

# THE GREAT BEND OF THE GILA

A Nationally Significant Cultural Landscape





The Great Bend of the Gila: A Nationally Significant Cultural Landscape

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# The Great Bend of the Gila

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Prepared by



**Archaeology Southwest**

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# TABLE OF CONTENTS

List of Figures .....	v
List of Maps .....	ix
List of Tables .....	xi
Acknowledgments .....	xiii
Foreword: Tribal Perspectives .....	xv
An <i>O'odham</i> Perspective on the Great Bend of the Gila .....	xv
A <i>Quechan</i> Perspective on the Great Bend of the Gila .....	xvii
Executive Summary .....	xxi
1. INTRODUCTION TO THE GREAT BEND OF THE GILA .....	1
2. THE LANDSCAPE OF THE GREAT BEND OF THE GILA .....	5
Fragile-Pattern Areas of the Great Bend .....	5
Yesterday, Today, and the Future .....	7
3. THE DEEP HISTORICAL CONTEXT OF THE GREAT BEND OF THE GILA .....	9
The First Americans .....	9
Archaic Gatherer-Hunters .....	11
Formative Farmers .....	13
The Hispanic Heritage .....	19
The American Era .....	25
Conclusion .....	34
4. THE RICH CULTURAL RESOURCES WITHIN THE PROPOSED GREAT BEND OF THE GILA NATIONAL MONUMENT .....	37
Rock Art .....	39
Geoglyphs .....	46
Pre-Hispanic Villages and Forts .....	49
Trails .....	52
Wagon Roads .....	56
Communication Features .....	57
Stagecoach Stations .....	57
Historic Canals .....	59
The Great Bend of the Gila's National Significance .....	61
5. PROTECTING THE FRAGILE PATTERNS OF THE GREAT BEND OF THE GILA .....	63
REFERENCES CITED .....	65



## LIST OF FIGURES

1.1.	The Great Bend of the Gila is a stark yet beautiful landscape .....	2
1.2.	Petroglyphs carved into ancient lava fields and mountains tower over the lower Gila River throughout the boundary of the proposed national monument .....	2
2.1.	Many of the archaeological resources around the Great Bend of the Gila are tied to the unique geology of the Sentinel-Arlington Volcanic Field, a series of late Tertiary shield volcanos and lava flows .....	7
2.2.	Desert pavements preserve traces of human movement and activity across the landscape of the Great Bend of the Gila .....	8
3.1.	Cultural traditions along the Great Bend of the Gila .....	10
3.2.	This Folsom point, made sometime between 8900 and 8200 B.C., was found at AZ S:16:37 (ASM) in the lower Dendora Valley, just north of the Gila River between Face Mountain and Signal Mountain .....	11
3.3.	San Pedro projectile points, such as these replicas, are diagnostic of the later stages of the Cochise cultural tradition in southern Arizona .....	13
3.4.	This broken projectile point, found lying on the desert pavement near Rocky Point, tipped the end of an Archaic atlatl dart .....	13
3.5.	In 1993, abnormally high rainfall caused the Painted Rock Reservoir to breach its 660-ft-high impoundment and inundate important cultural resources in the surrounding floodplain, including the Ring site shown here .....	19
3.6.	Every October, community events throughout southern Arizona pay tribute to the legacy of Juan Bautista de Anza's remarkable mission to California .....	22
3.7.	"O. W. Randall 1849" is the signature of Osborn Woods Randall, a New England-born man who moved to Nacogdoches, Texas, and fought in the Texas War of Independence .....	24
3.8.	This ornamental map celebrates the U.S. victory over Mexico and the country's expansion to the Pacific Ocean .....	25
3.9.	This 3-cent postage stamp, issued on December 30, 1953, commemorates the centenary of the Gadsden Purchase .....	26

3.10. Stanwix stage station, just west of Sears Point in Yuma County, was a stop along the Butterfield Overland Stage Line .....	29
3.11. The Saint Lucy Church stands as a pillar of San Lucy Village, a district of the Tohono O’odham Nation .....	35
4.1. When Father Jacobo Sedelmayr traveled through the area in the 1740s, he noted many “painted” designs upon the rocks, as opposed to the numerous engraved petroglyphs for which the area is known.....	41
4.2. The orange, abstract petroglyph designs on this prominent rock exposure at Quail Point, AZ Y:4:2 (ASM), are a rare occurrence of Archaic rock art in the region .....	41
4.3. This boulder exhibits a heavily varnished circular petroglyph of likely Archaic origin surrounded by younger Hohokam designs.....	41
4.4. This large petroglyph panel at Sears Point, AZ Y:3:6 (ASM), is just one of many lining the edge of the Sentinel Lava Field, just above and visible from the Gila River floodplain below .....	42
4.5. At Hummingbird Point, AZ-055-2733 (BLM), this boulder and its highly figurative and unique bird petroglyph – for which the landform is named – are situated high above the river’s floodplain and are visible to passersby below .....	42
4.6. This incredibly dense concentration of Hohokam rock art is located at Painted Rock Campground, AZ S:16:1 (ASM), at the northern end of the Painted Rock Mountains .....	43
4.7. This tall panel at Hummingbird Point depicts a large human-like figure, numerous handprints, and several geometric designs .....	43
4.8. Rock art panels along the edges of the Sentinel-Arlington Volcanic Field tower above the river floodplain .....	43
4.9. The remoteness of the Great Bend of the Gila from urban centers provides tranquility and minimal light pollution at night .....	44
4.10. This large petroglyph panel at Oatman Point contains many designs that may be diagnostic of the area’s unique style .....	44
4.11. Much of the rock art around the Great Bend of the Gila adorns the cliff faces of ancient lava flows lining the river corridor .....	44
4.12. This series of intaglios is at Oatman Point, on the edge of the Sentinel Lava Field .....	46



4.13. Unlike rock enclosures, walls, and trails, many of the geoglyphs around the Great Bend of the Gila, including the rock alignment pictured here, lack any clear indication of a utilitarian function .....	48
4.14. A circular rock alignment lies upon the desert pavement west of Oatman Mountain .....	48
4.15. This rock alignment, formed by the selective placement of boulders upon the desert pavement, appears to depict a quartered circle .....	49
4.16. These long, linear rock alignments are bisected by a trail .....	49
4.17. The Rock Ballcourt stands to this day on the floodplain of the lower Gila River .....	49
4.18. Dry-laid masonry wall atop Powers Butte .....	50
4.19. View to the west, across the Gila River valley, from the crest of Powers Butte .....	50
4.20. One of several massive walls raised to enclose the canyon around the Fort Pierpoint site .....	52
4.21. View across the Gila River valley to the east from behind a wall at the Fort Pierpoint site .....	52
4.22. Ancient trails blazed into the desert pavement often intermix with geoglyphs and other rock features in intricate and curious ways .....	53
4.23. For ages, perhaps even several millennia, this trail at Sears Point, just one of thousands in the area, has guided countless people on excursions through this remote desert landscape .....	53
4.24. Rings and piles of rocks are occasionally found alongside ancient trails .....	54
4.25. The trails running throughout the region of the Great Bend of the Gila connected Hohokam and Patayan communities with distant places and resources .....	54
4.26. Archaeologists have noticed an unusually high proportion of nonlocal pottery in the refuse at Hohokam villages in the vicinity of the Great Bend of the Gila .....	55
4.27. View of Powers Butte from the southwest .....	56
4.28. This view from the top of Rocky Point shows a summit trail up close .....	57

4.29. Many segments of the Butterfield Overland Stage Line, as shown here, remain in a remarkable state of preservation within the boundary of the proposed national monument .....	58
4.30. After running mail between Fort Yuma and Stanwix stage station for the government, William Fourr capitalized on the Butterfield Overland Stage Line .....	58
4.31. The Oatman Incident occurred at this point along Cooke's Wagon Road, where it leaves the sandy river floodplain and ascends the basalt mesa of the Sentinel Lava Field .....	58
4.32. A sign erected by the Yuma Historical Society marks the site of the Oatman Incident .....	58
4.33. Fragments of the 140-year-old glass insulators used to protect the cables can be found to this day along the U.S. military telegraph route as it passes through the proposed national monument.....	59
4.34. This short post was part of the U.S. military telegraph .....	59
4.35. The story of Stanwix stage station engages younger generations to this day .....	60
4.36. This turn-of-the-century building at AZ S:16:9 (ASM), located within the proposed national monument's boundary and affiliated with the South Gila Canal, stands as a memorial to the labors and struggles of efforts to tame the floodwaters of the lower Gila River .....	60
4.37. This 100 pounds sterling gold bond was issued in 1892 to help finance the expansion of the South Gila Canal .....	61

## LIST OF MAPS

1.1. The boundary of the proposed Great Bend of the Gila National Monument .....	3
2.1. Major landforms of the Great Bend of the Gila .....	6
3.1. Overlapping Paleoindian traditions across southern Arizona .....	10
3.2. Overlapping Archaic traditions across southern Arizona .....	12
3.3. Overlapping farming traditions across southern Arizona .....	14
3.4. The Great Bend of the Gila was the western range of Hohokam irrigation communities .....	15
3.5. Eighteenth century villages along the Great Bend of the Gila described by Father Eusebio Kino, Father Jacobo Sedelmayr, and Captain Juan Bautista de Anza .....	21
3.6. The lower Gila has long served as the primary east-west corridor through southern Arizona and northern Sonora and was instrumental in opening the West .....	23
3.7. Several stage stations along the Butterfield Overland Stage Line were located along the Great Bend of the Gila .....	28
3.8. More than 400 years after the Hohokam walked away from their massive canal projects, American pioneers brought large-scale canal irrigation back to southern Arizona .....	32
4.1. Large rock art clusters along the Great Bend of the Gila .....	40
4.2. Ancient trails across southwestern Arizona and northern Sonora .....	55



## LIST OF TABLES

1.1. Tribal entities traditionally associated with the Great Bend of the Gila .....	4
4.1. Cultural resources within the proposed Great Bend of the Gila National Monument .....	39





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## FOREWORD: TRIBAL PERSPECTIVES

### AN *O'ODHAM* PERSPECTIVE ON THE GREAT BEND OF THE GILA

The *O'odham* (people) of central and southern Arizona are represented by four separate federally recognized tribal governments that include *O'odham* of the Gila River Indian Community, the Salt River Pima-Maricopa Indian Community, the Ak-Chin Indian Community, and the *Tohono O'odham* Nation. *O'odham* of the *Tohono O'odham* Nation also hold lands at San Lucy in Gila Bend, Florence Village west of Florence, and the San Xavier District Community in Tucson. The *O'odham* have a familial relationship of shared cultural group identity that can be traced historically and prehistorically to the *Huhugam* who inhabited central and southern Arizona, as well as the northern region of present-day Mexico.

The *O'odham*, in accordance with their story of creation, have inhabited their lands from the beginning of existence of human life in central and southern Arizona. The *O'odham* have a reverence for the natural landscape that is central to *O'odham* traditional and spiritual understanding of, and respect for, the natural resources and vast ecosystem. This unique relationship enabled *O'odham* ancestors to live harmoniously within this harsh desert environment, and this relationship is essential to the continued survival of *O'odham Himdag* (Way of Life).

The proposed boundary of the Great Bend of the Gila National Monument encompasses numerous archaeological sites attributed to ancient *Huhugam* farmers. Many *Huhugam* petroglyph sites are located from the Gillespie Dam through Sears Point. These places hold ancient teachings on stone that document traditional religious use of the region since the precontact days of our *Huhugam* ancestors. *O'odham* Traditional Religious Practitioners, in private religious activities, continue to conduct ancient rituals and ceremonies at these places.

Prehistorically, the *Huhugam* shared southern Arizona with peoples of the *Patayan* tradition, who are the ancestors of present-day Yuman Tribes along the lower Colorado River. Among the descendant Yuman Tribes are the Yavapai-Apache Nation, Yavapai Prescott Indian Tribe, Fort McDowell Yavapai Nation, Cocopah Indian Tribe, Fort Mojave Tribe, Fort Yuma Quechan Tribe, Colorado River Indian Tribes, and Maricopa (*Pee Posh*) Indian Tribe. The *Pee Posh* have a separate and distinct culture, history, and language from the *O'odham*. Historically, the *Pee Posh* have lived beside the *O'odham* since the 1800s, and reside in the Gila River Indian Community and the Salt River Pima-Maricopa Indian Community.

Archaeological sites define and establish the connections *O'odham* have with their *Huhugam* ancestors. The spiritual, reverent, and respectful associations assist in maintaining our links

to these ancestral and sacred places. Spiritual associations to sacred places in the landscape define the existence and extent of the *O'odham* world. These places are not only historically significant; by virtue of their role in annual cycles of universal and spiritual renewal, religious practice, and traditional knowledge, they are critical to *O'odham* beliefs about cultural perpetuation and survival.

The *O'odham* believe that everything in nature within the proposed boundary of the Great Bend of the Gila National Monument is of great cultural significance. Evidence of the existence of our *Huhugam* ancestors' travels throughout this land—such as shrines, prehistoric trails, archaeological sites, and petroglyphs—is certain. We all share a strong interest in the long-term protection of the many things our ancestors left behind for *O'odham* as messages to continue the traditional ways of life.

*Barnaby V. Lewis*  
*Tribal Historic Preservation Officer*  
*Gila River Indian Community*  
*Sacaton, Arizona*





## A QUECHAN PERSPECTIVE ON THE GREAT BEND OF THE GILA

Kukumat was the creator of all people including the Quechan nation. He lived with one of the women he had made, and she gave birth to a son, Kumastamxo. After his father's death, Kumastamxo stepped in, took control of the people, and continued to live at *Avikwame* Mountain in the southeastern part of Nevada. *Avikwame* ("high mountain") is the tribal name; it translates as Spirit Mountain in English, and it is sometimes called Newberry Mountain. There, he taught the people everything they needed for survival. Kumastamxo then dismissed the people and told them to leave *Avikwame* in groups. After doing this he became ill, and before he died he directed the people to turn his body towards east, north, west, and south in the four cardinal directions. Therefore, his people placed his body on the ground and moved him about and finally he chose south. Kumastamxo held that position until he passed away. By taking such a position he set the example for coming generations that when they die their spirits will travel south.

Before dying, Kumastamxo made a wish for the coyote to take after his heart and do what is right, but the coyote took it wrong and thought he was asked to take the actual heart of Kumastamxo. He took the heart and ran east to the Gila Bend Mountains and to the junction of the Gila and Salt Rivers. At a mountain near present-day Tempe, Arizona he ate the heart and then rubbed his fingers on the mountain, calling it *Avi Kwahas* ("greasy mountain"). He then went south to another mountain and named it Heart Mountain after his father's heart. This mountain is known today as the South Mountain. After naming the mountain coyote went to a slough several miles southeast of present-day Sacaton, Arizona and claimed it as his swimming pool. After swimming in the pool he exposed himself to all the sickness in the world, and from there he dragged himself to the ocean and onto an island. He named the island *Avi Ni Wa*, meaning Heart Mountain, again referencing his father Kumastamxo's heart. There coyote cured himself.

During the time of creation, all of the people lived as spirits in a mystical dimension, but in the physical world they appeared in animal or bird form. At the end of creation, each group traveled to different areas along the Colorado River. Kumastamxo had created this river by tracing a course through the desert with the tip of his lance. Several groups journeyed south on a trail called *Xam Kwacan*, which means "descending and going by." After many years, some settled on fertile land northeast of the Colorado and Gila River confluence.

## Ancient Villages

Overlooked then and forgotten now, the small settlements of many affiliated natives were once the homes of Southwest tribes. Several centuries ago they left those villages, as they became victims of changing times. Mud piles remain where dwellings used to stand. It was once a land grand enough to hold all of life's passions and contradictions, to expand one's soul with vast possibilities, and to awaken all of one's senses. The ruins evidence the passage of time, but they once spoke well for the society that lived there. They reveal that their residents were wealthy enough in spiritual and natural resources, but all that remains are the human artifacts. Stone tools, utilitarian items, petroglyphs, human remains, lithic sites, and prehistoric trash heaps are all that exist today. During the early days, these native villages sprang up in so many places along the Gila River. They started in the west and spread eastward, but they have since disappeared.

The Quechan people live around the junction of the Gila River and the Colorado River. It was never a place of beauty, located as it is in the most barren and forbidding part of the Southwest region. In some areas bold, bare volcanic cones rise steeply upward. These are located east, west, and north of the settlements on the divided Gila and Colorado River. In historical times, Quechan people known as the Gila Group lived north and south of the confluence of the Gila and Colorado River and east of present-day Yuma, Arizona. In the late nineteenth century they joined the south dwellers in filing for homesteads near Somerton, Arizona. Some Quechan people moved on to reservations to take land allotments. Another group of Quechan people resided north of the Gila River several miles east of the Gila and Colorado River confluence. They were called *Akitkwamac* ("Sunflower Eaters"), and they had a particular function to perform for a sacred ceremony. Another group of Quechan people called *Ami* ("high") settled near the confluence of the Gila and Colorado Rivers.

Beginning in the prehistoric era, the Quechan villages and neighboring villages, together, created the Native Gila River corridor that extends upriver and into the eastern reaches of the Gila. Quechan people traveled along the route for trading, exploiting resources, and reaching distant regions in Arizona. From the prehistoric era to modern times, the Gila River and adjacent geological features have served as landmarks and comprise part of the ancient Quechan homeland. For these reasons this area is highly significant to the Quechan people.

The Quechan nation and the Quechan Cultural Committee view the efforts to establish a Great Bend of the Gila National Monument as a way to glue time back together. It honors the last pieces of wilderness for the purposes of educating people and enchanting every child. The Great Bend of the Gila is part of the story and history of our Quechan ancestors. It is a subject sometimes complicated to non-Indians, but we recognize this landscape as a dramatic

portrait of life on the Gila Corridor. The resources of this fragile area are a major scholarly addition to our growing, collective knowledge and appreciation for Arizona.

*Lorey Cachora  
Quechan Tribe  
Yuma, Arizona*



Quechan community members, Yuma, Arizona (left to right): Lorey Cachora, Sophia Rendon, Linda Cachora with baby Justine Rendon, (back) Barbarita Aguilar, Quechan Tribal President Mike Jackson Sr., with Maliha Rendon, (back) Ida Jose, Ernestina Noriega (Yaqui Tribe), (back) Manfred Scott, Claudette C. White, Zion White, (front) Kenna Escalanti, Layla Escalanti, Keely Escalanti, (back) Kendrick Escalanti. (Photograph by Elias Butler.)



## EXECUTIVE SUMMARY

The Great Bend of the Gila occupies a stretch of the lower Gila River in southwestern Arizona, where the westerly flowing river turns south and then west again as it empties into the Colorado River. Here, the river is lined by jagged peaks and ancient lava flows, which meld into an interesting and harmonious balance between water and fire, mountains and valley. Atop this unique natural landscape lies an equally intriguing ancient cultural landscape that speaks to a deep history of multiculturalism in one of the most challenging environments on Earth.

For more than 12,000 years, the Great Bend of the Gila has been a cultural crossroads on the American frontier, where people of different backgrounds, traditions, and values came together in interesting and inspiring ways. This legacy is preserved in an amazing array of fragile cultural resources dotting the landscape. The region is best known for the countless examples of visually stunning petroglyphs carved into the cooled and hardened lava. The petroglyphs were authored by Native Americans, as well as by Spanish, Mexican, and Anglo-American explorers and travelers. Most of the rock art is attributable to Archaic, Patayan, and Hohokam cultural traditions that are ancestral to many contemporary Native American communities in Arizona, New Mexico, southern California, northern Sonora, and Baja California. The rock art materializes the cultural diversity that has characterized the region for millennia.

The Great Bend of the Gila is also recognized as the eastern range of geoglyphs. Geoglyphs are symbols created on the ground surface by either removing the desert gravels to expose lighter-colored sediments, or by aligning rocks to create designs. These enigmatic features occasionally take the form of humans or animals, but most often, they consist of abstract and geometrical shapes.

While rock art and geoglyphs adorn the cliffs and mesas lining the river, ancient villages cover the valley floor. Hohokam and Patayan farmers cultivated these lands for more than 1,000 years. They left their mark in a variety of architectural signatures, such as buried pit-houses, adobe and stone buildings, ballcourts, and irrigation canals. This village-scape also includes several walled settlements built on promontories along the river. Early explorers believed these to be ancient forts, and archaeologists and Native American consultants agree that they likely served a defensive purpose.

As a cultural crossroads, the Great Bend of the Gila was a corridor for people and goods moving through this frontier. This is most evident in the extensive network of ancient trails that criss-cross the landscape and converge in the valleys of the Great Bend. These trails stretch in every direction, linking the Pacific Coast to the Great Plains and West Mexico with



the Great Basin. The Great Bend of the Gila was central to pre-Hispanic economies that circulated goods over incredibly long distances.

The Great Bend's frontier essence persisted into the Historic era and was instrumental in the westward expansion of the United States. The river valley served as an overland route between Spanish settlements in Sonora and their missions along the California coast. This trail was blazed by Father Eusebio Kino in 1699, and later formalized by Juan Bautista de Anza in 1775. This route was the foundation for many subsequent transcontinental trails and roads, including Kearny's Trail for the Mormon Battalion and the Butterfield Overland Stage Line. Stage stations and pioneer communities sprang up along these trails. At one of these, Stanwix station, the California Column encountered several Confederate Rangers and a battle ensued, thus marking the site of the westernmost skirmish of the Civil War.

The area's cultural resources are truly world class, and the region's history is a one-of-a-kind chapter in our country's saga. The Great Bend of the Gila, as a natural and cultural landscape, is nationally significant and speaks to aspects of our country's cultural composition in a way no other place can.

## INTRODUCTION TO THE GREAT BEND OF THE GILA

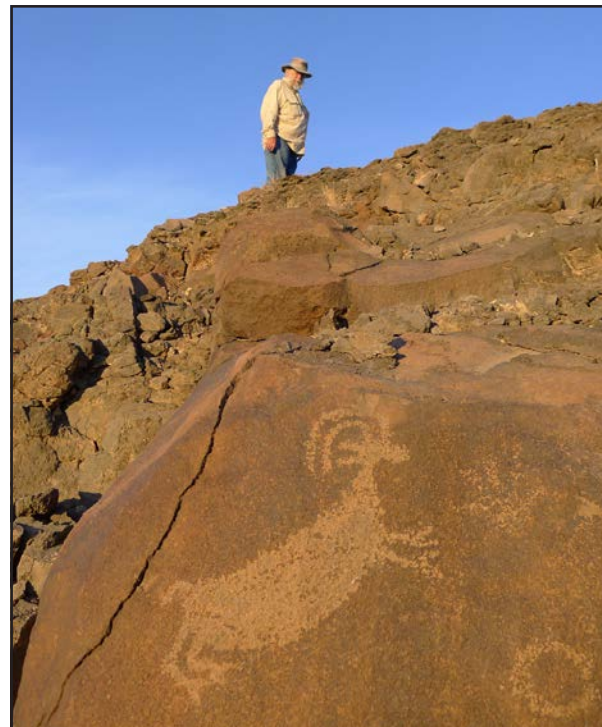
The Gila River is one of the epic waterways of the American West (Corle 1951). Born in the high country of southern New Mexico, this mighty river snakes westerly across the Sonoran Desert of Arizona and empties into the Colorado River, just north of the Sea of Cortez. The river's lower stretch, between the cities of Phoenix and Yuma, is bound by extinct lava fields and jagged mountains, landforms famed naturalist John Audubon (1906:153) called "peaks of the wildest character and desolation." As the Gila's waters wind around these monoliths, the river's course veers south and then swings west once again, creating its distinctive "Great Bend" before spilling into the Colorado River (Figure 1.1). These life-giving waters have enabled cultures to flourish and cities to rise in one of the world's most challenging and least hospitable terrains. Cultural resources attributed to Native Americans, Spaniards, Mexicans, and Americans represent the region's deep history of cultural diversity and the legacy of frontier life in the early American West. The river's Great Bend, in particular, is renowned for an impressive and dense array of cultural resources, most notably, a rich tapestry of ancient, world-class rock art (Figure 1.2). Because the landscape along the Great Bend of the Gila remains sparsely inhabited, much of its natural character and the unique cultural resources concentrated there persist untouched. It is this spectacular composition of remarkable cultural resources within a pristine natural setting that merits special recognition and heightened protection.

To celebrate the Great Bend's diverse cultural heritage and contribution to our nation's story, a Great Bend of the Gila National Monument (GBGNM) has been proposed. As currently drawn up, this monument would contain approximately 84,000 acres of nearly contiguous public lands along the lower Gila River corridor, from Robbins Butte in the Town of Buckeye in Maricopa County to Sears Point in Yuma County (Map 1.1). Except for a few inholdings of land owned by the Tohono O'odham Nation, the state, and private parties, the area within the perimeter of the proposed national monument is currently managed by the Bureau of Land Management (BLM), which has designated two cultural Areas of Critical Environmental Concern within this parcel that the national monument boundary generally follows. Non-BLM-administered land within the outer boundary would not be part of the GBGNM.



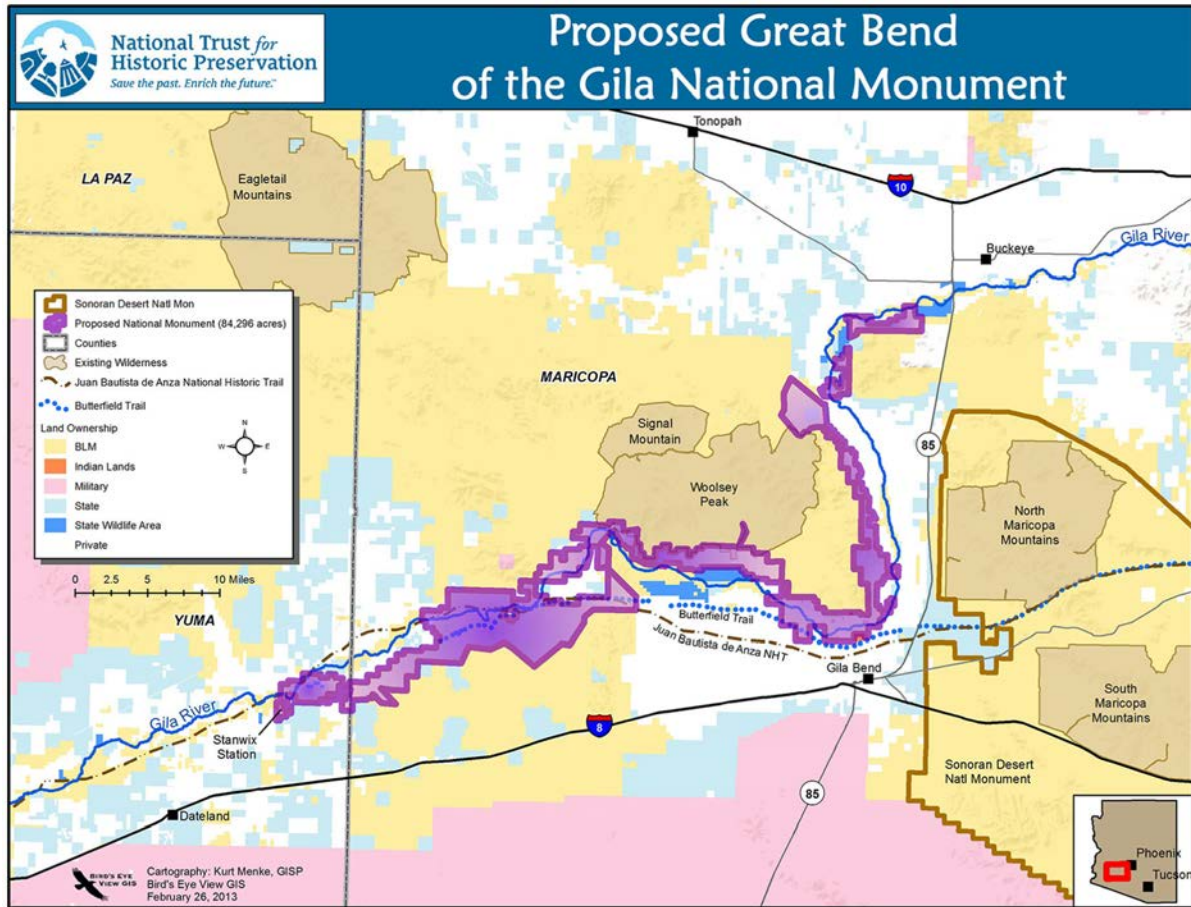
**Figure 1.1.** The Great Bend of the Gila is a stark yet beautiful desert landscape. This view is from the summit of Powers Butte, just upstream from where the Gila River takes its big turn south between the Buckeye Hills (at center) and the Gila Bend Mountains (on the horizon at right). One of the many low rock walls atop Powers Butte is visible in the foreground. These walls were part of a fortified village built about 800 years ago by a farming society archaeologists call the Hohokam. The Hohokam are ancestral to several contemporary Native American communities who consider the Great Bend of the Gila part of their traditional lands. (Photograph courtesy of Elias Butler.)

Although layered in a deep history, many contemporary Native Americans continue to identify with the lands and resources encompassed by the boundary of the proposed Gila Bend of the Gila National Monument. As Barnaby Lewis and Lorey Cachora explained in the Foreword, the Great Bend of the Gila is a sacred, ancestral landscape to the Native American commu-



**Figure 1.2.** Petroglyphs carved into ancient lava fields and mountains tower over the lower Gila River throughout the boundary of the proposed national monument. Although a full inventory awaits, available information suggests at least 100,000 individual glyphs may adorn the cliffs and mountains along the river's Great Bend, between the towns of Agua Caliente and Buckeye, representing one of the richest collections of rock art in North America. (Photograph by Andy Laurenzi.)





**Map 1.1.** The boundary of the proposed Great Bend of the Gila National Monument.

nities who identify with this area and its cultural resources. The cultural resources are a testament to their connection to the land and are critical in maintaining their traditional ways of life. Indeed, 14 Native American tribal entities are historically and traditionally associated with the landscape of the Great Bend of the Gila and attribute heritage value to the landscape as well as the cultural and natural resources it contains (Table 1.1). A more comprehensive report on the significance of the Great Bend to these associated tribal communities is in progress and will ultimately complement this cultural resource study.

This report provides a historical perspective on the significance of the cultural resources and natural landscape encompassed by the boundary of the proposed GBGNM. To set the stage, Chapter 2 briefly describes the Great Bend's distinctive natural landscape, and the curious ways in which the terrain and cultural resources are intertwined. Portions of notable landforms and natural features encompassed by the boundary include:

- the **Gila River**, an important waterway and former international border;
- the **Sentinel-Arlington Volcanic Field**;
- the **Gila Bend Mountains**;

**Table 1.1.** Tribal entities traditionally associated with the Great Bend of the Gila.

• Ak-Chin Indian Community	• Hopi Tribe
• Cocopah Indian Tribe	• Salt River Pima-Maricopa Indian Community
• Colorado River Indian Tribes	• San Carlos Apache
• Fort McDowell Yavapai Nation	• Tohono O’odham Nation
• Fort Mojave Indian Tribe	• Yavapai-Apache Nation
• Fort Yuma Quechan Tribe	• Yavapai-Prescott Indian Tribe
• Gila River Indian Community	• Zuni Pueblo

- the **Painted Rock Mountains**;
- the **Buckeye Hills**; and
- **Oatman Mountain**.

Chapter 3 outlines 12,000 years of history along the Great Bend of the Gila, and the enormous breadth of cultural resources within the boundary of the proposed GBGNM are synthesized in Chapter 4. This impressive array of cultural resources embodies much of Great Bend’s deep history, including:

- upwards of **100,000 Ancient Petroglyphs**, spanning thousands of years;
- **Giant Ground Figures**, or geoglyphs, covering the volcanic mesa tops;
- **Pre-Hispanic Forts** with dramatic rock walls;
- the **Rock Ballcourt** site, a one-of-a-kind Hohokam village;
- **Ancient Trails** that linked the Pacific Ocean to the continent’s deep interior;
- **Stanwix Stage Station**, site of the westernmost **Civil War** skirmish;
- historic roads, including the **Anza Trail** and **Butterfield Overland Stage Line**;
- site of the infamous **Oatman Incident**; and
- **Nineteenth-Century Irrigation Canals** dug by the area’s pioneers.

The following pages offer a comprehensive review of the history of the Great Bend of the Gila, coupled with a synopsis of the most notable cultural resources it has to offer. They will show that the significance of this landscape to our country’s storied history, its relevance to our nation’s cultural identity, and its continued value to a diverse body of contemporary communities are self-evident.

## THE LANDSCAPE OF THE GREAT BEND OF THE GILA

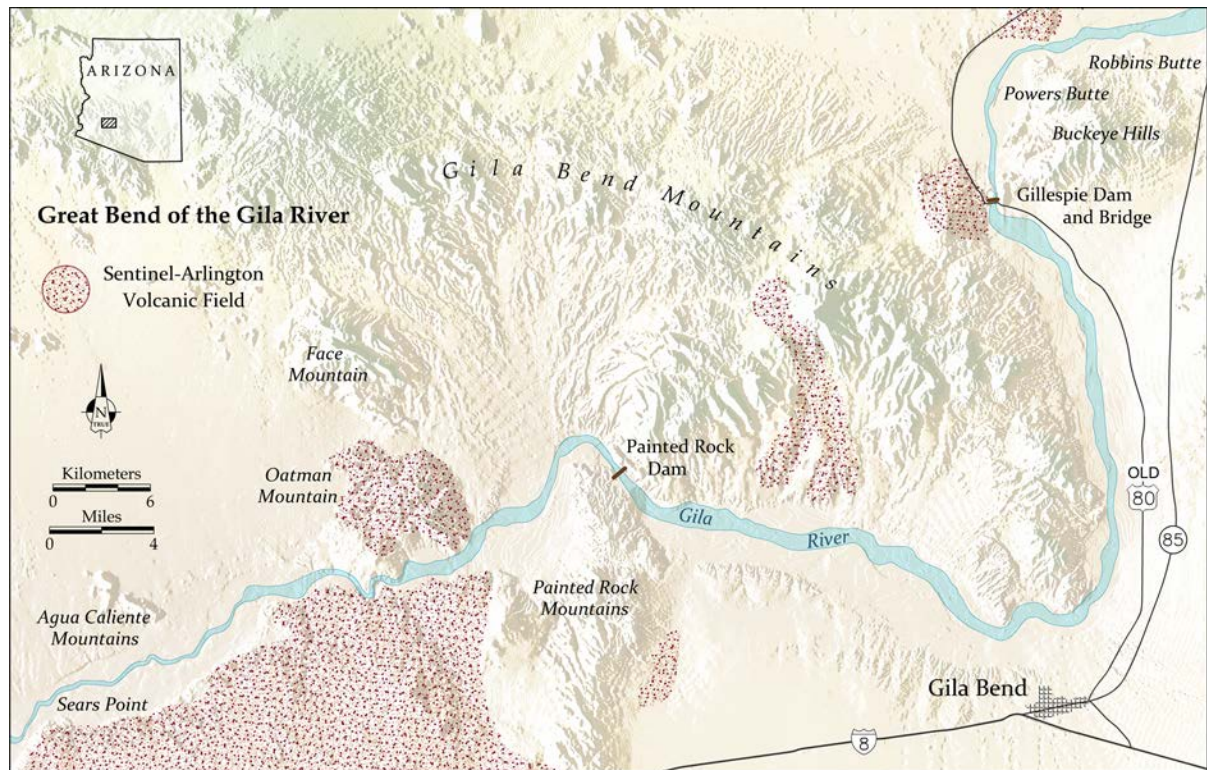
One of the first things visitors to the Great Bend of the Gila notice is the extreme heat and aridity that characterize this remote quarter of the American Southwest. The town of Gila Bend, for instance, receives an average of just 7.0 inches of rainfall each year and witnesses summer temperatures typically in excess of 110°F, with a record high of 122°F (National Oceanic and Atmospheric Administration 2014). It becomes even less bearable downstream; the city of Yuma has a record high temperature of 124°F and averages less than 3.5 inches of rain per year. This low section of the Sonoran Desert is indeed one of North America's most daunting terrains, but it is a landscape layered deep in history nonetheless due, in large part, to the life-giving waters of the lower Gila River.

The lower Gila River was once a perennial river that flowed through an ever-evolving braided network of channels interspersed with cobblebars, sandbars, dunes, swales, and marshes. In years past, the river supported a rich riparian habitat full of waterfowl and fish-life (Haase 1972; Minckley and Brown 1994; Stromberg 1993). The mountain ranges lining the Great Bend pinch and constrict the river at various points along its course, which has created valleys of deep, fertile soil that have been farmed almost continuously for more than a millennia. The floors of these valleys rise gradually away from the river channel until they meet the slopes of granitic mountain ranges and ancient lava fields, and cycles of flooding have cut a series of shallow terraces that parallel the river channel (Ross 1923). Much like the communities along the Great Bend today, ancient Native American farmers favored these terraces as settings for their villages and fields. Fortunately, the incredible and inspiring legacy of their endeavors endures in a world-class assemblage of visually stunning archaeological resources located within the rocky and mountainous landscape along the river's edge (Map 2.1).

### FRAGILE-PATTERN AREAS OF THE GREAT BEND

The archaeological resources within the boundary of the proposed Great Bend of the Gila National Monument (GBGNM) are found in and around a series of geological rises lining the river valleys—the Buckeye Hills, the Gila Bend Mountains, the Painted Rock Mountains,





**Map 2.1.** Major landforms of the Great Bend of the Gila. Formed around two million years ago, the Sentinel-Arlington Volcanic Field is comprised of numerous shield volcanoes and their associated basaltic lava flows. The surfaces of these rocks developed a dark patina, which, when pecked away by humans, revealed lighter rock beneath and enabled communication of bold signs and symbols. Older geological features, such as the Gila Bend Mountains, Painted Rock Mountains, and the Buckeye Hills, are embedded in and adjacent to the volcanic field. Powers Butte and Robbins Butte are two volcanic spires between the Gila River and the Buckeye Hills.

Oatman Mountain, and the Sentinel-Arlington Volcanic Field. Containing some of the oldest and youngest rocks in Arizona (Chronic 1983), these geological formations are stained with patinas and varnishes that add different hues and chromas—dark reds, greens, purples, browns, grays, and blacks—to the desert’s palette. These windblown and sand-blasted formations host an assortment of peculiar geological surfaces that archaeologists consider “fragile-pattern areas.” Fragile-pattern areas are natural surfaces upon which cultural resources rest without any overlying sediments (Hayden 1965). It is this unguarded exposure to environmental and human forces that make them fragile.

Most of the unique, world-class cultural resources within the boundary of the proposed GBGNM are found in two types of fragile-pattern areas within and around the region’s mountains and lava fields. The surfaces of many of the outcrops, boulders, and cliffs lining the Great Bend are one type of fragile-pattern area. Many of the rock surfaces are covered in layers of remarkable rock art crafted first by Native Americans, who have called this place home for millennia, followed by early American sojourners on westward journeys to California (Figure 2.1).





**Figure 2.1.** Many of the archaeological resources around the Great Bend of the Gila are tied to the unique geology of the Sentinel-Arlington Volcanic Field, a series of late Tertiary shield volcanos and lava flows. The lava flows end abruptly where they meet the river channel. This has created black, blocky, sheer-faced cliffs all along the river corridor. For thousands of years, people of variable cultural backgrounds chose these smooth, dark surfaces as canvases for petroglyphs. The examples here, near Gillespie Dam, were pecked by Hohokam farmers more than 1,000 years ago. Experience has shown that fragile patterns such as these are highly prone to graffiti and bullets, which cause irreversible damage to archaeological resources of great cultural and spiritual significance to contemporary people. (Photograph by Andy Laurenzi.)

Desert pavements, another type of fragile-pattern area, are thin, generally compact lenses of rocks that form upon the slopes and terraces between the river and mountains, as well as atop and around lava flows (Dixon 1994). The stones in desert pavements typically exhibit dark patinas, and when one is moved, the lighter-colored sediments below are exposed. Desert pavements around the Great Bend preserve a range of inadequately understood but important archaeological resources, such as trails, cleared sleeping circles, and giant ground figures of mysterious geometric and naturalistic forms, which are often discernible and identifiable only from the air (Figure 2.2).

## YESTERDAY, TODAY, AND THE FUTURE

One may find it challenging to picture the dry ri-

verbed as a magnificent riparian corridor teeming with life. Nevertheless, accounts from the seventeenth century through the nineteenth century attest to just how grand the lower Gila once was (see Clarke 1852:96; Hinton 1878:281-282; Manje 1954:84). Descriptions of a river a quarter mile wide and full of beaver, ducks, and other water-loving animals are common.



**Figure 2.2.** Desert pavements preserve traces of human movement and activity across the landscape of the Great Bend of the Gila. Trails, such as the one here, were created by walking atop the pavement, which impressed the stones into the surface and pushed the larger rocks to the side. Some trails are thousands of years old, and by studying them, we can learn about the social and economic networks that linked communities in far-off places. As fragile-pattern areas, desert pavements and associated cultural features are highly susceptible to vehicular damage. (Photograph by Andy Laurenzi.)

These historical accounts captured the river the way it was then, the way it had been for centuries, and the way it continued to be until the dawn of the twentieth century, when amazing feats of engineering tamed the river and paved the way for the industrial agriculture and urbanization we see today. Although the river's water has been diverted, the remarkable human story tied to it remains etched in sand and stone within the boundary of the proposed Great Bend of the Gila National Monument.

## THE DEEP HISTORICAL CONTEXT OF THE GREAT BEND OF THE GILA

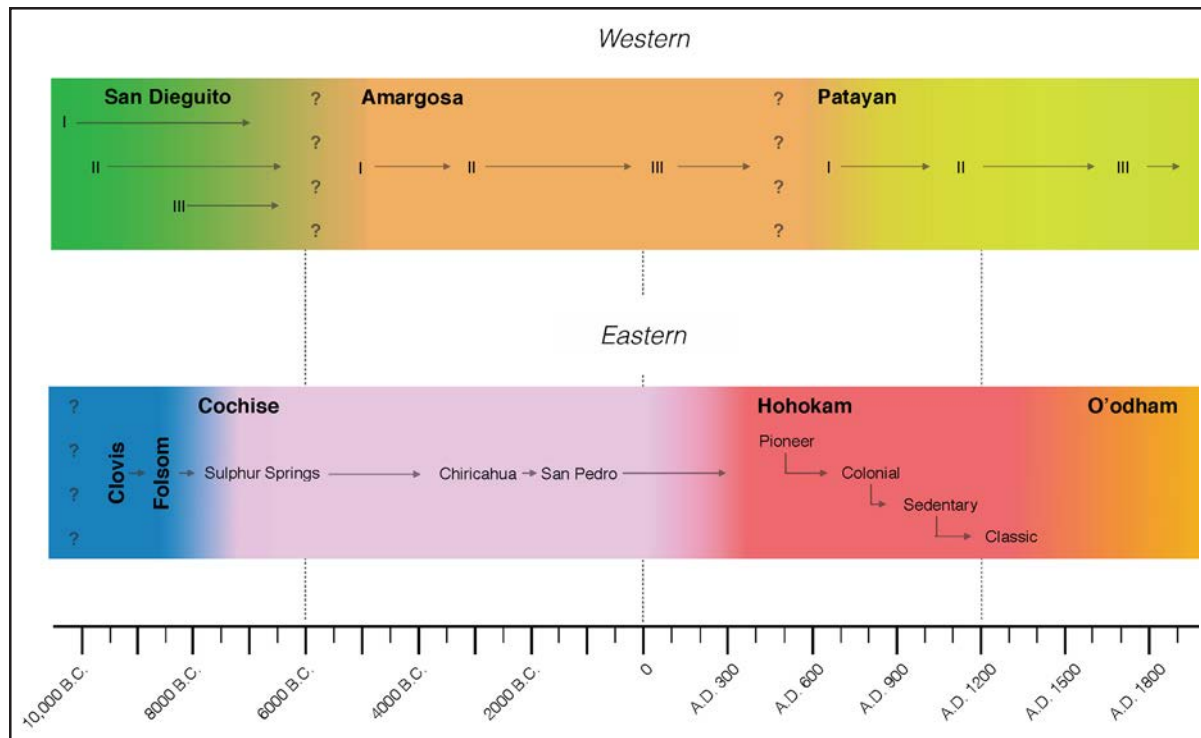
For more than 12,000 years, the waters of the lower Gila River have enabled culturally diverse communities to flourish in what is one of the most arid and inhospitable environments in North America. Much like the river itself, the human story tied to this linear oasis has taken dramatic turns as it coursed through the jagged and boulder-strewn landscape along the river's Great Bend. At various times through the millennia, people of different and sometimes contrasting cultural traditions seemingly spread out from regions to the north, south, east, and west and into the valleys and mountains of the Great Bend of the Gila (Figure 3.1). Native American hunters, gatherers, and farmers, followed by Spanish and Mexican explorers and missionaries, and most recently, American pioneers and homesteaders, all etched their legacy in this austere desert frontier in unique and fragile ways. Some settled down and developed bustling communities along the river corridor, only to later retreat to their homelands or move to greener fields elsewhere; others simply paused for awhile before continuing their journey through one of the most foreboding places on earth. The following is an outline of these cultural traditions as we understand them from the cultural resources they left on the landscape. The intent is to provide an overview of the historical setting around the Great Bend of the Gila. Chapter 4 focuses explicitly on the cultural resources within the boundary of the proposed Great Bend of the Gila National Monument (GBGNM) that link this important cultural landscape to its larger historical framework.

### THE FIRST AMERICANS (10,000–7000 B.C.)

“Paleoindian” denotes a time when the first Americans moved into, migrated across, and eventually settled into different ecological niches throughout the Western Hemisphere. The term thus subsumes a series of early cultural traditions archaeologists identify through distinct, subsistence-related technological complexes/industries, which likely represent unique cultural adaptations to specific environments. Two such Paleoindian traditions—Clovis/Folsom and San Dieguito—overlapped in the valleys of the Great Bend (Map 3.1).

Finely crafted projectile points of distinctive styles attributed to the Clovis and the slightly younger Folsom traditions are the earliest traces of a human presence in the area of the Great Bend of the Gila. It is generally accepted that these points, which are sometimes found with





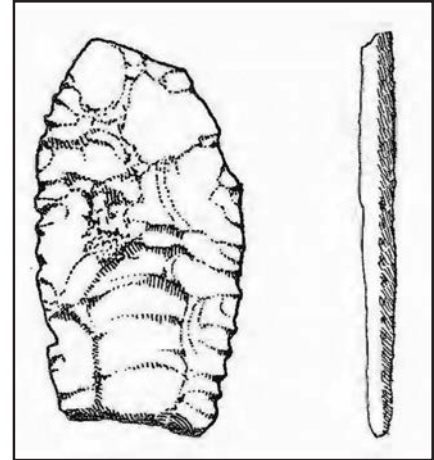
**Figure 3.1.** Cultural traditions along the Great Bend of the Gila.



**Map 3.1.** Overlapping Paleoindian traditions across southern Arizona.

the remains of extinct Pleistocene megafauna, represent adaptations to big-game hunting and a highly mobile lifestyle that accompanied it (Haynes 2002). Although Clovis points have been found across the continent, those of Folsom – a descendant technological tradition focused on bison hunting – are more localized to the Rocky Mountains and surrounding regions (Figure 3.2). Nevertheless, the westernmost Folsom point in Arizona was found in the southern Dendora Valley, just north of the boundary of the proposed GBGNM (Effland and Green 1983).

The other Paleoindian tradition found within the region of the Great Bend, San Dieguito, is known best from sites in southern California and northwest Sonora, Mexico (Hayden 1976, 1998; Huckell 1998; Rogers 1939, 1958, 1966; Warren 1967). From what remains, the San Dieguito lifestyle was apparently less concerned with hunting big game and more focused on exploiting lowland aquatic environments. Although projectile points are known from some contexts, the San Dieguito tool kit emphasized a specialized flaked stone technology well suited for working wood. Also attributed to the San Dieguito tradition are ancient trails and enigmatic clearings in the desert pavement, including “sleeping circles” and geometric and amor- phously shaped geoglyphs, rock alignments, and rock piles many researchers interpret as ancient shrines. Found predominantly on desert pavements lining river terraces and the shores of desiccated lakes, archaeological resources assigned to the San Dieguito cultural tradition extend into southwestern Arizona but are rare east of the Great Bend area.



**Figure 3.2.** This Folsom point, made sometime between 8900 and 8200 B.C., was found at AZ S:16:37 (ASM) in the lower Dendora Valley, just north of the Gila River between Face Mountain and Signal Mountain. It is the westernmost Folsom point found in Arizona (from Effland and Green 1983:Figure 27).

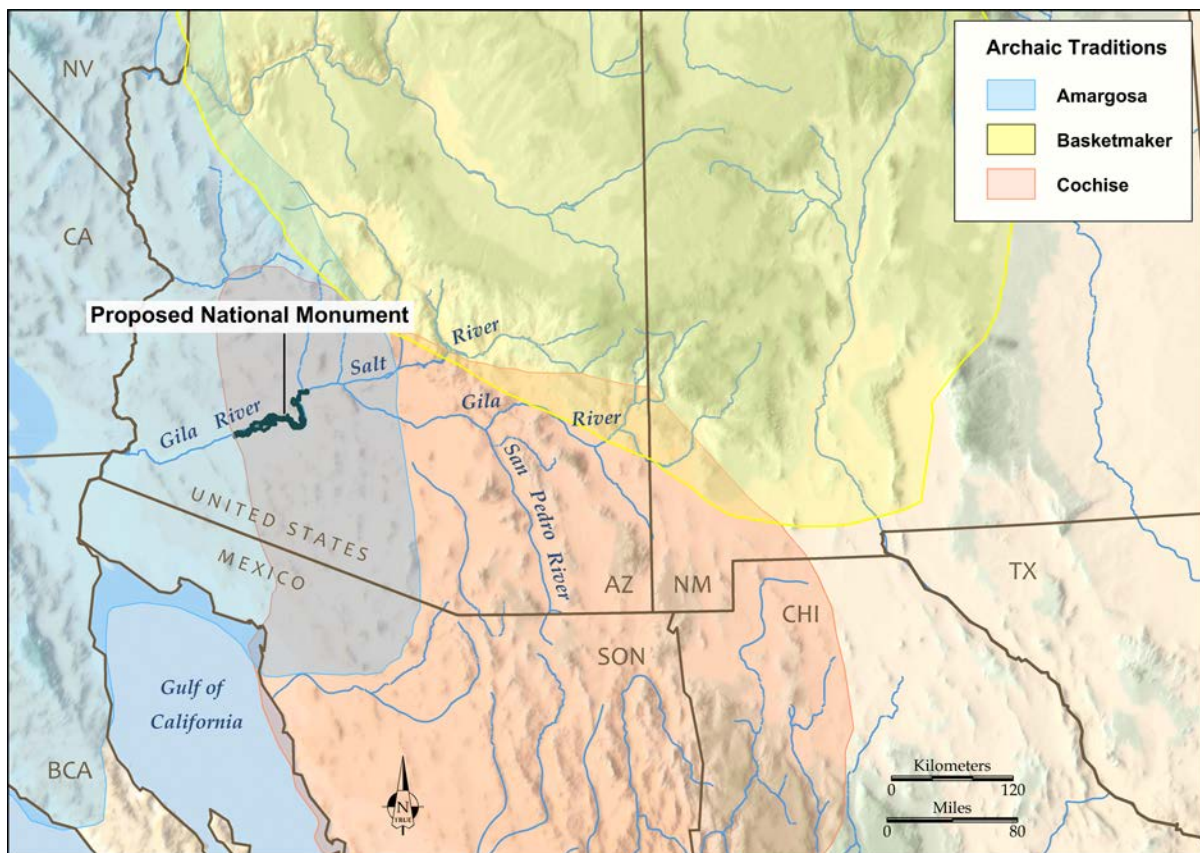
#### ARCHAIC GATHERER-HUNTERS (7000 B.C.–A.D. 200)

Between 9500 and 8000 B.C., as the Ice Age ended, the planet entered a prolonged period of warmer temperatures. This warming initiated a cascade of global-scale environmental changes, including the retreat of Pleistocene ice sheets, the mass extinction of most species of megafauna, and the formation of new plant and animal communities, all of which impacted human communities across the globe (Straus et al. 1996). With many of the large species gone and new ecosystems taking root, many people dependent on big-game hunting had to shift their dietary foci. The widespread adoption of grinding technology (for the processing of seeds) and changes in projectile technology show that populations in the Greater Southwest

met this challenge by intensifying their use of plants and by increasing their reliance on smaller game animals (Huckell 1996). As with the Paleoindian traditions, however, the Great Bend of the Gila was a crossroads where two long-lived Archaic traditions overlapped: Cochise to the east and Amargosa to the west (Map 3.2).

The Cochise tradition, dating from about 7500 B.C. to A.D. 200, was centered around the international four corners of New Mexico, Arizona, Sonora, and Chihuahua. It is thought to be a local derivation of the preceding Clovis and Folsom traditions (Meltzer 2006; Sayles and Antevs 1941). This tradition developed characteristic styles of ground stone and projectile points, indicating an ongoing process of adaptation that, near the end, witnessed semi-sedentary communities experimenting with incipient agriculture and new forms of social organization in villages. In fact, the earliest irrigation canals in the Americas are attributed to the early part of the San Pedro phase of the Cochise tradition, circa 1500 B.C. (Figure 3.3) (Vint and Nials 2015).

The Amargosa tradition was centered in the deserts of southern Nevada and south-central California. It is not as well studied as the neighboring Cochise tradition but is thought to date from about 7000 B.C. to A.D. 500 (Hayden 1976; Rogers 1939, 1958, 1966). Although the relationship between the Amargosa tradition and that of San Dieguito, its regional Paleoindian



Map 3.2. Overlapping Archaic traditions across southern Arizona.





**Figure 3.3.** San Pedro projectile points, such as these replicas, are diagnostic of the later stages of the Cochise cultural tradition in southern Arizona. Such points are somewhat rare west of the Tucson Basin, but have been recorded at sites along the Great Bend of the Gila. (Replicas and photograph by Allen Denoyer.)



**Figure 3.4.** This broken projectile point, found lying on the desert pavement near Rocky Point, tipped the end of an Archaic atlatl dart. The breakage pattern is typical of fractures that occur when projectiles miss their targets and impact hard surfaces. Typologically, this point falls within the Elko Eared style, dating from about 1500 B.C. to A.D. 600. The Elko series is attributed to Archaic Great Basin cultures, and in this context, it likely signifies an Amargosan cultural affiliation. (Photograph by John Alcock.)

dian predecessor, is inadequately understood, similarities in archaeological resources, such as sleeping circles, geoglyphs, and sundry rock features, as well as site location, suggest the Amargosa tradition also entailed a proclivity for riverine and lacustrine environments of the desert lowlands. The Amargosa tradition adopted ground stone technology slightly later than the Cochise did, and projectile points from Amargosa contexts more closely resemble Great Basin styles than other Southwestern Archaic traditions (Figure 3.4). Nonetheless, the Amargosa tradition is recognized in southwestern Arizona about as far as the Great Bend of the Gila.

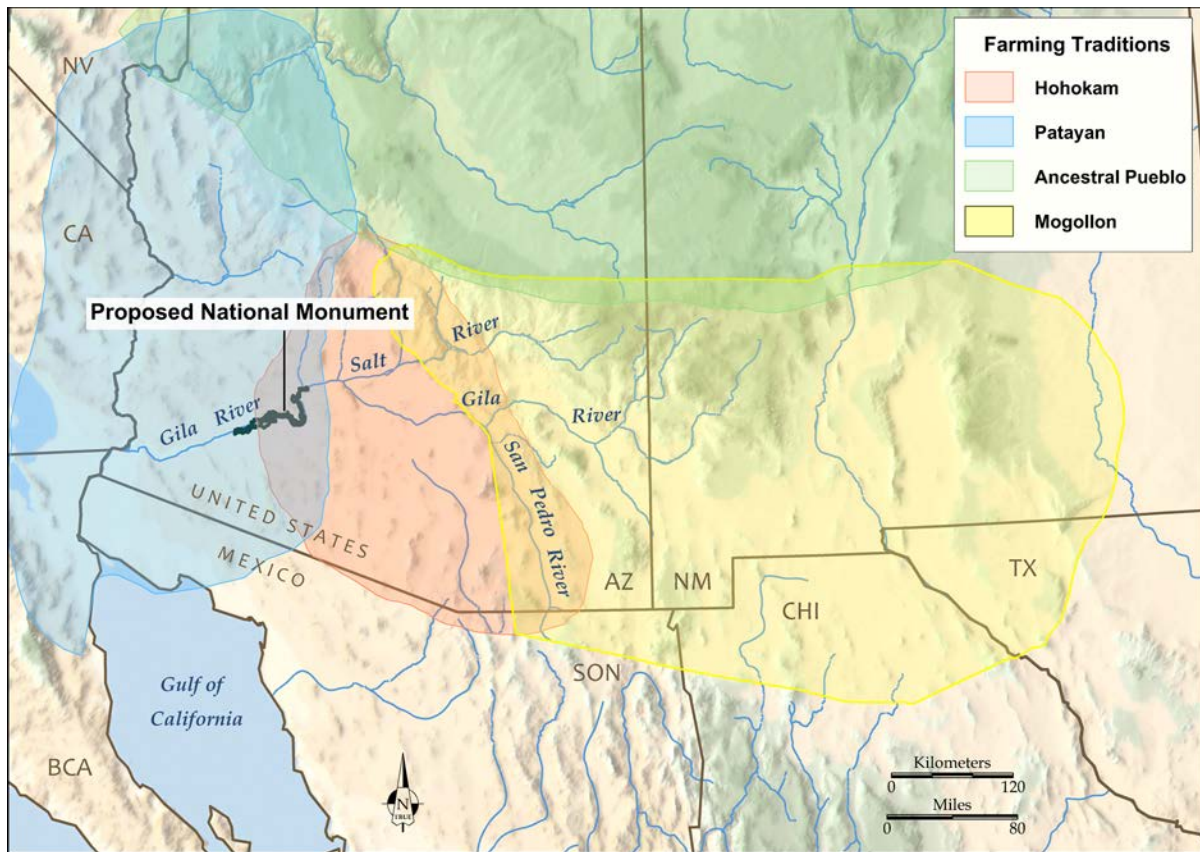
#### FORMATIVE FARMERS (A.D. 500–1500)

The adoption of an agricultural village lifestyle closes the chapter on the Archaic period in the American Southwest (Huckell 1996). Southwestern farming traditions had more significant impacts to the landscape than their more transient Archaic and Paleoindian ancestors, so considerably more is known about them. Indeed, the majority of the archaeological resources within the boundary of the proposed GBGNM can be attributed to two formative farming traditions

that, once again, overlapped in this desert frontier (Map 3.3) (McGuire and Schiffer 1982).

The first farmers to work the valleys of the Great Bend moved into the region around A.D. 500 (Schroeder 1961; Wasley and Johnson 1965). Archaeologists attribute these pioneering agriculturalists to the Hohokam, a Southwestern farming tradition whose core area was the middle Gila and lower Salt River valleys just east and upstream from the Great Bend. The Hohokam tradition is renowned for its elaborate, Mesoamerican-inspired material culture,

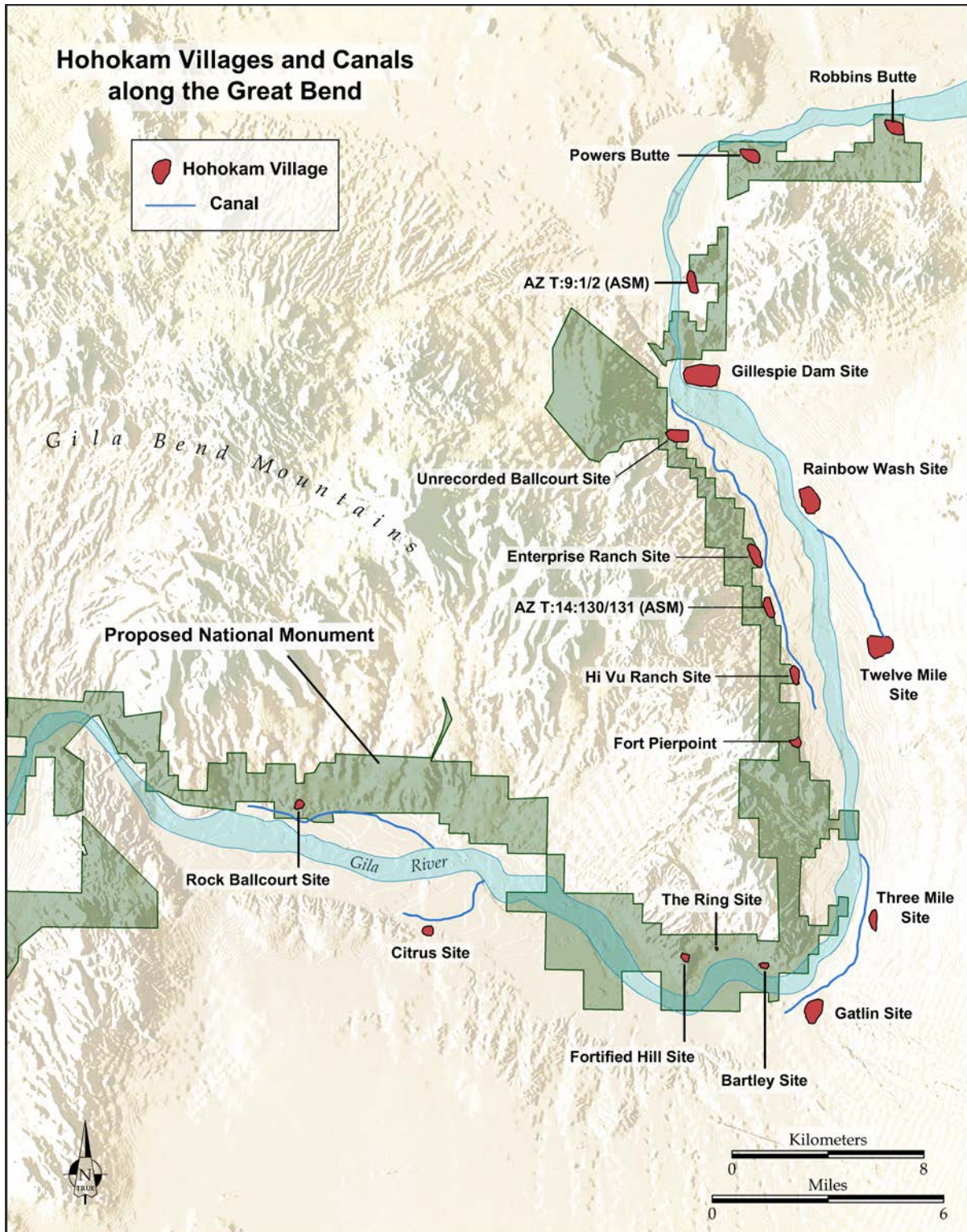




**Map 3.3.** Overlapping farming traditions across southern Arizona.

monumental architecture, and the complex canal irrigation networks it engineered and operated for nearly a millennium (Fish and Fish 2007; Gumerman 1991; Haury 1976). Typical of frontier communities, however, Hohokam farmers along the Great Bend did not mirror their core-area neighbors in every aspect (Map 3.4).

Occupying the western frontier of the Hohokam world, communities in the valleys of the Great Bend played a key, perhaps strategic role in the exchange of goods and information with neighboring traditions to the west and south (Doyel 1991, 1996, 2008; McGuire and Howard 1987). Linguistic and archaeological evidence indicates some Hohokam communities maintained steady contact with Yuman speakers, who archaeologists refer to as Patayan, residing along the lower Colorado River for centuries (Shaul and Andresen 1989; Shaul and Hill 1998). The Patayan tradition subsumes a conglomerate of material culture traditions centered along the lower Colorado River that are thought to be ancestral to modern Yuman speakers (Colton 1938, 1945; Rogers 1941, 1945; Schroeder 1952). These traditions are unfortunately understudied, especially along the lower Gila River, as research emphasis in southern Arizona has long been placed on the easier to identify, more flamboyant footprints of the Hohokam. Nevertheless, sometime between A.D. 900 and 1000, Patayan groups began to migrate up the Gila River and, in some instances, alongside and into Hohokam communities



**Map 3.4.** The Great Bend of the Gila was the western range of Hohokam irrigation communities. The local Hohokam villages were large, and many had ballcourts, a form of monumental architecture in which a ritualized ballgame was played. The westernmost Hohokam ballcourt is found at the Rock Ballcourt site, at lower left in the map and within the boundary of the proposed national monument. Canal locations are based on maps created by Frank Midvale and reported in Dart et al. (1989). The canal leading to the Rock Ballcourt site, as alluded to in Bernard-Shaw (1990), is not confirmed.



### The Hohokam Tradition

The Hohokam tradition is well known for producing exquisite craft items, as well as the economy that moved these goods across vast expanses of desolate desert terrain. Hohokam artisans worked in numerous media, including clay, stone, shell, textile, and paint. Shown here are examples of etched-and-painted shell and distinctive styles of red-on-buff pottery. The shell was gathered from the Pacific Ocean, and the artisan probably used a weak solution of acid to create the designs. Red-on-buff pottery is a hallmark of the Hohokam tradition. Much of it was manufactured by specialists, and it was possibly distributed to surrounding communities by virtue of a nascent market economy linked to a ritual ballgame. (Photograph of shell courtesy of the National Park Service. Photograph of pottery by Mat Devitt, courtesy of Eastern Arizona College.)



(Doyel 2000, 2008; Henderson 2011; Rice et al. 2009; Schroeder 1961; Wasley and Johnson 1965). An interesting contrast between the two is that the Hohokam tradition relied largely on canals to irrigate their fields, whereas Patayan farmers relied on floodwater, or overbank irrigation, to water their crops.

By A.D. 1100, after a century or two of persistent and evidently peaceful cooperation between neighboring and possibly cohabitating Hohokam and Patayan farmers, the influence of the Hohokam tradition, as it is understood from the core area to the east, began to weaken around the Great Bend. Archaeologists refer to this time of widespread social change within the Hohokam world as the beginning of the Classic period. This change in social alliances left farmers within the frontier of the Great Bend in the Gila to adopt their own developmental trajectory. During the A.D. 1200s, communities along the Great Bend began erecting clusters of stone buildings in seemingly defensive settings. Three such settlements are found atop Powers Butte, Robbins Butte, and the Fortified Hill. Powers Butte and Robbins Butte are on Bureau of Land Management (BLM) land within the proposed national monument, whereas the Fortified Hill is on Tohono O'odham reservation land of the San Lucy District and is encompassed by the proposed national monument. At about the same time that such fortified settings began to take shape, local communities also began experimenting

### The Patayan Tradition

Patayan material culture is not as flamboyant or abundant as that of the Hohokam. In fact, Malcolm Rogers, the first archaeologist to define Patayan material culture and map its distribution, stated, "The material pattern of this culture is so poor that it seems necessary to conjecture whether the producers might not have been proficient in some of the perishable arts such as the wood and fiber crafts" (Rogers 1945:171). Nevertheless, Patayan communities along the lower Colorado and lower Gila rivers crafted a distinctive type of pottery known as Lower Colorado Buffware. Although its buff color resembles that of Hohokam pottery, the Lower Colorado variety exhibits unique forms, surface treatments, and paste qualities. The reconstructed vessel (top) is a Palomas series wide-mouth jar with a stucco finish. It dates to the Patayan III phase, probably between A.D. 1650 and 1900. The Palomas series of Lower Colorado Buffware predominates at Patayan sites along the lower Gila River. The pottery fragments from a Lower Colorado Buffware jar (bottom) found at a small village near Oatman Point, exhibit telltale features of Patayan manufacture, including a grayish paste (bottom left) and a scummy exterior surface that gives the pottery its buff color. (Photograph of Palomas vessel courtesy of the Arizona State Museum, Accession No. 23225. Photograph of sherds by Andy Laurenzi.)



with new forms of architecture and the social and religious customs that guided those decisions. An example of this is the Ring site, AZ T:14:12 (ASM) (Figure 3.5). Like Fortified Hill, the Ring site is on Tohono O'odham reservation land encompassed by the proposed national monument. Tested and partially excavated in 1960 (Wasley and Johnson 1965), the Ring site consists of a roughly circular, 50-m-diameter masonry wall encompassing a similarly fashioned rectangular masonry structure. The Ring site may not have been a residential village, but was perhaps a ceremonial center for a dispersed community of small, Classic period hamlets on the floodplain north of the Gila River and south of the Gila Bend Mountains, between Point of Rocks and Cobble Mountain. The contemporaneous settlement on Fortified Hill was possibly part of this sprawling community.

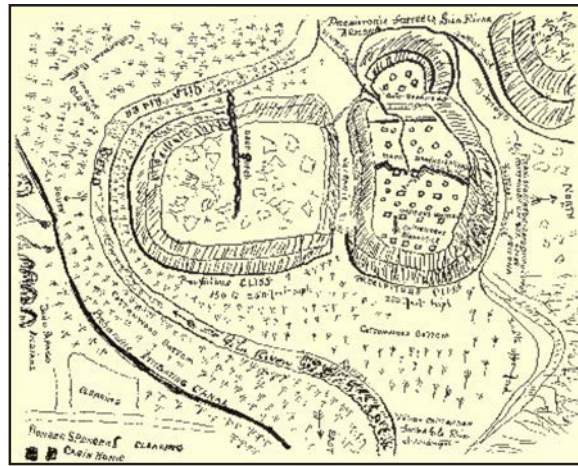
By A.D. 1300, communities around the Great Bend had formed unique cultural identities that hybridized elements of the Patayan and Hohokam traditions in new and innovative ways (Doyel 2000, 2008; Henderson 2011; Rice et al. 2009). This was the blended cultural landscape that Spanish Jesuit missionaries described a little over three centuries ago as they,



### La Fortaleza

La Fortaleza (aka, “The Fortified Hill site”), AZ T:13:8 (ASM), is stationed atop a volcanic bluff at the southeastern tip of the Gila Bend Mountains.

Archaeologists from the Arizona State Museum excavated and partially reconstructed the site in the 1960s (Greenleaf 1975), and it is one of the few archaeological properties in the region listed on the National Register of Historic Places. This hilltop village contains at least 57 rooms, and its elevated perch offers expansive views across the Gila River valley. Pottery at



the site suggests the village was built and occupied by several generations of Hohokam farmers in the A.D. 1200s. The village’s defensive posture—bounded on three side by steep cliff faces and enclosed by two large masonry walls—has long fueled debates about the causes and consequences of the retreat of the Hohokam farmers to the Phoenix Basin and the migration of Patayan communities up the Gila River (Rogers 1945; Schroeder 1961). Newton Henry Chittenden, a famed explorer and writer, visited the Fortified Hill site in 1888-1889 and drafted this illustration.

Chittenden’s sketch, the first published map of La Fortaleza, appeared in the December 1905 issue of the popular magazine *Overland Monthly*. (Photographs by Henry Wallace.)

by royal decree, began to establish missions in Sonora and Alta California. The river corridor of the Great Bend of the Gila was their principal gateway connecting those regions.



**Figure 3.5.** In 1993, abnormally high rainfall caused the Painted Rock Reservoir to breach its 660-ft-high impoundment and inundate important cultural resources in the surrounding floodplain, including the Ring site shown here. (Photograph by Henry Wallace.)

#### THE HISPANIC HERITAGE (1699–1848/1854)

The American Southwest was initially colonized by Spain, later becoming the northern extent of Mexico after its declaration of independence from Spain. Beginning in the sixteenth century, conquistadores laid claim to the region in the name of the Spanish crown. A party led by the legendary Jesuit friar Eusebio Francisco Kino entered the valleys of the Great Bend of the Gila in 1699. Most historians credit Father Kino and his party as the first Europeans to travel through much of what is now southwestern Arizona. Father Kino's journals (Bolton 1919) and those of his military escort, Lieutenant Juan Matheo Manje (1954), offer the earliest historic details of this country and its people. Although Yuman speakers (whom the Spaniards called "Opas" and "Cocomaricopas," and who refer to themselves as Pee Posh) inhabited most of the rancherías along the lower Gila at this time, Kino and Manje described a considerable degree of interaction and cultural sharing with the O'odham ("Pimas" and "Papabotes," or Papagos), including extensive bilingualism, intermarriage, and several instances of O'odham peoples residing at Opa villages and vice versa. This cultural mixing was most pronounced around the river's Great Bend. Subsequent descriptions by Spanish, Mexi-

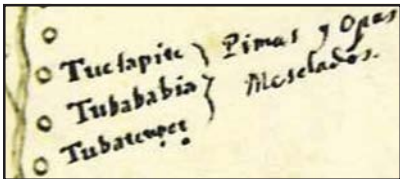
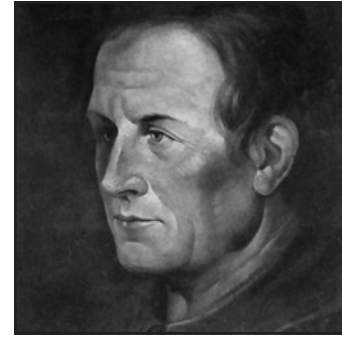


### Father Eusebio Kino, "Priest to the Pimas"

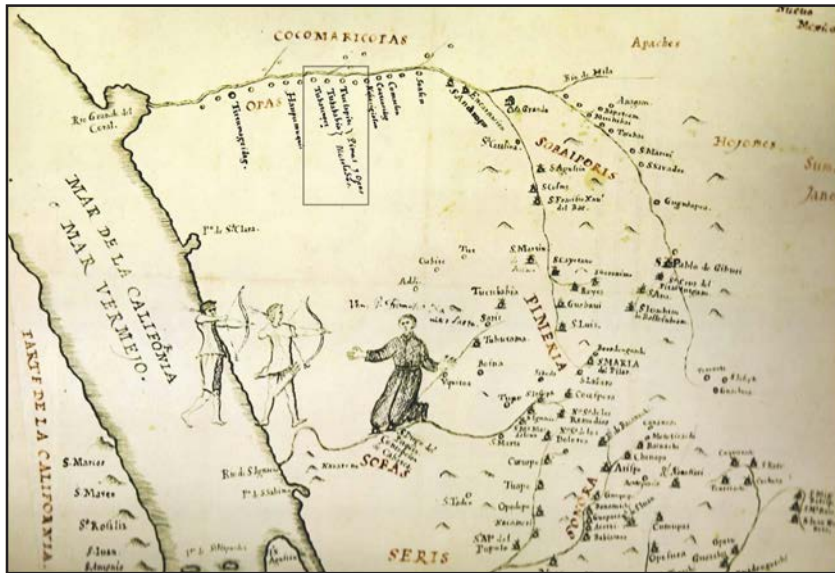
Father Eusebio Kino drafted this untitled map of Pimería Alta to illustrate the 1695 Pima revolt in the Altar Valley. The uprising started at Tubutama and spread to the mission of Caborca, resulting in the death of Father Francisco Javier Saeta (depicted on the map) and his assistants on April 2 of that year. The map, probably intended as an illustration for Kino's biography of Father Saeta, was prepared in 1696–1697 and accompanied a letter to Thirso

Gonzalez, Father General of the Jesuit Order. It predates Kino's discovery that California is a peninsula and therefore portrays Baja California as an island.

The map also depicts a continuous array of Opa and Cocomaricopa villages along the Rio Grande del Coral (lower Gila River),



which, at the time, was the northwestern reach of the known Spanish world. Kino noted "Pimas y Opas Mesclados" (Pimas and Opas mixed) at Tucsapite, Tubababia, and Tubatcupot (see inset). In Kino's "Teatro de los Trabajos Apostolicos de la Compa de Jesus en la America Septentrional, 1696," an earlier and more detailed map from which this version was based, these three villages are shown adjacent to and upstream of Oiadaibu. Oiadaibu is

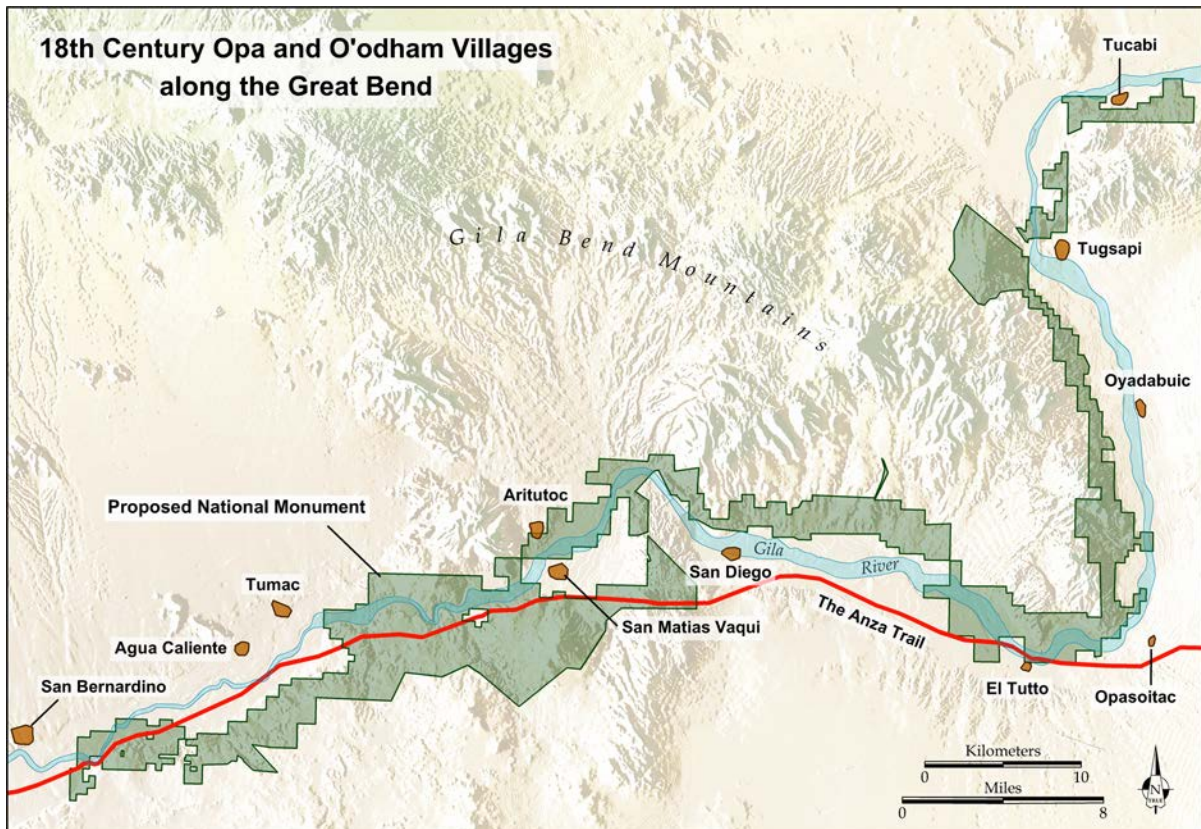


undoubtedly San Felipe y Santiago de Oyadoibuise, an early village located in the vicinity of the modern town of Gila Bend and a major node on the east-west and north-south trail networks running through the area. Accordingly, these "mixed" communities were located along a stretch of the Gila River between Gila Bend and Buckeye. (Illustration of Father Kino courtesy of Tumacácori National Historic Park, U.S. National Park Service.)

can, and early American travelers through the region portray a very similar cultural landscape well into the nineteenth century (Map 3.5).

By the late seventeenth century, Spaniards referred to the vast and mostly unexplored lands of southern Arizona and northern Mexico as the Pimería Alta. It was a landscape identified by the culture and language of its residents, and the name persisted under Mexican rule. In subtle ways, the Pimería Alta has survived to the present as a cultural entity straddling the international boundary. The cultural resources of the Great Bend of the Gila help keep that multinational heritage alive. The Juan Bautista de Anza National Historic Trail





**Map 3.5.** Eighteenth century villages along the Great Bend of the Gila described by Father Eusebio Kino, Father Jacobo Sedelmayr, and Captain Juan Bautista de Anza.

provides a case in point. The search for gold, silver, transportation routes, and souls to convert drew Spanish soldiers and missionaries such as Melchior Díaz (in 1540), Juan de Oñate (1604), Father Kino with Juan Mateo Manje (1699), Jacobo Sedelmayr (1744), Francisco Garcés (1771), and Pedro Fages (1781) to and through the lower reaches of the Gila River (Bannon 1970; Fontana 1994; Officer 1987). A quest of a different nature launched Anza on his remarkable journey.

By the 1770s, Spain was eager to safeguard its California outposts from Russian and English incursions. The Bay of San Francisco was considered a critical point in the power struggle. Anza, a Basque military captain serving at Tubac Presidio in southern Arizona, scouted an overland route to the bay in 1774, and led an expedition to colonize the area the following year. The expedition included 30 families, totaling about 240 men, women, and children. The ethnically diverse colonists were of Native American, European, and African ancestry. The expedition—with its colonists, military escort, support workers (cowboys, mule packers, and Indian guides), supplies, and more than 1,000 head of livestock—resembled a traveling town as it trekked across the desert. The party left Tubac on October 23, 1775; more than 1,000 miles and seven months later, it safely reached its destination in northern California. Much of Anza's

success was attributable to the cooperation of native O'odham, Cocomaricopa, Chumash, and Quechan people encountered along the route.

As it made its way to California, the Anza expedition journeyed down the lower portion of the Great Bend of the Gila. Diaries recorded no fewer than eight campsites used by the colonists in that area. Although the exact positions of the encampments and trail are uncertain (because the river has changed course through time), the corridor of the expedition is sufficiently known to be designated as a National Historic Trail. Today, the trail is a piece of living history celebrated annually by reenactors at events such as "Anza Days" in southern Arizona (Figure 3.6) (Anza Trail Foundation 2015).

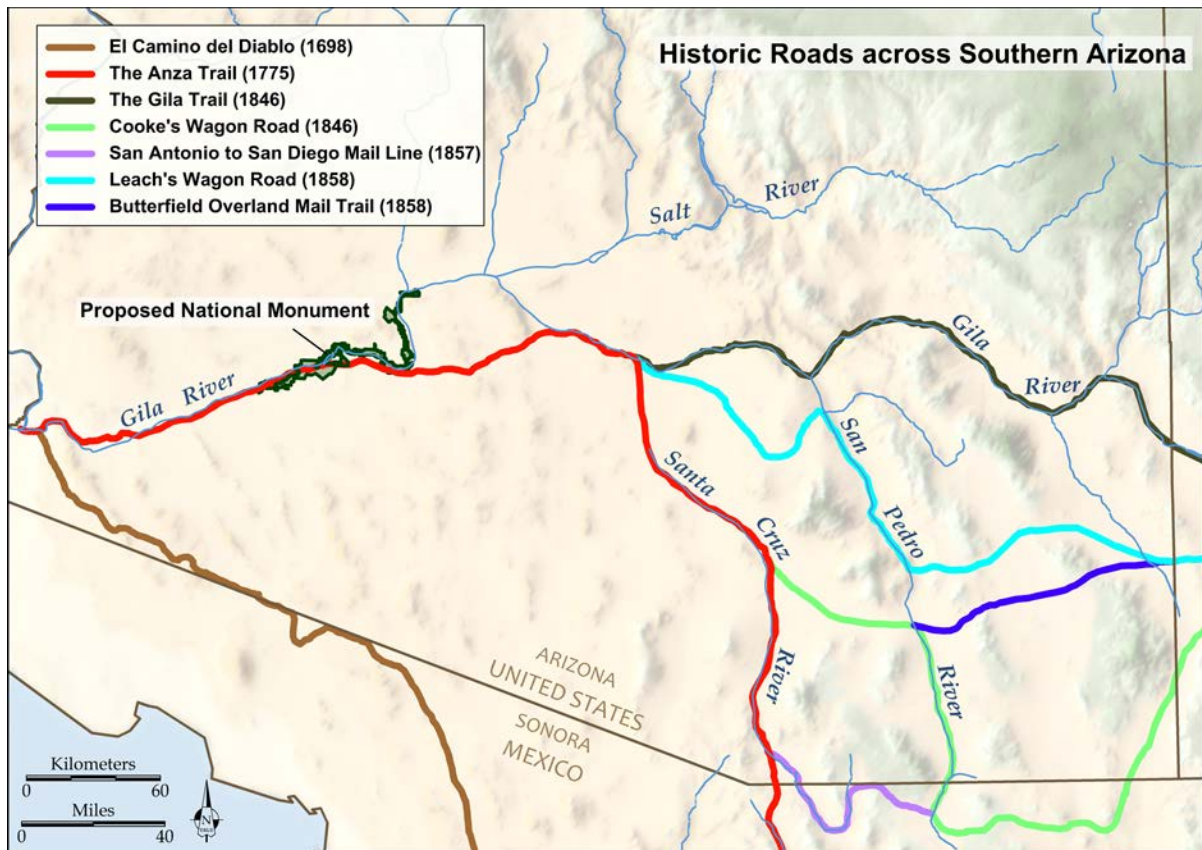
The Southwest became part of Mexico when that country won its independence from Spain in 1821. In 1823, an effort was made to reopen Anza's overland trail so that it could be used as a mail route by Native American runners. As part of that effort, Father Félix Caballero, a Dominican priest, traveled with an Indian escort from his mission in Baja California, up the lower Gila River valley, across the "Forty-Mile Desert" between the southern Great Bend and the O'odham (Pima) villages, and finally south to Tucson. Brevet Captain José Romero, commandante of the Tucson Presidio, accompanied Caballero on his return voyage. Through such effort and under Mexican rule, the trail along the lower Gila River valley again became an important route through the Pimería Alta, although Mexicans did not establish settlements within the valleys of the Great Bend (Map 3.6) (Fontana 1994).



**Figure 3.6.** Every October, community events throughout southern Arizona pay tribute to the legacy of Juan Bautista de Anza's remarkable mission to California. Shown here is a reenactment of the Anza Expedition's departure from the Tubac Presidio in 1775, which led a colonizing expedition through the Sonoran and California deserts to reach the Bay of San Francisco in 1776. The expedition followed the natural corridor of the lower Gila River, from the vicinity of Gila Bend to its mouth at Yuma. This route is commemorated by the Juan Bautista de Anza National Historic Trail. (Photograph courtesy of Paula Beemer.)

This western leg of the "Gila Trail" played a dynamic role during the United States-Mexican War. When the war erupted in 1846, the Army of the West, commanded by Colonel Stephen Watts Kearny and guided by Kit Carson, used the trail to establish U.S. control over a vast area of the Southwest. A topographical engineer with Kearny's force produced the first relatively accurate map of the Gila Trail (Walker and Bufkin 1986).





**Map 3.6.** The lower Gila has long served as the primary east-west corridor through southern Arizona and northern Sonora and was instrumental in opening the West. The closest alternatives were the Camino del Diablo that linked Yuma to the Spanish missions in Mexico's Altar Valley, and Beale's Wagon Road (not shown), which passed through Flagstaff and Kingman in northern Arizona. Many different trails and wagon roads heading west from Texas and southern New Mexico converged at the O'odham village of Maricopa Wells, just east of the proposed national monument. This thoroughfare through southwestern Arizona followed the path blazed over a century earlier by Father Kino. This route was subsequently followed by the Southern Pacific Railroad (1877), the Dixie Overland Highway (1914), the Bankhead Highway (1916, aka the "Broadway of America"), U.S. Highway 80 (1927), and most recently, Interstate 8 (1977).

Reinforcements for the Army of the West left Fort Leavenworth about a month after the main body. A 500-man infantry, consisting of volunteers from the Church of Jesus Christ of Latter-day Saints, was called the Mormon Battalion. Its captain, Philip St. George Cooke, was ordered to march the force to California and build a wagon road along the way. Cooke diverged from Kearny's route in southeastern Arizona, but followed it from the Pima villages westward. Cooke's Wagon Road would soon carry thousands of "49ers" through the Great Bend of the Gila to California (Figure 3.7) (Walker and Bufkin 1986).

The Treaty of Guadalupe Hidalgo ended the war with Mexico by ceding most of the Southwest to the United States. Under the terms of the 1848 treaty, land lying north of the Gila River became part of the United States, while that lying south of it remained under Mexican rule. The Gila River itself thus became one large, linear cultural resource: a man-made political boundary conveniently defined by a geographical feature. The Great Bend of the Gila was part of that international border (Figure 3.8) (Griswold del Castillo 1990).



**Figure 3.7.** “O. W. Randall 1849” is the signature of Osborn Woods Randall, a New England-born man who moved to Nacogdoches, Texas, and who fought in the Texas War of Independence (Randall 2014). Like tens of thousands of others, Randall was eventually struck by the gold bug and set out for California in what is known as the Gold Rush of 1849. Randall reached California over the Southern Emigrant Trail, and returned to Texas in 1851 via a steamboat. Family legend asserts that Randall did in fact find gold, which he buried inside two tin cans in his peach orchard. Randall’s inscription here, surrounded by several of his descendants at a water tank on the Sentinel Plain within the boundary of the proposed national monument, is one of many with stories and legacies tied to the opening of the American West. (Photograph by Randy Randall.)

In 1851, the Great Bend became the scene of an incident that would draw national attention. The Royce (aka Roys) Oatman family had left a caravan of dissident Mormons bound for California and was journeying alone on Cooke’s Wagon Road. On February 18, the Oatmans were approached by a group of Native Americans seeking tobacco and food. The family was attacked: the events leading to the attack are unclear. All family members were killed except a son, who was left for dead, and two daughters, who were abducted. The daughters

were eventually sold by their captors to Mojave Indians living along the lower Colorado River valley. One of the girls died but the other, Olive, lived among the Mojave until the military command at Fort Yuma negotiated her return in 1856. The story of the Oatman family long resonated in the national consciousness through novels, plays, movies, poetry, and Olive’s own speeches and memoir (Kroeber 1951; McGinty 2005; Mifflin 2009; Stratton 1857). The prominent tattooing of Olive’s face further piqued public interest. The site of the Oatman Incident lies within the proposed national monument boundary, where a sign commemorates the tragedy (Du Shane 2012).

The 1848 international boundary did not long satisfy the need and desire of the United States for an all-weather route to the Pacific. James Gadsden, the U.S. minister to Mexico, negotiated the purchase of lands south of the Gila River from a government desperate for cash. The United States paid Mexico \$10 million for more than 29 million acres, establishing the present international border. The entire Great Bend of the Gila officially became part of the U.S. Territory of New Mexico. With the ratification of the Gadsden Treaty in 1854, the expansion of the American frontier was complete (Figures 3.8-3.9) (Garber 1959; Weber 1982).





**Figure 3.8.** This ornamental map celebrates the U.S. victory over Mexico and the country's expansion to the Pacific Ocean (from Ensigns & Thayer 1848). At this time, much of what is now Arizona, ceded by Mexico under the Treaty of Guadalupe Hidalgo, was subsumed under New California. The Gila River, dividing New California from the Mexican state of Sonora, became the new international boundary. The proposed Great Bend of the Gila National Monument straddles this former political boundary.

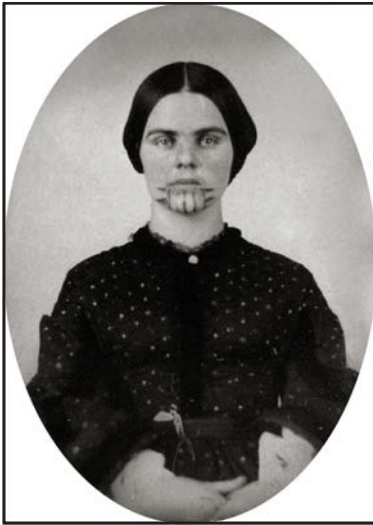
## THE AMERICAN ERA (1854–Present)

The ink was barely dry on the Gadsden Treaty when the federal government took steps to learn about its vast new tract of land. Parties were sent to explore possible routes for a trans-continental railroad. Money was appropriated to survey, mark, and improve wagon roads. In 1857–1859, James B. Leach was assigned to work on the El Paso-Fort Yuma Wagon Road. Leach's Wagon Road, as it came to be known, diverged from Cooke's Wagon Road in southeastern Arizona, but closely followed the earlier route from Maricopa Wells westward. The Great Bend of the Gila formed an integral part of the improved road (Wagoner 1975; Walker and Bufkin 1986).

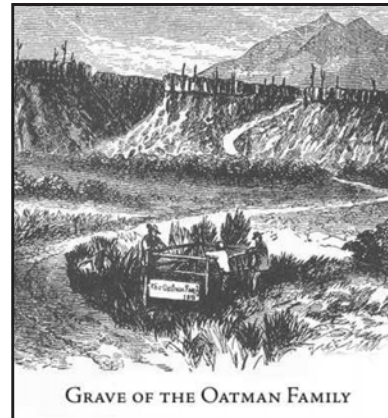


### The Oatman Family

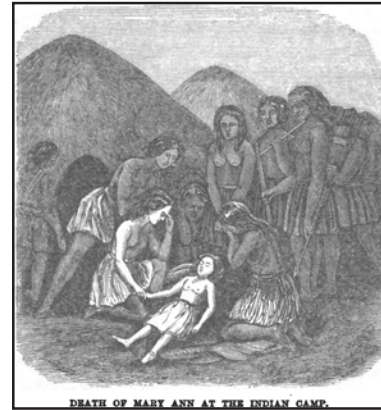
The Oatman Incident of 1851 captured headlines from coast to coast. The conflict took place on the edge of Oatman Flat, just above the floodplain of the Gila River, and resulted in the deaths of Royce and Mary Oatman and four of their children. The bodies were eventually buried in 1854 on the floodplain below (illustrated at top right, from J. Ross Browne's [1869] *Adventures in Apache Country*). Lorenzo (age 15), Olive (age 14), and Mary Ann Oatman (age 7) were the sole survivors. Lorenzo was left for dead, whereas Olive and Mary Ann were taken captive and a year later sold to a band of Mojave Indians on the Colorado River. Both girls were tattooed on their chins, a Mojave custom. Several years later, Mary Ann succumbed to starvation during a severe drought and famine (illustrated at bottom right, from Royal Stratton's [1857] *Captivity of the Oatman Girls*). Olive was returned to the U.S. Army at Fort Yuma in 1856, at age 19. The iconic photograph at left, taken in 1857, shows a 20-year-old Olive Oatman caught between two worlds; she's garbed in Victorian dress yet courageously bears tattoos from her life among the Mojave. Olive eventually married John Fairchild and settled in Sherman, Texas.



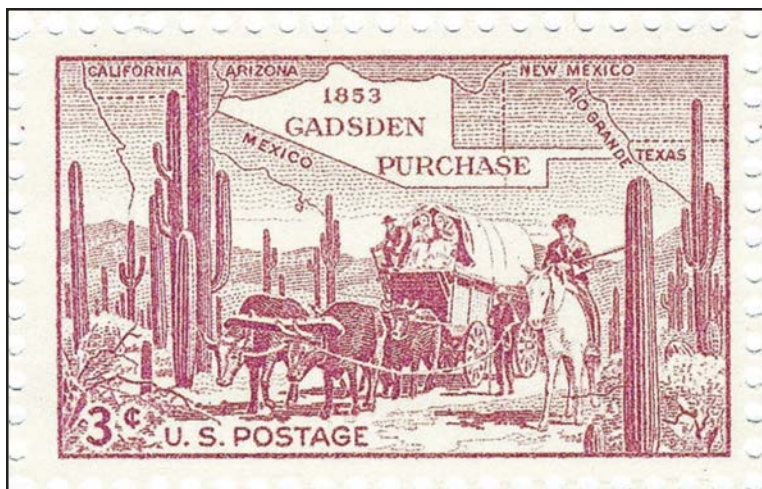
Olive Oatman-Fairchild passed away on March 30, 1903, at the age of 65. (Photograph of Olive Oatman courtesy of the Beinecke Rare Book & Manuscript Library, Yale University.)



GRAVE OF THE OATMAN FAMILY



DEATH OF MARY ANN AT THE INDIAN CAMP



**Figure 3.9.** This 3-cent postage stamp, issued on December 30, 1953, commemorates the centenary of the Gadsden Purchase. The massive land deal cost the United States a mere \$10 million, but it settled a range of boundary disputes with Mexico and finalized the country's westward expansion. (Image courtesy of the U.S. Postal Service.)

Leach's Wagon Road quickly became a resource of strategic importance to the nation and its new territory. The road made emigration across the desert easier and helped the federal government strengthen its hold on the Southwest. Communications were vital to the development of the new lands. The Gadsden Purchase received its first regular and reliable link

### Hi Jolly's Camels

"Hi Jolly," an emigrant of Greek and either Turkish or Syrian descent, was not the real name of this Muslim pioneer but it was what Americans could pronounce. Some say Ali al-Hajaya took the name Hadji Ali early in life after making a religious pilgrimage to Mecca. He was working for the Ottoman Empire as a breeder and trainer of camels when the U.S. government recruited him to be a camel driver for the U.S. Camel Corps, an experiment using camels as pack animals in the desert Southwest (Fowler 1950). The camels and their drivers were imported on the orders of Jefferson Davis, then U.S. Secretary of War.

Lieutenant Edward F. Beale, a veteran of the U.S.-Mexican War, used the Camel Corps in 1857 to survey a wagon road from Texas to California (Lesley 1970). The route began in Camp Verde, Texas, went up the Rio Grande to Albuquerque, and followed approximately the 35th parallel through Arizona into California.

The Beale Road was extensively used from 1858 to 1883, helping unite the East and West. The camel experiment, however, was considered a failure. The large, alien animals were said to cause panic among the Army's burros, horses, and mules. The camels' feet did poorly on volcanic soils. Mounting tensions of the impending Civil War made Congress reluctant to continue funding the experiment.

Most of the camels were auctioned at Benicia, California, in 1864, and at Camp Verde, Texas, in 1866, but Hadji Ali kept a few of them (Frangos 2005). He used the beasts to carry freight between the lower Colorado River and Tucson and to surrounding mines. When the freighting business failed, Ali released the camels into the Arizona desert near Gila Bend.

William Fourr's memoir tells about the fate of some of the auctioned camels (Fourr 1935). While running the stage station at Oatman Flat, Fourr met a Muslim porter who was using between 16 and 30 camels to haul water between Yuma and Tucson. The porter, who Fourr contends was not Hadji Ali, had purchased the camels from the government; they were likely some of the camels auctioned after the failed Camel Corps experiment. However, like Hadji Ali, after one trip up the Gila, the porter released the camels near Gila Bend. Sightings of camels in southern Arizona continued for many years.

After his involvement with the U.S. Camel Corps, Hi Jolly took up prospecting, and continued to be a familiar presence among the frontier towns along the lower Gila River. The U.S. Army continued to intermittently employ Hi Jolly as a mule packer, guide, and scout until 1870 (Frangos 2005). His whereabouts are then unknown until 1880, when he was once again employed by the Army (Frangos

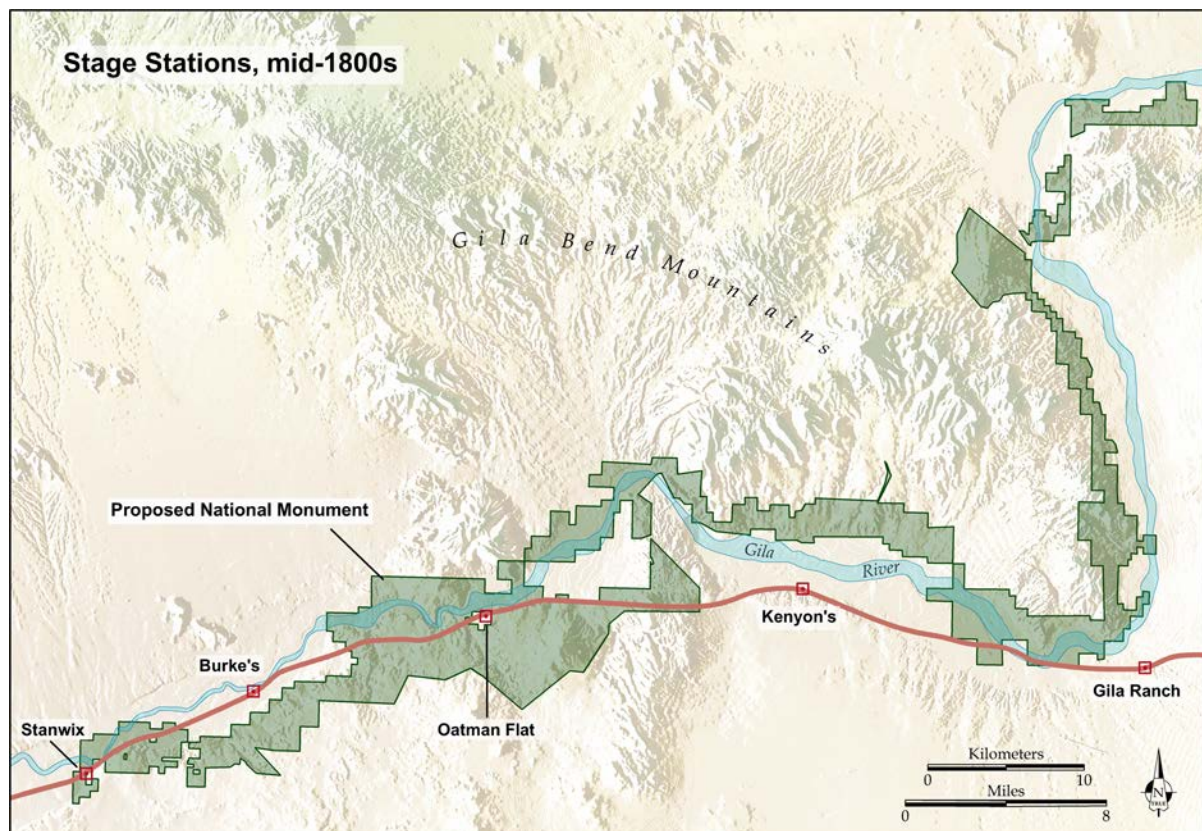
2005). At this time, Hadji Ali began to assert his Greek name, Philip Tedro, and in the same year, he married Gertrudis Serna of Tucson (photo top right; courtesy of the University of North Texas and the Marfa Public Library). The couple soon had three children: Amelia, Herminia, and Fernando (Al-Ahari 2015; Frangos 2005). While in Tucson, Philip Tedro once again worked for the Army, this time as a packer or Indian Scout at Fort Huachuca during the Geronimo campaign. In 1889, Tedro left his family in Tucson and resumed life as a prospector in the mountains around the Great Bend of the Gila. Tedro died on December 16, 1902, while walking the desolate desert road between the Colorado River and Wickenburg. Hadji Ali/Philip Tedro was buried in the town cemetery in Quartzite. In 1934, the Arizona State Highway Department erected a pyramidal monument over his grave topped by a copper camel weathervane (photo at left; courtesy of Jeremy Butler). Some of the boulders in the monument bear pre-Hispanic petroglyphs, and a vault was placed in the monument's base. It allegedly contains some personal letters, his government contracts, and a few coins that was all the money Tedro had to his name. It also contains the ashes of 80-year-old Topsy, the last camel from the original herd that had died that same year at Los Angeles' Garfield Zoo.



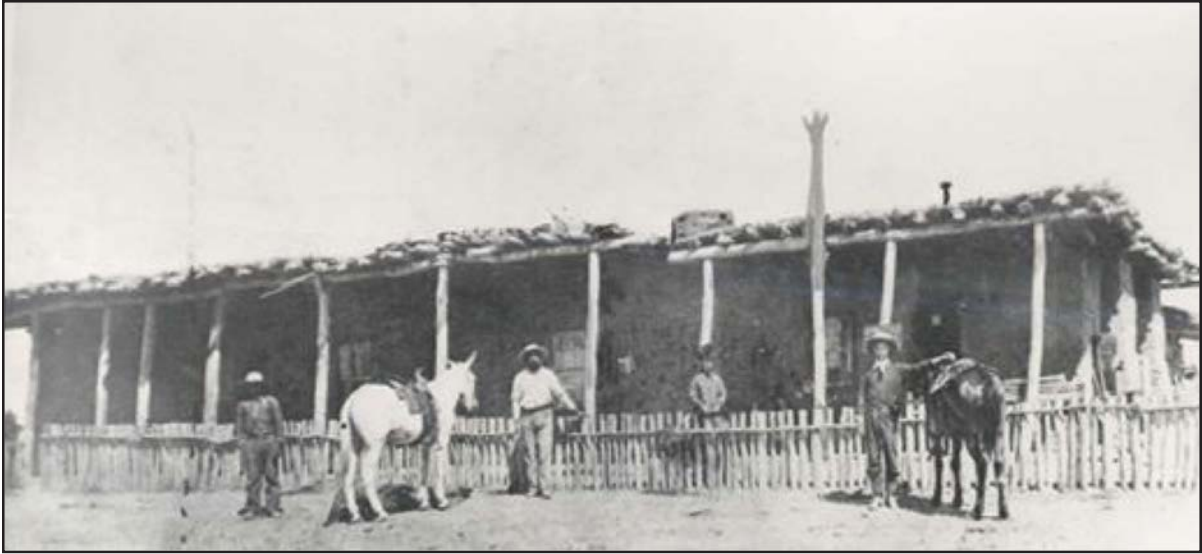


to the outer world in 1857, when the San Antonio & San Diego Mail Line, nicknamed “the Jackass Mail,” began using Leach’s Wagon Road. Then, in 1858, the Butterfield Overland Mail Company started service along the route. Butterfield established stage stations where horses and people could find rest, food, and water. Five such stations were located within or immediately adjacent to the boundary of the proposed GBGNM (Map 3.7). They were called, from east to west: Gila Ranch (aka Tezotal), Kenyon’s (aka Murderer’s Grave), Oatman Flat, Burke’s, and Stanwix (aka Flap-Jack Ranch) (Figure 3.10) (Ahnert 2011; Conkling and Conkling 1947; Wagoner 1975; Wright and Bynum 1942).

Stanwix stage station and Leach’s Wagon Road played notable roles in the Civil War. In the spring of 1862, Confederate Captain Sherod Hunter marched from the Rio Grande to Tucson, where he was hailed by a majority of Southern sympathizers. He built on his success by sending a platoon of mounted rangers down the Gila to dispose of wheat at former Butterfield stations he believed would be used by Union troops advancing from California. On March 29 at Stanwix, the Confederate rangers encountered two Union vedettes (mounted sentinels). The Rebels took aim, injuring Private William Semmilrogge of Company A, First California Cavalry. The wounded private and his comrade rode for help without returning



**Map 3.7.** Several stage stations along the Butterfield Overland Stage Line were located along the Great Bend of the Gila. The site of Stanwix stage station, at far left, is on land within the boundary of the proposed national monument.



**Figure 3.10.** Stanwix stage station (aka Flap-Jack Ranch and Grinnell's Station), just west of Sears Point in Yuma County, was a stop along the Butterfield Overland Stage Line. It was also the site of the westernmost skirmish of the Civil War, between the Union's California Column and a detachment of Confederate troops out of Tucson. It later served as a repair station for the U.S. military telegraph in the 1870s. The site of Stanwix stage station is within the boundary of the proposed national monument. (Photograph courtesy of the Arizona Historical Society.)

fire. Hunter's men meanwhile beat a hasty retreat when they realized they had encountered an advance guard of Colonel James H. Carleton's California Column. Leach's Wagon Road would become one of the routes used by the Column to wrest New Mexico Territory from the grip of the South. The incident at Stanwix stage station would mark the westernmost skirmish of the Civil War (Horn & Wallace 1961; Masich 2006; Wagoner 1975).

Confederate interest in Arizona and the discovery of gold there spurred Congress to create Arizona as a territory separate from New Mexico. The Union badly needed gold to finance its war effort and was anxious that the mineral wealth of Arizona not fall into enemy hands. While the Confederates envisioned a new territory that would comprise New Mexico and Arizona south of the 34th parallel, the Union chose to divide the two territories vertically, approximately along the 109th meridian. President Abraham Lincoln signed the bill creating the Arizona Territory on February 24, 1863 (Wagoner 1975; Walker and Bufkin 1986).

A state of near lawlessness settled over the Great Bend in the years immediately following the Civil War. As stage service and emigration resumed, Euro-American entrepreneurs acquired former Butterfield stations, turning them into outposts where travelers could restock supplies. King S. Woolsey, a notorious Indian fighter, owned Stanwix stage station. Billy Fourr owned Oatman Flat, and Edward Lumley and John Murphy jointly held Kinyon's (by then called Kenyon's). Fourr hired Lumley and Murphy to move the wagon road so that it would pass by Fourr's newly erected station house. Fourr then operated that section as a toll road. Emigrants did not know of the arrangement until they reached the area and had to

pay the fee. Disputes became common. Fourr could show travelers his legislative license to collect tolls, but sometimes found that his double-barreled shotgun offered a more expedient solution (Du Shane 2012; Fourr 1935; Smith 2006).

Despite gaining territorial status in 1863, much of Arizona remained *tierra incognita*, a vast expanse of largely unexplored country. In those formative years, news and military orders were conveyed slowly over rutted roads and desolate trails by runners and wagons. Word from Prescott, the territorial capital, to Los Angeles took at least seven days, and newspapers mailed from Saint Louis to Tucson took two to three weeks to arrive. Arizona Territory was truly part of a wild and sometimes lawless West. For example, on August 18, 1873, Edward Lumley was murdered and robbed at his Kenyon Station. His assailants fled down the Gila River, where one of them (Lucas Lugas) was shot and killed, and the other (Manuel Subiate) was injured and arrested. While Subiate was being transported under sheriff's custody along the wagon road, a group of vigilantes stopped the stagecoach, took the prisoner, and hanged him from a mesquite tree near the spot where he had killed Lumley (Smith 2006).

Arizona's landscape of lawlessness and vigilante justice ended with the arrival of the military telegraph (Rue 1967). When Lieutenant Colonel George Crook, of the U.S. Army's 23rd Infantry, assumed command of the Department of Arizona in 1871, he immediately undertook improvements to the territory's meager military infrastructure. With a campaign soon underway to subjugate the Yavapai, Crook, a Civil War veteran who had subsequently developed a reputation as a successful Indian fighter in the Pacific Northwest, saw the telegraph as a way to overcome Native American resistance. He lobbied for and received authorization and funding from the War Department for a telegraph linking the Arizona Territory to the rest of the country. Originally estimated to cost approximately \$150,000, the War Department sought to cut costs by relying on military transport and labor. The wire line was planned and erected by the Quartermaster Corps of the Division of the Pacific. It extended from Los Angeles to San Diego, then turned east passing through Yuma on its course to Maricopa Wells; from there it split into lines serving both Prescott and Tucson. The corps chose this route, in part, because of the availability of cottonwood trees (for poles) and the existing wagon roads along the lower Gila River.

The first pole was raised on August 8, 1873, in San Diego, and on November 18, Prescott was finally linked to the transcontinental telegraph, followed by Tucson on December 2. The new line cost merely \$47,557.97, covered 540 miles, required 9,820 poles, and took just 97 days to build (Rue 1967). Completed under budget and before deadline, "Crook's project" was hailed as a success, and on October 29 the lieutenant colonel was promoted to brigadier general (skipping the rank of colonel), weeks before the line was finished. However, complaints of shoddy craftsmanship using inferior supplies soon surfaced, and the need for a

constant stream of repairs became apparent as early as December 1873, barely a month after completion. Soon, a repairman, John T. Gifford, was housed at Stanwix stage station and was paid \$100/month plus room and board to maintain a large stretch between Gila Bend and Yuma (Rue 1967).

Stressed by the price tag of operation and maintenance, neither of which were budgeted in the original appropriation, control of the line switched from the Quartermaster Corps to the Signal Corps in July 1874. Nonetheless, by 1882, the military telegraph line through Arizona Territory had been largely phased out as the arrival of the railroad and the commercial telegraph line accompanying it came on the scene (Rue 1967).

In 1879, the Southern Pacific Railroad reached the Great Bend (Orsi 2005). A new settlement called Gila Bend sprouted near the tracks about 3 miles southwest of the Gila Ranch stage station. The transcontinental carrier used a largely Chinese work force to lay tracks across the desert south of the Gila River. Railroad officials claimed that Anglos could not work in the extreme heat, but the real reason for the use of Chinese laborers was that they could be paid lower wages. Once the tracks were laid, some of the Asian sojourners remained behind to work as cooks, waiters, gardeners, miners, section hands, and entrepreneurs. Some stayed permanently, contributing to the ethnic mix of newcomers to the Gadsden Purchase area (Fong 1980; Sheridan 1995; Wilson 2014).

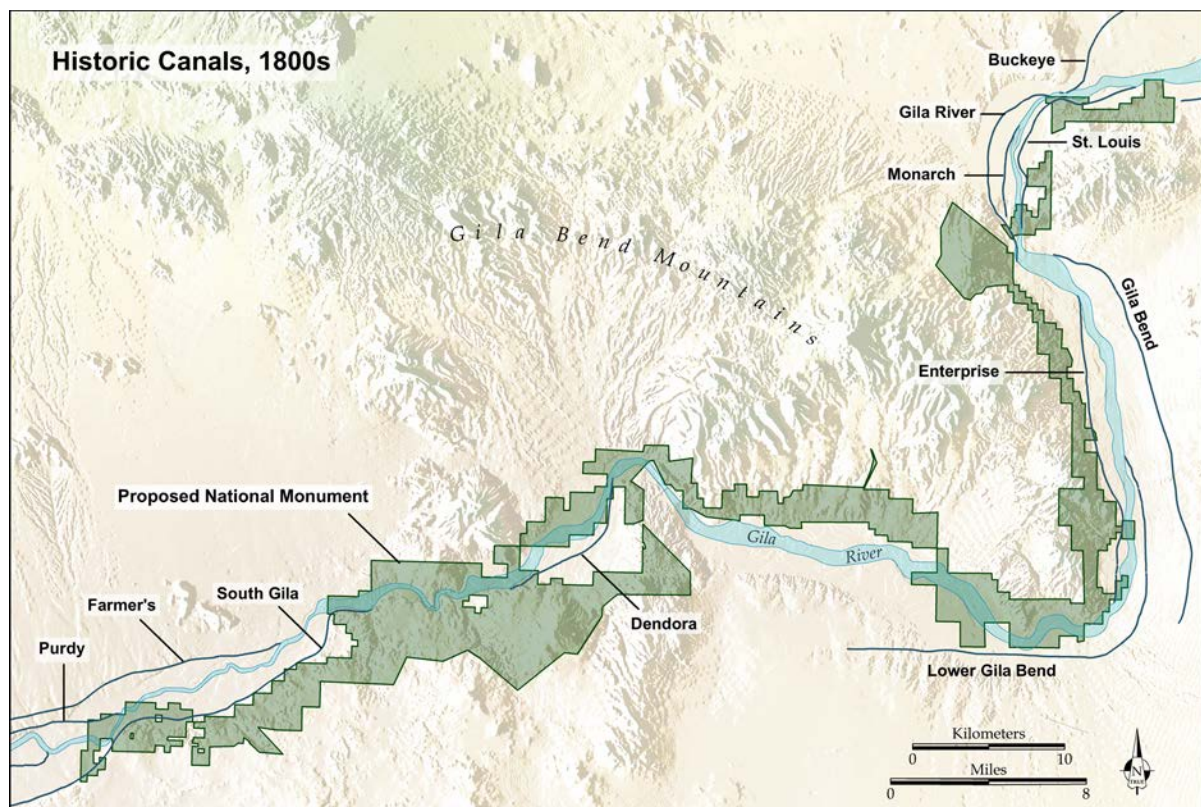
If the transcontinental railroad carried new populations to the Great Bend, it was perceived opportunities that drew them. Two pieces of federal legislation particularly appealed to potential settlers: the Homestead Act of 1862 and the Desert Land Act of 1877. These acts (and their amendments) made it possible for heads-of-households, or persons at least 21 years of age, to acquire land by making improvements to it. Pioneers pursuing the dream of nearly free land helped settle and populate the Great Bend communities of Gila Bend, Arlington, Palo Verde, and Buckeye (Meck 2007; Murray 2012). Because it was one of the few ways to acquire land cheaply, homesteading appealed to a broad cross section of America, especially to people of disadvantaged backgrounds. One such person was Warren Goode, an African-American sharecropper from Oklahoma (Stein 2009). Goode's son, Calvin, would later become the second African-American elected to the Phoenix City Council, where he was instrumental in getting the city and state to recognize Martin Luther King, Jr. Day.

Schemers joined the dreamers. By the 1870s, speculators envisioned making the Great Bend desert an agricultural mecca by bringing irrigation water to it. Just as it was for Hohokam and Patayan farmers in prior centuries, American pioneers in southern Arizona had to tap the Gila's life-giving waters to raise enough food to support their fledgling frontier communities. Nowhere was this more precarious than along the river's lower stretch, from the Great Bend to its mouth at the Colorado River.



Records from the nineteenth century are sparse and vague, but government reports document at least 15 pre-twentieth century canals between Buckeye and Palomas, the two frontier communities that bracket the proposed GBGNM (Map 3.8) (Davis 1897; Newell 1894; Olberg 1923; Southworth 1919). These early canals include the Contreras, Purdy, Farmers' (aka Palomas), South Gila, and Dendora canals between the Painted Rock Mountains and the proposed monument's western edge; the Citrus, Papago (aka the Anderson Canal or Farmer's Ditch), and the Lower Gila Bend (aka Riverside or Palmer) canals around the town of Gila Bend; the Enterprise and Gila Bend (aka East River or Peoria) canals just below the Gillespie Dam; and the Gila River, Monarch, Arlington, St. Louis, and Buckeye canals between the towns of Arlington and Buckeye.

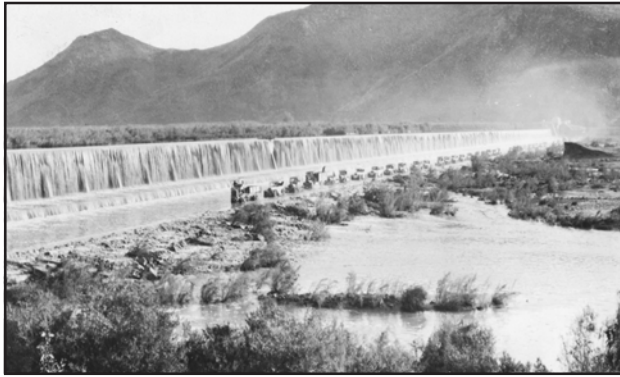
Most of the early irrigation projects along the lower Gila amounted to little more than a few miles of shallow ditches; rarely was an actual diversion dam erected. However, the Gila was so inconsistent that, without dams or pumps, the canals would flow only after floods. Several dams were raised, but torrential floods would wash them out and fill the canals with mud and silt. Rehabilitation of the canals was an annual ritual, done mostly so that farmers



**Map 3.8.** More than 400 years after the Hohokam walked away from their massive canal projects, American pioneers brought large-scale canal irrigation back to southern Arizona. By the early 1870s, successful canal systems had been operating near Phoenix and Yuma. Soon after, similar operations were planned along the Great Bend of the Gila, and by the 1880s, a number of attempts were underway (as shown here, based on information in Newell [1894] and Southworth [1919]). A significant portion of one of these, the South Gila Canal, falls within the boundary of the proposed national monument.

### The Gillespie Dam

Built between 1919 and 1921 at a cost of \$1.6 million, the Gillespie Dam tamed the powerful floodwaters of the lower Gila River (Stein 2011). By providing flood protection and a stable supply of irrigating waters, the dam and associated modifications to the Gila Bend Canal system succeeded where nearly 40 years of prior, half-hearted attempts failed. The dam also functioned as a river



crossing for the Arizona segment of the Dixie Overland Highway (later renamed U.S. Highway 80). In the early years, automobiles crossed via the dam's concrete apron, and during spillovers, trucks were used to haul caravans of smaller vehicles through the waters (pictured at left; courtesy of Arizona State Library, Archives and Public Records: No. 98-2339 and 98-2645).



With the onset of the federal highway system, in 1926, the Arizona State Highway Department funded construction of a steel truss bridge below the Gillespie Dam (shown below; photograph by Henry Wallace). Finished in 1927, with a price tag of approximately \$320,000, the Gillespie Dam Bridge continued the Great Bend's legacy as a travel and transport corridor well into the twentieth century. The bridge was added to the National Register of Historic Places in 1980 (Davidson 2011; Jones et al. 2006). Although neither the bridge nor the dam are within the boundary of the proposed GBGNM, they span the river between the Gila Bend Mountains and the Buckeye Hills, symbolically bridging these two parcels of the proposed GBGNM (Map. 2.1).



could maintain their shares in these “franchises” and any future prosperity they may bring. As a result, many of the early irrigation projects never actually operated and were eventually abandoned.

It took an Oklahoma oilman and a wartime market for cotton to bring successful large-scale irrigation to the Great Bend. Between 1916 and 1920, Frank Gillespie amassed large

tracts of land, acquired the holdings of previous canal companies, redesigned the Gila Bend Canal, and built a dam that actually held water. The system began irrigating the Great Bend in the early 1920s, and, with occasional modification, has remained functional into the twenty-first century (Stein 2011).

Native Americans fared poorly as their traditional territory gained agricultural value. The federal government responded to the worsening plight of Native Americans by creating reservations that both defined and delimited their traditional lands. Thus, in 1882, President Chester A. Arthur signed an executive order creating the Gila Bend Indian Reservation for the Papago (now the Tohono O'odham). The reservation contained more than 22,400 acres. However, by the early 1900s, non-Indian settlers began agitating for greater access to valley land. President William A. Taft became convinced that the initial Gila Bend reservation was too large, and in 1909, he reduced its size to 10,297 acres. The 1909 action meant that an O'odham village called Si:l Mekk no longer fell within the reservation boundary. Some people left the village, while others chose to remain there (Fontana 1999; Laurenzi 2013; McIntyre 2008; Murray 2012).

In the 1960s, the Army Corps of Engineers built the Painted Rock Dam to provide flood control for the lower Gila River. The water impound area jeopardized Si:l Mekk and most of the remaining reservation. The federal government therefore set aside a 40-acre tract, next to the town of Gila Bend, where some of the Si:l Mekk residents agreed to move. However, they insisted that a cultural resource of prime importance be relocated with them: their church. Villagers walked behind the St. Lucy Church as it made the slow and fragile journey to its new home. They named the new community San Lucy Village. The church remains the heart of that community (Figure 3.11) (Laurenzi 2013).

## CONCLUSION

The Great Bend of the Gila is, and always has been, a frontier into which many diverse cultural traditions spread, each of which contributed something unique to the region's cultural landscape. The histories of these traditions—San Dieguito, Clovis/Folsom, Amargosa, Cochise, Hohokam, Patayan, O'odham, Pee Posh, Spanish, Mexican, and American—come together in the valleys of the Great Bend of the Gila; at times they have collided, but more often they have coalesced in fascinating and unpredictable ways, ways that inspire and speak to us to this day with tales of ingenuity and multiculturalism unique to the American West.

Today, agriculture is still the main economic activity of the Great Bend. New enterprises have come, and some gone, in modern times. In the age of the automobile, Gila Bend became





**Figure 3.11.** The Saint Lucy Church stands as a pillar of San Lucy Village, a district of the Tohono O'odham Nation. This religious edifice once stood at the historic village of Si:l Mekk, but when the community was forced to relocate in response to rising waters from the Painted Rock Reservoir, they brought the church with them. Many community members remember participating in the procession that brought the church to the new village, as well as the difficult feelings the relocation inflicted. (Photograph by Andy Laurenzi.)

a crossroads for U.S. highways 80, 84, and 85, earning the moniker “Fan Belt Capital of the World.” The unlikely desert activity of shrimp farming gained traction: hatcheries produce food, fertilizer, and biofuels. A solar energy plant has developed in the lower reaches of the Great Bend. A state prison occupies some acreage upstream. These modern industries are curiously – and have so far been carefully – woven into a landscape rich in ancient and

historical cultural resources. Foresight will be needed to ensure the cultural resources of the Great Bend survive as unique, irreplaceable national treasures.

Because the Great Bend’s cultural resources preserve key elements of its ancient, historical, and modern cultural landscape, they have substantial potential for future research into how people of very different backgrounds and technologies faced common challenges in one of the world’s driest and hottest environments. In fact, some of the best preserved evidence of some of the least understood cultural and historical aspects of Southwest, especially the Patayan tradition, is concentrated within the boundary of the proposed Great Bend of the Gila National Monument. As the following pages detail, much of what remains are truly world-class resources that instill profound senses of awe, wonder, and national pride in just about anyone who is fortunate enough to experience them. These fragile cultural resources stand as tangible vestiges of the deep history of this amazing landscape, and they encourage people to experience and connect with the Great Bend’s unique chapters in the nation’s story.





## THE RICH CULTURAL RESOURCES WITHIN THE PROPOSED GREAT BEND OF THE GILA NATIONAL MONUMENT

The lower Gila River is a formidable landscape, but the legacy of human struggle, triumph, and, ultimately, cultural florescence in one of the most austere environments on earth is just one element in the tale of the river's Great Bend. The Great Bend of the Gila has been a cultural frontier since people first set foot in its valleys and mountains more than 12,000 years ago. Frontiers arise between regions that exhibit relatively homogenous cultural traditions, areas social scientists tend to consider heartlands. They are transitional cultural landscapes where social rules, norms, and identities may not mirror those of communities in the differing, and perhaps competing, heartlands. As a result, frontiers are places where social and political boundaries form, cultures overlap, and people either conflict—sometimes quite violently—or learn to live together peacefully (Green and Perlman 1985; Lewis 1984). Instances of all of this are found in the human stories of the Great Bend.

The Great Bend of the Gila has long been a frontier, first between cultural heartlands to the east and west for thousands of years, and most recently between empires and national governments to the north and south. Therefore, what makes the Great Bend unique and remarkable is that this frontier landscape boasts an incredibly deep history of multiculturalism. Equally amazing is the fact that this deep history—and the lessons and values we can draw from it—are quite tangible and highly visible among the cultural resources preserved on the landscape. However, there have been few professional, legally mandated, mitigation-related cultural resource surveys of the lands within the proposed Great Bend of the Gila National Monument (GBGNM), so a comprehensive inventory is not currently available. Though current inventories are incomplete, we do know that most of the cultural resources are extremely fragile because they lie unburied and thus exposed on the ground surface.

Even though many of the Great Bend's cultural resources have evaded the level of professional attention directed at many other places in the state, records at the Arizona State Museum (ASM), the state's official repository for cultural resource site files, attest to an incredibly rich and diverse assemblage. These records show that as of August 2015, less than 13

percent of the lands (circa 10,627 acres) within the boundary of the proposed GBGNM have been systematically surveyed to professional standards. The museum, nevertheless, holds information on 247 archaeological and historical sites on BLM-administered land within the proposed monument area. Extrapolating this figure to the unsurveyed regions suggests there may be upwards of 1,900 sites within the boundary of the proposed national monument. State records attribute the area's cultural resources to Archaic, Hohokam, Patayan, Yavapai, Hopi, O'odham, and historic Euro-American traditions. This relatively small sample clearly demonstrates the breadth of cultural diversity materialized in the resources within the boundary of the proposed GBGNM.

To represent the diversity of cultural resources on BLM-administered lands within the boundary of the proposed GBGNM, Table 4.1 summarizes the types of archaeological and historical features among the sites listed in the ASM records. However, due to a lack of modern and professional archaeological attention as noted above, a comprehensive tally of what actually resides within the boundary of the proposed GBGNM awaits further study. Nevertheless, because many of the Great Bend's cultural resources are so impressive—indeed world-class—a fair amount of general information is known about them, including those that have yet to be officially documented. Despite the limited amount of surveyed lands, it is clear that there is an abundance of cultural resources within the proposed national monument, the vast majority of which are nationally significant. Of the 247 documented archaeological and historical sites that have had their significance professionally assessed, 93 percent are considered or have been determined eligible for inclusion in the National Register of Historic Places (NRHP). Two places—the Sears Point Archaeological District and the Painted Rocks—are already listed on the NRHP. The national significance of the proposed GBGNM, however, is not just in the number of sites on or eligible for inclusion in the NRHP.

One of the ways in which the cultural resources of the Great Bend of the Gila are unique is how they are tied to the immediate landscape—in particular, the way rock art and geoglyphs adorn the ancient lava flows of the Sentinel-Arlington Volcanic Field and other landforms, how ancient and historic canals course across the braided river floodplain, and the manners in which pre-Hispanic villages and forts stretch from summits to the valley floor. It is this intricate relationship between the natural landscape and the cultural resources that makes the significance and value of the Great Bend's cultural landscape greater than the sum of its constituent resources. The following sections closely examine the types of cultural resources within the boundary of the proposed national monument that make the Great Bend such a truly remarkable, one-of-a-kind landscape.

**Table 4.1.** Cultural resources within the proposed Great Bend of the Gila National Monument.

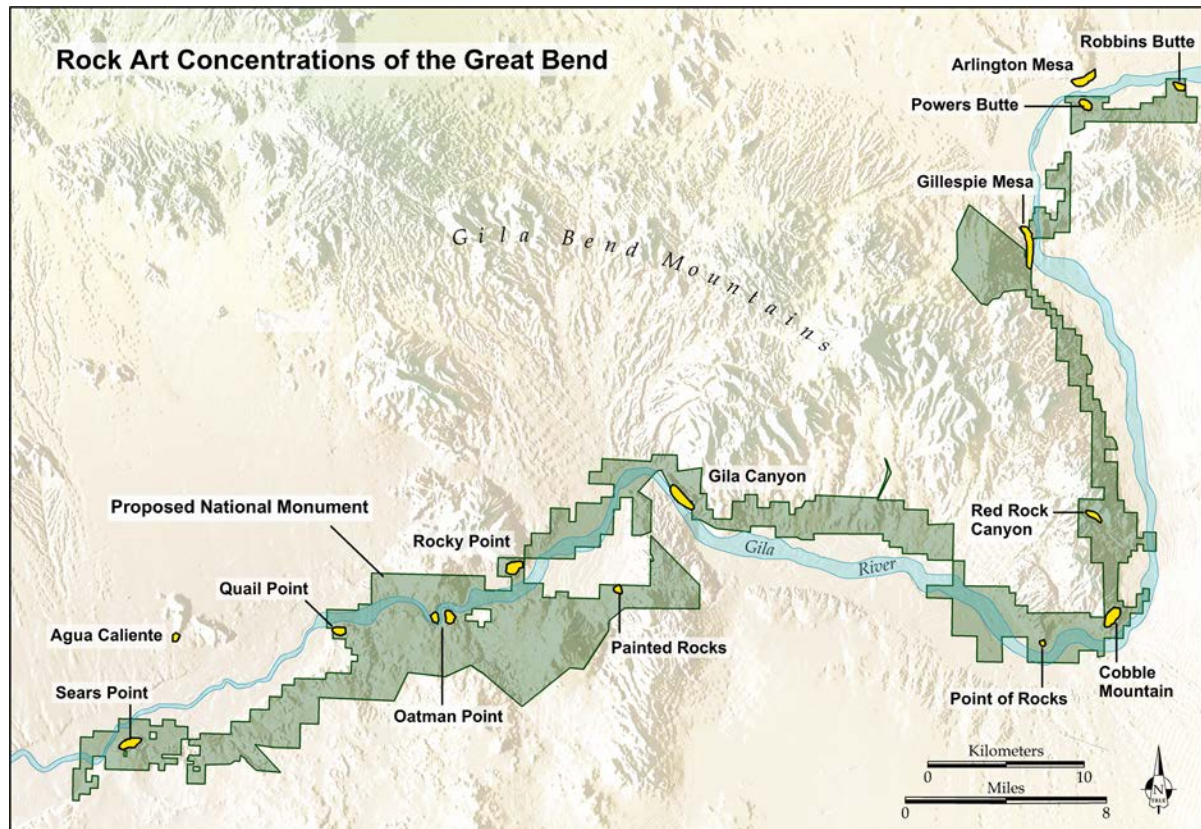
Pre-Hispanic Villages and Farms	Pre-Hispanic Resource Gathering Loci
<ul style="list-style-type: none"> <li>• Prehistoric Trash Mounds</li> <li>• Human Cremation Areas</li> <li>• Agricultural Terraces</li> <li>• Masonry Structures</li> <li>• Prehistoric Canals</li> <li>• Ballcourts</li> <li>• Pithouses</li> </ul>	<ul style="list-style-type: none"> <li>• Bedrock Grinding Features</li> <li>• Hearths/Roasting Pits</li> <li>• Artifact Scatters</li> <li>• Rockshelters</li> <li>• Clearings</li> <li>• Quarries</li> <li>• Trails</li> </ul>
Pre-Hispanic Ritual and Ceremonial Sites	Historic Homesteading, Ranching, and Mining
<ul style="list-style-type: none"> <li>• Rock Piles (shrines)</li> <li>• Rock Alignments</li> <li>• Rock Art Panels</li> <li>• Rock Rings</li> <li>• Geoglyphs</li> </ul>	<ul style="list-style-type: none"> <li>• Structure/Buildings</li> <li>• Wagon Roads</li> <li>• Stock Tanks</li> <li>• Log Cabins</li> <li>• Canals</li> <li>• Corrals</li> <li>• Fences</li> <li>• Mines</li> <li>• Wells</li> </ul>

## ROCK ART

One of the clearest signatures of the overlap and admixture of ancient cultural traditions within the boundary of the proposed GBGNM is found in the famous rock art written upon the walls of the valleys and mountains. Geometric and representational images have accumulated over years into great galleries lining the river's terraces. A complete inventory of the region's rock art has never been attempted; however, if we extrapolate from the few small surveys that have been conducted, an estimated 100,000 petroglyphs likely occur along this stretch of the river, with perhaps 75 percent falling within the boundary of the proposed national monument. This far surpasses the amount of rock art, in terms of quantity and density, found in most other regions in North America, including Petroglyph National Monument in New Mexico (Map 4.1).

The curious symbols scattered about the dark rocks lining the river valleys of the Great Bend of the Gila are some of the longest known archaeological resources in the American Southwest. The earliest account can be found in the journal of eighteenth century Spanish Jesuit missionary Jacobo Sedelmayr (Dunne 1955), who described the area's rock art as "painted" (Figure 4.1). Archaeologists refer to painted rock art as "pictographs," and although

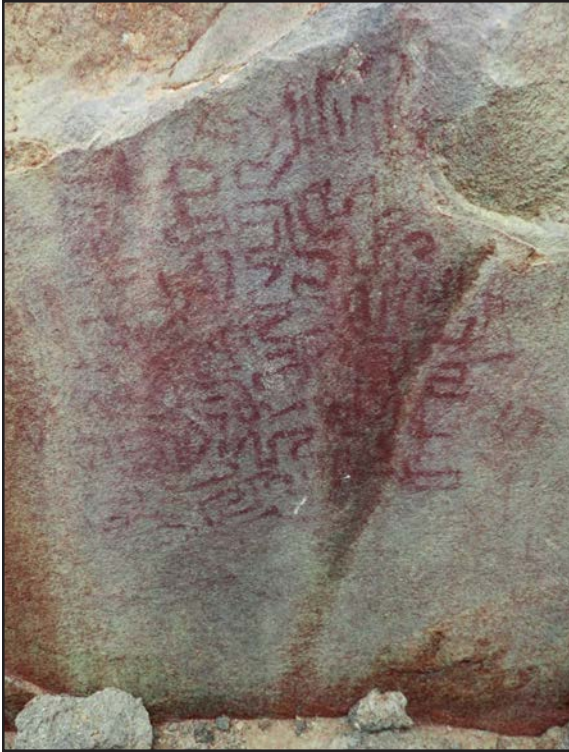




**Map 4.1.** Large rock art clusters along the Great Bend of the Gila.

highly prone to erosion, a few pictographs are still found in the area today (Childress and Phiher 1997; Mark and Billo 2016). Petroglyphs are images that were cut, scratched, abraded, or pecked into the rock. Petroglyphs, some of which were probably once painted as well, are the predominant type of rock art around the Great Bend. Sedelmayr and many subsequent explorers and travelers down the lower Gila took notes on what they saw and what they believed these images meant or told. A common interpretation was that the symbols relate war stories or enshrine peace treaties among warring communities of Yuman and O'odham speakers. We now know that much of the area's rock art predates such intertribal conflict, and that at least four cultural traditions are represented by the petroglyphs and pictographs.

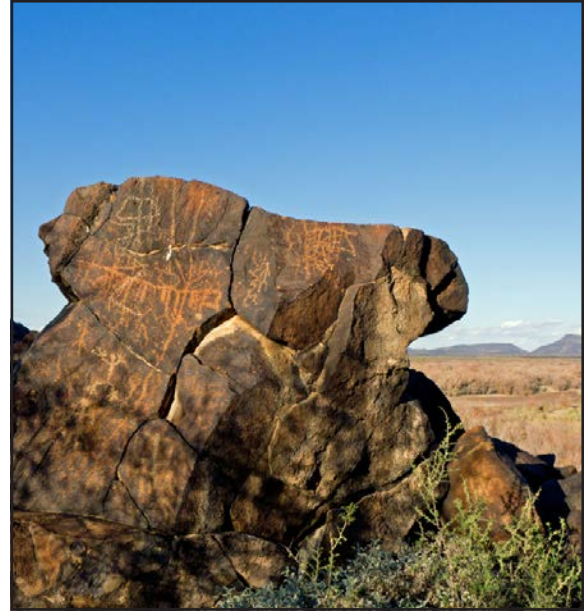
The oldest rock art around the Great Bend conforms to what researchers call the Western Archaic Tradition, a petroglyph style attributed to the Archaic cultural traditions of the area (Figures 4.2-4.3) (Hedges 1982; Hedges and Hamann 1993; Thiel 1995; Wallace 1989; Wallace and Holmlund 1986). From what is known, Western Archaic rock art consists mainly of deeply executed abstract shapes and tend to be found, if not exclusively, on prominent rock faces in open settings. Because it is so rare and little studied, it is unclear whether regional and cultural variability exists within this broadly shared Western Archaic Tradition, and assigning its authorship to either an Amargosa or Cochise cultural tradition is not yet possible. Further



**Figure 4.1.** When Father Jacobo Sedelmayr traveled through the area in the 1740s, he noted many “painted” designs upon the rocks, as opposed to the numerous engraved petroglyphs for which the area is known. This red pictograph was recently discovered at Quail Point and is one of the only known painted designs along the lower Gila River. Only faint traces of the red pigment are visible to the unaided eye, but enhancement with digital image editing software (as done here) reveals an intricate geometric pattern of likely Patayan manufacture. Advances in technology continue to add to our knowledge of the area and reframe our understanding of the region’s past. (Photograph by Robert Mark.)

research is also needed to more accurately date this early rock art. The Archaic cultural traditions spanned many thousands of years, and some of the Great Bend’s rock art may be equally as old. Paleoindian rock art has been recently discovered in the desert regions in western North America, and its presence in the Great Bend area is plausible.

Most of the rock art within the boundary of the proposed GBGNM was created by Patayan and Hohokam farmers who took up residence in the river’s valleys after A.D. 500 (Figures 4.4-4.5). This later rock art differs from its Archaic predecessor in that it is found in both open and secluded settings and incorporates a wide assortment of symbols not present before, including an abundance of animal and



**Figure 4.2.** The orange, abstract petroglyph designs on this prominent rock exposure at Quail Point, AZ Y:4:2 (ASM), are a rare occurrence of Archaic rock art in the region. Several younger, lighter-colored designs are superimposed over the Archaic glyphs. The color differences are due to variable thicknesses of desert varnish, which grows slowly across rock surfaces. The amount of desert varnish is a clue to the petroglyphs’ antiquity. (Photograph by Andy Laurenzi.)



**Figure 4.3.** This boulder exhibits a heavily varnished circular petroglyph of likely Archaic origin surrounded by younger Hohokam designs. The relationship between Archaic and Hohokam rock art is not well understood. Hohokam petroglyph artisans continued to depict some Archaic designs in their work. In this case, the younger Hohokam rock art incorporated the older Archaic glyph into a new scene, thereby altering both the panel and likely meaning of the imagery. (Photograph by Andy Laurenzi.)





**Figure 4.4.** This large petroglyph panel at Sears Point, AZ Y:3:6 (ASM), is just one of many lining the edge of the Sentinel Lava Field, just above and visible from the Gila River floodplain below. These glyphs are thought to be of Patayan manufacture, but the animal designs bear strong affinities to those crafted by the Hohokam further upstream. Rock art such as this has much to teach about the history and cultural identities of the area's ancient residents. (Photograph by Andy Laurenzi.)



**Figure 4.5.** At Hummingbird Point, AZ-055-2733 (BLM), this boulder and its highly figurative and unique bird petroglyph—for which the landform is named—are situated high above the river's floodplain and are visible to passersby below. The design is presumed to be Patayan in origin, although bird designs are well documented among Hohokam petroglyphs in the Phoenix Basin. (Photograph by Aaron Wright.)

human imagery (Figures 4.6-4.11) (Bostwick 2002; Schaafsma 1980; Wallace and Holmlund 1986; Wright 2014). Gila style petroglyphs, attributed to the Hohokam, dominate in the eastern portion of the proposed national monument boundary, whereas Patayan style imagery predominates below the Painted Rock Mountains (Doolittle 2000; Hedges and Hamann 1992, 1994, 1995; Wallace 1989; Weaver et al. 2012).

These two styles have much in common, which, as with similarities in Hohokam and lower Colorado decorated buffware pottery, shows considerable sharing in technology and symbolism between the two cultural traditions. In fact, these styles overlap to a great extent between Sears Point and Oatman Mountain, so much so that some researchers think this brief stretch of the river exhibits a style of rock art (called the Sears Point style) that is so blended and unique that it is distinct from either the Gila or Patayan style (Hedges 2000; Thiel 1995). Some of the symbols unique to the Great Bend's rock art include broken diamonds, shields, and certain

renditions of birds (Hedges 2000; Martynec 1989; Wallace 1989; Weaver et al. 2012).

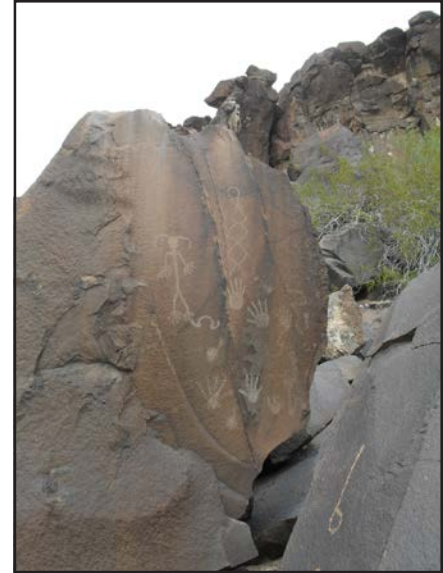
The most recent style of rock art in the area of the Great Bend includes a variety of incredible nineteenth and early twentieth century petroglyphs left by resident Native Americans, as well as Hispanic and Anglo-American travelers along the numerous wagon roads through



**Figure 4.6.** This incredibly dense concentration of Hohokam rock art is located at Painted Rock Campground, AZ S:16:1 (ASM), at the northern end of the Painted Rock Mountains. Although the site is listed on the National Register of Historic Places, the rock art and other cultural features have never been fully documented. (Photograph by Andy Laurenzi.)



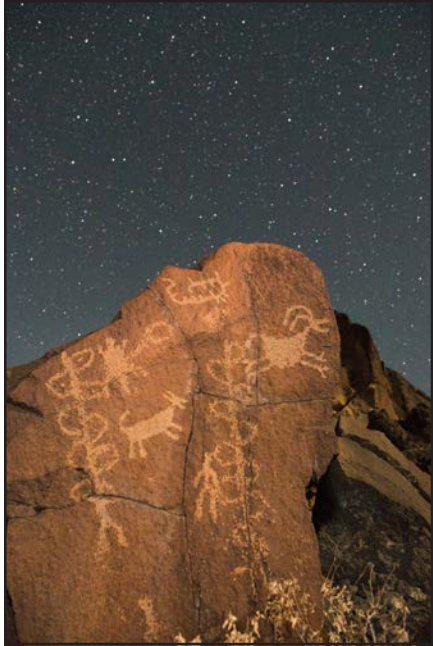
**Figure 4.8.** Rock art panels along the edges of the Sentinel-Arlington Volcanic Field tower above the river floodplain. As if it were an ancient billboard, this large panel at Oatman Point broadcasted messages to people as they moved up and down the river valley. The crowded and superimposed composition of the rock art suggests it was incrementally added to over the centuries, most recently in 1916. The handprints and digitated human-like figure are characteristic of the style of rock art found at Oatman and Hummingbird Points. The white stains on the rocks to the right of the panel show that raptorial birds also perch themselves at this high point as they scan the valley floor for food. (Photograph by Aaron Wright.)



**Figure 4.7.** This tall panel at Hummingbird Point depicts a large human-like figure, numerous handprints, and several geometric designs. Two curved lines protrude from the human-like figure, possibly representing horns or a headdress. The figure's appendages are also digitated, showing fingers and toes. Digitated appendages on human and animal forms, which are quite rare in Hohokam rock art, seem to be a distinctive stylistic attribute of Patayan rock art along the lower Gila River. (Photograph by Aaron Wright.)

the area. Because much of this historic rock art consists of names and dates, it can be assigned to specific people and certain historical events and eras important to the nation's history, such as the Mexican-American War, the California Gold Rush, and the Dust Bowl. The legendary Christopher "Kit" Carson, who guided Kearny's Army of the West down the lower Gila, and members of his party allegedly carved their names at Independence Rock in 1845 (Grandrud 2009; Griffen 1942:214; see also Johnston 1848:





**Figure 4.9.** The remoteness of the Great Bend of the Gila from urban centers provides tranquility and minimal light pollution at night. This panel at Sears Point displays a juxtaposition of animal, human, and geometric elements. The vertical lines with alternating attached lobes have been referred to as “decorated staffs” (Weaver et al. 2012); however, what they may symbolize remains to be determined. Nearly 50 decorated staff designs have been recorded at Sears Point (Weaver et al. 2012:Figure 6.1), but they are rarely, if ever, found at other places along the lower Gila. They are part of the corpus of rock art symbols unique to the area within and around the proposed GBGNM. (Photograph by Elias Butler.)

605). Historians had long misplaced Carson’s Independence Rock at the famous Painted Rocks, when, in fact, it is now known as both Maxwell’s Point and Independence Point, near Sears Point, and within the boundary of the proposed GBGNM.

Continued study and preservation of the rock art within the boundary of the proposed GBGNM has much to reveal about the ancient cultural traditions, especially the Patayan, and the historical personae and events that took place within this frontier. The rock art, so visual and abundant throughout the area, seemingly invites people to add to the galleries, or in more extreme cases, take away from them through vandalism and theft. Because the rock art comprises a unique type of fragile-pattern area, such damage is irreversible. Ongoing van-



**Figure 4.10.** This large petroglyph panel at Oatman Point contains many designs that may be diagnostic of the area’s unique style. (Photograph by Aaron Wright.)



**Figure 4.11.** Much of the rock art around the Great Bend of the Gila adorns the cliff faces of ancient lava flows lining the river corridor. The Hohokam placed petroglyphs in a diversity of settings, including atop summits. This panel, adjacent to a fortified village on Powers Butte, accompanies an expansive view over the wide valley created by the confluence of the Salt and Gila rivers. (Photograph courtesy of Elias Butler.)

### Red Rock Canyon and Protohistoric Rock Art

Red Rock Canyon, at the eastern edge of the Gila Bend Mountains, is a rare exposure of reddish and pinkish sedimentary rock. In addition to Hohokam petroglyphs, the canyon hosts a curious assortment of early historic Native American petroglyphs of probable Yavapai or Apache manufacture. Horse-and-rider glyphs are shown in the left and central images, and must postdate the Spanish conquest of the sixteenth century that brought horses into the region. The human figures in the central



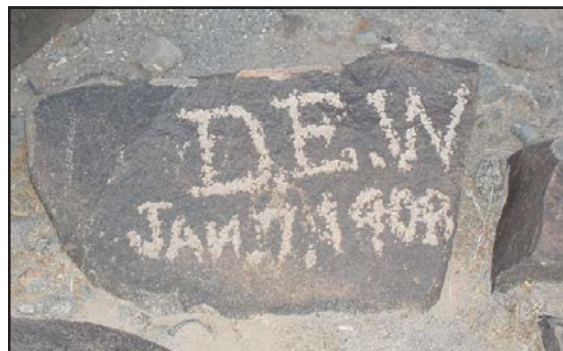
and right images wield circular objects that may be shields, emblems of a warrior's identity among many Native American communities. The figure in the right image also dons a feathered headdress and instead of being pecked like most other petroglyphs in the area, it was created through incision. The incisions suggest a metal implement was used to create the glyph, another clue to its likely historic origin. (Central photograph by Andy Laurenzi; other two by Craig Weaver.)

### Historic Inscriptions: Graffiti or Rock Art?

Often considered vandalism, at some point, graffiti itself becomes an important cultural resource. The examples shown here, all from the famous Painted Rocks at the northern end of the Painted Rock

Mountains, show the initials, names, and dates of early travelers and settlers to the region. Dates of 1879, 1885, 1907, and 1908 have been carved into the rock alongside (and sometimes on top of) older Hohokam and Patayan petroglyphs.

Archaeologists and scientists can rely on variability in varnish formation, attested to by the color differences between the historic and pre-Hispanic rock art, to date the rock art and study climatic and environmental changes in the area. The actual names and dates permit historians and genealogists to research the thousands of people and families who made their way west through Arizona Territory and on to California. (Photographs by Aaron Wright.)





dalism and theft of the Great Bend's world-class rock art constitute losses of global significance.

## GEOGLYPHS

The lower Gila River, including the region around its Great Bend, is within the eastern range of a peculiar class of cultural resource archaeologists refer to as geoglyphs, or ground figures (Davis and Winslow 1965; Harner 1953; Holmlund 1993; Johnson 1986; Solari and Johnson 1982; Vanderpot and Altschul 2008). First noted by travelers in the late 1800s (Blake 1857), these features consist of geometric and, less commonly, figurative shapes arranged horizontally on the ground surface (Figure 4.12). Like the world famous Nazca lines in Peru, geoglyphs within the boundary of the proposed GBGNM and surrounding areas give the impression they were intended to be seen from the sky, which adds to their mystique. Archaeologists have yet to determine what functions these enigmatic features may have served, but since some depict recognizable forms—such as humans and animals—and others con-

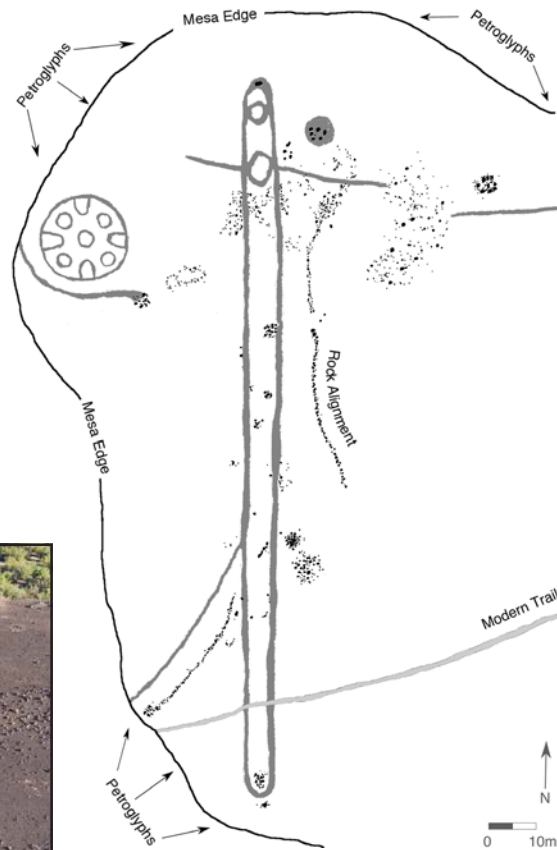


**Figure 4.12.** This series of intaglios is at Oatman Point, on the edge of the Sentinel Lava Field. The cliff faces below are covered in petroglyphs, and a summit trail leads from the intaglios to a village encampment on the river's floodplain below. Repeated vehicular access to the escarpment, evidenced by numerous faint two-tracks, has resulted in considerable damage to the intaglios. (Photograph by Henry Wallace.)

### Rock Art, Geoglyphs, and Trails at Sears Point

The cultural resources along the Great Bend hold their own as impressive, world-class antiquities that speak of a deep history to which many different people can connect and experience. Another unique aspect of the region, however, is how the different cultural resources come together in meaningful ways, and incorporate elements of the natural landscape into the tapestry that is the cultural landscape. This is why the significance and value of the cultural landscape—as a composition of the different archaeological, historical, and natural resources—is greater than the sum of its parts.

Sears Point Archaeological District, AZ-050-1902 (BLM), which is just one small piece of the larger Great Bend of the Gila landscape, provides a case in point. Added to the National



Register of Historic Places in 1985, the Sears Point Archaeological District is located at the northwestern edge of the Sentinel Lava Field. It is an incredibly dense concentration of distinctive rock art on a series of prominent cliff faces above the river channel. Almost 10,000 individual glyphs were recently recorded (Weaver et al. 2012), but the composition does not stop there. Above the cliffs, on the escarpment of the plain, is an intricate pattern of geoglyphs. One of these is the Agua Caliente “Racetrack,” an elliptical intaglio once argued to be a prehistoric racetrack (Johnson 1986). The recent recording project revealed that the intaglio is actually part of a larger, complex pattern that incorporates lines, piles, and geometric shapes composed of rocks, as well as multiple trails that merge and splinter from the design. At Sears Point, artisans designed a ritualized place on the landscape that

utilized both vertical and horizontal planes in ways archaeologists are just starting to understand. Similar associations between geoglyphs, rock art, and trails occur throughout the boundary of the proposed Great Bend of the Gila National Monument. (Photograph courtesy of Elias Butler; the map is an adapted and updated version based on an original in Weaver et al. 2012:Figure 6.10a.)



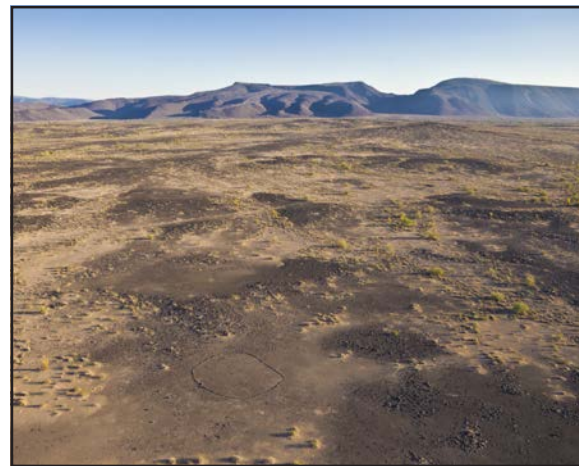
form to symbols in rock art, many believe they were ritually and spiritually important in the lives of the area's indigenous communities. Because geoglyphs may be difficult to discern from the ground, they are more prone to inadvertent damage, such as foot and vehicular traffic, than rock art, which faces its own threats.

There are two general types of geoglyphs around the Great Bend: intaglios and rock alignments. Like sleeping circles and trails, intaglios are shapes in negative relief created by the selective removal of stones in the desert pavement to expose the lighter-colored sediments underneath. Other examples in which the stones were impressed into the pavement, rather than removed, have been interpreted as ancient dance grounds (Johnson 1986). Rock alignments, on the other hand, were made by placing rocks, sometimes on desert pavements and at other times on lighter-colored ground surfaces, thereby forming designs in positive relief (Figures 4.13-4.16). At times, geoglyphs were made through a combination of these methods, and by integrating other types of features, such as rock piles and gravel mounds, the geoglyph artisans formed complex, bichromatic, three-dimensional images.

Because the distribution of geoglyphs maps onto the historic range of Yuman-speakers, they are generally attributed to these communities and their ancestral cultural tradition, the Patayan. Dating these mysterious features, however, has been a methodological hurdle for archaeologists, but advances in archaeological and geomorphological science show promise for resolving some of these issues. Previous researchers have attributed some of these features to the region's first inhabitants, the Paleoindians (e.g., Hayden 1976, 1982). More contemporary perspectives hold intaglios to be much more recent phenomena, perhaps less than 500 years old (Holmlund 1993; Vanderpot and Altschul 2008), but the rock alignments may be of much greater antiquity. Serious, in-depth



**Figure 4.13.** Unlike rock enclosures, walls, and trails, many of the geoglyphs around the Great Bend of the Gila, including the rock alignment pictured here, lack any clear indication of a utilitarian function. Their enigmatic nature suggests they instead served a religious purpose and were part of a much larger ritual landscape. (Photograph by Andy Laurenzi.)



**Figure 4.14.** A circular rock alignment lies upon the desert pavement west of Oatman Mountain. (Photograph by Henry Wallace.)



**Figure 4.15.** This rock alignment, formed by the selective placement of boulders upon the desert pavement, appears to depict a quartered circle. Quartering, a common design layout on Hohokam pottery, may relate to the ritualized orientation of the four cardinal directions, a religious premise widely shared among indigenous communities of the American Southwest. (Photograph by Henry Wallace.)

studies and greater protection efforts are sorely needed to better understand and preserve these enigmatic features.



**Figure 4.16.** These long, linear rock alignments are bisected by a trail. Shorter rock alignments paralleling and lining the trail suggest the trail and geoglyph are contemporaneous, and perhaps part of a composite design and ritual stage. (Photograph by Henry Wallace.)

## PRE-HISPANIC VILLAGES AND FORTS

The Great Bend of the Gila was the western extent of the Hohokam world, and the region contains villages with unique styles of architecture. One of these is the Rock Ballcourt site, AZ T:13:9 (ASM), a pioneering Hohokam village in the area (Figure 4.17). About one-third of the site was excavated in the 1960s (Wasley and Johnson 1965), and the founding of this village was determined to date to the early Colonial period, around A.D. 750. In addition to a ballcourt, the village contained multiple trash mounds and an unknown



**Figure 4.17.** The Rock Ballcourt stands to this day on the floodplain of the lower Gila River. (Photograph by Henry Wallace.)



number of houses and other structures. The Rock Ballcourt is important in several regards. First, it is one of the few Hohokam ballcourts to have been fully excavated, so archaeological knowledge of these features is indebted to the work done here. Even more significant, however, is that of the more than 200 known Hohokam ballcourts in southern Arizona, the Rock Ballcourt is the only known example made entirely of stone. All the others are made of mounded soil. The Rock Ballcourt is truly a one-of-a-kind cultural resource.

After A.D. 1100, disparate communities throughout the southern Southwest began raising dry-laid masonry buildings atop hills and buttes (Fish et al. 2007). Several lines of evidence, including their locations and the character and organization of the architecture, suggest these villages assumed defensive postures. Three such hilltop sites, each with masonry buildings and seemingly fortified with defensive walls, overlook the Gila River as it winds its way through the boundary of the proposed GBGNM. Two of these fortified hilltop villages are found on Powers Butte, AZ T:10:1 (ASM) and AZ T:10:2 (ASM) (Figures 4.18-4.19), and Robbins Butte, AZ T:10:6 (ASM). Powers Butte and Robbins Butte are prominent rises in the Buckeye Hills along the Great Bend's northern arc, and both are within the boundary of the proposed national monument. A third, the Fortified Hill, is on an inholding of Tohono O'odham reservation land encompassed by the proposed national monument. Between these three fortified hilltops lies another defensively postured village, Fort Pierpoint, AZ T:14:136 (ASM) (Figures 4.20-4.21). However, unlike the hilltop villages, Fort Pierpoint is nestled in a canyon



**Figure 4.18.** Dry-laid masonry walls and rooms atop Powers Butte. (Photograph by Elias Butler.)



**Figure 4.19.** View to the west, across the Gila River valley, from the crest of Powers Butte. The masonry wall in the foreground encircles a cluster of rooms and other features on the summit of the butte. (Photograph by Elias Butler.)



### Robbins Butte



The fortified site atop Robbins Butte, AZ T:10:6 (ASM), consists of a cluster of dry-laid masonry walls and rooms such as the one pictured at the top right. Terraces, likely used to grow corn, agave, or some other domesticated crops, extend down the slope of the butte to the floodplain below.

At the top left, modern agricultural fields fill views to the east from atop Robbins Butte. In prior centuries, this valley was densely inhabited by Hohokam farmers who tilled the same fertile fields as today. The cluster of small boulders in this picture are remnants of a walled enclosure.

One of the many advantages of hilltops are the wide vistas they provide over the landscape. From this masonry enclosure atop Robbins Butte pictured above, one can survey nearly the entirety of the lower Salt River valley and north into the valley of the Hassayampa River. Powers Butte, visible in the top right of the image, hosts a similarly elevated and seemingly fortified village. (Photographs by Andy Laurenzi.)



within the Gila Bend Mountains, and it was fortified with two massive walls that barricaded the canyon's mouth. It is also within the proposed national monument.

All four fortified villages are attributed to the Classic period Hohokam and, from the limited data available to date, appear to be contemporaneous. The Fortified Hill, known since at least 1860 and partially excavated and reconstructed in the 1960s, is one of the best known archaeological properties in the valleys of the Great Bend. Excavations there revealed that the



**Figure 4.20.** One of several massive walls raised to enclose the canyon around the Fort Pierpoint site. (Photograph by Andy



**Figure 4.21.** View across the Gila River valley to the east from behind a wall at the Fort Pierpoint site. (Photograph by Andy Laurenzi.)

Laurenzi.)

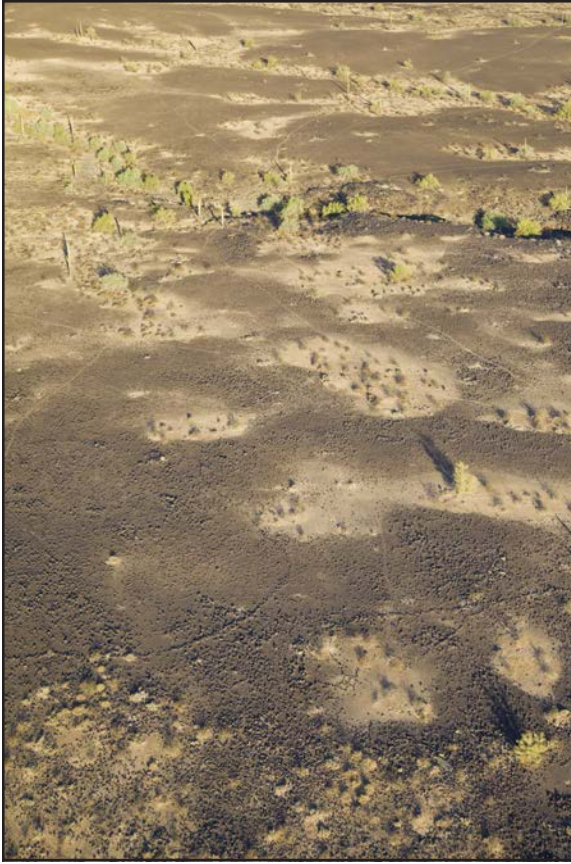
atop the mesas flanking the river. These trails criss-cross the valleys and uplands, forming webs of movement that model the social networks and exchange systems among ancient villages and important places within this formidable landscape. Ancient trails are what integrate all the region's archaeological resources into a unified cultural landscape, and for this reason, archaeologists have recently turned their attention to exploring these features in greater detail (Figures 4.22-4.23) (e.g., Darling and Eiselt 2009; White 2012). When mapped out, these trail networks stretch in every direction, sometimes reaching the beaches of southern California, Baja, and northwest Sonora. These long-distance connections are what facilitated the flow of people, ideas, and goods across western North America for millennia. They are also

57-room fort was more than a defensive retreat; it housed a residential community for at least several generations. However, evidence of habitation at the Fortified Hill and the other three fortified villages around the Great Bend does not rule out defense as a motivational factor for establishing settlements in such guarded, hard-to-reach settings. The question nevertheless remains as to who or what these communities were shielding themselves from? Early investigators believed the forts protected Hohokam farmers from Patayan raiders, or vice versa, but it is now known that some Patayan and Hohokam farmers were living together in the surrounding valleys for at least a century before these forts were raised. The dangers that drove farmers to take refuge in these defensive settings remain a mystery.

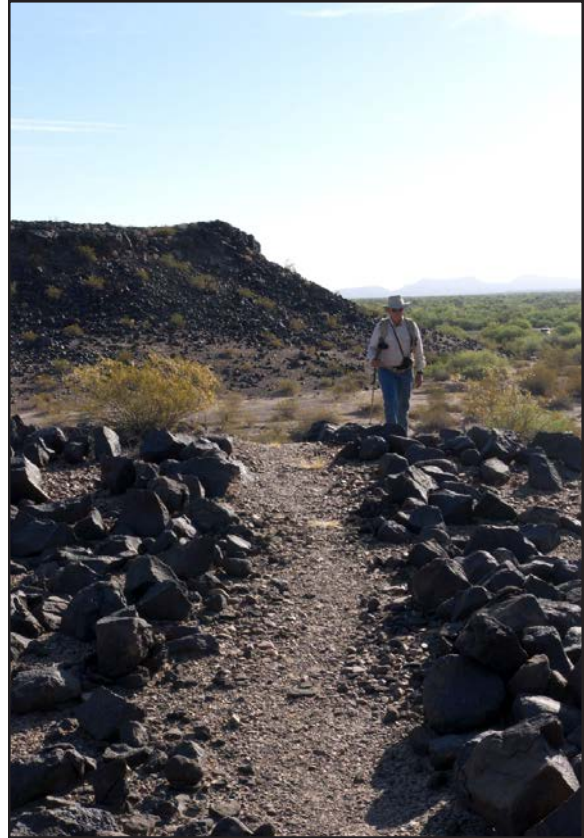
## TRAILS

The boundary of the proposed GBGNM contains numerous stretches of ancient trails that are preserved on the desert pavements





**Figure 4.22.** Ancient trails blazed into the desert pavement often intermix with geoglyphs and other rock features in intricate and curious ways. (Photograph by Henry Wallace.)



**Figure 4.23.** For ages, perhaps even several millennia, this trail at Sears Point, just one of thousands in the area, has guided countless people on excursions through this remote desert landscape. (Photograph by Andy Laurenzi.)

the core infrastructure onto which the roads of later Spanish, Mexican, and American pioneers expanded, including those of Kino, Anza, Emory, and Kearny.

Historical and ethnographic accounts relate how descendants of Hohokam and Patayan farmers used the Great Bend's trails in a number of important ways. For instance, O'odham villagers from further upstream along the middle Gila traveled though this area on ritualized salt pilgrimages to the Gulf of California (Underhill 1979). They recorded their routes and waypoints along the trails in songs that are still remembered and sung by community elders (Darling and Lewis 2007). Between the sixteenth and nineteenth centuries, hundreds, if not thousands, of Yuman-speakers fleeing conflict along the lower Colorado River migrated en masse over these trails in search of a more peaceful life in the valleys of the Great Bend and later among O'odham villages further upriver (Ezell 1963). Later, bands of Quechan, Mojave, O'odham, and Pee Posh warriors traversed these ancient trails between the middle Gila River valley and the lower Colorado River as intertribal warfare waged on well into the mid-nineteenth century (Kroeber and Fontana 1986; Kroeber and Kroeber 1973).



Because they were used repeatedly throughout the years, determining just how ancient the trails around the Great Bend of the Gila are can be rather difficult. Nevertheless, many are undeniably thousands of years old, and some of the trails may have been blazed by the first people to enter the region more than 12,000 years ago. A general impression of the antiquity of the trails can be garnered from the types of other archaeological resources found alongside them (Figure 4.24). These include stone artifacts, clearings, and various other features, such as piles and rings of rock, some of which may be of Paleoindian (San Dieguito) and Archaic (Amargosa) manufacture.

Hohokam and Patayan farmers also traveled over and added to the trail network throughout the Great Bend of the Gila (Figures 4.25-4.26). These trails were integral to regional economies because they enabled many exotic, prestigious items to circulate across social and physical boundaries. Obsidian, coveted for its physical properties and color, was quarried in the mountains around the Great Bend and transported in all directions over these trails (Doyel 1996). Shell, salt, and other aquatic resources from the Pacific Ocean moved north and east into central Arizona and New Mexico, whereas beautifully decorated pottery and finely crafted stone axes moved west and south into southern California and Sonora (Hayden 1972; McGuire and Howard 1987; Merrill 2014; Mitchell and Foster 2011). Many of these trade goods, as well as rock art and geoglyphs, can be found to this day lying beside the trails atop the desert pavements.



**Figure 4.24.** Rings and piles of rocks are occasionally found alongside ancient trails. In this example, a ring of rocks (at center) is positioned inches away from a well-worn trail (at left). What rock rings such as this were used for is not clear, but similar features have been interpreted as sleeping circles and trail-side shrines. (Photograph by Andy Laurenzi.)



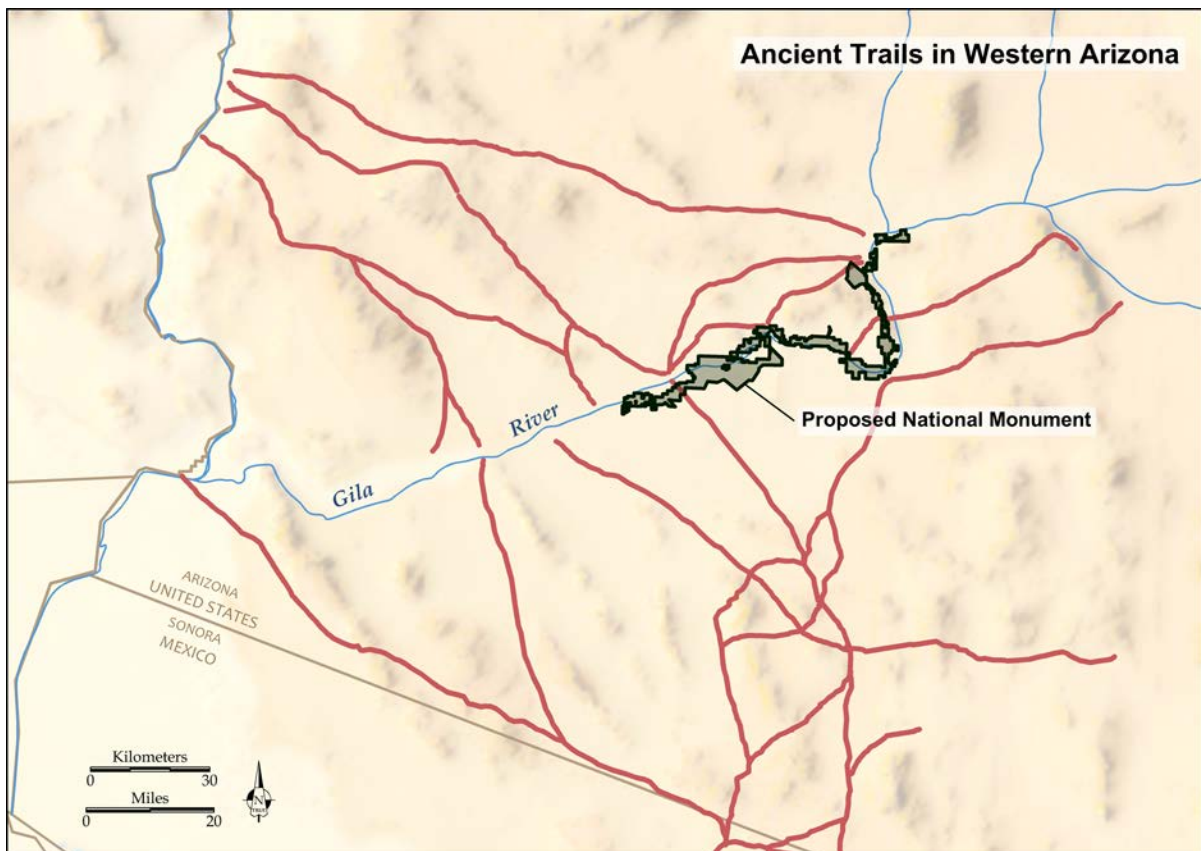
**Figure 4.25.** The trails running throughout the region of the Great Bend of the Gila connected Hohokam and Patayan communities with distant places and resources. Shell was an integral component of the Hohokam economy. There is ample evidence that the Hohokam maintained trade relations with communities in southern California who had access to seashell, and it is clear that some Hohokam villagers made pilgrimages to the Sea of Cortez to acquire shell firsthand. This *Conus* sp. shell, from the Pacific's waters, was found at a small village on the river floodplain below Oatman Point. (Photograph by John Alcock.)



**Figure 4.26.** Archaeologists have noticed an unusually high proportion of nonlocal pottery in the refuse at Hohokam villages in the vicinity of the Great Bend of the Gila. This fragment of a black-on-white vessel, found amid a scatter of artifacts at a small village near Hummingbird Point, was likely made hundreds of miles to the north and east by Ancestral Puebloans around A.D. 1000. The trail network facilitated the exchange of goods, ideas, and genes across cultural boundaries. (Photograph by John Alcock.)

In addition to trails for traveling, the region of the Great Bend of the Gila is also the center of a distribution of ritualized trails archaeologists have just recently begun to recognize and study (Map 4.2; Figures 4.27-4.28). Called ascent paths or summit trails, these footpaths, sometimes rock-lined or actually dug into the hillside, ascend conically shaped summits and other rises in a strictly linear fashion (Darling and Eiselt 2009; Wallace 2008; Wright 2014). Clusters of rock art are often found at either or both ends, and on occasion, rock piles thought to be shrines were built atop the summits. Ethnographic

insights about the significance and use of mountains among local indigenous communities and the association with shrines and rock art suggest these summit trails were designed to



**Map 4.2.** Ancient trails across southwestern Arizona and northern Sonora, as mapped by Malcolm Rogers (n.d.), Julian Hayden (1972), Darling and Eiselt (2009), and Rice et al. (2009).



**Figure 4.27.** View of Powers Butte from the southwest. A trail, visible in the center of the slope, ascends the butte from base to summit. Summit trails such as this probably directed ritualized processions between the valley floor and the crests of religiously important landforms. (Photograph by Andy Laurenzi.)

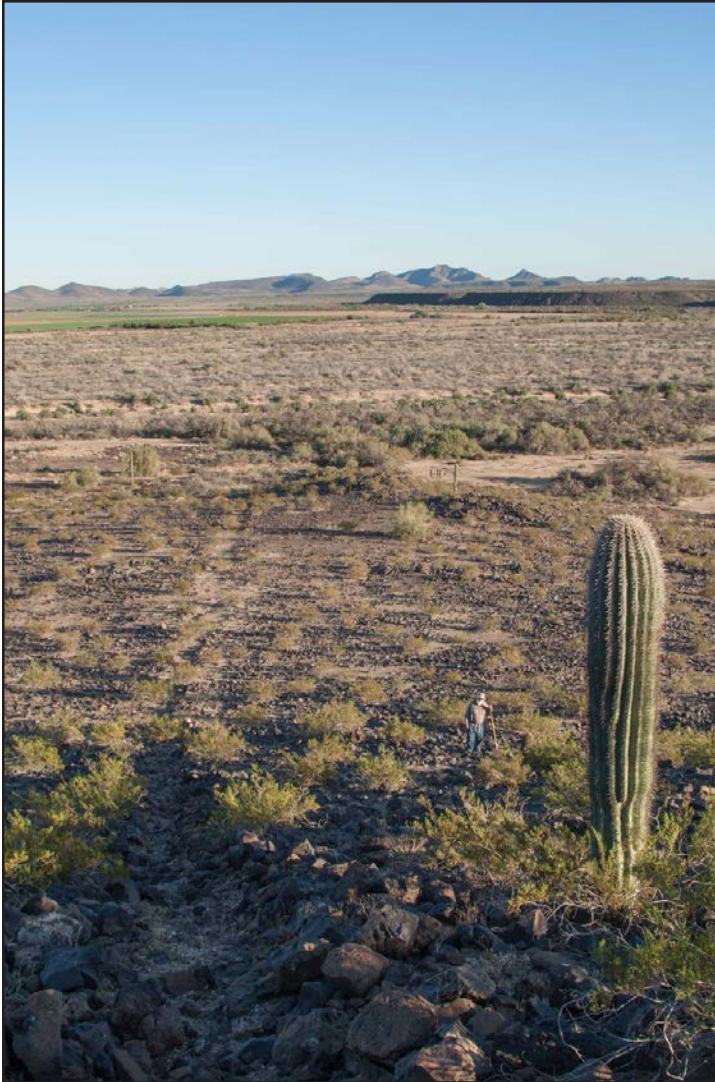
guide ritualized processions up and down the landforms. Because they are confined largely to this lower stretch of the Gila River, and because they are so new to researchers, summit trails are the most understudied and arguably the least understood archaeological resource within the boundary of the proposed GBGNM. They are, nevertheless, one of the unique, fragile components of the area's world-class archaeological resources.

## WAGON ROADS

Beginning with Father Eusebio Kino's first descent down the lower Gila River in 1699, the valleys and wide plains through the Great Bend have served as a natural travel and transport corridor for colonial governments and the people, animals, mail, and goods they shuffled between outposts on the California coast and the continent's interior. As with the ancient trails described previously, numerous historic trails and roads known under a series of monikers—the Anza Trail, Gila Trail, Kearny Trail, Southern Emigrant Trail, Leach's Wagon Road, Cooke's Wagon Road, Sonoran Road, and Butterfield Overland Stage Line, for examples—merged and diverged along this stretch of the lower Gila. Remnants of these trails, as well as lesser known roads such as William Fourn's Toll Road, remain etched in the desert pavement and rutted in the river floodplains (Figures 4.29-4.31). They are reminders of what life must have been like before the automobile and testaments to the countless Spanish, Mexican, and American soldiers, migrants, and pilgrims who opened the West.

Most of the notable historical resources within the boundary of the proposed GBGNM are tied to the wagon roads that criss-cross this landscape. These include the historic petroglyphs reviewed above and the Stanwix stage station and U.S. military telegraph described below. It also includes the site of the Oatman Incident, which occurred along a desolate stretch of Cooke's Wagon Road (the Mormon Battalion's Trail) as it rises out of the river floodplain and





**Figure 4.28.** This view from the top of Rocky Point shows a summit trail up close. In this example, large boulders were moved to the sides, creating a causeway that directed movement in a strictly linear manner from the edge of the lava field near the river to the hill's summit. (Photograph by Andy Laurenzi.)

#### Overland Line.

This key piece of communications infrastructure helped bring law, order, and commerce to the Arizona Territory and the country's western frontier. Remnants remain standing along the lower Gila River and within the boundary of the proposed GBGNM (Figure 4.34).

#### STAGECOACH STATIONS

As detailed in the previous chapter, Stanwix stage station is tied to several key historical events and people. Originally a station along the Butterfield Overland Stage Line, Stanwix

atop the Sentinel Lava Field (Figure 4.32). The incident is memorialized in the names of several local landforms, such as Oatman Mountain, Oatman Flat, and Oatman Point. It is also memorialized by a series of cairns at the site, which some think are the grave sites for the deceased members of the Oatman family (Du Shane 2012).

#### COMMUNICATION FEATURES

For much of its stretch from Yuma to Maricopa Wells, along the lower Gila River and through the southern portion of its Great Bend, the U.S. military telegraph paralleled the wagon road of the Butterfield Overland Stage Line (Figure 4.33) (Rue 1967). In fact, repairmen were stationed at both Stanwix and Gila Ranch, two former stops along the Butterfield



**Figure 4.29.** Many segments of the Butterfield Overland Stage Line, as shown here, remain in a remarkable state of preservation within the boundary of the proposed national monument. (Photograph by Andy Laurenzi.)



**Figure 4.31.** The Oatman Incident occurred at this point along Cooke's Wagon Road, where it leaves the sandy river floodplain and ascends the basalt mesa of the Sentinel Lava Field. (Photograph by Andy Laurenzi.)



**Figure 4.30.** After running mail between Fort Yuma and Stanwix stage station for the government, William Fourr (1843–1935) capitalized on the Butterfield Overland Stage Line. He first owned Kenyon's, sold it and bought Burke's, then sold it and set up shop at the deserted Oatman Flat station. There, he invested \$5,000 to improve the road, where he charged a toll and 10 cents a head for water. Fourr operated the Oatman Flat stage station from 1869 to 1877, when he left and ultimately settled in the Dragoon Mountains of southeastern Arizona. However, Fourr's Toll Road, shown above, remains etched in the desert pavement within the proposed national monument. (Photograph by Henry Wallace.)



**Figure 4.32.** A sign erected by the Yuma Historical Society marks the site of the Oatman Incident. (Photograph by Bill Doelle.)

was also the site of the westernmost skirmish of the Civil War, in which Confederate rangers wounded Private Semmilrogge of the California Column. About a decade later, Stanwix served as a repair station for the U.S.





**Figure 4.33.** Fragments of the 140-year-old glass insulators used to protect the cables can be found to this day along the U.S. military telegraph route as it passes through the proposed national monument. (Photograph by Darryl Montgomery.)

military telegraph. None of the buildings associated with the Stanwix stage station remain standing, but the location is well known and continues to be a significant part of the local community's history (Figure 4.35) (McDaniel 2013). The site of Stanwix stage station lies within the westernmost section of the proposed national monument.

## HISTORIC CANALS



**Figure 4.34.** This short post was part of the U.S. military telegraph. As shown, the height of the line in the vicinity of Oatman Point was notoriously low. This led to the need for constant repairs, as cattle often walked into it. (Photograph by Darryl Montgomery.)

The proposed GBGNM contains short segments of the historic Arlington Canal, AZ T:10:80 (ASM), and the Gila Bend Canal, AZ Z:2:66 (ASM), both in the vicinity of the Gillespie Dam. It also contains tangible traces of several ill-fated irrigation projects, including canal segments, headworks, and dilapidated dams that are inadequately known and many of which remain undocumented (see Map 3.8). The best preserved, and one of the better known, is that of the South Gila Canal Company (Figure 4.36). In the works since at least 1879, the South Gila Canal, AZ Y:3:50 (ASM), was completed in the 1880s for approximately \$45,000 (Southworth 1919). It starts from a point just below Oatman Flat, stretches for 22-1/2 miles along the river's south bank, and ends near Stanwix stage station. South Gila Canal Company president Oscar Fitzallen Thornton, a retired newspaper editor and former Tombstone Ranger, claimed the project would soon irrigate 18,000

acres of river bottom and 162,000 acres of mesa (Hughes 1893).

The South Gila Canal was just the first stage in a loftier, more ambitious project that Thornton predicted would attract 70,000 settlers to Yuma County. In 1892, the company be-



gan erecting an asphalt-faced dam 1,400 ft long, 106 ft broad at the base, 13 ft at the top, and 50 ft high. The dam, the base of which is designated AZ S:16:11 (ASM), was needed to raise and divert water to the canal's headgate, which was 30 ft above the natural riverbed (Davis 1897). Thornton's plan was to eventually heighten the dam to 110 ft to create a massive, 252,000-acre reservoir. Thornton projected that this impoundment would hold enough water to irrigate 1 million acres for 3 years without additional water from the river's natural flow. Plans were also in place to build a companion canal on the north side of the river that would



**Figure 4.35.** The story of Stanwix stage station engages younger generations to this day. As part of his Eagle Scout Project, 17-year old Lucas Daniel, a member of local Boy Scout Troop 8004, enlisted the help of his community in erecting this informational kiosk near the site of Stanwix stage station. (Photograph by Elias Butler.)



**Figure 4.36.** This turn-of-the-century building at AZ S:16:9 (ASM), located within the proposed national monument's boundary and affiliated with the South Gila Canal, stands as a memorial to the labors and struggles of efforts to tame the floodwaters of the lower Gila River. (Photograph by Andy Laurenzi.)

reclaim another 320,000 acres.

To finance this grandiose project, the South Gila Canal Company sold bonds to American and foreign investors (Figure 4.37). Nonetheless, the venture to reclaim 500,000 acres of Arizona desert proved futile. The north canal was never dug, the dam never finished, and by 1893, the project was abandoned due to financial troubles (Davis 1897). Several attempts to rework the canal were made, including an undertaking by the Southwestern Arizona Fruit & Irrigation Company between 1911 and 1914. This last ditch effort amounted to little, and the company was later sued. In the end, not a single crop was ever irrigated by the South Gila Canal



**Figure 4.37.** This 100 pounds sterling gold bond was issued in 1892 to help finance the expansion of the South Gila Canal. (Image courtesy of Scripophily.com.)

(Southworth 1919). Much of the South Gila Canal and its associated facilities, untouched in over a century, sit quietly within the boundary of the proposed GBGNM.

## THE GREAT BEND OF THE GILA'S NATIONAL SIGNIFICANCE

For thousands of years, people of very different backgrounds, lifeways, and customs have left their mark in one way or another on the landscape of the Great Bend of the Gila. Some settled along the river, whereas others simply passed through, taking advantage of the river corridor and the Gila's life-giving waters. The preceding pages outlined the region's deep history and the many cultural resources that materialize this unique and

important chapter in our nation's story. Today, as it has for millennia, the history of the Great Bend of the Gila touches people from many different walks of life in variable though compatible ways. Likewise, the wide variety of cultural resources draw their national significance in different but complimentary ways, each of which is a compelling case for commemoration, continued preservation, and national recognition.

Cultural resources within the boundary of the proposed GBGNM are associated with significant people and events in our country's past. The cast of historical figures begins with Father Eusebio Kino in the seventeenth century, when our country was still a hodgepodge of colonial enterprises by distant European empires. Others include Juan Bautista de Anza, Kit Carson, Steven Kearny, Olive Oatman, and Hi Jolly, to name just a few. Magnifying this historical legacy are nationally significant events that played out along the Great Bend of the Gila, in ways unique to this peculiar landscape. Notable events and developments include the Mexican-American War and the Mormon Battalion; 49ers and the California Gold Rush; the former international border and the Gadsden Purchase; the Butterfield Overland Stage Line; the infamous Oatman Incident; the California Column, Stanwix station, and the Civil War; and the Dust Bowl. A wide swath of our country's history is encapsulated in this narrow stretch of the lower Gila River.

The Great Bend of the Gila does not owe its significance to just famous people, places, and events important to our nation's short history. The vast majority of the region's cultural resources are far older, dating to an era before contact with the Euro-American world. Although nameless, the people who crafted this ancient cultural landscape were not insignificant, nor are they forgotten. The rock art, geoglyphs, trails, villages, and countless other features and artifacts attest to a much deeper Native American history that is intrinsically linked to the desert's harsh yet dramatic landscape. Although we do not know the personal names or events from which these ancient cultural resources were born, we do not need to. Their mark on history is unmistakable, and the significance of those cultural resources is self-evident to anyone who is fortunate enough to experience them in their natural, unadulterated settings.

We are just beginning to understand the diversity preserved within Great Bend's ancient cultural landscape and the lessons it can teach as we build a future of trust, tolerance, and cooperation in an increasing multicultural world. What we do know is that the Great Bend of the Gila bridges cultures and millennia in a way very few places can. With just a fraction of this landscape professionally surveyed, and research into the Great Bend's deep history so nascent, this important landscape will continue to yield new insights and a continued sense of wonder for years to come.



## PROTECTING THE FRAGILE PATTERNS OF THE GREAT BEND OF THE GILA

The deep history of the Great Bend of the Gila is preserved, ironically perhaps, in the region's incredibly dense concentration of surficial cultural resources. Due to the xeric climate, the landscape is subject to only minor sedimentation, meaning that little, if any, sand or soil accumulates upon its surface. This has left an amazing array of visually stunning rock art and other curious cultural resources, as well as countless artifacts, exposed on the desert pavement and rock faces. In fact, one of the peculiar aspects of the landscape encompassed by the boundary of the proposed Great Bend of the Gila National Monument is that many of the cultural resources reveal how people of diverse cultural backgrounds, and separated by hundreds if not thousands of years, intentionally altered and manipulated the landscape's sediment-free surfaces to address shared concerns. Over thousands of years, people wore trails into the desert pavement that memorialize the Great Bend's central position in the American Southwest. Early wagon roads expanded on these trails and played a vital role in the opening of the West. People crafted enigmatic rock art and geoglyphs by modifying rock surfaces and mesa tops. Religious expression and human triumph over incredible hardships come together in compelling and interesting ways, and the Great Bend's story of multiculturalism along a persistent frontier is vibrantly told through the highly visible cultural resources dotting the landscape.

However, the proclivity for the Great Bend's remarkable cultural resources to lie exposed on the modern ground surface, and to therefore be so visually engaging, is a mixed blessing. Much of what is known, despite the limited amount of professional attention directed toward the region, is due to the fact that so much can be seen and studied by simply walking across the landscape. The locations of many resources are known in spite of a lack of official records. This has been a boon for researchers and the interested public alike. The other side of this situation is more problematic. Because most of the cultural resources remain unburied, they are highly prone to loss, whether intentional or inadvertent. Off-road vehicular traffic that strays from well-established routes and trails has had an irreversible impact to geoglyphs and other cultural resources etched into the desert pavement. Graffiti, bullet holes, and chisel scars mar the surfaces of rock art-adorned boulders and cliffs. This recklessness has obscured and, in some cases, obliterated petroglyphs that once boldly told stories of an ancient past. As

Barnaby Lewis remarked in the Foreword, these images are teachings to contemporary Native peoples, and they are instrumental to the continuity of O'odham Himdag (Way of Life) and crucial for cultural perpetuation and survival.

The cultural resources of the Great Bend of the Gila are truly fragile patterns. Even though some impacts have taken their toll, the vast majority of this cultural landscape is in a remarkable state of preservation, and proactive foresight by policymakers and land managers can curtail continued loss. As the Phoenix metropolitan area continues to expand westward, just as the Hohokam cultural tradition did 1,500 years ago, the Great Bend's landscape and cultural resources will experience increased visitation and face an exponential growth in potentially adverse impacts. These are the future challenges for the Great Bend of the Gila.

This important landscape should not be cordoned off from the public, nor should the Great Bend and its cultural resources be neglected. These resources can serve to educate the public about important aspects of our nation's history and encourage respectful visitation.

## REFERENCES CITED

Ahnert, Gerald T.

- 2011 *The Butterfield Trail and Overland Mail Company in Arizona, 1858-1861*. Canastota Publishing Co., Inc., Canastota, New York.

Al-Ahari, Muhammed

- 2015 The Story of Hajj Ali (Hi Jolly) and the U.S. Camel Calvary Corp. Unpublished manuscript available at <[http://www.acadmia.edu/r250078/The\\_Story\\_of\\_Hajj\\_Ali\\_and\\_the\\_U.S.\\_Camel\\_Corps](http://www.acadmia.edu/r250078/The_Story_of_Hajj_Ali_and_the_U.S._Camel_Corps)>, accessed 1 October 2015.

Anza Trail Foundation

- 2015 The Juan Bautista de Anza National Historic Trail. Electronic document available at <<http://www.anzahistorictrail.org>>, accessed 10 August 2015.

Audubon, John Woodhouse

- 1906 *Audubon's Western Journal: 1849-1850; Being the MS. Record of a Trip from New York to Texas, and an Overland Journey through Mexico and Arizona to the Gold-Fields of California*. The Arthur H. Clark Company, Cleveland, Ohio.

Bannon, John Francis

- 1970 *The Spanish Borderlands Frontier, 1513-1821*. Holt, Rinehart and Winston, New York.

Bernard-Shaw, Mary

- 1990 *Archaeological Survey in the Painted Rock Reservoir Area, Western Arizona*. Technical Report No. 89-10. Center for Desert Archaeology, Tucson.

Blake, William P.

- 1857 *Explorations and Surveys for a Railroad Route from the Mississippi River to the Pacific Ocean*. Senate Document No. 78. 33rd Congress, Vol. 5. Washington, D.C.

Bolton, Herbert Eugene (editor and translator)

- 1919 *Kino's Historical Memoir of Pimería Alta: A Contemporary Account of the Beginnings of California, Sonora, and Arizona, by Father Eusebio Francisco Kino, S.J., Pioneer Missionary Explorer, Cartographer, and Ranchman, 1683-1711*. 2 vols. The Arthur H. Clark Company, Cleveland, Ohio.

Bostwick, Todd W.

- 2002 *Landscape of the Spirits: Hohokam Rock Art at South Mountain Park*. University of Arizona Press, Tucson.

Browne, J. Ross

- 1869 *Adventures in the Apache Country: A Tour Through Arizona and Sonora, with Notes on the Silver Regions of Nevada*. Harper & Brothers, New York.



Childress, Jane Pike, and Paige Phifer

- 1997 *A Cultural Resources Inventory of Red Rock Canyon, Gila Bend Mountains, Maricopa County, Arizona*. Bureau of Land Management, Phoenix.

Chittenden, Newton H.

- 1905 Discovery of a Remarkable Pre-Columbian Fortress and Ancient Irrigating Canal on the Gila River. *Overland Monthly* 46(December):573-576.

Chronic, Halka

- 1983 *Roadside Geology of Arizona*. Mountain Press, Missoula, Montana.

Clarke, Asa Bement

- 1852 *Travels in Mexico and California: Comprising a Journal of a Tour from Brazos Santiago, through Central Mexico, by Way of Monterey, Chihuahua, the Country of the Apache, and the River Gila, to the Mining Districts of California*. Wright & Hasty, Boston.

Colton, Harold S.

- 1938 Names of the Four Culture Roots in the Southwest. *Science* 87:551-552.
- 1945 The Patayan Problem in the Colorado River Valley. *Southwestern Journal of Anthropology* 1:114-121.

Conkling, Roscoe P., and Margaret B. Conkling

- 1947 *The Butterfield Overland Mail 1857-1869: Its Organization & Operation over the Southern Route to 1861; Subsequently over the Central Route to 1866; and under Wells, Fargo and Company in 1869*. The Arthur H. Clark Company, Glendale, California.

Corle, Edwin

- 1951 *The Gila, River of the Southwest*. Rinehart & Company, New York.

Darling, J. Andrew, and B. Sunday Eiselt

- 2009 Trails Research in the Gila Bend Area. In *Trails, Rock Features and Homesteading in the Gila Bend Area: A Report on the State Route 85 Gila Bend to Buckeye Archaeological Project*, edited by J. L. Czarzasty, K. Peterson, G. E. Rice, and J. A. Darling, pp. 199-228. Anthropological Research Papers No. 4. Gila River Indian Community, Sacaton, Arizona.

Darling, J. Andrew, and Barnaby V. Lewis

- 2007 Songscales and Calendar Sticks. In *The Hohokam Millennium*, edited by S. K. Fish and P. R. Fish, pp. 131-139. School for Advanced Research Press, Santa Fe.

Dart, Allen, Stephen H. Lekson, and Henry D. Wallace

- 1989 *Historic Properties Management Plan for the U.S. Army Corps of Engineers Painted Rock Reservoir Project, Southwestern Arizona*. Technical Report No. 88-6. Institute for American Research, Tucson.

Davidson, Hugh

- 2011 Gillespie Dam Bridge. *Archaeology Southwest* 25(1):11.

Davis, Arthur Powell

- 1897 *Irrigation near Phoenix, Arizona*. Water-Supply and Irrigation Papers of the United States Geological Survey No. 2. U.S. Government Printing Office, Washington, D.C.

Davis, Emma Lou, and Sylvia Winslow

- 1965 Giant Ground Figures of the Prehistoric Deserts. *Proceedings of the American Philosophical Society* 109:8-21.

Dixon, John C.

- 1994 Aridic Soils, Patterned Ground, and Desert Pavements. In *Geomorphology of Desert Environments*, edited by A. D. Abrahams and A. J. Parsons, pp. 64-81. Chapman & Hall, London, England.

Doolittle, Christopher J.

- 2000 Petroglyph Research at Antelope Hill. In *Of Stones and Spirits: Pursuing the Past at Antelope Hill*, edited by J. S. Schneider and J. H. Altschul, pp. 83-118. Technical Series No. 76. Statistical Research, Inc., Tucson.

Doyel, David E.

- 1991 Hohokam Exchange and Interaction. In *Chaco and Hohokam: Prehistoric Regional Systems in the American Southwest*, edited by P. L. Crown and W. J. Judge, pp. 226-252. School of American Research, Santa Fe.
- 1996 Resource Mobilization and Hohokam Society: Analysis of Obsidian Artifacts from the Gatlin Site, Arizona. *Kiva* 62:45-60.
- 2000 Settlement Organization at Gila Bend. In *The Hohokam Village Revisited*, edited by D. E. Doyel, S. K. Fish, and P. R. Fish, pp. 101-138. Southwestern and Rocky Mountain Division of the American Association for the Advancement of Science, Fort Collins, Colorado.
- 2008 Edge Work: The Late Prehistory of the Gila Bend Frontier. In *Fragile Patterns: The Archaeology of the Western Papaguería*, edited by J. H. Altschul and A. G. Rankin, pp. 233-251. SRI Press, Tucson.

Dunne, Peter Masten

- 1955 *Jacobo Sedelmayr: Missionary, Frontiersman, Explorer, in Arizona and Sonora: Four Original Manuscript Narratives, 1744-1751*. Arizona Pioneers' Historical Society, Tucson.

Du Shane, Neal

- 2012 Arizona Pioneer & Cemetery Research Project: Oatman Massacre Graves and Fourr Ranch Cemetery. Electronic document available at <[http://www.apcrp.org/OATMAN\\_FOURR/1\\_Oatman\\_Massacre\\_-\\_Fourr\\_Cem\\_120612\\_1.htm](http://www.apcrp.org/OATMAN_FOURR/1_Oatman_Massacre_-_Fourr_Cem_120612_1.htm)>, accessed 11 August 2015.

Effland, Richard W., and Margerie Green

- 1983 *Cultural Resource Investigations for the Yuma 500kV Transmission Line, Arizona Public Service Company*. Cultural Resources Report No. 14. Archaeological Consulting Services, Tempe, Arizona.

Ensigns & Thayer

- 1848 *Ornamental Map of the United States & Mexico. Map of the United States and Mexico Including Oregon, Texas and the Californias.* Thematic map, 1:13,000,000. Ensigns & Thayer, New York.

Ezell, Paul H.

- 1963 *The Maricopas: An Identification from Documentary Sources.* Anthropological Papers No. 6. University of Arizona Press, Tucson.

Fish, Suzanne K., and Paul R. Fish (editors)

- 2007 *The Hohokam Millennium.* School for Advanced Research Press, Santa Fe.

Fish, Suzanne K., Paul R. Fish, and María Elisa Villalpando (editors)

- 2007 *Trincheras Sites in Time, Space, and Society.* Amerind Studies in Archaeology No. 1. University of Arizona Press, Tucson.

Fong, Lawrence Michael

- 1980 Sojourners and Settlers: The Chinese Experience in Arizona. *The Journal of Arizona History* 21(Autumn).

Fontana, Bernard L.

- 1994 *Entrada: The Legacy of Spain and Mexico in the United States.* Southwest Parks and Monuments Association, Tucson.

- 1999 *A Guide to Contemporary Southwest Indians.* Southwest Parks and Monuments Association, Tucson.

Fourr, William

- 1935 Reminiscences of William Fourr (as told to Mrs. George F. Kitt). *Arizona Historical Review* 6(4):68-84.

Fowler, Harlan D.

- 1950 *Camels to California: A Chapter in Western Transportation.* Stanford University Press, Stanford, California.

Frangos, Steve

- 2005 Philip Tedro: A Greek Legend of the American West. *Greek-American Review* 56(692):25-35.

Garber, Paul Neff

- 1959 *The Gadsden Treaty.* Peter Smith (publisher), Gloucester, Massachusetts.

Grandrud, Reba Wells

- 2009 Historic Graffiti: Arizona's Independence Rock. *Overland Journal* 27(4):113-121.

Green, Stanton W., and Stephen M. Perlman (editors)

- 1985 *The Archaeology of Frontiers and Boundaries.* Academic Press, Orlando.



Greenleaf, J. Cameron

- 1975 The Fortified Hill Site near Gila Bend, Arizona. *The Kiva* 40:213-282.

Griffen, John S.

- 1942 A Doctor Comes to California: The Diary of John S. Griffin, Assistant Surgeon with Kearny's Dragoons, 1846-47 (Part 1). *California Historical Society Quarterly* 21:193-224.

Griswold del Castillo, Richard

- 1990 *The Treaty of Guadalupe Hidalgo: A Legacy of Conflict*. University of Oklahoma Press, Norman.

Gummerman, George J. (editor)

- 1991 *Exploring the Hohokam: Prehistoric Desert Peoples of the American Southwest*. Amerind Foundation New World Series No. 1. University of New Mexico Press, Albuquerque.

Haase, Edward

- 1972 Survey of Floodplain Vegetation along the Lower Gila River in Southern Arizona. *Journal of the Arizona Academy of Science* 7:75-81.

Harner, Michael J.

- 1953 Gravel Pictographs of the Lower Colorado River Region. *Reports of the University of California Archaeological Survey* 20:1-32. Papers on California Archaeology No. 21-22. University of California, Berkeley.

Haury, Emil W.

- 1976 *The Hohokam: Desert Farmers and Craftsmen, Snaketown, 1964-1965*. University of Arizona Press, Tucson.

Hayden, Julian D.

- 1965 Fragile-Pattern Areas. *American Antiquity* 31:272-276.
- 1972 Hohokam Petroglyphs of the Sierra Pinacate, Sonora and the Hohokam Shell Expeditions. *The Kiva* 37:74-83.
- 1976 Pre-Altithermal Archaeology in the Sierra Pinacate, Sonora, Mexico. *American Antiquity* 41:274-289.
- 1982 Ground Figures of the Sierra Pinacate, Sonora, Mexico. In *Hohokam and Patayan: Prehistory of Southwest Arizona*, edited by R. H. McGuire and M. B. Schiffer, pp. 581-588. Academic Press, New York.
- 1998 *The Sierra Pinacate*. Southwest Center Series. University of Arizona Press, Tucson.

Haynes, Gary

- 2002 *The Early Settlement of North America: The Clovis Era*. Cambridge University Press, Cambridge, England.

Hedges, Ken

1982 Great Basin Rock Art Styles: A Revisionist View. In *American Indian Rock Art*, Vol. 7/8, edited by F. G. Bock, pp. 205-211. American Rock Art Research Association, Tucson.

2000 Petroglyphs of the Lower Gila River, Southwestern Arizona. *Glyphs* 50(9):8-9, 14-15.

Hedges, Ken, and Diane Hamann

1992 Look to the Mountaintop: Rock Art at Texas Hill. In *American Indian Rock Art*, vol. 17, edited by D. E. Weaver, pp. 45-55. American Rock Art Research Association, Tucson.

1993 The Rock Art of White Tanks, Arizona. In *American Indian Rock Art*, vol. 19, edited by F. G. Bock, pp. 57-69. American Rock Art Research Association, Tucson.

1994 Oatman Point: New Discoveries on the Lower Gila. In *American Indian Rock Art*, vol. 20, pp. 7-12. American Rock Art Research Association, Tucson.

1995 Petroglyphs at Quail Point, Southwestern Arizona. In *Rock Art Papers*, vol. 12, edited by K. Hedges, pp. 89-94. Museum of Man Papers No. 33. San Diego.

Henderson, T. Kathleen (editor)

2011 *Archaeology at the Gillespie Dam Site: Data Recovery Investigations for the Palo Verde to Pinal West 500kV Transmission Line, Maricopa County, Arizona*. Technical Report No. 2009-06. Desert Archaeology, Inc., Tucson.

Hinton, Richard J.

1878 *The Hand-Book to Arizona: Its Resources, History, Towns, Mines, Ruins and Scenery*. Payot, Upham & Co., San Francisco.

Holmlund, James P.

1993 *The Ripley Geoglyph Complex: Results of an Intensive Survey*. Technical Report No. 93-15. Statistical Research, Inc., Tucson.

Horn & Wallace (publishers)

1961 *Confederate Victories in the Southwest: Prelude to Defeat, from the Official Records*. Horn & Wallace, Albuquerque.

Huckell, Bruce B.

1996 The Archaic Prehistory of the American Southwest. *Journal of World Prehistory* 10:305-373.

1998 A San Dieguito Site on the Lower Gila River, Southwestern Arizona. *Kiva* 64:145-174.

Hughes, Louis Cameron

1893 Report of the Governor of Arizona. In *Report of the Secretary of the Interior; Being Part of the Messages and Documents Communicated to the Two Houses of Congress at the Beginning of the Second Session of the Fifty-Third Congress*, vol. 3, pp. 300-356. House of Representatives Executive Document 1, Part 5. 53rd Congress, 2nd Session. U.S. Government Printing Office, Washington, D.C.

Johnson, Boma

- 1986 *Earth Figures of the Lower Colorado and Gila River Deserts: A Functional Analysis*. Arizona Archaeologist No. 20. Arizona Archaeological Society, Phoenix.

Johnston, Abraham Robinson

- 1848 Journal of Captain A. R. Johnston, First Dragoons. In *Notes of a Military Reconnaissance from Fort Leavenworth, in Missouri, to San Diego, in California, Including Part of the Arkansas, Del Norte, and Gila Rivers*, by Lieutenant W. H. Emory, pp. 566-614. War Department Executive Document No. 41. Washington, D.C.

Jones, Thomas E., Andrew B. Bockhorst, and Robert J. Stokes

- 2006 *Cultural Resources Survey and Historical Context of the Gillespie Dam Bridge Potential Impact Area, Maricopa County Department of Transportation, Maricopa County, Arizona*. Project No. 05-091-02. Archaeological Consulting Services, Tempe, Arizona.

Kroeber, Alfred Louis

- 1951 Olive Oatman's Return. *Kroeber Anthropological Society Papers* 4:1-18. University of California, Berkeley.

Kroeber, Alfred Louis, and Clifton Brown Kroeber

- 1973 *A Mohave War Reminiscence, 1854-1880*. Publications in Anthropology No. 10. University of California Press, Berkeley.

Kroeber, Clifton Brown, and Bernard L. Fontana

- 1986 *Massacre on the Gila: An Account of the Last Major Battle between American Indians with Reflections on the Origin of War*. University of Arizona Press, Tucson.

Laurenzi, Andy

- 2013 The Story of San Lucy Village. Electronic document available at <<http://www.archaeologysouthwest.org/2013/05/17/the-story-of-san-lucy-village/>>, accessed 10 August 2015.

Lesley, Lewis Burt (editor)

- 1970 *Uncle Sam's Camels: The Journal of May Humphreys Stacey, Supplemented by the Report of Edward Fitzgerald Beale (1857-1858)*. The Rio Grande Press, Glorieta, New Mexico.

Lewis, Kenneth E.

- 1984 *The American Frontier: An Archaeological Study of Settlement Pattern and Process*. Academic Press, Orlando.

Manje, Captain Juan Mateo

- 1954 *Luz de Tierra Incógnita: Unknown Arizona and Sonora 1693-1701*. Translated and edited by Harry J. Karns. Arizona Silhouettes, Tucson.

Mark, Robert, and Evelyn Billo

- 2016 A Pictograph at Quail Point. *Archaeology Southwest* 30(1). In preparation.



Martynec, Richard J.

- 1989 Hohokam, Patayan, or ?: Rock Art at Two Sites near Gila Bend, Arizona. In *Rock Art Papers*, vol. 6, edited by K. Hedges, pp. 16-24. Museum of Man Papers No. 24. San Diego.

Masich, Andrew E.

- 2006 *The Civil War in Arizona: The Story of the California Volunteers, 1861-1865*. University of Oklahoma Press, Norman.

McDaniel, Chris

- 2013 Local Boy Scout Pinpoints Civil War Skirmish Site. *The Yuma Sun* 29 January:Features, Desert Life. Yuma. Electronic document available at <[http://www.yumasun.com/features/local-boy-scout-pinpoints-civil-war-skirmish-site/article\\_8677060a-6eb2-11e3-8268-0019bb30f31a.html](http://www.yumasun.com/features/local-boy-scout-pinpoints-civil-war-skirmish-site/article_8677060a-6eb2-11e3-8268-0019bb30f31a.html)>, accessed 10 August 2015.

McGinty, Brian

- 2005 *The Oatman Massacre: A Tale of Desert Captivity and Survival*. University of Oklahoma Press, Norman.

McGuire, Randall H., and Ann Valdo Howard

- 1987 The Structure and Organization of Hohokam Shell Exchange. *Kiva* 52:113-146.

McGuire, Randall H., and Michael B. Schiffer (editors)

- 1982 *Hohokam and Patayan: Prehistory of Southwestern Arizona*. Academic Press, New York.

McIntyre, Allan J.

- 2008 *The Tohono O'odham and Pimeria Alta*. Images of America Series. Arcadia Publishing, Charleston, South Carolina.

Meck, Verlyne

- 2007 *Buckeye*. Images of America Series. Arcadia Publishing, Charleston, South Carolina.

Meltzer, David J.

- 2006 *Folsom: New Archaeological Investigations of a Classic Paleoindian Bison Kill*. University of California Press, Berkeley.

Merrill, Michael

- 2014 *Increasing Scales of Social Interaction and the Role of Lake Cahuilla in the Systemic Fragility of the Hohokam System (A.D. 700-1100)*. Ph.D. dissertation, School of Human Evolution and Social Change, Arizona State University, Tempe. University Microfilms International, Ann Arbor, Michigan.

Mifflin, Margot

- 2009 *The Blue Tattoo: The Life of Olive Oatman*. The University of Nebraska Press, Lincoln.

Minckley, W. L., and David E. Brown

- 1994 Wetlands. In *Biotic Communities: Southwestern United States and Northwestern Mexico*, edited by D. E. Brown, pp. 223-297. University of Utah Press, Salt Lake City.

Mitchell, Douglas R., and Michael S. Foster

- 2011 Salt, Seashells, and Shiny Stones: Prehistoric Hohokam Resource Exploitation in the Papagueria and Northern Gulf of California. *Journal of Arizona Archaeology* 1:176-184.

Murray, Vincent

- 2012 *Gila Bend*. Images of America Series. Arcadia Publishing, Charleston, South Carolina.

National Oceanic and Atmospheric Administration

- 2014 National Weather Service Forecast Office, Phoenix, AZ. Electronic document available at <<http://w2.weather.gov/climate/xmacis.php?wfo=psr>>, accessed 10 August 2015.

Newell, Frederick Haynes

- 1894 *Report on Agriculture by Irrigation in the Western Part of the United States at the Eleventh Census: 1890*. Census Office, Department of the Interior. U.S. Government Printing Office, Washington, D.C.

Officer, James E.

- 1987 *Hispanic Arizona, 1536-1856*. University of Arizona Press, Tucson.

Olberg, Charles R.

- 1923 History of Irrigation along Gila River West of Gila River Reservation. In *The Lower Gila Region, Arizona: A Geographic, Geologic, and Hydrologic Reconnaissance with a Guide to Desert Watering Places*, by C. P. Ross, pp. 96-108. Water-Supply Paper No. 498. U.S. Geological Survey. U.S. Government Printing Office, Washington, D.C.

Orsi, Richard J.

- 2005 *Sunset Limited: The Southern Pacific Railroad and the Development of the American West, 1850-1930*. University of California Press, Berkeley.

Randall, Randy Craig

- 2014 The Quest to the O. W. Randall Rock. Electronic document available at <<http://www.archaeologysouthwest.org/2014/04/07/the-quest-to-the-o-w-randall-rock/>>, accessed 10 August 2015.

Rice, Glen E., John L. Czarzasty, Christopher N. Watkins, Erica L. O'Neil, Karen Adams, David Bustoz, Richard Holloway, Gary Huckleberry, Thomas C. O'Laughlin, Manuel R. Palacios-Fest, Lydia Pyne, John Rapp, Eric Steinbach, and Arthur W. Vokes

- 2009 AZ T:13:18 (ASM), the Gillespie Dam Site. In *The Transwestern Phoenix Expansion Project, Bureau of Reclamation (Central Arizona Project), Arizona State, and Private Lands, Maricopa and Pinal Counties, Arizona Sites in the Sonoran Desert Pipeline Mile Posts (MP) 110.8 to 138.8*. Report No. 48936-C-123. TRC, Albuquerque.

Rogers, Malcolm J.

- 1939 *Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Desert Areas*. San Diego Museum Papers No. 3. San Diego.

- 1941 Aboriginal Culture Relations between Southern California and the Southwest. *The San Diego Museum Bulletin* 5(3):1-6.

Rogers, Malcolm J.

- 1945 *An Outline of Yuman Prehistory. Southwestern Journal of Anthropology* 1:167-198.
- 1958 San Dieguito Implements from the Terraces of the Rincon-Pantano and Rillito Drainage Systems. *The Kiva* 24(1):1-23.
- 1966 *Ancient Hunters of the Far West*. The Union-Tribune Publishing Company, San Diego.
- n.d. Site records for archaeological sites in the state of Arizona recorded by Malcolm J. Rogers. On file, San Diego Museum of Man, San Diego.

Ross, Clyde P.

- 1923 *The Lower Gila Region, Arizona: A Geographic, Geologic, and Hydrologic Reconnaissance with a Guide to Desert Watering Places*. Water-Supply Paper No. 498. U.S. Geological Survey. U.S. Government Printing Office, Washington, D.C.

Rue, Norman L.

- 1967 Words by Iron Wire: Construction of the Military Telegraph in Arizona Territory, 1873-1877. Unpublished Master's thesis, Department of History, University of Arizona, Tucson.

Sayles, Edwin Booth, and Ernst V. Antevis

- 1941 *The Cochise Culture*. Medallion Papers No. 29. Gila Pueblo, Globe, Arizona.

Schaafsma, Polly

- 1980 *Indian Rock Art of the Southwest*. University of New Mexico Press, Albuquerque.

Schroeder, Albert H.

- 1952 *A Brief Survey of the Lower Colorado River from Davis Dam to the International Border*. U.S. Bureau of Reclamation, Region Three, Boulder City, Nevada.
- 1961 An Archaeological Survey of the Painted Rocks Reservoir, Western Arizona. *The Kiva* 27(1):1-28.

Shaul, David Leedom, and John M. Andresen

- 1989 A Case for Yuman Participation in the Hohokam Regional System. *Kiva* 54:105-126.

Shaul, David Leedom, and Jane H. Hill

- 1998 Tepimans, Yumans, and Other Hohokam. *American Antiquity* 63:375-396.

Sheridan, Thomas E.

- 1995 *Arizona: A History*. University of Arizona Press, Tucson.

Smith, Brad

- 2006 *The Occurrences at Kenyon Station Arizona Territory*. Privately published by author, Cochise, Arizona.



Solari, Elaine Maryse, and Boma Johnson

- 1982 *Intaglios: A Synthesis of Known Information and Recommendations for Management*. In *Hohokam and Patayan: Prehistory of Southwest Arizona*, edited by R. H. McGuire and M. B. Schiffer, pp. 417-432. Academic Press, New York.

Southworth, Clay H.

- 1919 *The History of Irrigation along the Lower Gila*. In *Hearings before the Committee of Indian Affairs, House of Representatives, Sixty-Sixth Congress, First Session on the Condition of Various Tribes of Indians, Act of June 30, 1919*, Vol. 2, Appendix A, pp. 103-223. U.S. Government Printing Office, Washington, D.C.

Stein, Pat H.

- 2009 *The History and Historic Context of Site AZ T:14:96 (ASM), the Warner Goode Homestead*. In *Trails, Rock Features and Homesteading in the Gila Bend Area: A Report on the State Route 85 Gila Bend to Buckeye Archaeological Project*, edited by J. L. Czarzasty, K. Peterson, G. E. Rice, and J. A. Darling, pp. 163-180. Anthropological Research Papers No. 4. Gila River Indian Community, Sacaton, Arizona.
- 2011 *An Archival Study of AZ T:14:143 (ASM), a Historic Canal Southeast of Gillespie Dam*. In *Archaeology at the Gillespie Dam Site: Data Recovery Investigations for the Palo Verde to Pinal West 500kV Transmission Line, Maricopa County, Arizona*, edited by T. K. Henderson, pp. 165-176. Technical Report No. 2009-06. Desert Archaeology, Inc., Tucson.

Stratton, Royal B.

- 1857 *Captivity of the Oatman Girls*. Whitton, Towne & Company's Excelsior Steam Power Presses, San Francisco.

Straus, Lawrence Guy, Berit Valentin Eriksen, Jon M. Erlandson, and David R. Yesner (editors)

- 1996 *Humans at the End of the Ice Age: The Archaeology of the Pleistocene-Holocene Transition*. Plenum Press, New York.

Stromberg, Juliet C.

- 1993 *Riparian Mesquite Forests: A Review of Their Ecology, Threats, and Recovery Potential*. *Journal of the Arizona-Nevada Academy of Science* 27:97-110.

Thiel, J. Homer

- 1995 *Rock Art in Arizona: A Component of the Arizona Historic Preservation Plan*. Technical Report No. 94-6. Center for Desert Archaeology, Tucson.

Underhill, Ruth Murray

- 1979 *Rainhouse & Ocean: Speeches for the Papago Year*. American Tribal Religions Vol. 4. Museum of Northern Arizona Press, Flagstaff.

Vanderpot, Rein, and Jeffrey H. Altschul

- 2008 *Patterns of Stone: Ritual Landscapes of the Western Papaguería*. In *Fragile Patterns: The Archaeology of the Western Papaguería*, edited by J. H. Altschul and A. G. Rankin, pp. 347- 376. SRI Press, Tucson.

- Vint, James M., and Fred L. Nials (editors)  
2015 *The Anthropogenic Landscape of Las Capas, an Early Agricultural Irrigation Community in Southern Arizona*. Anthropological Papers No. 50. Archaeology Southwest, Tucson.
- Wagoner, Jay J.  
1970 *Arizona Territory 1863-1912: A Political History*. University of Arizona Press, Tucson.  
1975 *Early Arizona: Prehistory to Civil War*. University of Arizona Press, Tucson.
- Walker, Henry P., and Don Bufkin  
1986 *Historical Atlas of Arizona*. 2nd ed. University of Oklahoma Press, Norman.
- Wallace, Henry D.  
1989 *Archaeological Investigations at Petroglyph Sites in the Painted Rock Reservoir Area, Southwestern Arizona*. Technical Report No. 89-5. Institute for American Research, Tucson.  
2008 The Petroglyphs of Atlatl Ridge, Tortolita Mountains, Pima County, Arizona. In *Life in the Foothills: Archaeological Investigations in the Tortolita Mountains of Southern Arizona*, edited by D. A. Swartz, pp. 159-231. Anthropological Papers No. 46. Center for Desert Archaeology, Tucson.
- Wallace, Henry D., and James P. Holmlund  
1986 *Petroglyphs of the Picacho Mountains, South Central, Arizona*. Anthropological Papers No. 6. Institute for American Research, Tucson.
- Warren, Claude N.  
1967 The San Dieguito Complex: A Review and Hypothesis. *American Antiquity* 32:168-185.
- Wasley, William W., and Alfred E. Johnson  
1965 *Salvage Archaeology in Painted Rocks Reservoir, Western Arizona*. Anthropological Papers No. 9. University of Arizona, Tucson.
- Weaver, Donald E. Jr., Evelyn Billo, and Robert Mark  
2012 *Sears Point Rock Art Recording Project*. Report on file, Bureau of Land Management, Yuma Field Office, Arizona.
- Weber, David J.  
1982 *The Mexican Frontier 1821-1846: The American Southwest under Mexico*. University of New Mexico Press, Albuquerque.
- White, Devin A.  
2012 Prehistoric Trail Networks of the Western Papaguería: A Multifaceted Least Cost Graph Theory Analysis. In *Least Cost Analysis of Social Landscapes: Archaeological Case Studies*, edited by D. A. White and S. L. Surface-Evans, pp. 188-206. University of Utah Press, Salt Lake City.

Wilson, John P.

- 2014 *Peoples of the Middle Gila: A Documentary History of the Pimas and Maricopas 1500s-1945*. Anthropological Research Papers No. 6. Gila River Indian Community, Sacaton, Arizona.

Wright, Aaron M.

- 2014 *Religion on the Rocks: Hohokam Rock Art, Ritual Practice, and Social Transformation*. University of Utah Press, Salt Lake City.

Wright, Lyle H., and Josephine M. Bynum (editors)

- 1942 *The Butterfield Overland Mail by Waterman L. Ormsby, only through Passenger on the First Westbound Stage*. The Huntington Library, San Marino, California.



