

Human Interactions With the Environment Through Time in Southern Nevada

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Executive Summary

Southern Nevada is rich in irreplaceable cultural resources that include archeological remains, historic sites, cultural landscapes, and other areas of significance to Native Americans and other cultural groups. This chapter provides information related to Goal 2 in the SNAP Science Research Strategy, which is to “Provide for responsible use of Southern Nevada’s lands in a manner that preserves heritage resources and promotes an understanding of human interaction with the landscape.” Specifically, it addresses Sub-goal 2.1, which is to “Develop an understanding of human interactions with the environment through time” (see table 1.1). The summary presents a review of human occupation in the region as derived from studies of southern Nevada’s cultural resources. The depth with which these questions can be discussed is dependent upon the nature and extent of archeological survey coverage of the region and the nature of the resources themselves (fig. 8.1). The area shows wide ranging use of resources and environmental zones over time. The focus of this overview is on the time periods primarily informed by archeological sources, which is roughly from 11,950 BP (10,000 BC) to 100 BP (AD 1850). This period encompasses the end of the Pleistocene/beginning of the Holocene until occupation by Euro-Americans.

Focal Area

The focal area is mainly southern Nevada’s Clark County but lands in Lincoln and Nye Counties are also included, as well as a small portion of Mohave County, Arizona. The geographic focus includes areas surrounding Lake Mead, the Muddy and Virgin Rivers, and the Las Vegas Valley. It extends west to Sloan Canyon National Conservation Area, the Spring Mountains National Recreation Area, and Ash Meadows National Wildlife Refuge. Physiographic features important for human occupation in and surrounding the location include the Muddy and Virgin Mountains, Moapa and Virgin Valleys, the Valley of Fire, the Muddy and Virgin Rivers, Las Vegas Valley, and the Spring Mountains (figs. 8.2 and 8.3).

Culture History

Tables 8.1 and 8.2 outline the chronology of the region. The earliest period of human occupation in the area is the Paleo-Archaic, known primarily from diagnostic projectile points. Paleoenvironmental research in southern Nevada and the Great Basin indicates that climatic changes from a moister, temperate regime to current climatic conditions began around 13,950 BP (roughly 12,000 BC) with deglaciation of the mountains within the area.

Southern Nevada Archeological Surveys

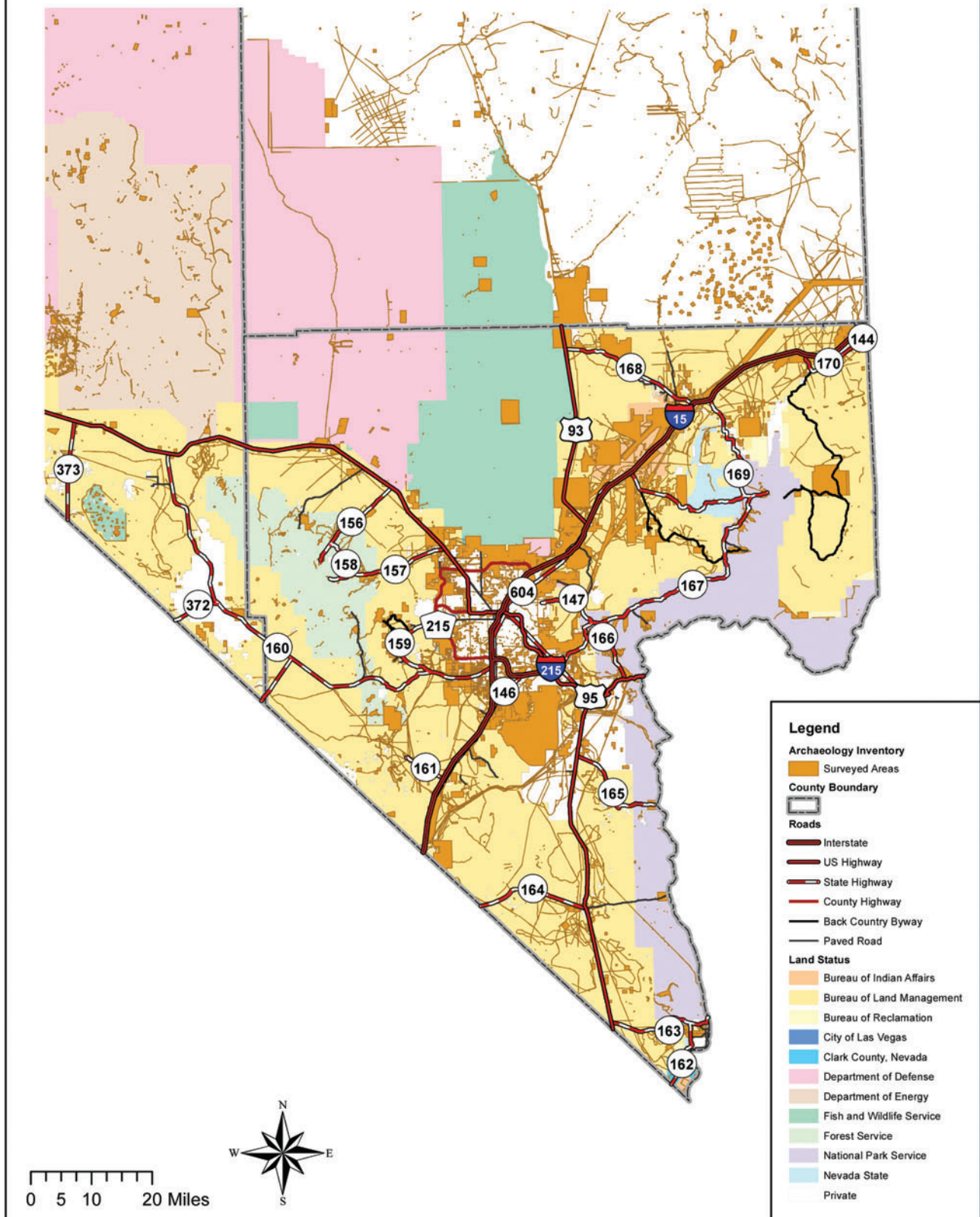
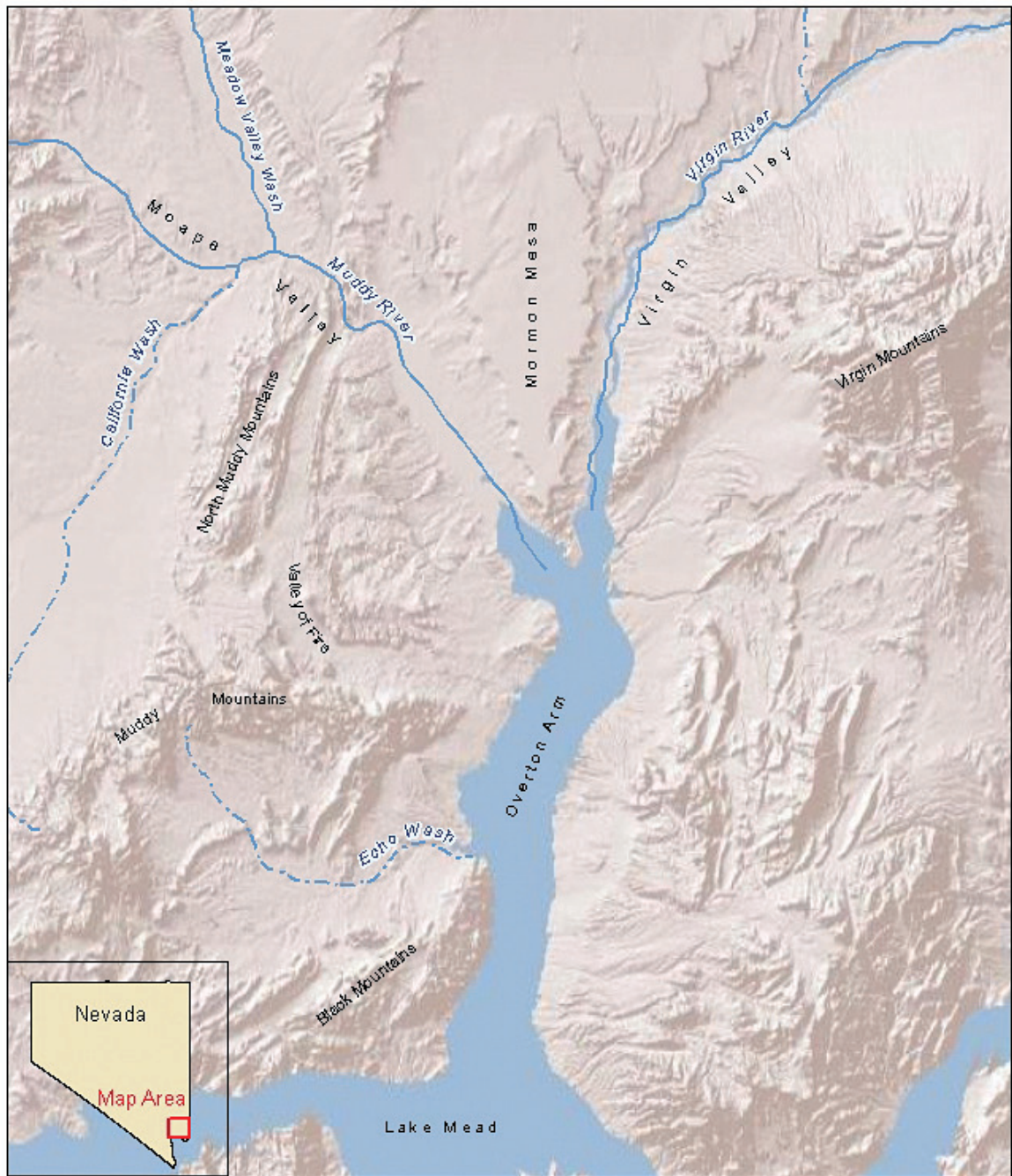
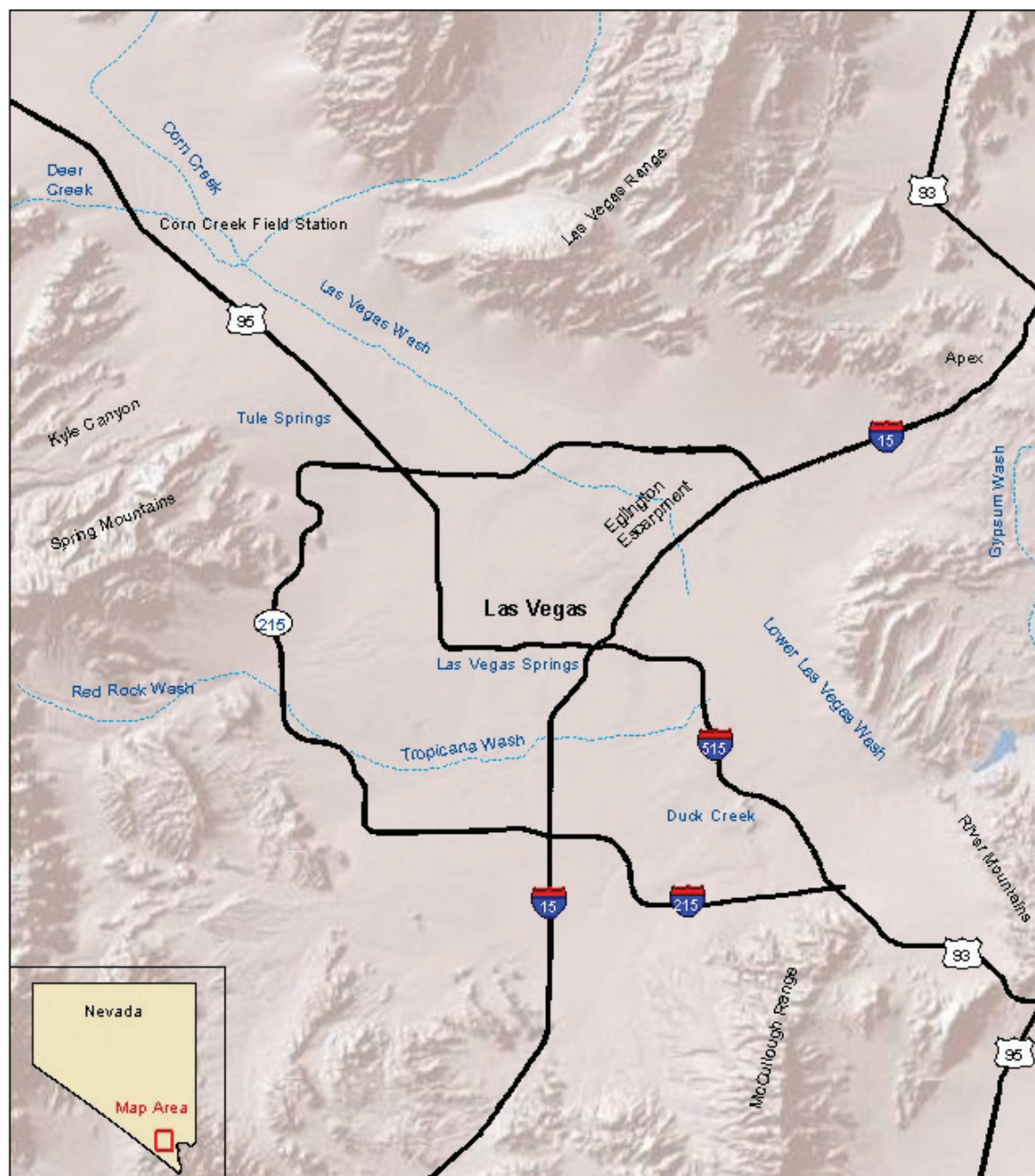


Figure 8.1—Map of southern Nevada archeological survey coverage.



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Figure 8.2—Map of the Moapa and Virgin Valleys.



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Figure 8.3—Map of the Las Vegas Valley.

Table 8.1—Chronological sequence for the Moapa and Virgin River Valleys (adapted from Ahlstrom and Roberts 2012¹; Ezzo 1995²; Harper and others 2006³; Lyneis 2012⁴). Question marks indicate uncertain date range.

Period	Subperiod	Date range	Source
Paleo-Archaic		11,950-7450 BP (10,000-5500 BC)	3
	Paleo-Indian	11,450-10,950 BP (9500-9000 BC)	2, 3
	Early Archaic	11,150-7450 BP (9200-5500 BC)	3
Archaic	Middle Archaic	7450-4950 BP (5500-3000 BC)	3
	Late Archaic	4950-2350 (?) BP (3000-400 (?) BC)	3
	Late Archaic/Early Agricultural	2350 (?) -1450 BP (400 (?) BC-AD 500)	3
	Virgin Branch	1600-750/650 BP (AD 350-1200/1300)	1, 3, 4
Virgin Branch	Moapa phase	1600-1400 BP (AD 350-550)	3
	Muddy River phase	1400-1200 BP (AD 550-750)	3
	Lost City phase	1200-800 BP (AD 750-1150)	3
	Mesa House phase	800-750/650 BP (AD 1150-1200/1300)	1, 3, 4
Late Prehistoric and Protohistoric		750/650-150 BP (AD 1200/1300-1800)	3, 4
Historical		150-0 BP (AD 1800-1950)	3

Table 8.2—Chronological sequence for the Las Vegas Valley (adapted from Roberts and Ahlstrom 2007).

Period	Subperiod	Date range
Paleo-Archaic		11,450-7450 BP (9500-5500 BC)
	Paleo-Indian	11,450-10,950 BP (9500-9000 BC)
	Early Archaic	11,150-7450 BP (9200-5500 BC)
Archaic	Middle	7,450-4950 BP (5500-3000 BC)
	Late	4950-1450 BP (3000 BC-AD 500)
	Terminal Late	1949-1450 BP (AD 1-500)
Ceramic	Early	1450-950 BP (AD 500-1000)
	Middle	950-450 BP (AD 1000-1500)
	Late	450-100 BP (AD 1500-1850)
Historical	Early	450-100 BP (AD 1500-1850)
	Late	100-50 BP (AD 1850-1900)

A continuing trend toward aridity and drying of pluvial lakes is indicative of southern Nevada's climate in the Holocene, with an increase in succulent plants in lower environments and a movement of woodlands to higher elevations. Clovis points attached to the thrusting spear or atlatl (spear-thrower) are representative of the Paleo-Indian occupation found across the Americas and are generally considered to represent the activities of nomadic groups hunting and scavenging Pleistocene megafauna, represented by mammoth, camel, horse, and bison. Paleo-Indian sites include camps, kill and butchering locations, and isolated projectile points.

The Archaic periods represent adaptation to Holocene animal and plant resources similar to those of the present. Site locations indicate that groups continued a mobile strategy seasonally exploiting ecological zones from a wide range of elevations and landforms. During these times, plant procurement and processing tools, storage cists, and snares and traps for small game came into use. In earlier portions of the period, sites seem to be located near water sources such as drainages and remnant pluvial lakes. Unusually arid conditions are thought to drive the settlement pattern. Later portions of the period are described as having a climatic shift toward greater precipitation and an increasing diversity of plant resources available to southern Nevada groups, with sites occurring in riverine areas, lowland zones, and mountains. Upland sites were also more frequently used in later portions of the period. Both of these trends suggest the growing importance of plant foods. Sites include caves, rockshelters, campsites, roasting pits, hearths, and scatters of flaked and ground stone.

The following periods represent the beginnings of agriculture in the region and its growing importance as a subsistence strategy, although exploitation of wild resources coupled with seasonal movement continued to play an important role in food procurement. These time periods represent the beginning of the Virgin Branch Ancestral Puebloan occupation of the area. The Virgin Branch is most strongly represented in the Moapa and Virgin River Valleys, expanding its occupational range into the Las Vegas Valley during the later portions of the period when population peaked in the area. Key features include the appearance of the bow and arrow, ceramics, two-handed manos, and various types of metates (grinding implements). Habitations consisted of pit structures with above-ground, surface structures appearing in the later portions of the period. Site location in relation to the best agricultural land in the valley indicates the growing importance of agriculture during these times.

By approximately 750/650 BP (AD 1200/1300), the Virgin Branch cultural tradition was no longer present in southern Nevada. With the decline of agriculture as a major subsistence practice in the area, archeological remains reflect a return to a more nomadic foraging way of life that was supplemented by smaller-scale agriculture. This adaptation is associated with the Southern Paiute, who were residents of the region at European contact and who occupy southern Nevada today.

European Contact

The first reported direct European contacts were with the Spanish in the late 1700s with the expeditions of Garcés and of Domínguez and Escalante. After the explorers, trappers, and traders extended their operations into the area, an active slave trade began that lasted from the late 1700s to the mid-1850s. Captives, often Southern Paiute, were transported along the Old Spanish Trail between California and New Mexico. This slave trade seriously impacted the people of the Moapa and Las Vegas Valleys forcing them away from favorable agricultural lands, depopulating some Southern Paiute bands, and increasing their hostility and fear of travelers and other outsiders. Slave raiding continued in the region until the mid-1850s when steps taken by the Mormons and the territorial legislature ended the trade.

During the 1850s, the Old Spanish Trail became the Mormon Road, which brought settlers and other travelers to the area. Increased Euro-American settlement displaced the Southern Paiute from long-used agricultural, foraging, and hunting lands, which became depleted by livestock grazing and larger farming operations. Interactions with Mormon settlers increased so that by the 1870s the majority of Southern Paiute had direct contact with Euro-Americans, with some settling near Mormon communities.

Expansion of Euro-American settlement led to increasing hostilities. In 1873, an executive order was issued setting aside 3,900 square miles (10,101 square kilometers) to form the Moapa River Reservation. The reservation was expanded in 1874 then sharply reduced to 1.5 square miles (2.4 square kilometers) in 1875 to accommodate complaints from white settlers within the reservation lands. In 1982, the reservation was increased to its present size of 112 square miles (180 square kilometers) after a petition to congress from the Moapa Band of the Paiute.

In 1951, the Southern Paiute filed a claim with the Indian Claims Commission that was resolved in 1965 with a monetary settlement. Portions of the money from the settlement were invested in improvements to the reservation's business enterprises. In 2011, there were 287 enrolled Tribal members with approximately 180 members living on the reservation. The total population was estimated at 425 residents (<http://www.xeri.com/Moapa/moapa.htm>). The Southern Paiute have persevered over the years in the face of many obstacles and hardships associated with Euro-American occupation and settlement of the area and are actively working to preserve their heritage in publications detailing their history and culture.

Knowledge Gaps and Management Implications

Knowledge gaps concerning southern Nevada's past, as derived from the archeological record, result from several sources. Chief among them are the extent of archeological survey coverage (the most common means of identifying cultural resources) and the nature of archeological survey itself. Approximately 783,756 acres (317,174.8 hectares) or 7 percent of the area under consideration have been surveyed for archeological resources (fig.8.1). Thus, a large portion of the area has received no coverage.

Because of the sparse nature of archeological survey coverage, basic inventories of cultural resources are needed. In particular, inventories that are not associated with planned development projects are desirable to expand surveyed lands and address gaps in coverage. Complete survey of the public lands in the study area is not a realistic goal owing to the cost involved. SNAP offices manage over 7 million acres—which is a huge area—to meet the “complete survey” expectation that would require over 500 man-years to survey with 30-meter transects at 2-miles per hour. In addition, cultural resource recording standards, as well as the sites themselves, will continue to change over time. A more realistic goal for regional-scale inventory would be to expand and improve the sample of lands that have been examined and sites that have been located and recorded. Because cultural resources represent finite, non-renewable resources that must be protected for the future, an important goal of inventory is to provide baseline information for measuring changes in the condition of sites through time.

In addition to the basic need for greater survey coverage, several studies have identified both specific and more general information gaps and have provided recommendations for addressing them. A major recommendation from the working group on the Information and State-of-the-Science Summary developed for the Ecosystem Health Assessment of Southern Nevada Project was to prepare a new Historic Context for the region that would structure and promote research important to the agencies. Such a context has been prepared, is currently in draft form, and is used in this review.

Other general recommendations from the working group include compiling region-wide data sets featuring both survey and excavation data. This data base would include layers suitable for GIS with information on plant communities, springs, surface geology, soils, and other pertinent resource information reflective of the close association between archeological sites and their environmental surroundings. The group also recommended producing “finder's guides” to identify locations of existing collections

of materials and records to assist researchers in locating available information on the regions' cultural resources. More detailed discussions of needed research are found in the draft Prehistoric Context for Southern Nevada.

Managers in the area must take the limitations of archeological surveys into consideration when planning ground-disturbing projects to ensure that all sites are protected and free from damage. Managers in the area must take the limitations of archeological surveys into consideration when planning ground-disturbing projects to ensure that all sites are protected and free from damage as required, or that potential damage is mitigated by data recovery as mandated under Federal regulations.

Interpretive scenarios must also take into account the ongoing possibility that discovery of previously unknown resources will alter time lines and chronological schemes. The previously discussed recommendations made in the Draft Prehistoric Context for Southern Nevada address these issues and make recommendations to assist managers in dealing with the difficulties inherent in interpreting the archeological record. For a more in-depth discussion of the topics reviewed in this summary, see *Chapter 8, Human Interactions With The Environment Through Time* in "The Southern Nevada Agency Partnership Science and Research Synthesis—Science to support land management in Southern Nevada" (RMRS-GTR-303).

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