctuations in copper prices and ore quality at Clarkdale, and eventual closure of mining operations in 1953. Some families followed the mining companies to new locations, and the tribal council even leased 174 acres of farmland to non-Indian farmers. Farming by the Yavapai-Apache essentially was a dead enterprise. Kelly (1953:58)

reports that of the 115 resident families on the reservation at that time, only 87 were self-supporting, and all of these derived their income from off-reservation wage labor. He also notes that 28 of the 115 families (about 24 percent) were on welfare support. In 1968 all employed reservation residents continued to work off the reservation (Morris 1971:50).

In 1969, 60 acres near Clarkdale were established as reservation land for the Yavapai-Apache who had lived there while working the mines (Khera and Mariella 1983:43). As of the 1970s, the three reservation "blocks" of Camp Verde, Middle Verde, and Clarkdale existed primarily as residential areas for those unable to find work elsewhere (Morris 1971:50). Residents of these communities jointly elected one tribal council under an Indian Reorganization Act constitution and by-laws approved February 12, 1937; the constitution was totally revised in March 1991. The tribe's corporate charter was ratified in 1948 (BIA 1994:80; Kelly 1953:57; Khera and Mariella 1983:44).

The Yavapai Apache Reservation now comprises five parcels (see Figure 8.10) for a total of 635 acres: Middle Verde, Lower Verde, Clarkdale, Rimrock (3.75 acres), and the Montezuma Castle complex (75 acres) near Interstate 17 purchased by the tribe for commercial-development purposes. The sites all are located within the Verde Valley and are from 20 to 55 miles distant from one another (BIA 1994:81; IPP 1980:3). The Rimrock section appears to have been added around 1980 (compare IPP [1981:Table 1], based on Department of Economic Security 1980 population projections and Weaver [1975] with IPP 1980). The tribe is currently attempting, through legislation, to obtain 6,400 additional acres for the reservation. To date, political reasons have prevented this from occurring (BIA 1994:82).

Population figures over time are difficult to reconstruct and interpret, given that from the early twentieth century on there has been a consistent trend toward movement off of the reservation in search of employment. Approximately 150 persons lived in the area in 1906 (Morris 1971:45), whereas for the early 1950s Kelly (1953:58) lists 438, and as of the late 1970s IPP (1980:Table 1) shows 520. The BIA (1994:81), however, gives figures of 1,200 Yavapai Apache on the tribal rolls, with 800 living on or near the reservation.

This substantial increase in numbers is even more surprising given the backdrop painted by Morris (1971) of a reservation in economic stagnation. Only a decade later the IPP (1980:21) reports that, even though tribal members still largely were dependent upon outside wage labor, the then recently established Yavapai-Apache Construction Company was providing employment for tribal members (17 persons in 1980). Cattle raising and farming were practiced on reservation lands. At that time, a significant portion of tribal income was derived from transfer payments. The tribe had recently

acquired land (apparently in the late 1970s) near Montezuma Castle near Interstate 17, and tourism was being touted as the major area for potential development.

The tribe's recent BIA (1994:81–82) profile indicates that although reservation employment opportunities for tribal members may be improving slightly (tourism, smoke shops, gaming under negotiation), most individuals still depend on outside wage labor such as work as ranch hands or in a nearby cement plant. The present available labor force numbers 203. Of these persons, 84 are employed, and 119 are not. The tribe derives other income from rents, leases, and permits. There is an unrealized potential for industrialization in the Verde Valley.

Yavapai Prescott Reservation

The Yavapai-Prescott Indian Tribe occupies this reservation, which is served by Truxton Canyon Agency, Valentine. The history of the Yavapai Prescott Reservation parallels in many ways that of Fort McDowell and the Yavapai Apache Reservation (Camp Verde). The following summary is primarily based on Khera and Mariella (1983:44–45), with other sources as noted. Some of the Yavapai who had escaped from the forced march to San Carlos in 1875, along with others who returned from San Carlos in the 1890s, settled in the area around the town of Prescott near Fort Whipple (established in 1863 and closed in 1922 [Roberts 1988:49]). Keller and Stein (1985:48–49) note that from the time they first returned from San Carlos in the late nineteenth century until the early 1930s, the Yavapai lived in encampments located in and around the Prescott area, with the main settlement being on the grounds of the Fort Whipple Military Reserve. Although this area had been the traditional territory of the Central Yavapai, settlement choices had been limited for the returning Indians because of non-Indian settlement of the area in their absence.

According to Khera and Mariella (1983:44) and Keller and Stein (1985), the Prescott Yavapai had a mixed economy that included their traditional subsistence base of gathering and hunting of foods native to the region, trading for agricultural produce grown elsewhere, selling traditional craft items (particularly baskets), and wage labor in the nearby American community. Government rations also may have been available during the years Fort Whipple was active. Keller and Stein (1985:12) indicate that local Yavapai may have been involved in wage labor construction projects, such as the hydroelectric plant at Fossil Creek and Fort Whipple's rebuilding episode between 1905 and 1908. In addition, Yavapai women frequently worked as domestic servants for non-Indian families in Prescott. Keller and Stein (1985) commented that their

late recognition as a political unit affected the particular economic adjustment of the Prescott Yavapai in comparison with other southwestern tribes. Khera and Mariella (1983:44), however, indicate that the Yavapai families in the Verde Valley and at Fort McDowell practiced a similar adaptation.

A housing project was undertaken by the Yavapai Prescott community in 1933 and 1934. The community had experienced continuing difficulties in obtaining federal funds for such development projects, and this was one impetus for obtaining reservation status. After considerable efforts on the part of the Yavapai and their allies, 75 acres from the former Fort Whipple military reserve were transferred from the Veteran's Administration to the Department of the Interior by act of June 7, 1935 for the Yavapai Prescott Reservation. An act of May 18, 1956, added 1,320 acres from the Fort Whipple lands to the reservation, for a total of 1,409 acres. The enlarged reservation borders Prescott on three sides (Khera and Mariella 1983:44).

Khera and Mariella (1983:44) note that during its early years, the community had a working, traditional form of leadership in which a chief or chieftess was supported by a group of councilors composed of family heads. This ran contrary to the Indian Reorganization Act of 1935, which detailed procedures for establishing tribal councils. The community had codified its traditional form of government and submitted it to the federal government, who in turn rejected it as "undemocratic" and "unacceptable." Of the reservations discussed here, Yavapai Prescott is the only one who rejected the provisions of the Indian Reorganization Act. The administrative government of the reservation was eventually organized under Articles of Incorporation adopted December 5, 1962, with amendments in 1970 and 1975, but the tribe does not have a charter (see BIA 1994:83; Khera and Mariella 1983:45).

According to Kelly (1953:59), the original 75-acre reservation was sufficient only for home sites and necessary community developments such as a cemetery. In the 1950s, 580 acres of the abandoned Fort Whipple military reserve were being used for a small stock-raising enterprise. Rocky soils and a lack of water precluded farming, thus wage labor provided almost 100 percent of total income of community members.

Writing about the situation in the late 1970s and early 1980s after the reservation had been enlarged, Khera and Mariella (1983:45) were more optimistic. New housing had been constructed, many tribal members had returned, and plans were underway for the development of an industrial park to dovetail with the expansion of the city of Prescott. The BIA (1994:84–85) reports that a 17-acre commercial park included a resort with motel and meeting facilities, a restaurant, and an indoor swimming pool, six light industrial businesses, and potential for additional development. Bingo

began in 1983, and gaming was started in their Sheraton Hotel in 1993. The tribe also controls 400 acres of highway frontage, derives income from a tribal taxing ordinance (sales tax on reservation), and available range lands are used by Indian operators with 40–60 head of cattle.

Population trends through time are difficult to assess because of fluctuations resulting from movements off and on the reservation as people pursued and abandoned wage-labor options, although it appears that population has approximately doubled since the middle of this century. For the early 1950s, Kelly (1953:59) reports 54 persons (presumably living on the reservation). In the late 1970s, Khera and Mariella (1983:45) give a tribal enrollment of 108 (based on BIA figures), with 68 of these persons living on the reservation. IPP (1981:Table 1) provides 120 persons, and the BIA (1994:84–85) gives two figures for tribal membership, 140 and 133, with 95 living on or near the reservation. Of these 95 persons, the present labor force is estimated at 86, with 73 employed and 13 unemployed. In comparison, Kelly (1953:59) approximates that of the 23 families living on the reservation, all were self-supporting, and only 2 (about 11 percent) were receiving partial welfare support.

Tonto Apache Reservation

The Tonto Apache Reservation located near Payson is occupied by the Tonto Apache Tribe and served by the Truxton Canyon Agency, Valentine. Of the six reservations profiled here, the Tonto Apache Reservation is the most recent and the smallest. Public Land Order 5422, dated May 31, 1974, provided that an 85-acre tract of land be set up for the Payson community of Tonto Apache. The tribal constitution is dated January 21, 1980, but the tribe has no charter. It may be the case that Payson is a "derivative" reservation with population derived from either the Yavapai Apache Reservation (Camp Verde) or the Yavapai Prescott Reservation.

A population of 100 "Yavapai-Tonto Apache" was listed by the IPP (1981:Table 1) for around 1980. About the same number (103) is given by the BIA (1994:74), with 88 living on the reservation (29 households). The community has a potential labor force of 56. Of these, 44 are unemployed. A 5-acre community fruit orchard is being irrigated, and a smoke shop/convenience market currently is in operation. The BIA (1994:74) notes that the current tract of land occupied by the reservation is inadequate if further development is contemplated. No more space is available for housing, and the tribe is attempting to acquire an additional 1,500 acres of land. Two projects have been planned: an 80-unit motel with meeting rooms and a restaurant, and a gaming center.

Apache-Yavapai Interaction on the Reservation

In this section, a number of factors relating to the six reservations profiled above are used to assess the nature of the contemporary relationship between the Western Apache and the Yavapai. These reservations include Fort Apache (Apache), San Carlos (Apache), Fort McDowell (Yavapai ["Mohave-Apache"]), Yavapai Apache (Camp Verde; Yavapai-Apache), Yavapai Prescott (Yavapai), and Tonto Apache (Payson; Yavapai-Tonto Apache) (see Figure 8.10). Factors of interest include historical, social, political, linguistic, and economic variables; population dynamics (absolute size); and settlement.

A starting point for comparison is the assumption that particular groups of Yavapai interacted on a regular basis with certain Western Apache groups through visiting, trade, intermarriage, and occasionally as raiding partners during the prereservation period. These Apache and Yavapai usually occupied adjacent hunting and gathering territories. Based on Goodwin's (1942:88) discussion of the different Western Apache groups, it appears that the San Carlos band and the Southern and Northern Tonto had the most contact with the Yavapai, both Southeastern and Northeastern Yavapai. Although the Cibecue and White Mountain groups knew the Yavapai, there was less frequent contact between them.

In his discussion of the prereservation Northern and Southern Tonto Apache, Goodwin (1942:43–47) notes that three bands had a mixed composition of Apache and Yavapai: the Fossil Creek band, the Bald Mountain band, and the Oak Creek band. Goodwin concluded that these three "fusions" had existed for some time. These mixed Apache-Yavapai groups presented a variety of different living scenarios. The Fossil Creek band was made up of both groups, with Yavapai predominating. According to Goodwin (1942:44–45), the two groups were so interrelated by marriage that they did not constitute separate entities within the band. However, the "Apache" camped higher up the creek than the "Yavapai." The Bald Mountain band was part Apache and part Yavapai, but the Apache claim that in the beginning the clan of the same name was purely Apache. A final example is the part-Apache, part-Yavapai Oak Creek band, where the two groups intermingled, and the principal chief of the band was married to a Yavapai woman.

Goodwin's (1942:47) commentary on the Oak Creek band is especially illuminating:

It is interesting to note that the Apache and Yavapai in this group have maintained their own language, whereas in material culture there seem to have been few if any differences between them. An individual born an Apache preferably used the Apache language, even though he might speak Yavapai; and, in spite of being bilingual, neither people forgot their identity. The deciding Apache

factor in this was identity of the mother, descent being reckoned through her. Thus the children of the Oak Creek band chief . . . and his Yavapai wife were termed Yavapai by the Apache, and the son of [the chief], . . . still living at Cottonwood, states that he is Yavapai, not Apache. He, in turn, has married a Southern Tonto woman, and in former times the offspring of the couple would have been Apache.

It is evident from this quote that Western Apache-Yavapai relations were extremely fluid, with the potential for the "ethnic balance" of a band to change from generation to generation. Given the small size of some of these bands, it would have taken very little for them to become "extinct" as a result of disease, lack of reproductive success, fusion with other bands where one or other ethnic group predominated, and so forth. It is clear that for any given ethnographic moment, what appeared to be a Yavapai band might in the next generation become an Apache band, if ethnic assignment of a band depended simply on numerical superiority of one group over another. Surely also involved in this were decisions about residence.

What we have at the prereservation-reservation interface, then, are a series of observations about how and why the Western Apache and Yavapai interacted. The hows include: Yavapai-Apache coresidence, intermarriage, joint pursuit of economic activities (hunting, gathering, possibly horticulture, trading, raiding), learning of one another's language, and possible assimilation or modification of the other group's customs. The "whys" are more difficult, but probably included similar prereservation lifestyle and territorial proximity. Finally, the "prereservation-reservation" dichotomy is an artificial one, constructed simply for explanatory purposes. The reality of the situation is more akin to the following statement by Perry (1991:4–5) about the Apache, some aspects of which might also be applied to the Yavapai.

Social divisions among the Apache have shown remarkable persistence in some cases. For the most part, though, Apache populations have diverged, merged, and separated along different fault lines and converged to form new aggregates. . . . But in general, Apache history is a tale of individual alliances and ad hoc affiliations that confound our attempts to trace any neat continuity of social divisions back through the centuries. . . . The issue amounts to what people over a series of generations chose to do. . . . They formed aggregates to which other people they happened to encounter gave names. They dispersed and in different places joined others with whom they felt a *common purpose*. Underlying what seems to have been an organizational chaos, a special kind of order persisted over the centuries. It depended upon the continuity of interpersonal ties, in shared self-definition, and in a perception of commonality through bonds of reciprocal obligations [emphasis added].

How, then, do we evaluate the history of the interactions between these two groups after they were settled onto reservations? One way is to assume that their early reservation histories were probably conditioned by the interrelations of the groups before they were sent to reservations. If this was indeed the case, one might evaluate whether or not the hows and whys still obtained as a part of reservation life. Perhaps most important is whether the two groups continued to share a "common purpose."

Government policy after the Apache Wars ended worked against a continuity in common purpose for the Apache and the Yavapai. With assimilation into American society as the eventual goal, three objectives were afforded primary importance (Basso 1983:482). First, emphasis was placed on economic development of the reservations to the point where Indian self-sufficiency was possible. Second, schools were opened to act as the "civilizing" medium for Indian children, where they could be convinced to give up their native languages and customs. Finally, churches were established in the hopes that all Indians would eventually be converted to Christianity (and thus abandon their "pagan" beliefs). Given the two sets of opposing forces—prereservation common purpose and directed culture change by the federal government—we can ask, What is the nature of reservation-period Apache-Yavapai interaction?

Evidence for Apache and Yavapai Interaction on the Reservations

The forcible designs of the U.S. government as carried out by the military brought the two tribes together at San Carlos, Camp McDowell (later Fort McDowell), and Rio Verde during the period 1873–1875. Fort Apache, however, remained exclusively Apache in its composition. Where the tribes did live together on the reservations, intermarriage continued to occur, but residence was often segregated by group (for example, see Khera and Mariella [1983:41] for hints of the situation at San Carlos).

Ethnic divisions at San Carlos were still evident in the organization of the tribal council created as part of the tribal constitution accepted on December 24, 1934. As noted in a commentary about the constitution published in *The Apache Scout* (1935:378),

Thus there is to be a Tribal Council consisting of seven representatives of the population, two for the Bylas District, three for the San Carlos District [Peridot, Seven Mile Wash, and Gilson Wash]—each one of its three branches to be represented—one for the Mohave section, [and] one for the Tonto Section.

Presently, tribal council representatives are no longer separated out for the Tonto and Mohave sections. Instead,

locations—Peridot, Gilson Wash, Seven Mile, Bylas—have a certain number of representatives (David Samuels, personal communication 1994). It is unclear whether the current divisions reflect specific ethnic groups or simply the "Anglo" concept of representation by geographic location ("precinct"-type organization).

The reservations that were founded later—Yavapai Apache (Camp Verde), Tonto Apache (Payson), and Yavapai Prescott—had mixed, small to very small populations, which apparently derive from small primarily Yavapai and Tonto Apache groups or family units that had either remained in the Verde Valley by avoiding removal to San Carlos or who had left San Carlos, by permission of the Indian agent, as early as the last decade of the nineteenth century.

Once the Yavapai and Apache were confined to reservations (separately and together), their common economic purpose for maintaining close ties began to vanish. Even though they often continued to live in close proximity, this was a result of non-Indian political and military maneuvering rather than an autonomous choice on their parts. Hunting and gathering were not on the roster of approved subsistence activities, and raiding no longer was an option.

Economic activities for reservation Yavapai today differ substantially from those of the Apache. The three primarily Yavapai reservations focus on some or all of the following: farming, off-reservation wage labor, and tourism and gaming. For the Apache at San Carlos, stock raising has been more successful than farming, and other kinds of development projects have met with limited success. Off-reservation wage labor was important for a time for those living at San Carlos, but was affected by fluctuations in the regional mining economy. The Apache living on the Fort Apache Reservation, although also engaged in stock raising, have developed a strong economic base using the resources found on their reservation (timber, areas in demand for skiing, camping, hiking, fishing, and hunting). The economic situation of the Tonto Apache Reservation is poorly developed at this time, primarily because of the small size of the reservation. Most reservations, however, capitalize to some extent on the opportunities afforded them by their ambiguous status as "sovereign" entities (for example, smoke shops, gaming facilities). Finally, it is interesting to note that most developments on these reservations are geared outwardly, toward interaction with non-Indians, rather than toward interaction within the specific reservation or between reservations.

Linguistic differences between the Apache and the Yavapai are considerable. Apache is an Athapaskan language, and Yavapai belongs to the Yuman family of languages. Willem de Reuse (personal communication 1994), who currently is compiling a dictionary of the Apache language, notes that there is minimal lexical borrowing between the two languages. As noted earlier, bilingualism did occur in situations where intermarriage occurred. Retention of one's native language appeared to be essential for the maintenance of

identity and self-definition (Basso 1983:482; Goodwin 1942:47; Perry 1991:4).

Unfortunately, linguistic data of the sort necessary to document Yavapai-Apache interaction are scarce. In his profiles of the five reservations extant in the early 1950s, Kelly (1953) lists numbers of reservation members who do not speak English, and who were, presumably, monolingual in their native tongue. Unfortunately, it is never stated whether the native language in question was Apache or Yavapai. The number of remaining monolingual (native language) speakers as of the early 1950s is very telling: Fort Apache, 800 out of 3,738 persons; San Carlos, 742 of approximately 3,971 persons; Prescott Yavapai, no remaining monolingual speakers; Fort McDowell, 6 of 212 persons; and Yavapai Apache (Camp Verde), 13 of 438 persons. Although these figures tell us nothing about the number of persons who were bilingual in their native language and English, it is clear that the number of Yavapai speakers was small, even in the early 1950s.

Mierau (1963) discusses one case of Yavapai-Apache bilingualism at the Prescott Yavapai reservation (fieldwork conducted in 1961) where the informant, whose native language was Yavapai, spoke Apache as a second language. It is not known how many Yavapai still speak their native language in the 1990s, although one assumes that the number is very low. Certainly a more common form of bilingualism is that in which an Apache would speak both Apache and English. Basso (1983:482) notes that Apache is still the "first and preferred" language for the Western Apache. One might hypothesize that Apache and Yavapai working off the reservation in wage-labor situations would have less reason to maintain fluency in both their native language and English, and might tend to use and learn English more regularly. In summary, there appear to be few reasons other than historical accident to expect that Apache-Yavapai bilingualism would still occur.

Perhaps one of the most salient conclusions that might emerge from this consideration of Yavapai-Apache interaction after the establishment of the reservations is that the situation that brought them together in prereservation times and for a short time afterward is an anomaly. The Yavapai are the *only* group among 11 who had a relationship of some sort with *all five* Western Apache divisions listed by Basso (1983:Table 1). The most-pressing reasons for contact, at least in late prereservation times, appeared to be low absolute population sizes for the Yavapai and proxemics. Once reservations were established, the traditional rationale for maintaining close contact began to erode. Groups of mixed Yavapai and Apache who left San Carlos in the 1890s to return to the areas that eventually became the "Yavapai" and "Tonto" reservations had the greatest potential to maintain ties between the two groups through already established within-group dynamics. Once traditional ways of reckoning group membership changed, however, the ethnic distinctions eventually blurred. The patterns of interaction, when they

persisted, occurred within the confines of the options presented by reservation life.

Ultimately, the Indian Reorganization Act of 1934 may have had the greatest impact upon traditional Native American ways of self-reckoning, even though systems such as Clum's at San Carlos (tagging Indians to identify them as belonging on a specific reservation; listing them by number on tribal "rolls," etc.) had primed the system. Among its many provisions, the act provided that "any tribe so desiring could form itself into that which the Supreme Court had defined the New Mexico Pueblos to be: 'In the nature of municipal corporations,' with home-rule powers in the political and human-relations spheres" (Collier 1972:150). These home-rule powers, however, were expected to be based on democratic notions rather than traditional Indian notions of government. Collier (1972:150) also noted that the act became operative for each tribe only after a formal referendum of all male and female members of that tribe voted to make it so. But how was tribal membership defined?

Once the tribal councils could set (and modify) standards for membership (with the approval of the Secretary of the Interior) that could supersede traditional means such as kinship and intermarriage, the potential for "reconstruction" of tribal identity was born. Tribal identity became identified less with ethnicity based on kinship than with place. Khera and Mariella (1983:38) illustrate this point well when they note that Yavapai born around or before the 1920s distinguish individuals of their own or older generations as belonging to a particular subtribe, whereas most younger Yavapai emphasize a person's membership in one of the four Yavapai reservation communities: Fort McDowell, Prescott, Middle Verde, and Clarkdale. It is unclear to what extent this still holds for the Verde Valley and Clarkdale, which have been subsumed, along with lower Verde valley, Rimrock, and the Montezuma Castle complex, into the Yavapai Apache Reservation.

Kelly's (1953) profiles of the then-extant Apache and Yavapai reservations document that as of the early 1950s core members of the tribes constituted under the Indian Reorganization Act of 1934 usually consisted of those individuals listed on tribal rolls compiled during the 1930s. The date of the tribal roll for the White Mountain Apache is 1938, 1934 for the San Carlos Apache, 1934 for Fort McDowell, and 1934 (and 1936 supplement) for the Yavapai Apache Reservation (then called Camp Verde). As the Yavapai Prescott tribe had not accepted the provisions of the Indian Reorganization Act of 1934, nothing was listed in Kelly's profile of the tribe about membership requirements. No information currently is available regarding membership criteria for the Tonto Apache Tribe (reservation at Payson established in 1975).

New members of the four tribes mentioned above are added as follows. For the White Mountain Apache, new

members include all children born of marriages contracted before the date of the adoption of the constitution between enrolled Apache and persons other than Apache (note that this provision dispenses with reckoning through the mother), all children born to members of the tribe who are one-half or more Indian blood, and by ordinances enacted by the tribal council, subject to review by the Secretary of the Interior, governing future membership and adoption of new members (Kelly 1953:23). For the San Carlos Apache, new members include all children of resident members, all children of nonresident members when they have resided on the reservation for six months, and by action of the tribal council through the passage of ordinances covering adoption of new members, subject to approval of the Secretary of the Interior (Kelly 1953:16). For the Yavapai-Apache Indian Community at Yavapai Apache Reservation (then Camp Verde), new members include all children born to any member who are one-half or more Indian blood and those approved, by ordinance (as above), with the exception that no person may be adopted into the community who has not resided on the reservation for a probationary period of one year (Kelly 1953:57). Perhaps the most-lenient requirements for new membership are those put forward by the Fort McDowell Apache-Mohave Community (Kelly 1953:70): all children of members who are of at least one-quarter degree of Indian blood and *any* person of Indian blood who has resided on the reservation for at least three years and whose name does not appear on any other reservation roll may be granted membership in the community by a majority vote of the tribal council subject to the approval of the Secretary of the Interior (emphasis added).

From the above it is clear that membership is tied strongly to place of residence, and that an unaffiliated Native American can become a member of the Fort McDowell community whether or not he/she is an Apache or a Yavapai. Diachronic study of tribal rolls and changes in membership regulations effected since the early 1950s could prove illuminating about the apparently fluid nature of tribal membership, but this is outside of the scope of this overview. Suffice it to say that contemporary rules governing tribal membership for the reservations discussed here illustrate a changing focus from tribes composed of genetically related family groups united by marriage and a network of reciprocal obligations to tribes as corporate groups composed of individuals who meet certain criteria, not all of which are based on genetic relationships.

In summary, Yavapai and Apache relations, which were based on intermarriage, similar lifeways, and shared economic pursuits during the prereservation period, underwent dramatic changes not long after the two groups were moved to reservations. Late in the nineteenth century, small "splinter" groups of related Apache and Yavapai left San Carlos and returned to the Verde valley where reservations eventually were founded for these mixed groups. Large concentrations of Apache remained at San Carlos and Fort Apache, and at

least at San Carlos, some Yavapai remained or returned later to pursue reservation economic pursuits such as stock raising (Spicer 1962:274). After the enactment of the Indian Reorganization Act of 1934, a breakdown of traditional methods for reckoning tribal affiliation occurred. This resulted in a homogenization of the remaining mixed Apache and Yavapai into groups identifying themselves as Yavapai (*contra* what reservation names such as Yavapai Apache Reservation or Fort McDowell Mohave-Apache Community may imply; see Khera and Mariella 1983) or Tonto Apache, but which appear to associate to a greater degree with place than with ethnicity. The composition of the Tonto Apache reservation established in 1975 near Payson may hold the key to understanding the nature of Apache-Yavapai relations after the San Carlos "exodus."

Summary

Except for Fort McDowell, the lower Verde region seems to have supported neither the population density nor the agricultural orientation seen elsewhere in central Arizona, such as the early settlement of Tonto Basin (Welch and Ciolek-Torrello 1994), falling far short of the Phoenix Basin. Homesteads and ranches were few and settlement was sparse and scattered. Certainly the terrain and the climate must be partly a factor. The rugged country possesses little water and few places suitable for farming. The land itself is dry, despite the river flowing through it. The environmental damage of the late 1800s created by overgrazing and the great losses experienced by the Arizona cattle industry must have discouraged ranching still further. The overall dearth of precious metals meant that miners were drawn to the more promising middle reaches of the Verde valley and to Tonto Basin. That the region's predominant mineral was granite no doubt early on discouraged prospectors from exploring it. Few resources meant few roads and no railroads. Even today there are few access routes into the region, and weekend recreationalists haul their boats over a twisting and bumpy road into Horse-shoe Reservoir.

Settlement of the lower Verde area centered on cattle and sheep raising, a pattern that persists today on a much-reduced scale (Barstad 1988; Bronson 1978; Willard 1975). By 1909, virtually all of the study area had been either permanently withdrawn from public settlement through incorporation into Tonto National Forest, or attached to specific grazing allottees. Much of the lower Verde region was subsumed into extensive ranches made up of private land and public land allotments, such as the Box Bar Ranch. The lack of permanent water required, as many have noted, the substitution of land-extensive ranching and farming practices.

Lack of water apparently was the primary factor in limiting farming possibilities. Despite the feasibility and apparent success of prehistoric irrigation along the river (Breternitz 1960a; Dart 1989:11; Fish 1974; Midvale 1946), large-scale irrigation agriculture was not developed in the historical period. Although the relatively narrow floodplain and lack of arable alluvium above Fort McDowell, and the presence of an extensive military reservation that took the land out of potential production may, in part, be responsible, the appropriation of Verde River water by Phoenix Basin irrigators is a far more pervasive explanation. The immense irrigation potential of the Verde River and the agricultural potential of the northern valleys were quickly recognized by the early pioneers, but a local Verde River irrigation complex was never developed. The Verde River was harnessed to Salt River irrigation systems and put to use in Salt River valley farms. This failure can be blamed on financial mismanagement, national crises such as the silver crisis of the 1890s and the Great Depression of the 1930s, and intense opposition by powerful and politically influential companies. Some farming took place along the lower Verde River above Fort McDowell, but it was limited. Alfalfa, corn, fruit, potatoes, and garden produce were grown. Although the ranchers grew crops for their own use, farming as a primary economic objective was not a successful venture in the lower Verde region (Wood et al. n.d.).

Despite the obvious factors inhibiting settlement, questions remain. Other regions with similar environmental settings had much higher settlement densities. Tonto Basin, for example, is just as arid and rugged as the lower Verde region, but there was more settlement there. The political struggle to control the Verde River water that emerged in the mid- to late 1800s certainly played an important role in diverting settlement to other areas, but does not explain earlier dearth of occupation in the region.

The lower Verde region can be understood best with reference to the Phoenix Basin. It served throughout much of its history as an economic catchment for the Salt-Gila River valley and, in some cases, these relationships were reciprocal. The ranches of the Verde found a necessary rail-head for their beef in Phoenix, and the Verde River was appropriated as a major resource by the farmers of the Salt River valley, resulting in the construction of Bartlett and Horseshoe Dams. Fort McDowell was an early stimulus for economic development in ranching and agriculture, however, and promoted growth of these industries in the Verde and Salt River valleys alike, while providing some degree of protection to the settlers in the early years when Apache raiding was still a prominent threat. Although isolated to a certain degree from the rest of the state, the Verde valley was linked, contentiously and often acrimoniously, to the Phoenix Basin.