

# **Galisteo Basin Archaeological Sites Protection Act**

## **General Management Plan**

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## EXECUTIVE SUMMARY

This general management plan provides an outline for the implementation of the Galisteo Basin Archaeological Sites Protection Act (the Act) (Appendix A). The Act (Public Law 108-208), which became law on March 19, 2004, requires the Secretary of the Interior to manage and protect 24 nationally significant archaeological sites, including large prehistoric and historic pueblos, Native American rock art, and early Spanish Colonial settlements. The Secretary of the Interior designated the Bureau of Land Management (BLM) Taos Field Office as lead federal agency for this effort. The Act withdraws public lands within these sites from development and mineral entry, and authorizes the BLM to develop cooperative agreements with other landowners to provide for the collaborative protection of these important cultural places. Other mechanisms for land protection include fee acquisition, donation, and exchange. The Act mandates that the BLM prepare a general management plan for the identification, research, protection, and public interpretation of those sites included in the Act that are on Federal land and for sites on non-Federal (state, county, or private) lands for which the Secretary of the Interior has entered into cooperative agreements.

This management plan provides the cultural and historical context for the sites designated by the Act and summarizes the current condition of each site, as well as the associated challenges to preservation and protection. As important, this plan provides for the implementation of the Act and prescribes long-term general management of the sites it designates. These prescriptions include erosion control, fencing, pest control, law enforcement patrol, monitoring, and other various site protection measures by site, but the majority of the prescriptions set forth in this general management plan are broadly applicable to all or most of the 24 designated protection sites, rather than specific to individual sites. The plan calls for the development of site-specific management plans for each protection site to provide tailored management prescriptions for each of these unique sites.

The general management plan provides for the development of conservation easements for protection sites and portions thereof located on private lands. Public visitation is encouraged at eight of the protection sites (seven through guided tours only), but not encouraged at the remaining sites. The plan includes developing educational and off-site interpretive materials and facilities to engage and educate the public without degrading the resources themselves. Research themes and procedures for permitting of research are also provided, and the use of invasive or ground-disturbing research techniques is discouraged.

The plan relies heavily on collaboration with landowners, Native American pueblos and tribes, government agencies, heritage resource professionals, organizations, and other members of the public to support and assist the BLM with implementation of the Act. The plan provides selection criteria and procedures for additions and deletions to the list of sites designated by the Act and allows for traditional cultural properties to be included if associated with archaeological sites. A policy for treatment of burials and human remains is also provided, in accordance with applicable laws.

The plan calls for two additional sites (Colina Verde and Galisteo Spring) to be protected by the Act, the deletion of one site (Rote Chert Quarry) from the designated protection list, and boundary adjustments for all but one of the currently designated sites to more accurately delineate their respective footprints. Preliminary recommendations for further evaluation for addition to the Act are also made for four sites (Pueblo La Bajada, Wildhorse Mesa Group, Mt. Chalchihuitl, and LA 149). This plan should be updated every five years; a list of recommended additions and deletions should be forwarded to Congress every five years.

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- B Example Cooperative Agreement
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- D Sites Considered for Possible Addition to the Act (For Agency Use Only)
- E Maps Showing Boundary Adjustments for Protection Sites (Detached – Available from the BLM)



## **CHAPTER 1 Introduction**

The area between Santa Fe and Albuquerque, New Mexico, embodies a rich cultural heritage, including long-term Native American occupation and use, as well as contact period Spanish activity and historic-era homesteading and ranching. The material manifestations of this heritage are found throughout the Galisteo Creek and Santa Fe River watersheds in the form of archaeological sites, trails, and petroglyphs (Figure 1.1–Figure 1.4). Less-tangible heritage resources are also present, including traditional hunting and gathering areas and other culturally significant places. Together, these important resources comprise a unique cultural landscape deserving of long-term protection and collaborative management.

This general plan provides a programmatic road map for the management of selected archaeological resources in the Galisteo Basin area, focused initially on 24 sites identified by the Galisteo Basin Archaeological Sites Protection Act (the Act). The Act (16 United States Code [USC] 470aa; Public Law 108-208) (Appendix A), which became law on March 19, 2004, requires the Bureau of Land Management (BLM), through the Secretary of the Interior, to prepare a general management plan for the identification, research, protection, and public interpretation of those sites included in the Act that are on Federal land and for sites on non-Federal (state, county, or private) lands for which the Secretary of the Interior has entered into cooperative agreements.

None of the 24 designated Galisteo Basin Archaeological Protection Sites (protection sites) are located entirely on Federal lands, including those administered by the BLM. All of the sites require cooperative agreements among the BLM, private landowners, and other government agencies. The BLM has initiated communications with all of the private landowners involved, and to date several have entered into cooperative agreements. The Act also requires ongoing identification of new sites to be considered for addition to the list of designated sites, and stipulates that sites can be withdrawn from this list as appropriate. Acquisition of lands containing currently listed protection sites or sites recommended for addition is another option for BLM management of protection sites authorized by the Act; all acquisitions will require the consent of the owner, whether the acquisition is made by donation, purchase at fair market value, or exchange. Additions require Congressional approval, but withdrawals of private land within site boundaries designated by the Act do not require Congressional approval. Rather, the Secretary of the Interior is required to remove such lands immediately upon written request from the landowner. Sites can also be withdrawn from protection under the Act by Congressional approval.

The BLM Taos Field Office has developed and entered into cooperative agreements with several non-Federal public landowners and is currently negotiating cooperative agreements with others. This general management plan addresses the BLM portions of sites and those where agreements are in place and provides guidelines for the management of the remaining sites. The management plan outlines procedures and protocols for future communications with landowners, Native American entities, and other stakeholders, and it sets priorities for preservation and protection work, as mandated by the Act. Although each of the protection sites designated in the Act is addressed in this general management plan, this document serves to provide broad, programmatic direction rather than detailed management prescriptions for each site. Individual, site-specific management plans will be developed in the future in accordance with guidelines presented in this general management plan.



**Figure 1.1. View south from Structure 6, Burnt Corn Pueblo.**  
Photo courtesy of Office of Archaeological Studies, New Mexico Department of Cultural Affairs (OAS).



**Figure 1.2. Aerial view of Pueblo Largo looking northeast toward Arroyo Estacada.**  
Photo courtesy of OAS.



**Figure 1.3. Dutton's unfilled Roomblock V, Pueblo Largo.**  
Photo courtesy of OAS.



**Figure 1.4. Shield-bearing figure, Comanche Gap Petroglyphs.**  
Photo courtesy of OAS.

In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, a supporting environmental review will assess the potential impacts associated with the development and implementation of the management plan. As the lead Federal agency, the BLM has determined that an environmental assessment (EA) is the appropriate level of NEPA documentation for evaluation of potential environmental effects resulting from implementation of the management plan. The management decisions included in this plan constitute the proposed action to be analyzed in the EA.

## **1.1 DOCUMENT STRUCTURE**

The organization of this management plan is based on the requirements of the Act, as well as collaboration with the public, including a volunteer group of concerned heritage resource professionals, Native American representatives, site stewards, and staff from various agencies and organizations. Following the Introduction (Chapter 1), Chapter 2 (Prehistory and History of the Galisteo Basin) provides the reader with a context for understanding the importance of the sites designated by the Act. Chapter 3 (Existing Conditions) summarizes the results of the site assessment project completed by the Office of Archaeological Studies, New Mexico Department of Cultural Affairs (OAS) in 2007–2008 to characterize each site regarding its physical constituents, land ownership, and any threats or challenges to preservation and protection. Chapter 4 (Protection and Preservation) outlines measures for implementing the primary purpose of the Act: protection of the listed sites and the lands that they occupy. The Act also calls for ongoing research at the sites it protects; Chapter 5 (Research) provides guidelines for the review and approval of proposed research projects at protection sites. Chapter 6 (Interpretation, Education, and Visitor Use) addresses issues associated with experiencing and learning from the protection sites, including site visitation in some cases, as well as off-site interpretation. Legislative and administrative compliance is the focus of Chapter 7, which outlines protocols for addressing boundary adjustments, additions, and deletions, as well as compliance with other applicable laws, ordinances, and regulations. Issues specific to the Native American community are addressed in Chapter 8, which provides a synopsis of tribal concerns and recommendations, as well as guidance with regard to access and discoveries of human remains. Chapter 9 (Plan Implementation) summarizes management actions set forth in previous chapters, proposes collaboration measures, and addresses funding and the need for site-specific management plans, as well as regular updates of this general management plan. Chapter 10 provides a conclusion to the general management plan, and Chapter 11 presents the references cited in this document.

## **CHAPTER 2 Prehistory and History of the Galisteo Basin**

People have lived in, traveled through, and used the resources of the Galisteo Basin for thousands of years, and the cultural history of the basin unfolded on a unique stage within the broader prehistoric and historic developments of the northern Rio Grande region. The concentration of prehistoric and historic occupation and activity over a long span of time makes the Galisteo Basin an ideal setting to investigate how human groups of differing levels of sociopolitical complexity and cultural and ethnic origin adapted to changes in the culture and natural environments of the Southwest. The Galisteo Basin's geographic location and available resources attracted and sustained many large-scale settlements, especially those of Native peoples in late prehistoric and early historic times. These settlements acted as beacons for other groups, from as far off as the Great Plains, who frequented the basin to establish and maintain social and economic relationships and networks with the local inhabitants. The Galisteo Basin is a unique microcosm for understanding the development and interaction of indigenous precontact societies and their adaptations to European contact. Among the more significant cultural resources of the basin are the sites designated by the Act, especially Pueblo Blanco, Pueblo Galisteo/Las Madres, San Lazaro Pueblo, the San Cristobal Pueblo, and the Las Huertas sites, to name a few (Toll and Badner 2008). The Galisteo Basin's repeated and diverse occupational history has and will continue to allow archaeologists to thoroughly address archaeological and anthropological questions regarding the origin and nature of the prehistoric and historic occupations within the Galisteo Basin and across the greater northern Rio Grande region.

This chapter presents the prehistoric and historic culture history of the Galisteo Basin. The discussion begins with a brief description of the Galisteo Basin's nomadic hunter-gatherer groups. Then the more sedentary agricultural cultures are discussed, followed by the rapid rise of the pueblo communities. The plan then provides a description of how pueblo life changed with the initial Spanish contact, occupation, and expansion of these settlements. The chapter concludes with a brief description of the later historic period occupation and history of archaeological activities within the Galisteo Basin.

### **2.1 HUNTER-GATHERERS AND EARLY FARMERS (10,500 B.C.–A.D. 400)**

Human prehistory in the Galisteo Basin began around 10,500 B.C., at the end of the Late Pleistocene epoch, with the Paleoindian cultural tradition. This tradition includes the Clovis (10,000–9000 B.C.), Folsom (9000–8000 B.C.), Plainview/Belen (8000–7000 B.C.), and Cody/Jay (7000–5500 B.C.) cultural complexes (Bradley 1993; Irwin-Williams 1979; Johnson and Holliday 1980; Judge 1970). These groups were highly mobile hunter-gatherers focused on a broad-spectrum subsistence strategy that included the hunting of large-bodied mammals, such as mammoth and bison (Judge 1973). Whereas the most notable artifacts of the Paleoindian peoples are long, fluted, lanceolate-shaped projectile points (Clovis and Folsom types), inhabitants also maintained a diverse artifact tool kit made of lithic, bone, and perishable materials. Low population densities prevailed among these earliest known Americans, who were organized as small-scale, residentially mobile, and socially fluid groups. These conditions, along with wide-ranging exchange and interaction networks, worked to homogenize cultural markers, such as projectile point styles, over vast geographic areas. Moreover, high mobility and low population density meant that known Paleoindian sites are rare and have low archaeological visibility. This

is especially true in the Galisteo Basin and Santa Fe regions, where Paleoindian sites are exceedingly rare (Elliott 1988). Approximately three known Paleoindian sites are located in the regional vicinity of the Galisteo Basin: La Caja del Rio (LA 112527) north of Santa Fe, and the Lucy site (LA 4974) and Manzano Cave (LA 4932) located north of the Estancia Basin (Stuart and Gauthier 1988; Williams 1996 [cited in Post 2001:44]).

The Archaic tradition (5500 B.C.–A.D. 400) begins during the Holocene epoch, with a shift to decidedly drier and warmer climates following the end of the Pleistocene and extinction of ice-age megafauna. The most widely used chronology for the Archaic is Irwin-Williams’ (1973) Oshara tradition, based on data from the Arroyo Cuervo area in the nearby Rio Puerco drainage. Irwin Williams’ chronology offers a temporal framework that covers the entire Archaic tradition in a sequence of phases (Table 2.1).

**Table 2.1. Archaic Periods and Phases for Northern New Mexico**

Period	Phase	Dates
Early Archaic	Jay	5500–4800 B.C.
	Bajada	4800–3200 B.C.
Middle Archaic	San José	3200–1800 B.C.
Late Archaic	Armijo	1800–800 B.C.
	En Medio	800 B.C.–A.D. 400

Source: Irvin-Williams (1973).

Exceedingly dry conditions prevailed throughout most of the Early Archaic period (Antevs 1948, 1955). In the Albuquerque Basin, Early Archaic sites are rare, and there are no radiocarbon dates for the Jay phase and few for the Bajada phase (Railey 2011). To the north, in the Jemez Mountains and the upper Rio Grande valley, Early Archaic sites become more common and include both Jay and Bajada phase components (Acklen 1997; Anscheutz 1998; Post 2000, 2002a; Renaud 1942, 1946; Vierra 2008a). North of the Santa Fe River, Early Archaic radiocarbon dates have been obtained from pit features that lacked diagnostic artifacts (Anscheutz 1998; Railey 2007).

Following the markedly dry conditions of the Early Archaic period, the climate ameliorated during the Middle Archaic (3200–1800 B.C.) and Late Archaic (1800 B.C.–A.D. 400) periods, with generally higher precipitation levels. Still, climatic fluctuations during these periods continued to challenge the adaptive ingenuity of native peoples. Concurrent with these changes, the Archaic tradition highlights several salient trends. One is population growth, evidenced by the much larger numbers of sites relative to the Paleoindian period. Another involves a progressive decrease in residential mobility, indicated by the appearance of preserved structure remains and other facilities (including storage pits) that suggest a more substantial and long-term commitment to at least certain settlements and localities.

To feed their increasing populations living in ever-smaller territories, Archaic peoples intensively utilized a wide variety of plants and animals, and eventually adopted maize and began farming. Wills’ (1988, 1992, 1995) frequently cited studies suggest that the first appearance of domesticated plants occurred in the Mogollon Highlands between 1500 and 1000 B.C., and that early farming was integrated into the seasonal scheduling of hunting and gathering in upland, piñon-juniper zones. It is now known that maize entered the Southwest at an earlier

date and that some of the earliest farming was in lowland river valleys. In the Tucson area, maize was present by 2100 B.C. (Mabry 2005), and other evidence from northern New Mexico suggests it may have been present even earlier. In the Albuquerque Basin, possible maize phytoliths were recovered from a stratigraphically buried feature that was radiocarbon dated to cal. 3310–3230 B.C. and 3110–2910 B.C., which straddles the boundary between the Early and Middle Archaic periods (Jones-Bartholomew et al. 2002). To the northwest, discoveries in the San Juan Basin indicate maize was indeed present in the region by the Middle Archaic period. Maize pollen-bearing organic particles from packrat middens in Chaco Canyon have yielded a series of dates extending back to before 2500 B.C. (Hall 2010). In the Fruitland area of the northern San Juan Basin, maize pollen and one charred piece of possible maize were identified in samples from several late Middle Archaic contexts (Honeycutt and Fetterman 1994; Horn et al. 2002). In the Rio Puerco valley and Jemez Mountains, maize is definitely present by 1400–1200 B.C. (Vierra and Ford 2007:119), and by 1200 B.C., irrigation farming was probably widespread in the Southwest, based on evidence from the widely separated Tucson and Zuni areas (Damp et al. 2002; Mabry 2002, 2005; Zuni Cultural Resource Enterprise 2000). In the Albuquerque Basin, most dates on maize fall after 1400 B.C., and the incidence of maize increases over the course of the Late Archaic period (Elyea 1999; Gerow 1998; Jones-Bartholomew et al. 2002; Polk 1999; Toll 1998; Walth and Railey 2011).

Just north of the Galisteo Basin, along the Santa Fe River, are two important Late Archaic sites that date from the Armijo phase (1800–800 B.C.). At the Tierra Contenta site, five pit structures were excavated, some of which had extended entryways (Schmader 1994a). At the nearby Airport Road site (LA 61282) excavations uncovered a substantially occupied camp with pit features, midden areas, abundant faunal remains, and a diverse artifact assemblage (Post 2002b). Maize is lacking in these sites, however. The Archaic tradition is not well known in the Galisteo Basin area, although there are artifact scatters and other sites with predominantly Archaic components, such as Salado Rock Shelter (LA 134770) (Toll and Badner 2008:139). Diagnostic and probable Archaic artifacts also have been found within and near later pueblo period sites, such as at La Cienega Pithouse Village (LA 166), Pueblo Shé (LA 239), Pueblo Colorado (LA 62), San Cristobal Pueblo (LA 80), the Arroyo Hondo Pueblos (LA 12 and 76), and Espinosa Ridge Site (LA 278) (Toll and Badner 2008). Some of the rock art at the Petroglyph Hill site (LA 148959) is completely patinated, and thus probably dates from the Archaic time frame (Toll and Badner 2008:211–234).

## **2.2 PUEBLO VILLAGE FARMERS (A.D. 400–1598)**

The Ancestral Pueblo tradition marks a time of accelerating population growth, greater sedentism, the appearance of ceramic technology, increasing dependence on agriculture and storage of cultivated plant foods, and remarkable developments in architecture, sociopolitical organization, and cultural marker traits. The bow and arrow probably also arrived during the early portion of this time frame. With its spectacular pueblo ruins, dating from the latter half of this time span, the Ancestral Pueblo is the cultural tradition for which the archaeology of the American Southwest is best known.

There are two predominant chronologies for the Ancestral Pueblo time frame in northern and northwestern New Mexico. The first is the Pecos Classification (Kidder 1924), which encompasses six time periods: Basketmaker III (A.D. 600–750), Pueblo I (A.D. 750–900), Pueblo II (A.D. 900–1100), Pueblo III (A.D. 1100–1300), Pueblo IV (A.D. 1300–1600), and Pueblo V (the historic period pueblos). The second is an alternative to the Pecos Classification and divides the Ancestral Pueblo tradition in the northern Rio Grande valley into three pre-Spanish contact periods: Developmental (A.D. 400/600–1200), Coalition (A.D. 1200–1325), and Classic (A.D. 1325–1598) (Wendorf and Reed 1955). The main differences between the two sequences are the prolonged persistence of pit house settlements in the northern Rio Grande valley and continued occupation of this same region long after the San Juan Basin was abandoned. The culture history presented here follows the Wendorf and Reed (1955) chronology for the three pre-Spanish contact periods, as it is more widely used by archaeologists working in the Galisteo Basin.

### **2.2.1 DEVELOPMENTAL PERIOD (A.D. 600–1175)**

The Developmental period is coeval with the Basketmaker III and Pueblo I–II periods and the first half of the Pueblo III period of the Pecos Classification. This lengthy period represents a time of gradual transition from the Late Archaic and witnessed the introduction of ceramics and the bow and arrow and the construction of more elaborate, substantial pit houses (Cordell 1979:42; Schmader 1990b). Wendorf and Reed (1955) subdivide the period into Early Developmental (A.D. 600–900) and Late Developmental (A.D. 900–1200).

The Early Developmental period witnessed increased sedentism made possible by greater reliance on agriculture. Increased precipitation during this period enhanced the prospects of intensified maize cultivation. In the Albuquerque Basin, a more sedentary lifeway is suggested by the presence of pottery, larger and more elaborate pit structures that were occupied for longer periods of the year, and increased numbers of storage cists both inside and outside pit houses (Allen and McNutt 1955; Condie 1987; Frisbie 1967; Hammack et al. 1983; Peckham 1957; Reinhart 1968; Schmader 1988, 1990a, 1990b, 1990c, 1993, 1994b; Schorsch 1962; Walth 1999).

To the north, Early Developmental pit house sites are also common in the Santo Domingo Basin (Lakatos 2007), just west of the Galisteo Basin. But further north, evidence suggests that an Archaic-like pattern of mobile hunting and gathering may have persisted in the Santa Fe area and upper Rio Grande valley until almost A.D. 900 (Lakatos 2007; Post 2002a:42–43; Vierra 2008b:77; Vierra and Ford 2007). Along the Santa Fe River and in the Galisteo Basin, Early Developmental sites are less common than in the Albuquerque area, and Post (2001) suggests that people living in neighboring areas used the Santa Fe Basin mostly as resource-procurement zone. Peckham (1954) excavated a site near San Felipe Pueblo that contained an elaborate subterranean kiva over 5 meters (m) in diameter, and at least three aboveground rooms. Based on the presence of Red Mesa Black-on-white pottery, Wendorf and Reed (1955:139–140) suggest this site dates from around A.D. 900, at the end of the Early Developmental and beginning of the Late Developmental time frame.

After A.D. 900, sedentary farming communities became established in the Santa Fe area and the upper Rio Grande valley all the way to Taos and beyond (Anscheutz 1984; Elliott 1988:18; Lakatos 2007; Post 2001:27; Scheick 2007; Stubbs and Stallings 1953; Wendorf and Reed 1955:140–143). During this period, sites became larger and some contained clusters of surface room blocks and kivas, along with pit houses, with most sites consisting of small, 10- to 15-room constructions, but there are also some larger sites with over 100 rooms with one to more than four kivas (Wendorf and Reed 1955:140–141). Architectural construction was mostly coursed adobe or jacal, sometimes with cobble foundations. Pueblo architecture apparently became more common after A.D. 1050 (Wendorf and Reed 1955:142). Common pit house features include four roof supports, a sipapu, curbed and uncurbed fire pits, an ash pit, ladder holes, and slab ventilators. Unlike contemporary pit houses in the Four Corners region to the west, those in the northern Rio Grande valley typically lack benches (Lakatos 2007). Distinctive black-on-white wares of this period include Red Mesa, Kwahe'e, and Socorro. In the Albuquerque Basin to the south, small clusters of relatively deep, round to rectangular pit houses of the Socorro phase typify the Late Developmental period (e.g., Acklen et al. 1995), suggesting little change from Early Developmental times.

The Galisteo Basin was in step with trends in the broader Santa Fe and upper Rio Grande area, with Late Developmental period sites more common than Early Developmental ones. Late Developmental occupations have been documented at Pueblo Colorado (LA 62) on La Jara Arroyo, and the La Cienega Pueblo (LA 3) and La Cienega Pithouse Village (LA 166) along the Santa Fe River (Toll and Badner 2008:95, 247–254, 275–287). At Pueblo Colorado, the Late Developmental component dates A.D. 1075–1175, and consists of a

habitation area represented by a moderately dense artifact scatter and dispersed sandstone cobbles within a stand of saltbush. Although no “mound” or depressions were observed, this area likely contains 6 to 10 jacal rooms and 1 to 2 pit structures. (Toll and Badner 2008:95)

The La Cienega Pueblo “contains several prehistoric room blocks, depressions, petroglyphs, and other features, including a probable water catchment feature, a possible windbreak, and bedrock grinding slicks” (Toll and Badner 2008:277), and the pottery suggests the main occupation spanned the Late Development to Coalition periods. The nearby La Cienega Pithouse Village

is a multi-structure site containing surface roomblocks and pit structures atop a small mesa. The mesa is inside a bend on the left bank of the Santa Fe River directly above the river. Basalt blocks constitute the main building material, and there are several roomblocks with possible plaza areas. The pit structures may be a combination of domestic and ceremonial subterranean constructions. (Toll and Badner 2008:247)

### **2.2.2 COALITION PERIOD (A.D. 1175–1325)**

In northern New Mexico, the Coalition period (A.D. 1175–1325) was a time of significant change. This period begins as the Chacoan system was declining in the San Juan Basin to the west and coincides with drought conditions that pushed much of population in the northern Southwest to upland areas (Crown et al. 1996; Stuart 2000). The use of organic pigment on painted vessels spread to the northern Rio Grande from the west, and Galisteo Black-on-white is one of these organic-painted types that become common in the latter portion of this period. Numerous large pueblo sites, some with hundreds of rooms, were constructed during this period,

although most pueblos were linear or L-shaped room blocks containing between two and 200 rooms, with 13- to 30-room structures being the most common (Stuart and Gauthier 1988). Stone masonry construction becomes more common, along with the appearance of aboveground kivas (Scheick 2007; Wendorf and Reed 1955:143–148). Population growth is indicated in some parts of the northern Rio Grande valley by sharp increases in both the number and the size of sites. This was probably the combined result of migrants arriving from other areas (such as the San Juan Basin, which was abandoned toward the end of this period) and internal population growth. Climate and precipitation patterns were unstable during this period, with human populations responding in dynamic ways, including construction and abandonment of pueblo villages within relatively short spans of time. Agricultural features such as grid gardens, cobble-mulch gardens, and cairn fields appear during this period to conserve soil moisture (Stuart 2000:141–142). The Santa Fe River valley and Pajarito Plateau were heavily occupied during the Coalition period, and especially in the latter half of the period (Cordell 1997:360; Crown et al. 1996).

The Coalition period is well represented among the Galisteo Basin sites. The Lamy Junction sites (LA 27, LA 362–LA 368, LA 31774–LA 31779), Burnt Corn Pueblo (LA 358–359), Lamy Pueblo (LA 1104 or LA 10607), Pueblo Alamo (LA 8), Chamisa Locita Pueblo (or Pueblo Wells, LA 4), La Cienega Pueblo (LA 3), and LA 333 were all prominent Coalition period sites (Toll and Badner 2008). Most consist of groups of room blocks and some pit houses and other features. Individual room blocks typically contain from fewer than 10 to 30 rooms, which is very typical for Coalition period sites, although Chamisa Locita is a large, late Coalition period E-shaped pueblo that was occupied until about A.D. 1350, while LA 333 is a pit house settlement dating from the early Coalition period (Ware 1989). Some of the Classic period pueblos in the Galisteo Basin got their start in the Coalition period, including Pueblo Shé (LA 239) and Arroyo Hondo Pueblos (LA 12 and 76) (Toll and Badner 2008).

### **2.2.3 CLASSIC PERIOD (A.D. 1325–1598)**

The Classic period, which corresponds roughly to the Pueblo IV period in the Pecos Classification, witnessed substantial social and technological change beginning around A.D. 1325 (Cordell 1979; Stuart and Gauthier 1988; Wendorf and Reed 1955). Major technological changes in ceramic production at this time involved the introduction of glaze-decorated pottery, which is the primary diagnostic marker of the Classic period (Wendorf and Reed 1955). Glazewares were first produced in the Zuni area, and their appearance in the Rio Grande valley is interpreted as evidence for either migration from the west (Shepard 1942) or diffusion of the new ceramic technology from the Zuni area (Wendorf and Reed 1955). In addition, there is a florescence of pictographic rock art identified near many large pueblo sites. Though the actual meaning surrounding the images is unknown, their depiction of warfare (Schaafsma 2000) or the Katsina cult (Saville 2001) is notable.

Demographic data suggest a sharp population increase during the Classic period, probably swelled by additional refugees from the abandoned San Juan Basin. In most areas, people continued moving from uplands and mountain canyons to lower-lying areas along rivers and drainages with reliable sources of surface water.

As with other relocations in the past, in some areas, the initial resettlement effort involved establishing temporary pit house villages and hamlets (Stuart 2000:147–148). But this pit house

phase was a brief one, and by the early fourteenth century, much of the northern Rio Grande valley population aggregated into large, multistoried adobe pueblos, some containing more than 1,000 rooms (Stuart and Gauthier 1988).

Still, the social and architectural landscape remained a very dynamic and changing one. Take the Galisteo Basin site of Arroyo Hondo (LA 12), for example, located just a few kilometers south of Santa Fe. Initial construction at this site began in A.D. 1315. Within the next 15 years, it had swelled to a massive pueblo encompassing 24 multi-story room blocks defining 13 plazas and a total of 1,200 rooms. Sometime between A.D. 1335 and A.D. 1345, however, Arroyo Hondo was abandoned, a time that correlates with a 20-year drought in the area (A.D. 1335–1355). Settlers returned to the site in the 1370s and 1380s, when a much smaller, 200-room pueblo was established and occupied until sometime around A.D. 1410–1425, when, in the wake of a devastating fire, Arroyo Hondo was abandoned for good (Creamer 1993a, 1993b; Stuart 2000:155–158).

By the late 1300s, a high density of pueblos was distributed along the Rio Grande and several of its major tributaries, including the Rio Galisteo, and settlements continued to expand in lowland areas during the fifteenth century. Irrigation systems were constructed to water crops in this drought-prone region. Field houses and farm plots were scattered in upland areas, and check dams, grid gardens, and rock mulching and cairns continued to be used to conserve and utilize available moisture. These strategies enabled Pueblo peoples to hedge their bets against the hit-and-miss rainfall pattern and facilitate access to various resources at different elevation zones (Stuart 2000:150–155).

The Santa Fe area and Galisteo Basin experienced continued population growth during the early Classic period, but after about A.D. 1420, the area east of Agua Fria—which had hosted a growing community since Late Developmental times—was mostly depopulated (Elliott 1988:21; Post 2001:34). Downriver, the large pueblo of La Cieneguilla (LA 16) grew in size after A.D. 1420, and was occupied until the Pueblo Revolt of 1680. Local populations aggregated into large sites in the Galisteo Basin, the Cochiti area, and the Tewa Basin, and pueblo architecture included fewer kivas and the development of plazas capable of accommodating large-scale group ceremonies.

The late Pueblo world remained a precarious one in many respects. The Classic period was apparently one of escalating warfare, and the construction of large, nucleated settlements is seen by some as a defensive measure symptomatic of this trend (e.g., LeBlanc 1999). The spread of the Katsina cult into the northern Rio Grande valley, at the beginning of the Classic period, is seen as a response to subsistence stress brought on by unreliable precipitation patterns and the need to integrate polyglot communities composed of diverse groups living in the large, nucleated pueblos.

The Classic period trends of population increase and aggregation are particularly evident in the Galisteo Basin. Within the Galisteo District, 13 large sites were occupied between A.D. 1275 and 1550 (Snead et al. 2004): Pueblo Shé (LA 239), Pueblo Colorado (LA 62), Pueblo Blanco (LA 40), Arroyo Hondo Pueblo (LA 12), Pa'ako Pueblo (LA 162), La Cieneguilla (LA 16), San Marcos Pueblo (LA 98), Pueblo Largo (LA 183), San Cristobal Pueblo (LA 80), Las Madres (LA 25), San Lazaro Pueblo (LA 91/92), Galisteo Pueblo (LA 26), and Piedra Lumbre (LA 309).

None of these sites have been fully excavated, but the room estimates from each range from 500 to 2,000 rooms (Creamer and Renken 1994; Dutton 1964; Lycett 1995:315; Nelson 1914, 1916; Snead et al. 2004). The lengthy dates of occupation for many sites do not accurately represent the use, abandonment, and reuse cycles of many sites in the area. For example, Crown's (1991) work at Pot Creek Pueblo documents average use-life of individual rooms at just 19 years. Similar trends are noted at other sites, including Tijeras Pueblo (Cordell 1980) and Arroyo Hondo (Creamer 1993a). Creamer (1993a) argues that the two architectural components at Arroyo Hondo Pueblo represent two independent occupation periods. In addition, although the general pattern in the Classic period is focused on aggregation into larger sites, small sites are not completely abandoned and are often occupied for use as field houses (Kulisheck 2005; Preucel 1990). There are also many Classic period petroglyphs in the Galisteo Basin, especially at Comanche Gap Petroglyphs site (LA 76065).

## **2.3 HISTORIC PERIOD (1540–PRESENT)**

### **2.3.1 EARLY SPANISH CONTACT (1540–1598)**

The ongoing human drama in the northern Rio Grande valley entered recorded history with the arrival of Coronado's expedition in A.D. 1540, and it is from this expedition that we have the first written record of the Galisteo Pueblos, by Pedro Castañeda (Winship 1904). He described three small but fortified pueblos—Galisteo, Pueblo de los Silos, and Coquite—and mentions several others located in the mountains near Santa Fe. The first Spanish expedition to visit San Marcos was the Chamuscado and Rodriguez expedition in 1581. These explorers visited the pueblo and named it “Malpartida” (Hammond and Rey 1966). The Espejo expedition of 1583 also visited San Marcos, although they called it Pueblo Santa Catalina. The name San Marcos was first given in 1590 by Gaspar Castaño de Sosa (Hammond and Rey 1966). Pueblo groups at this time practiced subsistence patterns based on farming combined with hunting and gathering (Hester 1962; McNitt 1972; Wozniak 1988). The Spanish also describe “Jumanos” or “rayados,” peoples who inhabit the plains east of the Galisteo area.

### **2.3.2 EARLY MISSION PERIOD (A.D. 1598–1680)**

The abuses perpetrated by the early Spanish expeditions set the tone for European–Pueblo relations for more than a century to come. By the end of the sixteenth century, the Spanish began settling among the established Native American villages of northern New Mexico, beginning with the 1598 colonizing expedition of Juan de Oñate. Although these early settlers stayed close to the Rio Grande, they also frequented Galisteo Pueblo en route to Pecos Pueblo. The Spanish recognized the Galisteo as a distinct “province,” with seven major pueblos. Three missions were established during this first period of Spanish colonization: Galisteo and San Lázaro between 1610 and 1613, and San Cristobal Pueblo in 1621. During the 1630s another mission was established at San Marcos Pueblo, with a *visita*, or mission, at nearby La Cienega, and by the mid-seventeenth century San Cristobal Pueblo had become a *visita* of Galisteo.

A *visita* was also established at Pa'ako (San Pedro) in the seventeenth century, but it is not as well documented and may have only been occupied intermittently (de Benevides 1630; Hackett 1937; Hammond and Rey 1966; Hodge et al. 1945; Lycett 2002:63–64; Reed 1954; Scholes

1936). During the seventeenth century Spanish settlers in the Galisteo region maintained small, scattered estates and farms in the growing gaps between Pueblo lands.

### **2.3.3 THE PUEBLO REVOLT AND THE RECONQUEST (A.D. 1680–1692)**

In 1680, Pueblo peoples revolted against the Spanish, driving them from New Mexico and burning many Spanish farms and missions. The Spanish did not return to the Pueblo regions of New Mexico for the next 12 years. By the reconquest of 1692, the residents of Galisteo Pueblo had moved to the Plaza at Santa Fe, and other residents of the basin were living at La Cañada in the Española Basin. Further dispersals saw original Galisteo inhabitants resettling at Acoma, Laguna, and First Mesa at Hopi, far to the west (Cordell 1997; Kessell and Hendricks 1992; Lycett 2002:61, 64).

### **2.3.4 THE SPANISH COLONIAL, MEXICAN, AND AMERICAN PERIODS (A.D. 1693–PRESENT)**

After the reconquest of 1692, the Spanish settled in consolidated villages instead of the isolated estates more typical of the pre-revolt decades (Cordell 1984). Following the reconquest, both Spanish and Pueblo settlements were commonly raided by Apache, Navajo, and Comanche groups. Raiding between the Spanish and the Indians continued for the next 150 years. Governor Cuervo y Valdés resettled 90 Tano speakers from Tesuque at Pueblo Galisteo in 1706 (Hackett 1937; Lycett 2002:64), but in 1780–1781, a smallpox outbreak hit and decimated the region. This epidemic effectively brought an end to Native American occupation of the Galisteo Basin, and the mission records were transferred to Pecos Pueblo (Chávez 1957; Lippard 2010; Lycett 2002:64).

In 1786, Juan Bautista de Anza negotiated a treaty with the Comanche, which brought an end to the raiding and ushered in a resurgence of Native and Spanish farmers and ranchers. In 1880, the Atchison, Topeka and Santa Fe Railroad arrived in Santa Fe through the Galisteo Basin (Fugate and Fugate 1989). Its presence helped spur a mining, ranching, farming, and industrial boom to the region. Following the economic and industrial decline of the Great Depression, many of the small mining and farming communities in the Galisteo Basin were abandoned. Today, the Galisteo Basin is sparsely populated, but has seen increasing growth with the development of residential subdivisions. The nearby national monuments, national forests, and state parks have helped increase tourism to the area. Through the continued support of the Act, these small towns and the Galisteo Basin as a whole will continue to learn, expand, and share their knowledge of the prehistoric and historic events and people who shaped their current landscape.

## **2.4 HISTORY OF ARCHAEOLOGICAL RESEARCH**

The Galisteo Basin provides a valuable window into the history of American archaeology, from Nelson's early demonstration of stratigraphic excavations, Kidder's and Mera's ceramic seriations, and the systematic use of optical petrography as pioneered by Anna Shepard (L. Cordell, personal communication 2011). Archaeologists began studying sites in the Galisteo Basin as far back as 1882, when Adolf Bandelier visited and described several sites in the basin. Nels Nelson of the American Museum of Natural History (AMNH) is credited with excavation, mapping, and/or naming 14 of the sites designated by the Act between 1912 and 1915. Nelson conducted his first archaeological excavations in the Galisteo Basin in 1912 and 1913 at Galisteo

Pueblo, Pueblo Blanco, Pueblo Colorado, Pueblo Largo, Pueblo Shé, San Cristobal Pueblo, and San Lazaro Pueblo, and in 1915 at San Marcos Pueblo (Nelson 1914, 1916). Galisteo Pueblo and Las Madres were partially excavated by Bertha Dutton (Dutton 1964; Schaafsma 1995). Richard Lang surveyed the Arroyo San Cristóbal drainage, as well as agricultural features at San Marcos (Lang 1977). In 1988, The Northern Rio Grande Research Project, under the direction of Jonathan Haas and Winifred Creamer, conducted test excavations at 13 Classic period sites in the northern Rio Grande region, including San Marcos Pueblo and Pueblo Blanco within the Galisteo Basin (Creamer and Renken 1994). The excavations included five 1 × 2-m test pits into different middens in the central section of the site at San Marcos, as well as room blocks on the western edge of the site. The goals of this research were to better understand chronology and demography across the wider northern Rio Grande region. The data and results from this work were presented in numerous conference presentations and publications (e.g., Creamer 1993b, 2000; Creamer and Haas 1988; Creamer and Renken 1994; Haas and Creamer 1992). With the goal of examining chronology and demography across the northern Rio Grande, Creamer and Haas conducted a number of field schools at Pueblo Blanco and excavated test pits at a number of sites across the region, including San Marcos through the Northern Rio Grande Research Project (Creamer 1993b; Creamer and Renken 1994). Contract archaeological work has also been conducted at a number of the protection sites, and in the past decade archaeological research within the basin has been expanding. James Snead of George Mason University has conducted surveys in the Galisteo Basin and excavations at Burnt Corn Pueblo (Snead et al. 2008a, 2008b) through the Tano Origins Project to explore population movement and conflict in the region during the A.D. 1300s. Marit Munson is studying rock art in the areas adjacent to San Cristobal Pueblo (Munson 2008). Also within the last decade, Ann Ramenofsky of the University of New Mexico (Ramenofsky et al. 2009), Chris Pierce, David Hurst Thomas of the AMNH, and Emily Hinz have conducted research at San Marcos Pueblo.

## **CHAPTER 3 Existing Conditions**

In 2007, with funding from the State of New Mexico, the OAS began administering and executing an initial assessment of the archaeological sites listed in the Act (Figure 3.1). The OAS conducted assessments at seven of the sites. Seven private firms were selected to conduct condition assessments at the remaining sites. Toll and Badner (2008) assembled a report on this collective effort. The goals of the OAS site assessment project included:

1. Gathering existing background information for each site;
2. Assessing the accuracy of the site boundary for each site as defined in the Act;
3. Assessing the accuracy of the archaeological definition of each site as defined in the Act;
4. Documenting existing conditions and threats to each site's integrity; and
5. Preparing new Laboratory of Anthropology (LA) site forms for each site.

The sites are organized into three main groups based on geographic location: the Rio Galisteo sites, the Rio Santa Fe sites, and the southern sites. Many of the sites are owned by a combination of entities, including private landowners, Santa Fe County, the New Mexico State Land Office, The Archaeological Conservancy (TAC), and/or the BLM. Below is a brief description of the sites and their present conditions and threats, which have also been summarized in Table 3.1.

Although the Act lists 24 sites, La Cieneguilla Petroglyphs and the Camino Real Site were combined and listed as a single site. This is because the site boundaries defined in the Act show the Camino Real Site completely surrounded by the La Cieneguilla Petroglyphs site. However, since the two sites are distinct in terms of cultural affiliation, period of use, and land ownership, they are discussed separately in both the site assessment project and this management plan. As such, 25 sites are listed in Table 3.1 and discussed individually in Chapter 3. In addition, the BLM considered renaming or adjusting the spelling of certain site names to be consistent with other names or spellings in the geographic area of some sites, however, in order to be consistent with the Act itself, the BLM elected to retain the names and spellings presented in the Act.

It is also worth noting that the term “site,” as used in the Act, the assessment project, and this management plan, may refer to one or more archaeological sites recorded with the Archaeological Records Management Section (ARMS) of the New Mexico Historic Preservation Division.

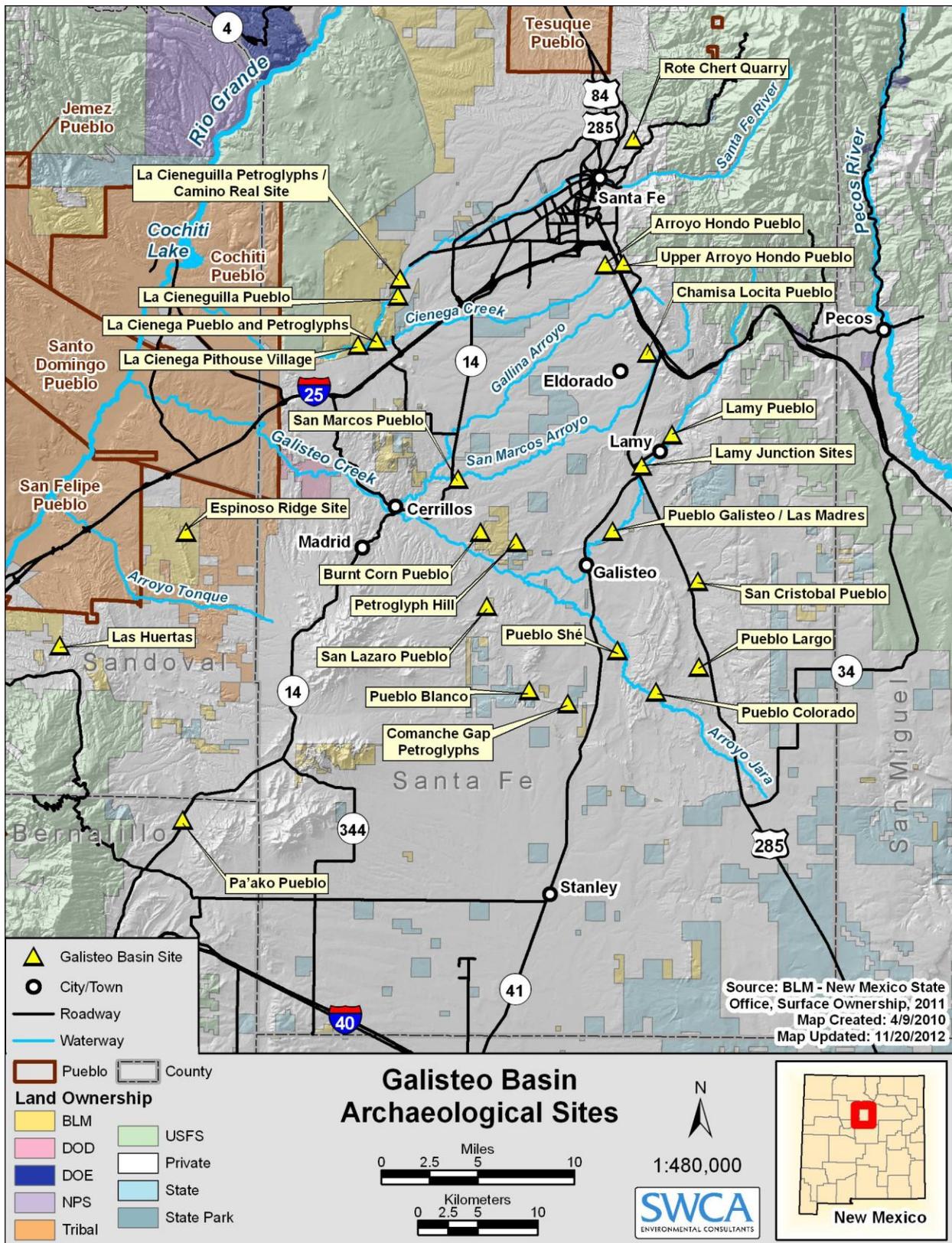


Figure 3.1. Galisteo Basin archaeological sites originally designated by the Act.

**Table 3.1. OAS Site Assessment Summary**

Site Name	Site Number(s)	Erosion	Vandalism	Looting	Animal Burrows	Livestock	Urban Development	Off-road Vehicles	Road Building	Excavation	Private Land	BLM Land	State Land	County Land	TAC	University of New Mexico
<b>Rio Galisteo Sites</b>																
<i>Early Sites</i>																
Lamy Junction Sites	LA 27; LA 362–368; LA 31774–31779	X	X	X	X		X		X	X				X		
Burnt Corn Pueblo	LA 358 and LA 359	X	X	X	X				X	X	X	X				
Lamy Pueblo	LA 1104 or LA 10607	X		X	X		X		X	X	X					
<i>Large Pueblo Sites</i>																
Chamisa Locita Pueblo (Pueblo Wells)	LA 4	X		X		X	X (future)		X	X	X					
Pueblo Largo	LA 183	X				X				X	X					
Pueblo Shé	LA 239	X		X	X	X			X	X	X					
Pueblo Colorado	LA 62	X		X	X	X				X	X					
Pueblo Blanco	LA 40	X		X						X	X	X	X		X	
<i>Large Pueblo with Mission Sites</i>																
San Cristobal Pueblo	LA 80	X	X	X		X			X	X	X					
Pueblo Galisteo/Las Madres	LA 26 and LA 25	X			X	X			X	X	X	X			X	
San Lazaro Pueblo	LA 91 and LA 92	X		X				X		X	X	X				
San Marcos Pueblo	LA 98	X			X	X	X		X	X	X		X		X	
<i>Rock Art Sites</i>																
Petroglyph Hill	LA 148959	X	X	X								X		X		
Comanche Gap Petroglyphs	LA 76065	X	X								X	X	X			
<b>Rio Santa Fe Sites</b>																
<i>Early Sites</i>																
La Cienega Pithouse Village	LA 166	X	X		X						X	X				
<i>Large Pueblo Sites</i>																
Upper Arroyo Hondo Pueblo	LA 76	X		X						X	X					
Arroyo Hondo Pueblo	LA 12	X		X	X		X		X	X	X				X	
La Cienega Pueblo and Petroglyphs	LA 3	X	X	X	X				X	X	X	X				
La Cieneguilla Pueblo (Tzeguma)	LA 16	X	X	X			X		X	X	X	X				
<i>Rock Art Sites</i>																
La Cieneguilla Petroglyphs	LA 9064	X	X	X								X		X		
<i>Resource Sites</i>																
Rote Chert Quarry	LA 65206	X					X								X	
<i>Historic Sites</i>																
Camino Real Site	LA 16767	X					X								X	
<b>Southern Sites</b>																
<i>Large Pueblo Sites</i>																
Espinoso Ridge Site	LA 278	X		X	X	X					X					
Pa'ako Pueblo (San Pedro Pueblo)	LA 162	X		X	X		X		X	X	X					X
<i>Historic Sites</i>																
Las Huertas	LA 25674	X		X			X		X	X	X				X	

Adapted from Toll and Badner (2008).

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## **3.1 RIO GALISTEO SITES**

### **3.1.1 EARLY SITES**

#### **LAMY JUNCTION SITES (LA 27, LA 362–368, LA 31774–31779)**

The Lamy Junction Community is a village complex comprising 19 structures dating to the Coalition period (A.D. 1200–1325) near the junction of U.S. Highway 285 (U.S. 285) and County Route 33. The area is owned entirely by Santa Fe County. The sites are for the most part small structures and pueblos of fewer than 20 rooms, with the exception of LA 27, which may have contained up to 60 rooms. Condition threats include three trailers placed close to LA 365, LA 366, and LA 31776. A low rubble mound that was recorded in 1981 at LA 365 is no longer evident and was likely destroyed during leveling of the site for trailer placement. Sites LA 368 and LA 31779 have been severely eroded by a cut bank. Excavation in the structure mound at LA 27 was well documented by Nels Nelson in 1915, and excavation depressions at LA 362 may have also been the work of Nelson. Pot-hunting holes (vandalism) are evident at LA 366. Most of the structure mounds have been affected by animal burrows, and many of the sites have been cut by old road grades. It is assumed the artifacts in the area have been subject to illicit collecting (Toll and Badner 2008). The Eldorado Water and Sanitation District owns a well and tank on the eastern boundary of the property, and past maintenance activities narrowly missed affecting the sites. A fence has been proposed for the eastern boundary of the parcel to limit access and reduce the potential for inadvertent damage to the archaeological resources (L. Lockwood, personal communication 2011).

#### **BURNT CORN PUEBLO (LA 358 AND LA 359)**

Burnt Corn Pueblo is a large Ancestral Puebloan site in the western Galisteo Basin dating to the Late Coalition period (Pindi Phase). The northern 42 acres are privately owned and the southern 68 acres are administered by the BLM. The site has been heavily looted prior to the 1980s when the entire site was on private ranch land. There is moderate erosion occurring, mostly by slope wash during summer rains. Animal burrows are a considerable problem and occur throughout the site. A former two-track road that crossed the site from north to south has been closed and the area has substantially revegetated. Though the site is fairly remote and is only accessible by foot, illicit artifact collecting appears to be ongoing and collectors' piles are present across the site (Toll and Badner 2008). There is also evidence of unauthorized excavation.

#### **LAMY PUEBLO (LA 1104 OR LA 10607)**

Lamy Pueblo is a Coalition period (A.D. 1200–1325) community 1 mile north of the town of Lamy on a private, dead-end road. The site was partially excavated by Nelson in 1915 and again in the 1970s by Steen (Toll and Badner 2008); at least one pit structure appears to remain unfilled. Two structures recorded by Nelson could not be relocated and may have been destroyed by arroyo downcutting. Active animal burrows are present in three of the structure mounds on the site. A portion of the site has been impacted by the construction of a modern house, outbuildings, driveway, and two-track road, but none of the room blocks appear to have been affected. Construction of the existing railroad also appears to have affected the southern portion of the site. Collectors' piles of sherds and flakes are present and suggest illicit artifact collecting in the past. The present owners are sensitive to protecting the cultural resources on their

property. While the Act and this plan refers to this site as Lamy Pueblo, the original site name was published as Manzanares Pueblo in 1981 (Steen 1981, as cited in Toll and Badner 2008).

### **3.1.2 LARGE PUEBLOS**

#### **CHAMISA LOCITA PUEBLO (OR PUEBLO WELLS) (LA 4)**

Chamisa Locita Pueblo is a Coalition period residential complex situated on a hill slope between Arroyo Ancho and Gallina Arroyo. The site lies entirely on private land administered by the Rancho Viejo housing development, though currently the land is being used for cattle grazing. The site was partially excavated by Nelson in the early 1900s and again by Mera in the 1920s (Toll and Badner 2008). A windmill and water tank has been constructed in the middle of one of the room blocks. Cattle congregate around the water tank and the trampling of artifacts is a problem. The site has experienced erosion and cattle trails may contribute to erosion in the future. A two-track road also passes over the room block and across the site. Though there is a locked gate on the ranch road, the site is easily accessible to residents of an adjacent subdivision and illicit artifact collecting has likely been occurring for some time.

#### **PUEBLO LARGO (LA 183)**

Pueblo Largo is a multicomponent site situated atop a steep ridge. The site lies entirely on private land and is part of the San Cristóbal Ranch. The site was extensively excavated by Nelson in 1914 and Dutton in the 1950s. Neither backfilled their excavations and the excavated structures have collapsed or are in the process of collapsing. The walls of some features built on the edge of a steep escarpment are eroding down slope. The site is accessible by permission of the landowner.

#### **PUEBLO SHÉ (LA 239)**

Pueblo Shé is a multicomponent building complex located west and south of Arroyo de la Jara. The site is entirely on private land and is part of the San Cristóbal Ranch. The site was partially excavated by Nelson in the early 1900s and was not backfilled; the rooms and structures have since collapsed. There is evidence of pot hunting, both recently and in the distant past. Erosion in the form of drainage downcutting exists on the west side of the pueblo. A two-track road cuts through the site and livestock grazing has trampled some areas. Animal burrowing is a long-term process affecting the integrity of the site. The site is accessible by permission of the landowner.

#### **PUEBLO COLORADO (LA 62)**

Pueblo Colorado is a multicomponent building complex situated at the base of a sandstone escarpment. The site is entirely on private land and is part of the San Cristóbal Ranch. The site was partially excavated by Nelson in the early 1900s and was not backfilled; the rooms and structures have since collapsed. There is evidence of pot hunting, both recently and in the distant past. There are several large drainages that have begun downcutting through the southern portion of the site and numerous smaller drainages are eroding the eastern ridge line. Livestock grazing and animal burrows are affecting the integrity of the site. The site is accessible by permission of the landowner.

**PUEBLO BLANCO (LA 40)**

Pueblo Blanco is a large Pueblo IV period Ancestral Puebloan village. The site is on land largely owned by the New Mexico State Land Office. A major arroyo, Cañada del Medio, flows through the site. This arroyo appears to have widened considerably over the last 100 years and has caused the collapse of many structures. The site was partially excavated by Nelson in the early 1900s and was not backfilled; these rooms and structures have since collapsed. The New Mexico State Land Office has made efforts to curtail the erosion. Some excavation was also conducted by the School of American Research (SAR, now the School of Advanced Research). Recent looting of the site includes illicit artifact collecting and excavation beneath the floor of the southern room block. The site is open to the public, but permission is needed by the New Mexico State Land Office. The site is beyond three locked gates and keys must be obtained. Other portions of the site are located on BLM land, as well as land owned by TAC and other private landowners.

**3.1.3 LARGE PUEBLOS WITH MISSIONS**

**SAN CRISTOBAL PUEBLO (LA 80)**

San Cristobal Pueblo is a multicomponent site situated on the banks of Arroyo San Cristóbal. The entire site, with the exception of the New Mexico Department of Transportation (NMDOT) right-of-way, belongs to the San Cristóbal Ranch. The site was extensively excavated by Nelson in 1912 and was not backfilled; these areas continue to collapse and erode. There is also evidence of looting, vandalism to the petroglyphs, and periodic livestock use. Arroyo San Cristóbal and its tributaries are eroding out both surface and subsurface structures. An irrigation ditch runs through the site and has caused considerable loss of midden deposits and continues to erode. A two-track ranch road is causing erosion along the east side of the site. The site is accessible by permission of the landowner.

**PUEBLO GALISTEO (LA 26) AND PUEBLO LAS MADRES (LA 25)**

This collection of sites includes multiple properties. Pueblo Galisteo is a large multicomponent site on the bank of the Rio Galisteo, and Pueblo Las Madres is a small pueblo on the opposite bank. The southwestern portion of the site is on land administered by the BLM. Three additional sites are located on the BLM parcel, including El Pipo Pueblo, where stone masonry room blocks date to the Coalition and Classic periods. The other portion of the site grouping is privately owned, but the owner granted TAC a conservation easement. Pueblo Galisteo was partially excavated by Nelson in 1912 and Pueblo Las Madres was excavated by Dutton in 1963. Neither backfilled their excavations and these areas are in various collapsed states. Pueblo Galisteo continues to erode, and large sections of structures have collapsed since Nelson first recorded the site. There is also evidence of animal burrowing and livestock presence. A two-track ranch road cuts across the north edge of the site. The sites are accessible from the Las Madres Ranch driveway.

**SAN LAZARO PUEBLO (LA 91 AND LA 92)**

San Lazaro Pueblo is a multicomponent site situated on either bank of Arroyo del Chorro. Most of the site is on private land of various owners. A smaller eastern portion is on BLM land. The site was partially excavated by Nelson in 1914 and was not backfilled. The present owner of the majority of the site has either excavated parts of the site himself or allowed various archaeological entities to excavate. These excavations have not been backfilled and are subject to

erosion. In addition, the owner of the site has used mechanized equipment to excavate several areas across the site, presumably in search of artifacts. Natural erosion around the perimeter of the site in the form of sheet washing and arroyo downcutting is severe in some places. There is evidence of equipment or off-highway vehicle use. Access to the site is restricted by two locked gates.

### **SAN MARCOS PUEBLO (LA 98)**

San Marcos Pueblo is a very large multicomponent site within the San Marcos land grant and Los Cerrillos Mining District. The site lies on land administered by the State of New Mexico, TAC, and on privately owned land. Part of the site is owned jointly by the State of New Mexico and TAC, and it is the sole responsibility of TAC to administer those portions of the site that are jointly owned. The site was excavated in 1915 by Nelson. Later, David Thomas of the AMNH excavated and mapped the *convento* and Ann Ramenofsky of the University of New Mexico conducted site mapping, surface collection, and limited testing (Ramenofsky et al. 2009). The site is experiencing severe erosion from the San Marcos Arroyo, which flows through the southern edge of the site, as well as from many smaller tributaries. Several dirt roads and mechanical disturbances in the northern portion of the site are contributing to sheet washing. A horse corral covers portions of the northeastern part of the site and there are private residences scattered across other parts of the site. Animal burrows are abundant across the site. The site is bounded by New Mexico Highway 14 (NM 14) on the west side and by county roads on the others. The site is accessible from any of these roads, although TAC has fenced much of the site and posted NO TRESPASSING signs.

### **3.1.4 ROCK ART SITES**

#### **PETROGLYPH HILL (LA 148959)**

Petroglyph Hill is a major rock art site in the western Galisteo Basin. The site consists of 1,865 petroglyphs scattered across two volcanic hills joined by a saddle. The eastern portion of the site including the two hills was acquired in 2000, by Santa Fe County's Open Space and Trails Program, from a private landowner. The western portion is on BLM land. It is a popular, well known recreation area, and some of the petroglyphs have been worn away by foot travel. Others have been intentionally defaced by scratching or chiseling. At least one portion of a panel has been cut out and there is evidence of smaller boulders being removed. Since acquiring the property, Santa Fe County has improved security by adding fencing and gates, and County maintenance staff has seen little to no evidence of trespass at the site since these security measures were implemented.

#### **COMANCHE GAP PETROGLYPHS (LA 76065)**

Comanche Gap Petroglyphs is composed of four contiguous basalt ridges extending from near New Mexico Highway 41 (NM 41) on the east, almost to Pueblo Blanco on the west. Portions of the site are on privately owned land, State Trust land, and BLM land. Most of the damage to the petroglyphs stems from natural erosion, spalling, and rock fall. Though there has been the addition of modern graffiti to prehistoric panels, very little defacing of petroglyphs has taken place. Vandalism is more prominent on the east side, closer to NM 41. The most damage to the site was done when a portion was dynamited in the early 1900s for construction of a railroad, although during the 1980s visitors were so common as to create a potential danger of erosion

from foot traffic. The site is easily accessible from the east side of NM 41, although NO TRESPASSING signs have been posted to discourage visitors from accessing any part of the site.

## **3.2 RIO SANTA FE SITES**

### **3.2.1 EARLY SITES**

#### **LA CIENEGA PITHOUSE VILLAGE (LA 166)**

La Cienega Pithouse Village is a multi-structure, Late Developmental period site atop a small mesa on the banks of the Santa Fe River. The western and river-bottom portions of the site are on BLM land, and the eastern and southern portions are on privately owned land. The biggest threat to the site is animal burrows. Erosion in the form of wind action and sheet wash is minimal. Some of the rock art at the site has been altered and modern graffiti has been added. There appears to be very little visitation of the site.

### **3.2.2 LARGE PUEBLOS**

#### **UPPER ARROYO HONDO PUEBLO (LA 76)**

Upper Arroyo Hondo Pueblo sits atop an alluvial plain almost completely surrounded by two channels of Arroyo Hondo. The site is on the land of various private owners, one of whom granted access for the site assessment. The site was partially excavated in 1915 and 1934; these areas were not backfilled and are now eroded. The SAR conducted a survey of the site in the late 1970s. Erosion is taking place on the north, east, and south edges due to arroyo downcutting. The site is bounded on the north and east by residential and commercial properties. It is assumed that some degree of illicit visitation and artifact collecting has taken place, though it does not appear to be a significant problem.

#### **ARROYO HONDO PUEBLO (LA 12)**

Arroyo Hondo Pueblo is a large Puebloan settlement of the late Coalition and early Classic periods. The site is owned by TAC, which leads public tours by request. The site is partially fenced with a pedestrian opening and is accessed by a public road that leads to a parking area in front of the site, which is posted as a TAC preserve (T. Stewart, personal communication 2011). The site was partially excavated by Nelson in 1915 and more extensively in the 1970s. The areas excavated by Nelson were not backfilled and have since eroded. There is some erosion in the form of downcutting occurring along the edge of Arroyo Hondo, but this is not threatening any structures yet. There is evidence of pot hunting from the late nineteenth century. A water tank and outbuilding have been built on the site, most likely in the 1940s. The tank used to release water into an acequia on the southern edge of the site, which was used for ranching or agriculture. Animal burrows are a problem in the main area of the village. Residential housing and road construction surrounding the site likely damaged or destroyed outlying features. It is assumed that some degree of illicit visitation and artifact collecting has taken place, though it does not appear to be a significant problem.

#### **LA CIENEGA PUEBLO AND PETROGLYPHS (LA 3)**

La Cienega Pueblo and Petroglyphs encompasses a mesa top and hill slope down to the confluence of the Santa Fe River and La Cienega Creek. Most of the site is on BLM land and a

portion is privately owned. The site was partially excavated by Nelson in 1915; these areas were not backfilled and are now eroded. Several looters' holes were noted on the site. Modern and abandoned fence lines and two two-track roads crisscross the site. A scatter of boulders has been dumped on the site. A small portion of the petroglyphs has been defaced with scratching and pecking. There is moderate animal burrowing in all of the room blocks. The petroglyphs along the base of the cliff are frequently visited. An abandoned fence bisects the site, and a modern fence bounds a large portion of the eastern side of the site; otherwise, the site is open to the public.

#### **LA CIENEGUILLA PUEBLO (TZEGUMA) (LA 16)**

La Cieneguilla Pueblo is a Classic period village on the east bank of the Santa Fe River. About 40 percent of the site is on BLM land. Fencing surrounds the BLM-owned portion of the site, separating it from New Mexico Highway 56 and private land on all sides. The rest of the site is privately owned and much of it has been sold for housing development. This development has damaged and destroyed a large portion of the site. There is evidence that at least some of the landowners have recovered artifacts from their property and sold them for profit. The BLM portion of the site has also been looted, despite fencing. It has been reported that petroglyphs on boulders were badly vandalized by souvenir hunters after World War II. There have been several archaeological excavations at the site. The most significant was by Nelson in 1915. The site boundary along the banks of the river is severely eroding with several deep drainages cutting down to the river.

### **3.2.3 ROCK ART SITES**

#### **LA CIENEGUILLA PETROGLYPHS (LA 9064)**

La Cieneguilla Petroglyphs are adjacent to La Cieneguilla Pueblo and the Camino Real Site, occurring on the cliffs and boulder fields north of the pueblo and southwest of the Camino Real Site. Most of the site is on BLM land, although Santa Fe County owns a portion of the northeast side. The petroglyphs have been used for target practice and more recently have been defaced with paint balls. Names and other graffiti have also defaced the panels. Smaller boulders with images have been stolen. Natural exfoliation has eroded panels as well. The site is open to the public and visited frequently, but has been closed to target practice. Recent BLM improvements include a designated parking area, a trail, signage, and additional fencing along the highway.

### **3.2.4 RESOURCE SITES**

#### **ROTE CHERT QUARRY (LA 65206)**

The Rote Chert Quarry is a 1-acre, T-shaped parcel fit in among three private residences comprising an area where chert cobbles have been naturally exposed due to erosion. The site is owned by TAC and is open on all sides. There is a small drainage eroding down between two of the houses. There is evidence of foot traffic on the site and it is probable that some collecting of cultural or raw toolstone material has taken place.

### **3.2.5 HISTORIC SITES**

#### **CAMINO REAL SITE (LA 16767)**

The Camino Real Site is a seventeenth century Spanish Colonial ranch built along the Santa Fe River. It is surrounded by the La Cieneguilla Petroglyph site. The 1-acre site is owned by TAC. Some erosion has occurred on the river side of the site. A major drainage runs between the site and the county road. Some garbage has been dumped around the site, but not recently. The site is accessible from the county road, but it is fenced with a locked gate (Toll and Badner 2008).

## **3.3 SOUTHERN SITES**

### **3.3.1 LARGE PUEBLOS**

#### **ESPINOSO RIDGE SITE (LA 278)**

The Espinoso Ridge Site is a multicomponent site 400 m west of Arroyo de la Vega de los Tanos. The entire site is privately owned. There are several looters' holes present on the site and illicit artifact collection has likely taken place. A road, corral, and water tank have been constructed on the periphery of the site. A bulldozer swath crosses the southern room block, but has completely revegetated. There is some active erosion along small drainages across the site. There are numerous animal burrows across the site. NO TRESPASSING signs are posted at the site and the roads across BLM land surrounding the site have locked gates, the keys to which can be signed out at the Rio Puerco Field Office in Albuquerque (Toll and Badner 2008). Two different spellings have been used to refer to this site: "Espinoso" and "Espinaso."

#### **PA'AKO PUEBLO (OR SAN PEDRO PUEBLO) (LA 162)**

Pa'ako Pueblo is a multicomponent site at the eastern base of the Sandia Mountains, just west of San Pedro Creek. The fenced portion of the site is owned by the University of New Mexico and an NMDOT right-of-way is adjacent to the east. All other land to the north, west, and south is privately owned. The site was partially excavated by Nelson in 1914 and by Edgar Lee Hewett and Marjorie Lambert in the 1930s. Recently it has been used for field school by the University of Chicago and Northwestern University. A drainage runs through the two major room blocks, but does not appear to be actively downcutting. The construction of NM 14 has altered deposits in the northeastern corner of the site. Surface collecting and pot hunting has taken place at the site. Animal burrows are densely distributed across the site. A bladed road cuts through the northern side of the site. Wooden lathe demarcating a future housing development were observed during the latest site assessment. Though the site is fenced, it is easily accessible to the public, although whether public access is legal is uncertain.

### **3.3.2 HISTORIC SITES**

#### **LAS HUERTAS (LA 25674)**

Las Huertas is at the northern end of the Sandia Mountains on a wide, flat terrace at the base of the Cuchilla de Escala hills. TAC owns much of the site. The eastern portion is privately owned and divided into several residential lots. Construction of a house in 2007 likely damaged or destroyed deposits in that part of the site. An abandoned road and retaining wall built in the early 1900s runs through the middle of the site. It is possible some of the stones for the wall were

removed from structures on the site. A modern road was constructed along the east edge of the site. In the 1960s various structures were built along the creek, again possibly using stones from the site. There are several drainages eroding the west end of the site. Limited excavation occurred in the 1980s in a pipeline right-of-way across the northern section of the site. From 2002 to 2004, Columbia University conducted several surface collections and excavated test units. The portion of the site owned by TAC is fenced and posted with NO TRESPASSING signs. It is assumed that some degree of illicit visitation and artifact collecting has taken place.

## **CHAPTER 4 Protection and Preservation**

The purpose of the Act is to “provide for the protection, preservation, and interpretation of the nationally significant archaeological resources in the Galisteo Basin in New Mexico (Section 2 [b]).” The Act also includes provisions for access, research, and education, among other aspects of cultural resource management. However, protection of the designated protection sites and any sites added in the future is a necessary prerequisite to the goals of preservation and interpretation. Therefore, the protection of these resources and the lands they occupy is considered to be the first priority to secure the resources from human and natural threats. Land protection can be achieved through the development of cooperative agreements, conservation easements, fee acquisition, donation, and exchange. The chapter also provides a tool kit of site protection measures, including best management practices for the avoidance of impacts to cultural resources during activities at protection sites. Site protection is also discussed in the context of existing BLM programs, including Fire, Minerals, and Realty.

The designated protection sites face a spectrum of threats to their integrity, including direct and active problems such as erosion, illicit artifact collection, looting, and unregulated access (humans and livestock), as outlined in Chapter 3 (Existing Conditions). Section 8 of the Act withdraws all Federal lands within the protection sites from consideration for development, mining, and mineral or geothermal leasing, thereby removing the threat of large-scale direct impacts to protection sites on public lands administered by the BLM. Direct impacts to protection sites, and portions thereof, located on lands not administered by the BLM are a concern, as are indirect effects on site integrity regardless of land ownership. Long-term and/or indirect threats include alterations to site setting and feeling associated with residential, commercial, and minerals development, as well as linear infrastructure projects (e.g., roads, pipelines, transmission lines). Some sites face more immediate threats than others, presenting the need for prioritization of site protection actions. Emergency site protection procedures are warranted for a select few of the sites, whereas long-term protection procedures are needed at all of the sites.

Site documentation can be considered a form of preservation, and other site protection and preservation measures present unique opportunities for targeted research. Erosion control and site stabilization work can involve ground disturbance, often in already disturbed contexts. Focused testing, data recovery excavation, sampling, mapping, and soil profiling could be conducted in conjunction with preservation efforts to minimize the loss of additional information and limit ground-disturbing archaeological research to areas requiring disturbance associated with site preservation. These approaches and strategies are addressed in greater detail in Chapter 5 (Research).

All site protection and preservation efforts will comply with applicable laws and mandates, including:

- Galisteo Basin Archaeological Sites Protection Act (the Act)
- National Environmental Policy Act (NEPA)
- National Historic Preservation Act (NHPA)
- Archaeological Resources Protection Act (ARPA)

- Native American Graves Protection and Repatriation Act (NAGPRA)
- Federal Land Policy and Management Act
- American Indian Religious Freedom Act
- Endangered Species Act
- Clean Water Act
- New Mexico State Burial Act
- New Mexico Cultural Properties Act
- Santa Fe County Land Development Code

The compliance requirements for each proposed preservation or site protection project will vary based on site condition, land ownership, funding, and permitting. Projects at sites including public lands administered by the BLM will require compliance with all applicable Federal mandates, as well as applicable state and county regulations. Projects at sites on private land will require compliance with applicable state and county mandates; however, if funded through the BLM or other Federal agency, or if permits from a Federal agency are required (e.g., Streambed Alteration Permit [Clean Water Act, Section 404] from the U.S. Army Corps of Engineers), projects on private land will also be required to comply with applicable Federal regulations. Project compliance is addressed in greater detail in Chapter 9 (Plan Implementation).

This management plan is developed to balance these viewpoints to achieve the best possible solution for site management. Native American representatives have been involved in the preparation of this plan, and their concerns are addressed in more depth in Chapter 8 (Native American Concerns).

## **4.1 LAND PROTECTION MEASURES**

### **4.1.1 COOPERATIVE AGREEMENTS**

#### **INTERAGENCY COOPERATIVE AGREEMENTS**

The Act authorizes the Secretary of the Interior to “enter into cooperative agreements with owners of non-Federal lands with regard to an archaeological site, or a portion thereof, located on their property” (16 USC 470aa). The BLM has sought to establish cooperative agreements with the private landowners with protection sites, or portions thereof, on their properties. The BLM has executed a Memorandum of Understanding with Santa Fe County and should establish a similar agreement with the New Mexico State Land Office, which owns portions of protection sites. The primary advantage of establishing such agreements is to reach and document a shared understanding with regard to collaborative management of sites protected by the Act.

This is particularly important in cases where portions of the same protection site are currently managed by two or more different agencies (e.g., La Cieneguilla Petroglyphs/Camino Real Site).

#### **COOPERATIVE AGREEMENTS WITH PRIVATE LANDOWNERS**

The BLM has approached each of the private landowners with protection sites, or portions thereof, located on their property in an effort to establish formal cooperative agreements with all

of them. To date, the BLM has established cooperative agreements with two private landowners, including TAC. TAC owns five protection sites and has a conservation easement with the private landowners of a sixth protection site—Pueblo Galisteo/Las Madres.

The cooperative agreements established to date do not outline specific stipulations or management strategies for each site. Rather, these agreements are general in nature and serve to document a shared understanding and intent to protect the archaeological site(s) in question. The Act does not require that private landowners comply with ARPA or NAGPRA. The conditions of each agreement are expected to vary, based on the different conditions and parties involved. Cooperative agreements could include provisions for Native American access if a pueblo or tribe has expressed interest in visiting the protection site addressed in the agreement. However, each agreement will outline the underlying goal of site protection and acknowledge the limitations of the Federal government’s ability and authority with regard to implementation and enforcement on private lands. An example cooperative agreement is provided in Appendix B.

As of May 2012, cooperative agreements have been executed for 10 protection sites (Table 4.1). Additional agreements are currently under review by landowners and approval is pending.

**Table 4.1. Protection Sites with Signed Cooperative Agreements (as of May 2012)**

<b>Site Name</b>	<b>Landowner</b>
Arroyo Hondo Pueblo	TAC
Las Huertas	TAC
Rote Chert Quarry	TAC
San Marcos Pueblo	TAC
Camino Real Site	TAC
Pueblo Galisteo/Las Madres	Private landowner (TAC easement)
Pueblo Blanco	Private landowner
La Cieneguilla Petroglyphs	Santa Fe County
Lamy Junction Sites	Santa Fe County
Petroglyph Hill	Santa Fe County

Although the overall response from private landowners to the BLM with regard to site protection has been positive and cooperative, it is possible that a cooperative agreement may not be reached for one or more protection sites. In this case, negotiations will continue indefinitely, as deemed appropriate by the BLM, with the site(s) in question remaining designated under the Act.

**RESPONSIBILITY FOR COMMUNICATION WITH PRIVATE LANDOWNERS**

The BLM will be the primary point of contact for all parties involved, including private landowners. The Galisteo Working Group, an informal group of stakeholders, will support the BLM with regard to communications and coordination, as needed. For instance, the Act states that private landowners wishing to withdraw their lands from protection under the Act may do so by submitting a written request to the Secretary of the Interior. In the future, any such requests

shall be submitted to the BLM, who will then forward the request to the Secretary. Ultimately, the BLM is responsible for carrying out the terms of any cooperative agreements that the agency enters into with private landowners on behalf of the Secretary of the Interior.

The BLM will contact private landowners during the process of drafting site-specific management plans for each site located entirely or partially on private property. At this stage, cooperative agreements may be augmented or revised to include specific provisions related to the management of specific sites. The BLM will ensure that the management prescriptions outlined in the site-specific plans are congruent with the cooperative agreements prior to finalizing the draft site-specific plans. The BLM will work closely with private landowners to coordinate resource protection projects, such as fencing, stabilization, or research projects, should the owner wish to pursue them.

### **BENEFITS TO PRIVATE LANDOWNERS**

Protection under the Act offers several benefits to private landowners who own all or portions of a currently listed protection site, or a site considered for addition to the Act. Private landowners may benefit from proposed protection measures, including but not limited to fencing, stabilization, pest control, and erosion control efforts at protection sites on their land. Funding for such projects may become available through BLM or other funding sources that the landowners would not necessarily have access to if the site or sites on their property were not designated by the Act. Surveillance and site monitoring by BLM law enforcement personnel or SiteWatch volunteers can also be a benefit to private landowners concerned about illicit activity at sites on their land. Protection of a site under the Act denotes a special significance to the resource as well, formally acknowledging an added layer of importance in addition to inclusion on the National Register of Historic Places (NRHP). The Act also provides a vehicle for private landowners to learn more about the cultural resources on their properties, engage with the archaeological and Native American communities, and be active participants in the protection and preservation of the shared heritage of the Galisteo Basin.

#### **4.1.2 CONSERVATION EASEMENTS**

The majority of the currently listed protection sites are located on private lands. Even most of those sites that include portions of public land administered by the BLM contain private lands. The cooperative agreements that the BLM is negotiating with private landowners will lay the foundation for future management efforts. One of the possible outcomes of working with private landowners is the establishment of formal conservation easements on portions of sites on private lands.

Archaeological conservation easements can take various forms and include a variety of stipulations and clauses, but the essential idea is to formally reserve lands for the protection of cultural resources by excluding the possibility of ground-disturbing development activity within the subject area for the long term. Private landowners may wish to continue certain activities within the easement (e.g., use of existing roads, grazing). If the landowner does not also own the mineral rights below the privately owned surface (referred to as “split estate” lands), a conservation easement cannot rule out the future development of minerals below the subject area, unless the mineral rights owner is also party to the agreement.

In addition to an archeological conservation easement, the BLM's split estate policy also provides a level of protection to cultural resources located on private surface lands above Federal mineral rights. In compliance with the NHPA, the BLM must determine whether activities proposed to access the minerals are subject to the NHPA, and if so, whether they may have an effect on cultural resources located on private surface (BLM 2008). Unless an area has already been surveyed, an on-the-ground survey is usually necessary to accurately identify cultural resources. Impacts to those cultural resources eligible to or listed on the NRHP must be avoided, minimized, or mitigated. Important sites on private surface with Federal mineral rights that cannot be avoided and would be disturbed by mineral rights development may have to be fully excavated to recover scientific information that would be lost. The BLM works to encourage coordination and cooperation among all parties that have rights and responsibilities in split estate situations.

The BLM and other land managing agencies that share protection sites with adjacent private landowners may partner with TAC in the development of conservation easements on private lands. With considerable expertise and experience negotiating conservation easements, TAC can facilitate the process of negotiating such easements with interested landowners.

#### **4.1.3 ACQUISITION**

Although the establishment of conservation easements is a valuable strategy for protecting designated sites located on private lands, property acquisition (surface and mineral rights) affords the government greater flexibility with regard to site management.

##### **FEE ACQUISITION**

The BLM is in ongoing negotiations with private landowners regarding acquisition of several Act sites. BLM acquisition of lands containing sites currently designated by the Act, or those recommended for addition, would be at fair market value and with the consent of the private landowner.

##### **DONATION**

Private lands, or lands owned or managed by another public entity, containing all or portions of a listed protection site may be donated to the Federal government for the purposes of land and site protection by the BLM.

##### **EXCHANGE**

Private lands, or lands owned or managed by another public entity, containing all or portions of a listed protection site may be exchanged with the BLM. Exchanges will be handled on a case-by-case basis.

## **4.2 SITE PROTECTION MEASURES**

This section outlines measures, tools, and best management practices that will be used to protect the archaeological resources at the heart of the Act and concludes with general guidance by site. Land protection measures are discussed in Section 4.1.

#### **4.2.1 NATIONAL REGISTER NOMINATIONS**

A Multiple Property NRHP nomination is currently in preparation for all of the sites currently designated by the Act (T. Stewart, personal communication 2011). Formal listing of a protection site on the NRHP would not place any restrictions on private landowners, unless Federal monies are involved. State and/or local preservation laws, ordinances, or regulations may apply, however. If Federal monies are involved in an activity proposed by a private landowner (e.g., through Federal grants or other funding programs), and the activity could affect the listed site, compliance with the NHPA is required. Private landowners are eligible for Federal tax incentives including a 25 percent investment tax credit for rehabilitating NRHP-listed properties, or properties that are contributing to a National Register District, provided the Standards for Rehabilitation set forth by the Secretary of the Interior are followed and that the property be income-generating. Additionally, the rehabilitation expenses must be equal to the adjusted basis of the property (State of New Mexico n.d.).

For protection sites on public lands, the nomination to or listing of the property on the NRHP does not impart any additional restrictions for a site that is already considered eligible for NRHP listing. The Section 106 process outlined at 36 Code of Federal Regulations (CFR) 800 requires Federal agencies to consider the effects of their undertakings on historic properties (cultural resources listed on, or considered eligible for listing on, the NRHP) and consult with the appropriate State Historic Preservation Officer.

#### **4.2.2 STATE REGISTER NOMINATIONS**

Sites listed on the State Register of Cultural Properties or contributing to a State Register district are also eligible for tax incentives through the State of New Mexico. Small-scale rehabilitation projects often produce larger tax credits within New Mexico than larger rehabilitation projects. Rehabilitation for archaeological sites includes protective maintenance, stabilization, and/or fencing of the site. Sites do not need to be income generating to be eligible for the state tax credit. Excavation of archaeological sites is not considered rehabilitation. However, if excavation is going to take place, the landowner is urged to contact the BLM prior to any ground-breaking activities, as improper excavation may be grounds for removing a site from both the State Register and the NRHP (State of New Mexico n.d.).

Any rehabilitation projects considered for protection sites should be coordinated with the BLM, should be conducted in accordance with the terms of the pertinent cooperative agreement between the BLM and the landowner, and must be permitted and implemented in accordance with applicable Federal, state, and county laws, ordinances, and regulations.

#### **4.2.3 SITE DOCUMENTATION**

Although documentation for each of the protection sites has recently been updated (Toll and Badner 2008), supplemental focused recording efforts can be undertaken at rapidly eroding features or other elements of sites that are considered “at risk.” Such efforts would include mapping, recording, and photography, thereby augmenting the site record and providing more detailed documentation of features that are at greater risk of destruction or disturbance than others.

#### **4.2.4 ACCESS RESTRICTION**

Restricting access to sites or portions of sites is a simple, cost-effective way to provide site protection and preservation of high-value features or areas within sites. Access can be restricted using fencing, gates, and signage. A site can be seasonally restricted or be limited to administrative or permitted access only (e.g., by a BLM-permitted guided tour). For instance, if pedestrian and livestock access during winter and spring is considered more harmful due to wet soil conditions, access to a site or portion of a site could be limited to summer and fall. Restricting access year-round is more straightforward; permanent fencing can be used to permanently limit entry to the site.

Access limitations and restrictions can take different forms, based on the existing conditions of a given site, land ownership, and other factors. Site access can be limited as such:

- No access (not applicable to public lands administered by the BLM)
- Public access not actively encouraged (i.e., through signage, marketing, or other means that might promote access) or facilitated (BLM lands)
- Limited public access, such as through
  - Guided tours (number and size) or permits
  - Seasonal access restrictions
  - Native American ceremonial access
  - Fencing of especially sensitive features or intrasite areas

It is possible that access to portions of sites would be restricted, rather than entire sites. Certain features or areas within a given site may be more sensitive than others, because of Native American concerns, environmental sensitivity, or other factors.

In general, activity and transportation within site boundaries would be restricted to foot traffic only. Foot traffic should be limited to specific trails to avoid undue disturbance and excessive erosion resulting from unrestricted foot access. If alternative modes of transportation (e.g., bicycle, horseback, off-highway vehicle) are permitted within a site boundary, they would be limited to designated routes within certain portions of the site. Restrictions with regard to modes of transportation within portions of protection sites on public lands administered by the BLM shall conform with the appropriate land use plan.

If future iterations of this management plan include additional restrictions, these additional restrictions shall be forwarded for consideration and implementation in the land use planning process. Similarly, restrictions regarding modes of transportation within protection sites located on county lands shall conform to applicable county regulations and planning guidance.

Public visitation is currently provided for at only one of the protection sites, on a self-guided basis—La Cieneguilla Petroglyphs. Public access to sites is also addressed in Chapter 6 (Interpretation, Education, and Visitor Use).

This plan does not call for formal closure of any public lands under the provisions of 43 CFR 8364.1, but rather recommends that public access not be actively encouraged at any of the

protection sites, with the exception of La Cieneguilla Petroglyphs, in order to help protect the sites from degradation.

Access to sites by Native Americans for religious and/or traditional subsistence activities will also be important (see Section 6.1.1.2). The ethnographic study (Parametrix 2011) identified Native American concerns with regard to access to specific sites, and the resulting recommendations have been summarized in this plan. Whereas this plan presents broad, programmatic concerns and guidance, management prescriptions regarding access to particular Act sites by Native Americans will be addressed in detail in future site-specific management plans tiering to this general management plan. Native American concerns are also addressed further in Chapter 8.

#### **4.2.5 FENCING**

Limiting pedestrian and/or livestock access to an archaeological site, or portion thereof, is one of the simplest ways to protect a site. Although the BLM Taos Field Office Resource Management Plan (RMP) discontinues grazing leases on BLM portions of protection sites, livestock on adjacent lands can still pose a threat to protection sites if livestock access is not restricted by fencing. Pedestrian and livestock traffic contribute to erosion and resource degradation through creation of “social trails” and topsoil disturbance. Public access will not be encouraged at the majority of the designated sites, and fencing is a good measure for limiting unwanted human access.

Fencing itself can be counterproductive if it draws attention to the resource it is intended to protect. Fencing can also potentially disturb intact, subsurface archaeological remains. For these reasons, fencing would be placed outside site boundaries and along property lines, to the extent practicable, to decrease the visibility of the designated site from the public. Fencing around designated sites would be posted with NO TRESPASSING signs to discourage illegal visitation and to protect landowners’ interests and liability.

Fencing intended to limit livestock travel into a site or portion of a site will require wire and solid fence posts driven into the ground. If installation of fencing will require ground-disturbing activities (e.g., driving of T-posts or excavation of post holes), a preconstruction archaeological survey should be conducted to ensure that important site features will not be adversely affected by fence construction. Proposed fence alignments would be modified as necessary to avoid site features. Fence construction involving ground disturbance would be monitored by a qualified archaeologist. Excavation or auguring of post holes also provides an opportunity for archaeological testing, which may also be conducted in conjunction with ground-disturbing fence installation to assess the potential for buried archaeological deposits. If intrasite fencing is installed within the site boundary to limit access to specific features or portions of a given site, additional measures will likely be warranted to ensure that the site is not subjected to an adverse effect, as defined by the NHPA, and its implementing regulations (36 CFR 800, as amended).

Some types of fencing do not require ground disturbance. For instance, a low-profile rope fence supported by short posts with wide, aboveground, stable bases of wood or concrete can be used to limit human access, particularly in intrasite situations. Although such a fence would not exclude livestock, it can be an effective symbolic barrier to pedestrian travel within sites,

especially when coupled with clear signage. Fences that do not require ground disturbance during construction would not require archaeological survey, monitoring, or testing (Table 4.2).

**Table 4.2. Fencing Options and Archaeological Measures That May Be Required**

<b>Type of Fencing</b>	<b>Ground Disturbance</b>	<b>Preconstruction Archaeological Survey</b>	<b>Archaeological Testing Prior to or Concurrent with Construction</b>	<b>Archaeological Monitoring of Fence Construction</b>
Construction fencing (aka snow fence) with T-posts	Yes	Yes	Yes	Yes
Construction fencing (aka snow fence) with aboveground posts	No	No	No	No
Rope with aboveground posts	No	No	No	No
Wire with T-posts or wooden fence posts	Yes	Yes	Yes	Yes
Barbed wire with T-posts or wooden fence posts	Yes	Yes	Yes	Yes

**4.2.6 EROSION CONTROL BEST MANAGEMENT PRACTICES**

Erosion control efforts involving ground disturbance (e.g., installation of drainpipes or water bars) would require preconstruction survey and possible testing prior to construction, as well as archaeological monitoring and possible testing concurrent with construction (Table 4.3). Erosion control measures such as hydroseeding, or placing straw wattles or other materials intended to slow the movement of water and sediment atop the ground surface, would not require archaeological work, unless anchored using stakes driven into the ground. TAC efforts to reduce erosion at Pueblo Galisteo through the use of check dams and livestock fencing represent a pilot project that could be referenced in future erosion control efforts at other designated sites (H.W. Toll, personal communication 2012).

**Table 4.3. Erosion Control Options and Archaeological Measures That May Be Required**

Measure	Ground Disturbance	Preconstruction Archaeological Survey	Archaeological Testing Prior to or Concurrent with Construction	Archaeological Monitoring of Fence Construction
Seeding	No	No	No	No
Hydroseeding	No	No	No	No
Fiber roll	Yes	Yes	Yes	Yes
Gabion installation to stabilize arroyo edges	Yes	Yes	Yes	Yes
Sand fence	Yes	Yes	Yes	Yes
Straw wattle	No	No	No	No
Straw bale	No	No	No	No
Cellular confinement (aka geocells) to stabilize arroyo edges	Yes	Yes	Yes	Yes
Riprap to stabilize arroyos	Yes	Yes	Yes	Yes
Mulch	No	No	No	No
Erosion control blanket	No	No	No	No
Contour bunding/water bars	Yes	Yes	Yes	Yes
Ditches above sites to divert water	Yes	Yes	Yes	Yes
Berms on high side of site	Yes	Yes	Yes	Yes
Netting over site area	No	No	No	No
Drainage system	Yes	Yes	Yes	Yes

#### **4.2.7 STABILIZATION OF STONE MASONRY**

Many of the protection sites contain stone masonry construction, all of which is in varying states of disrepair. As opposed to rebuilding or reconstructing stone walls and buildings, stabilization seeks to reduce the rate of degradation of such features over time. Use of appropriate local materials, such as adobe, and minimal use of modern materials, such as Portland cement, allows for low-impact and aesthetically appropriate stabilization efforts. Stabilization of stone masonry features would be planned, conducted, and monitored by specialists in this field to ensure that well-intended efforts do not inadvertently result in greater degradation of the resource in question.

#### **4.2.8 PEST CONTROL**

Bioturbation of archaeological deposits resulting from animal burrows is a problem at several of the protection sites (Figure 4.1; see Table 3.1). The digging roils and mixes stratified deposits, diminishing their integrity and their ability to provide information about the past. Buried artifacts encountered by burrowing animals are often pushed to the surface, where their provenience and context are lost. Bioturbation can also contribute to erosion and instability of stone masonry features.

Measures to reduce bioturbation resulting from burrowing animals would be in keeping with regulations concerning the management of animal populations. For portions of protection sites on BLM land, direct lethal methods should not be employed. However, enhancement of habitat features of natural predators would be considered on BLM lands. Such measures could include construction of raptor stands to encourage avian predation on rodents at affected sites.



**Figure 4.1. Rodent disturbance at LA 366 (Lamy Junction Sites).**  
Photo courtesy of OAS.

#### **4.2.9 MONITORING AND SURVEILLANCE**

Monitoring of the protection sites, whether undertaken by agency staff, landowners, or volunteers, allows for site conditions to be assessed and recorded on a regular basis. Site patrol and surveillance visits, conducted by the BLM or other law enforcement entities, can also serve to discourage vandalism and trespassing.

## **SITE MONITORING AND STEWARDSHIP PROGRAMS**

Site monitoring programs have been successful in not only tracking site conditions, but in engaging the local avocational archaeology community in proactive stewardship of important archaeological sites.

### *SITWATCH PROGRAM*

The SiteWatch program involves local volunteers and agency personnel to regularly monitor important archaeological sites. As of October 15, 2010, the Santa Fe–Galisteo Basin Chapter SiteWatch volunteer group has been monitoring the following protection sites on a regular basis:

- Upper Arroyo Hondo Pueblo
- Arroyo Hondo Pueblo
- Burnt Corn Pueblo
- LA 27/Lamy Junction
- La Cieneguilla Petroglyphs
- Petroglyph Hill
- Pueblo Blanco
- Las Huertas
- San Lazaro Pueblo (BLM portion)
- San Marcos Pueblo

SiteWatch volunteer site stewards document any changes to the integrity of these sites, whether through natural processes or changes caused by livestock or human activity, including vandalism and pot hunting. Changes are reported to the appropriate land management agency or landowner for the site in question.

Since SiteWatch site stewards operate as volunteers for, and at the invitation of, the land management agency or landowner, to date they have primarily monitored sites on BLM, Santa Fe County Open Space, and New Mexico State Land Office lands. Through the cooperative agreement process, arrangements could be made for SiteWatch volunteers to assist private landowners with the monitoring of heritage resources on their lands as well.

### **SITE SURVEILLANCE AND PATROL**

Regular or intermittent visits by law enforcement agents are appropriate for all sites with a history or current threat of trespassing, illicit collection, vandalism, or looting.

BLM rangers presently patrol protection sites on public lands administered by the BLM, primarily the sites in the La Cienega and La Cieneguilla area. The frequency of these patrols is between one to two weeks for accessible sites such as La Cieneguilla Pueblo and La Cieneguilla Petroglyphs, with less frequent visits to La Cienega Pithouse Village and La Cienega Pueblo and Petroglyphs, which require crossing private lands. BLM law enforcement rangers occasionally visit San Lazaro and Burnt Corn Pueblos, which both require long hikes across private land to access.

Santa Fe County field staff members check on Petroglyph Hill when they conduct windmill and fence maintenance activities at the Thornton Ranch Open Space. As noted above, this site is also

visited regularly by SiteWatch volunteers, as is the Lamy Junction site, which is also owned by Santa Fe County. The Santa Fe County portion of La Cieneguilla Petroglyphs/Camino Real Site is not regularly monitored at this time.

The six protection sites managed by TAC are all fenced (at least partially), posted, and routinely patrolled by volunteer site stewards (T. Stewart, personal communication 2011).

Law enforcement patrols have not been implemented for sites on private lands, since access to these sites is generally limited and controlled by the private landowners, reducing the potential for trespassing, vandalism, and looting in most cases. Sites with both agency and private ownership provide an opportunity for agency patrol on privately owned portions of sites adjacent to the agency-managed areas, but such arrangements would necessarily be based on landowner consent. No such arrangements are currently in place, but could be negotiated through cooperative agreements if a need for increased law enforcement presence is perceived and requested by the private landowner.

Federal (i.e., BLM) law enforcement agents can cross onto private land if they observe any laws being broken. However, the primary purpose of law enforcement patrols of private lands would be as a deterrent, rather than as an enforcement measure. Cooperative agreements could include provisions for notification of the private landowner if a law enforcement agent observes unusual or suspicious activity, and vice versa.

Tribal police may also be cross-deputized to enforce laws on public lands, but this may require a formal agreement between a given tribal government and the applicable Federal, state, or county agencies.

In general, patrol and surveillance of sites by law enforcement personnel, as well as enforcement efforts, would be coordinated between agencies. Interagency agreements would be executed and put in place as necessary to establish protocols and ensure smooth communication among the various agencies involved, as well as private landowners.

#### **4.2.10 PROPOSED SITE PROTECTION MEASURES BY SITE**

Some degree of protection and preservation is warranted at each of the protection sites. Based on the results of the OAS site assessment study (summarized in Chapter 3), the protection sites are listed below in Table 4.4 with protection and preservation measures for each site. High priority measures are indicated by **boldface type**.

Although erosion is a concern at all of the listed sites, six protection sites are currently suffering from severe erosion. Erosion control measures and stabilization of portions of these sites are warranted in the near term at Pueblo Galisteo, San Marcos Pueblo, San Cristobal Pueblo, Chamisa Locita Pueblo, Lamy Junction, and Las Huertas. Erosion control and other measures would be developed and implemented on BLM sites and sites where cooperative agreements are in place.

**Table 4.4. Summary of Proposed Site Protection Measures by Site**

Site Name	Site Number(s)	Erosion Control	Law Enforcement Patrol	Livestock Fencing	Pedestrian Fencing	Pest Control	Monitoring
<b>Rio Galisteo Sites</b>							
<i>Early Sites</i>							
Lamy Junction Sites	LA 27; LA 362–368; LA 31774–31779	X	X			X	X
Burnt Corn Pueblo	LA 358 and LA 359	X	X		X	X	X
Lamy Pueblo	LA 1104 or LA 10607	X	X			X	X
<i>Large Pueblos</i>							
Chamisa Locita Pueblo (Pueblo Wells)	LA 4	X	X	X			X
Pueblo Largo	LA 183	X		X			X
Pueblo Shé	LA 239	X	X	X		X	X
Pueblo Colorado	LA 62	X	X	X		X	X
Pueblo Blanco	LA 40	X	X		X		X
<i>Large Pueblos with Missions</i>							
San Cristobal Pueblo	LA 80	X					X
Pueblo Galisteo/Las Madres	LA 26 and LA 25	X					X
San Lazaro Pueblo	LA 91 and LA 92	X	X				X
San Marcos Pueblo	LA 98	X		X		X	X
<i>Rock Art Sites</i>							
Petroglyph Hill	LA 148959	X	X		X		X
Comanche Gap Petroglyphs	LA 76065	X	X		X		X
<b>Rio Santa Fe Sites</b>							
<i>Early Sites</i>							
La Cienega Pithouse Village	LA 166	X	X			X	X
<i>Large Pueblo Sites</i>							
Upper Arroyo Hondo Pueblo	LA 76	X	X				X
Arroyo Hondo Pueblo	LA 12	X	X			X	X
La Cienega Pueblo and Petroglyphs	LA 3	X	X		X	X	X
La Cieneguilla Pueblo (Tzeguma)	LA 16	X	X				X
<i>Rock Art Sites</i>							
La Cieneguilla Petroglyphs	LA 9064	X	X		X		X
<i>Resource Sites</i>							
Rote Chert Quarry	LA 65206	X					X
<i>Historic Sites</i>							
Camino Real Site	LA 16767	X					X
<b>Southern Sites</b>							
<i>Large Pueblos</i>							
Espinoso Ridge Site	LA 278	X	X	X		X	X
Pa'ako Pueblo (San Pedro Pueblo)	LA 162	X	X			X	X
<i>Historic Sites</i>							
Las Huertas	LA 25674	X	X				X

### **4.3 SITE PROTECTION AND EXISTING BLM PROGRAMS**

The BLM maintains several ongoing programs with the potential to result in direct or indirect effects to the significant archaeological resources at the BLM portions of the protection sites. These programs should be planned and implemented to avoid or minimize impacts to cultural resources. This management plan conforms to the BLM Taos Field Office RMP.

#### **4.3.1 FIRE**

A specific Fire Management Unit has been created for the protection sites located on BLM-managed public lands, tiering from the Farmington District Fire Management Plan (BLM 2010:114). Fire suppression efforts conducted at the protection sites would employ methods that avoid or minimize impacts to the archaeological resources present. Low-impact hand fuel treatments are the appropriate way to reduce fuel loads within and adjacent to site boundaries, and reduce the risk of destructive wildfires negatively impacting the surface features, artifacts, and landscapes.

#### **4.3.2 MINERALS**

Section 8 of the Act withdraws all Federal lands within the protection sites from consideration for development, mining, and mineral or geothermal leasing. Although this eliminates the potential for direct impacts to protection sites resulting from mineral leasing and sales, such actions on adjacent lands have the potential to cause indirect effects to protection sites. Indirect effects can include changes to the aspects of integrity that make the protection sites eligible for inclusion on the NRHP, including “feeling” and “setting.” This plan calls for BLM parcels directly adjacent to protection sites to be subject to internal review by BLM cultural resources staff prior to finalization, allowing the BLM to impose conditions of approval for minerals leasing and sales that would avoid or minimize indirect effects to the integrity of protection sites. The BLM will engage in Native American consultation to seek the input of tribes and pueblos with regard to potential minerals activity on BLM lands adjacent to protection sites.

#### **4.3.3 REALTY**

As stated in Section 5 of the Act, the BLM portions of protection sites are withdrawn from realty and all forms of entry. Existing rights-of-way are present on the BLM portions of two protection sites: La Cienega Pueblo and Petroglyphs and La Cieneguilla Petroglyphs.

##### **LA CIENEGA PUEBLO AND PETROGLYPHS**

The Gallegos ditch conveys water from the Santa Fe River to private land on the old Gallegos ranch where it was used for irrigation. The total area of the right-of-way is approximately 3 acres. This ditch is to the southeast of the Santa Fe River and much of it was constructed on the northwest side of the mesa on which La Cienega Pueblo (LA 3) is located.

##### **LA CIENEGUILLA PETROGLYPHS**

Rights-of-way present within the site include the Public Service Company of New Mexico transmission line, which intersects the northern portion of the existing boundary, as well as the proposed expanded boundary for the site. This right-of-way crosses La Bajada Mesa to the north

of the petroglyphs. Other rights-of-way within the site include the Santa Fe County Road that climbs onto La Bajada Mesa past the Camel Tracks cinder pit from the road along the Santa Fe River. This road parallels the transmission line on the mesa top. A fiber-optic line also follows this route.

#### **4.3.4 RANGE**

The BLM Taos Field Office RMP discontinues all grazing leases on BLM portions of protection sites. Existing permittees have received letters notifying them of the discontinuation of grazing on protection sites. Two years after the notice and issuance of a revised grazing permit, the sites can be fenced. Only one permittee will be affected.

#### **4.3.5 WILDLIFE**

The only ongoing program for wildlife in the area is the Galisteo Wildlife Working Group's identification of key wildlife species and important wildlife corridors. Any fencing projects proposed in future site-specific management plans would be cross-checked with the Galisteo Wildlife Working Group corridors, so that wildlife movement across the landscape would not be negatively impacted by proposed fencing.

#### **4.3.6 WEED MANAGEMENT**

Any existing or future BLM weed management programs or efforts to eradicate non-native species on BLM portions of protection sites should be subject to internal review by BLM cultural resources specialists to ensure that the methods employed do not adversely affect the significant archaeological resources present. Weed management actions involving ground disturbance should not be undertaken. The BLM may initiate Native American consultation with regard to weed management programs on BLM portions of the protection sites.

## **CHAPTER 5 Research**

In conjunction with preservation and protection, the Act directs the Secretary of the Interior to manage the designated protection sites in a manner that would provide for research (Section 5 [A][1]). Each of the protection sites is a valuable source of information, and carefully crafted research concerning these sites would continue to build our collective understanding of past lifeways in the Galisteo Basin. All proposed research efforts focused on the designated sites should be consistent with general principals outlined in this management plan, as well as with BLM 8100 series manual guidance, and should be either non-invasive or designed to minimize ground disturbance, indirect effects, and visual impacts. Furthermore, research proposals should be consistent with Native American concerns and recommendations for each site and compliant with all applicable laws and regulations.

### **5.1 COORDINATION OF RESEARCH EFFORTS**

The BLM, in collaboration with other agencies, heritage resource professionals, and other interested stakeholders, will serve as the clearing house for future research efforts at protection sites on BLM lands or with cooperative agreements in place. The BLM will be responsible for coordinating research efforts, reviewing and approving research designs and proposals, and compiling the results of research projects, with support from its collaborators as appropriate. TAC has its own protocols and procedures for reviewing and approving research projects on the sites that they own or have easements for. The BLM will work closely with TAC to coordinate research efforts involving TAC-managed sites. Ultimately, a single repository, located in New Mexico, could be identified and established to serve as a storage place for files, information, and even artifacts from cultural resources research in the Galisteo Basin area. The BLM will also be responsible for updating this management plan at regular intervals (e.g., every five years), with assistance from its collaborators, and new research themes may be identified and added in the future. Consultation with Native Americans regarding research proposals is crucial, and such consultation will be facilitated by the BLM with support of its collaborators.

### **5.2 RESEARCH THEMES**

Research proposals that inform the protection, preservation, and interpretation of protection sites with applications for current resource management would be considered. Although research proposals may seek to understand a variety of questions about past human activity and occupation in the Galisteo Basin, the following research themes and topics are provided here as broad guidelines for researchers.

#### **5.2.1 CULTURAL LANDSCAPES**

- Functionality of subsistence, trade, political, and ritual systems on an intersite, regional, or landscape level
- Mechanisms and vehicles for intersite communication, travel, and exchange

### **5.2.2 CLIMATE AND ENVIRONMENT**

- Changes in climate and natural environment within the basin over time
- Natural and cultural drivers for these changes
- Indigenous land use strategies, successes, and failures in the past, and application to current issues around sustainable living in the Galisteo Basin

### **5.2.3 SETTLEMENT AND POPULATION MOVEMENT**

- Timing of settlement of the Galisteo Basin
- Identity of populations moving into the basin
- Patterns of population movement (both within and in/out of the basin)
- Drivers behind these movements

### **5.2.4 CONTACT**

- Interaction of Spanish and Puebloan cultures
- Changes to traditional lifeways resulting from European contact and the introduction of the Mission system

### **5.2.5 MATERIAL CULTURE**

- Development of material culture in the Galisteo Basin
- Role of the protection sites in specialization and elevation of ceramics, turquoise, and other industries to the high levels of artistry and craftsmanship that this area is known for
- Locations of raw material sources for these industries
- Influence of intensive agriculture, societal structure, trade networks, European contact, and other factors on the direction of material culture production in the Galisteo Basin

## **5.3 TYPES OF RESEARCH**

### **5.3.1 ETHNOGRAPHY**

Ethnographic research, building on the results of the BLM's ethnographic study (Parametrix 2011), is encouraged. Ethnographic research poses no threat to the designated sites and promotes a deeper understanding of relationships between modern Native Americans and the archaeological sites.

### **5.3.2 GEOGRAPHY**

Geographic research presents another non-invasive line of inquiry with great potential to inform questions about the sites designated by the Act, as well as the greater cultural landscape. Geographic research analyzes intrasite and intersite spatial relationships, as well as relationships between cultural resources and aspects of the natural environment, including but not limited to landforms, vegetation, soils, and microclimatic conditions. Geographic research projects could

employ remote sensing, ground truthing, spatial analysis using geographic information technologies and modeling, and other non-invasive methods.

### **5.3.3 ARCHAEOLOGY**

Archaeological research at the protection sites should be limited to non-invasive or minimally disturbing projects. To the degree possible, archaeological research involving invasive methods would be planned and conducted in conjunction with ground-disturbing site protection measures. Pedestrian surveys are encouraged, as are projects involving detailed mapping of surface features.

#### **NON-INVASIVE ARCHAEOLOGY**

Non-invasive archaeological research is encouraged because it is consistent with the Act's primary mandate of site protection. Pedestrian surveys, mapping, remote sensing, and the use of ground-penetrating radar (GPR) are all considered non-invasive methods. Other types of non-invasive archaeological research include reporting previous research results, analyzing previous excavation collections, and recording and backfilling previous excavations.

Since each of the protection sites has been subjected to 100 percent, intensive pedestrian inventory, non-invasive research methods such as remote sensing and GPR hold the greatest potential for identifying previously unknown features within existing site boundaries, including buried deposits and human burials.

#### **INVASIVE ARCHAEOLOGY**

Invasive or destructive archaeological research refers to testing and data recovery excavation. Although invasive research methods should not be considered on a stand-alone basis, such methods can and should be applied in conjunction with any ground-disturbing site protection measures, such as stabilization, erosion control, and fencing. Careful coordination of testing and data recovery excavation with ground-disturbing site protection measures will ensure that impacts to the sites are minimized and that scientific information is generated, rather than lost.

All proposals to conduct invasive archaeological research would include a reclamation plan describing how the excavated areas will be restored to original grade and reseeded using an appropriate seed mix, approved by the appropriate land management agency and/or private landowner(s).

Invasive archaeology should be limited; the maximum percentage of each site to be excavated should be based on site-specific research goals, as well as the nature and extent of the associated ground-disturbing site protection measures, and stipulated in the research design. Archaeological excavation is destructive, and the primary objective of the Act and this management plan is to provide for the *protection* of the listed resources. The BLM, at its discretion, may choose to limit archaeological research proposals to less than the proposed disturbance percentage for sites on BLM land.

## **5.4 PERMITTING**

Landowner permission will be required to conduct research efforts at any of the protection sites. Specific permits will also be required depending on the ownership of each area where research is proposed. BLM is the permitting agency for research at protection sites on BLM land.

### **5.4.1 STATE LANDS**

Two types of permits are available for archaeological investigation on State land in New Mexico. One is the General Permit, which has provisions for survey and inventory, test excavation, monitoring, and unmarked human burial excavation. The second is the Project Specific Permit, which provides for survey and inventory, test excavation, excavation, monitoring, unmarked human burial excavation, and mechanical excavation of archaeological sites (State of New Mexico 2005). These permits are obtained through the Cultural Properties Review Committee of the New Mexico Historic Preservation Division, Department of Cultural Affairs under Section 18-6-5 (New Mexico Statutes Annotated 1978) of the New Mexico Cultural Properties Act. These permits are available to individuals, organizations, and companies, but are currently under revision. Any proposals for research on State land must follow the current and appropriate regulations. Permitting regarding ethnographic studies is not required by the State of New Mexico; however, individual tribes should be consulted if the project falls within counties of New Mexico in which individual tribes have expressed geographic interest (State of New Mexico 2011).

### **5.4.2 PUBLIC LANDS ADMINISTERED BY THE BLM**

Proposed archaeological research efforts at protection sites on BLM land would require a Statewide Cultural Resources Use Permit and a project-specific fieldwork authorization from the appropriate Field Office. Limited efforts may also be conducted under a volunteer agreement. Any invasive archaeological research proposed for portions of protection sites located on public lands administered by the BLM would also require a permit under ARPA. Ethnographic research could be conducted through a contract with the BLM or under an agreement and fieldwork authorization.

### **5.4.3 COUNTY LANDS**

Santa Fe County is currently working with its attorneys to develop a procedure for permitting cultural and environmental research requests for Open Space properties. These policies will be modeled after the New Mexico State Historic Preservation Office format, with additional emphasis on tribal consultation.

### **5.4.4 PRIVATE LANDS**

All proposed research on portions of protection sites located on privately owned lands will require the permission of the private landowner(s) and should be consistent with the provisions of any cooperative agreements established between the landowner(s) and the BLM. Upon receipt of a research proposal involving private lands, the BLM will coordinate with the appropriate landowner(s) to seek permission, ensure consistency with any applicable cooperative

agreements, and identify any additional permitting requirements. The BLM can assist private landowners with evaluating or vetting research requests for sites on private lands.

## **5.5 RESEARCH TO IDENTIFY SITES FOR POSSIBLE ADDITION TO THE ACT**

Pedestrian surveys for cultural resources, whether intensive (BLM Class III) or judgmental/probabilistic (BLM Class II) may be conducted in areas outside the areas currently covered by the Act. Such surveys would identify sites that could be considered for addition to the Act. While such surveys would not require review and approval by the BLM if the proposed survey areas did not include BLM lands or areas currently included in the Act, it is recommended that the BLM be consulted prior to implementation.

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## **CHAPTER 6 Interpretation, Education, and Visitor Use**

Public interpretation, education, and visitor use are important aspects of the long-term management of these significant archaeological resources. In order to protect the sensitive archaeological resources listed in the Act, public visitation will not be actively encouraged or facilitated at the majority of the protection sites included in the Act, but this does not preclude off-site interpretation of these sensitive and important resources. Reasons for limiting visitor use at protection sites include reducing the potential for adverse impacts to the resources (e.g., erosion, illicit collection) and being sensitive to Native American concerns, as well as expense, liability, and access issues (that may be associated with private land). Many of the protection sites are remote and not easily accessed.

This general management plan does not facilitate public visitation at any of the protection sites apart from La Cieneguilla Petroglyphs (self-guided) and the seven sites managed by TAC (guided tours only); however, the BLM, its collaborators, and other applicable landowners will carefully consider whether to permit public visitation at each site during the process of developing site-specific management plans. This document is a general management plan and, by definition, does not provide detailed prescriptions for each of the protection sites. Rather, future site-specific management plans, guided by this general management plan, will each include an interpretive plan with specific, detailed guidance for each site.

### **6.1 VISITOR USE**

#### **6.1.1 TYPES OF VISITORS**

Potential visitors to sites open to the public include a wide range of user groups and transportation modes, including pedestrians, equestrians, bicyclists, and off-highway vehicle enthusiasts. Generally, non-pedestrian uses are not considered compatible with the primary goal of site protection set forth in the Act. As such, routes within protection sites for motorized travel, bicycles, or equestrians would not be designated. Instead, the only use or type of transportation within protection sites considered in this management plan is pedestrian; pedestrian travel would be the mode of transportation within all of the protection sites.

Pedestrian visitors to the few protection sites where public visitation is facilitated may fit into one of several categories: tourist, student, or site steward. The tourist category can be further divided into two groups: independent tourists and organized group tourists.

#### **GROUP VISITORS**

Museums, avocational groups, schools, and other entities may wish to conduct group tours to protection sites in the future. Santa Fe County's Sustainable Land Development Plan promotes ecotourism and, as such, Santa Fe County may permit and encourage group visits to one or more of the protection sites under its control.

TAC periodically leads supervised tours of the protection sites under their ownership. These tours are for TAC members and the general public. Monthly public tours are offered at San Marcos Pueblo and at Arroyo Hondo Pueblo by request, and TAC will consider requests for

public group tours at the other protection sites it controls. A TAC employee or site steward must escort and accompany any such tours. TAC holds a preservation easement on the privately owned portion of Pueblo Galisteo. The terms of the easement limit the number of tours and the number of persons per tour. In general, TAC seeks to limit their group tours to 30 persons or fewer (J. Walker, personal communication 2011). Both Crow Canyon Archaeological Center and the SAR also lead tours of select Act sites, including Pueblo Galisteo and Arroyo Hondo, with owner permissions (L. Cordell, personal communication 2011).

### **NATIVE AMERICAN VISITORS**

The BLM will facilitate Native American access to the protection sites for traditional cultural and religious purposes. Requests for access must be made in advance of the visit to the BLM Taos Field Office. The date, approximate time of visit, identifying vehicle information, and names, addresses, and phone numbers of the visitors will be required. The BLM will work with the individual property manager(s) or owner(s) to arrange the visit. No disturbance or collection of archaeological materials is allowed. The BLM will inform the requestor of approval or denial, and of any additional stipulations made by the land manager or owner.

In addition, TAC's policy is to offer Native Americans access to TAC-owned sites for traditional purposes, provided the request is made in advance. Native American visitors are generally accompanied by a site steward or TAC employee; upon request, the staff member can remain outside the preserve so that native peoples can carry out their traditional visitation in private.

## **6.2 SITES WHERE PUBLIC VISITATION IS FACILITATED**

### **6.2.1 TAC-MANAGED SITES**

Guided group tours of the six sites managed by TAC are available upon request:

- Pueblo Galisteo/Las Madres
- Arroyo Hondo Pueblo
- Rote Chert Quarry
- Camino Real Site
- Las Huertas
- San Marcos Pueblo (monthly)

TAC offers monthly tours of San Marcos Pueblo to the general public between May and October. Locally advertised, these monthly public tours are led by a site steward. Guided tours of the other five sites managed by TAC are not conducted on a regular schedule. Unaccompanied or self-guided public visitation is not permitted at these sites (T. Stewart, personal communication 2011).

### **6.2.2 LA CIENEGUILLA PETROGLYPHS**

La Cieneguilla Petroglyphs is the only one of the protection sites named in the Act where public visitation is currently encouraged on a self-guided basis. The majority of the site lies on public land administered by the BLM, but a portion lies on Santa Fe County land. The BLM constructed a designated parking lot in 2006 at the trailhead. Signage has been installed at the trailhead parking lot within the past five years. Additional interpretive signage may be installed in the future. A site-specific management plan will be developed to address management needs including restrooms, picnic tables, ramadas, interpretive needs such as signage, and protection needs.

## **6.3 SITES TO BE CONSIDERED FOR CLOSING TO PUBLIC**

### **6.3.1 PETROGLYPH HILL**

In the past, Santa Fe County organized docent-led tours of the Petroglyph Hill site, with 12 to 18 visitors, twice a month. The Petroglyph Hill site is managed by Santa Fe County as a component of Thornton Ranch Open Space, which is currently closed to the public pending assignment of a ranger. Based on a recent assessment of the impacts of visitor use at Petroglyph Hill, Santa Fe County suspended the docent-led tours in January 2010, and has no plans to resume regularly scheduled tours. Santa Fe County has considered installing two or three viewing platforms connected by boardwalks on aboveground piers and is considering other alternative ways to interpret the site remotely from other locations on the Thornton Ranch property. Due to the new information provided to Open Space staff from the results of the ethnographic work done with tribes at Petroglyph Hill during summer 2010, staff is considering closing Petroglyph Hill to tours altogether. The management plan for Thornton Ranch Open Space (including Petroglyph Hill) has not yet been finalized. The plan will need the approval of both the Santa Fe County Open Lands, Trails, and Parks Advisory Committee and the Santa Fe Board of County Commissioners in order to be implemented (B. Mills, personal communication 2011).

## **6.4 CARRYING CAPACITY**

Each site is defined by unique topographic, environmental, and cultural factors and constraints. These constraints limit the capacity of each site to accommodate visitors. Larger sites may accommodate occasional visitation by organized group tours, whereas smaller or more sensitive sites may require tight limits on the frequency and duration of visits, as well as the number of visitors. Regardless of site size, archaeological sites are sensitive, fragile resources that are susceptible to degradation resulting from visitor use. Many of the protection sites feature stone masonry walls and structures in various states of decay; visitor use has the potential to accelerate the natural degradation of these features. Casual collection of surface artifacts, although illegal on public lands and proactively discouraged at archaeological sites open to public visitation, is a common occurrence at such places. Over time, the cumulative impacts of foot traffic, casual artifact collection, litter, and even oils from the skin on visitors' hands can negatively affect site integrity. Visitor carrying capacities will be defined for each site in future site-specific management plans to be tiered to this general management plan.

## **6.5 OFF-SITE INTERPRETATION**

A wealth of archaeological information exists for each of the protection sites. Although much of it is technical, the broad patterns and unique aspects of these sites can readily be conveyed to a wider audience via interpretive efforts and educational outreach. The results of the current ethnographic study would be incorporated into interpretive and educational efforts with the permission of the appropriate individuals or groups. Furthermore, all educational and interpretive efforts should acknowledge the connection between cultural and natural resources within the broader context of the Galisteo Basin landscape.

### **6.5.1 THEMES**

Themes and messages conveyed to the public through interpretive materials should be broadly cohesive across the different Act sites interpreted. Interpretive content should highlight the connections between issues and challenges facing past, present, and future residents of the Galisteo Basin. Important interpretive themes include:

- Land use strategies, successes, and failures in the past; cultural interconnection with natural resources; and applications to current issues around sustainable living in the Galisteo Basin
- Trade, population movement, and interaction among different groups in and around the basin, including changes associated with European contact
- Cultural continuity between the builders, residents, and users of the protection sites and their modern descendants

### **6.5.2 SIGNAGE**

Interpretive signage is one of the most commonly employed methods of off-site interpretation. For sites that have been closed, or sites where public access is not encouraged, interpretive signage can be placed at key observation points, where the site can be seen from a distance from transportation corridors or along a boundary fence restricting access to the site itself. Placement of such signage allows the public to learn about specific archaeological resources while making a visual connection with the site itself, but without actually entering the site and potentially disturbing it. One downside to placing interpretive signage immediately off-site or within sight of the protected resource is that such signage can call undue attention to the resource and inadvertently encourage some elements of the public to illegally access the site with illicit artifact collection or looting in mind. Interpretive signage could be placed along transportation corridors in any number of locations, not necessarily adjacent to one of the protection sites. In general, this management plan calls for interpretive signage to be installed off-site, where appropriate, and not immediately adjacent to a protection site in order to prioritize site preservation and protection as mandated by the Act.

Signage, exhibits, and displays should present a consistent appearance throughout the Galisteo Basin. BLM will work with all parties involved to ensure that interpretive signage and other materials will be consistent in content and appearance. Interpretive signage could demonstrate connections between protection sites and modern Native American populations. For example,

signage at or near Pa'ako Pueblo should state that the site is ancestral to Santa Ana Pueblo (J. Garcia, personal communication 2011).

### **6.5.3 POTENTIAL LOCATIONS FOR OFF-SITE INTERPRETATION**

In order to ensure that the designated sites are protected from pedestrian traffic, illicit artifact collection, and vandalism, off-site signage may be more appropriately placed at specific locations within the Galisteo Basin that are not immediately adjacent to the site being interpreted.

#### **CERRILLOS HILLS STATE PARK**

Cerrillos Hills State Park would provide an excellent location for off-site interpretation of archaeological sites throughout the Galisteo Basin, provided the appropriate interpretive opportunities were fostered through ongoing communication and collaboration among the BLM and New Mexico State Parks. The park currently features an existing trail network and interpretive staff, as well as public facilities including restrooms and parking. The Cerrillos Hills State Park Visitor Center is located in the village of Cerrillos, approximately 0.5 mile from the park. Cerrillos Hills State Park and/or the Visitor Center could serve as a gateway to the Galisteo Basin and as a center for interpreting the sensitive archaeological sites designated by the Act, as well as the broader cultural, historical, and environmental context of the basin to the public.

#### **THORNTON RANCH OPEN SPACE**

Santa Fe County's Thornton Ranch Open Space presents another unique opportunity for off-site interpretation of the archaeological sites designated by the Act. This area will ultimately be opened to multiple user groups through a system of sustainably developed trails. A portion of the Petroglyph Hill site is located within the Thornton Ranch Open Space property, although public access is currently restricted to this site. With Santa Fe County's planned improvements to facilitate visitor use, the Thornton Ranch Open Space property is well suited for public education and interpretation of the archaeology of the entire Galisteo Basin.

#### **LAMY JUNCTION**

Santa Fe County owns the Lamy Junction sites and manages the property as part of its Open Space and Trails Program. This property is closed to the public. Santa Fe County also owns 50 acres close to the Lamy Junction site and manages a small park there with picnic tables and shade structures. Open Space staff members are considering improving and expanding the Lamy Park facility to include interpretive displays for the Lamy Junction site and possibly other sites in the Galisteo Basin, but the Lamy Junction site itself will remain closed to the public.

#### **SANDIA RANGER STATION**

The U.S. Forest Service's Sandia Ranger Station, in the Village of Tijeras and adjacent to the archaeological site of Tijeras Pueblo, may be another possible venue for off-site interpretation of the archaeological sites designated by the Act. An existing interpretive center there could provide additional information about sites beyond Tijeras Pueblo itself. This location could prove to be even more appropriate for off-site interpretation of protection sites if sites in this area along NM 14 were added to the Act (see Chapter 7 Legislative and Administrative Compliance).

### **PUBLIC LANDS INFORMATION CENTER**

The Public Lands Information Center at the BLM State Office in Santa Fe represents a potential location for off-site interpretation of the cultural heritage of the Galisteo Basin. The center is currently a well-used source of information on public lands in the Santa Fe area for tourists and locals alike.

### **NEW MEXICO HIGHWAY 14**

NM 14, also known as the Turquoise Trail, traverses the Galisteo Basin area. The route is a designated National Scenic Byway in addition to being listed on the New Mexico Scenic Byway System. NM 14 presents an opportunity for installing interpretive signage readily accessible to both locals and tourists. The signage would be appropriately located within the Galisteo Basin, but not immediately adjacent to any of the protection sites. Signage could provide information about additional sources of information on, and interpretation of, Galisteo Basin archaeology. Pull-out/parking areas may be needed to accommodate vehicles with travelers stopping to read the signage. Coordination with the NMDOT would be required for this option.

#### ***6.5.4 DRIVING TOUR***

A self-guided driving tour could be developed for the Galisteo Basin using print and/or audio media. The driving tour could be keyed to landmarks or mileposts on NM 14 and other roads within the Galisteo Basin area, but would not lead visitors directly to protection sites. The materials for the tour could be made available on the Act website or at one of the centers for off-site interpretation. The driving tour could be linked to the existing Turquoise Trail driving tour.

#### ***6.5.5 TRAVELING EXHIBIT***

A compact, portable exhibit highlighting the archaeology of the Galisteo Basin could be prepared and loaned to various institutions throughout the area. Such an exhibit could include historical and modern photographs, maps, Native American perspectives, and dioramas. Artifacts could also be included; however, the inclusion of cultural materials could introduce challenges such as security issues or Native American sensitivities. This traveling exhibit could be maintained by the BLM or its collaborators, or possibly through the Museum of New Mexico's Van of Enchantment, and loaned to libraries, courthouses, airports, and other facilities with high public use. Rather than presenting detailed information about each site, the exhibit could discuss the Act and the reasons why the protection sites are considered significant. This would provide a good introduction to the area and direct interested parties to the sites that are open to the public, and to any Act interpretive centers that may have been established.

#### ***6.5.6 EDUCATIONAL OUTREACH***

Off-site interpretation need not be limited to signage and exhibits requiring a physical space for display and viewing. There are many possibilities for educating the general public about the archaeology of the Galisteo Basin through the public school system. It is important that Pueblo Indian and other Native American students be included in these programs.

### **LESSON PLANS**

One or more lesson plans focused on Galisteo Basin archaeology could be developed for incorporation into existing primary and secondary school curricula. Programs such as Project Archaeology have demonstrated that not only can the principles of archaeology be taught to children in public schools, but archaeological lesson plans can reinforce basic mathematical, writing, and problem solving skills. Act lesson plans should be developed in coordination with local educators and should dovetail with other initiatives, including but not limited to outdoor education, sustainability, and bilingual education. New Mexico State Parks (State Parks) is currently working on a curriculum guide for the Galisteo Basin/Cerrillos Hills State Park. Units or specific lesson plans focused on the archaeology of one or more protection sites should be incorporated or added to existing curricula, as appropriate. The BLM and its cooperators would coordinate this outreach with the OAS during the development of interpretive materials.

### **FIELD TRIPS**

When combined with and tied into a curriculum or specific lesson plan, field trips to publicly accessible sites and/or interpretive centers would be particularly effective in educating the school-aged public about the Act and the important sites that it protects. For high school students, such field trips could be conducted in conjunction with SiteWatch or other site stewardship activities, allowing students to contribute to documentation and stewardship efforts while engaged in outdoor and experiential learning.

### **WEB-BASED EDUCATION**

An Act website ([www.galisteoarchaeology.org](http://www.galisteoarchaeology.org)) has been developed by the OAS via an assistance agreement with the BLM. This website provides information about the Act, the sites, and the partners involved in managing them. The website features interactive maps, a historical context, and links to agency contacts. This website should be updated regularly to provide the public with information about access to sites and interpretive centers, as well as the status of planning and management efforts, stabilization projects, and research initiatives. Virtual, or online, field trips and other web-based interpretation efforts would augment other similar efforts.

### **RESPONSIBILITY**

The BLM will work together with State Parks and collaborators to develop interpretive and educational materials and strategies, and will collectively pursue funding for such collaborative efforts.

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## **CHAPTER 7 Legislative and Administrative Compliance**

All actions proposed for the protection sites shall be conducted in full compliance with applicable laws, ordinances, and regulations. The suite of mandates requiring compliance will vary by site, depending on the mix of land ownership, as well as the type of action proposed.

### **7.1 ADDITIONS, DELETIONS, AND BOUNDARY ADJUSTMENTS**

The Secretary of the Interior's addition or deletion of a site to the list of sites designated by the Act requires an Act of Congress. Any owner of property within the protection sites who wishes to have their land removed from the Act may do so by writing the Secretary of the Interior. The Secretary of the Interior may make minor boundary adjustments by publishing them in the *Federal Register*. The Act authorizes minor adjustments to protection site boundaries as defined in the Act. Sites recommended for addition, deletion, and boundary adjustment are listed in Chapter 9.

#### **7.1.1 ADDITIONS**

The Act charges the U.S. Department of the Interior with searching for additional Native American and Spanish colonial sites in the Galisteo Basin area and developing recommendations for adding sites to the current list of designated sites.

#### **GUIDELINES FOR IDENTIFICATION AND EVALUATION**

Potential additions to the list of designated sites will be identified through a variety of means, including intensive pedestrian surveys, file searches, and recommendations by knowledgeable local residents, archaeologists, and Native Americans. The BLM will evaluate sites proposed for addition to the Act according to the guidelines below and may solicit input, nominations, or self-nomination from collaborators and the wider stakeholder community, including tribes, professional specialists, and landowners.

The Act itself provides direction for evaluating sites considered for addition. At a general level, the Act uses the following language to refer to the archaeological resources of the Galisteo Basin:

well preserved prehistoric and historic archaeological resources of Native American and Spanish colonial cultures. (16 USC 470aa)

The Act further states that these sites include:

the largest ruins of Pueblo Indian settlements in the United States, spectacular examples of Native American rock art, and ruins of Spanish colonial settlements. (16 USC 470aa)

As such, it is clear that the Act is designed to protect Native American and Spanish colonial-era archaeological sites. Many of the Native American sites included in the current list date from the Classic (Pueblo IV) period (A.D. 1325–1598) or the period of cultural florescence immediately prior to Spanish contact.

However, the Act also includes earlier sites dating to the Late Developmental period (A.D. 900–1200) and the Coalition period (A.D. 1200–1325), as well as historic sites dating to the Early Mission period (A.D. 1598–1680). Certain components of some listed sites are much older, but in general the Act is largely concerned with sites dating to the 800-year time span between roughly A.D. 900 and 1700.

Another important selection consideration is significance:

The purpose of this Act is to provide for the preservation, protection, and interpretation of the *nationally significant* archaeological resources of the Galisteo Basin. (pp. 1–2) (emphasis added)

As such, only archaeological resources listed on or formally evaluated as eligible for inclusion on the NRHP can be considered for addition to the current list of sites named in the Act.

Sites to be added to the Act should exhibit a connection to the Galisteo Basin in terms of the wider cultural landscape. Such sites should have a demonstrable function or role in a cultural landscape system and should not be nominated purely on the basis of their own characteristics in isolation.

Sites to be added to the Act should have a demonstrable level of integrity such that preserving them would have a clear purpose—either for their connection to living societies or to the deeper scientific database represented by the archaeological record in general. Sites that are so degraded that adding them to the Act could not ensure their physical preservation should not be included.

The Act directs the Secretary of the Interior to “continue to search for additional Native American and Spanish Colonial sites in the Galisteo Basin area of New Mexico” (16 USC 470aa). The prehistory and history of the Galisteo Basin area is characterized not only by settlement and construction of villages, but also by seasonal and other migratory movements of peoples utilizing the landscape. As such, sites considered for addition to the Act need not be located directly within the Galisteo Basin itself, if they are on a geographic landform that is connected to the basin and can be shown to have temporal and cultural connections to past societies within the basin. Thus, sites representing trade or transportation links from the basin to other areas could be included if they can be shown to have the requisite connection with Galisteo Basin cultures.

Formally designated or nominated traditional cultural properties (TCPs) may be considered for addition to the Act if they comprise, or are associated with, one or more archaeological sites. Indeed, many of the currently designated sites could be considered TCPs, although they have not been formally evaluated as such. Numerous TCPs, including resource procurement areas and other places important to local Native American and Hispanic groups, are located throughout the Galisteo Basin area. However, the Act is focused on archaeological resources. As such, TCPs should include, or be associated with, one or more NRHP-listed or NRHP-eligible archaeological sites to be considered for addition to the Act. TCPs that do not comprise or include archaeological sites would not meet the criteria for designation under the Act.

### **SELECTION CRITERIA**

The BLM would consider the following questions when evaluating specific sites for possible addition to the list of sites currently designated by the Act:

1. Is it a place where the different cultures intersected?
2. Does it provide a link in the history of the basin?
3. Does the site have demonstrable significance under NRHP criteria?
4. Is it important to pueblos or tribes as a place of interest, affiliation, or ongoing use?
5. Is there public or professional interest in the site?

### *OWNERSHIP CONSIDERATIONS*

The processes of adding public and private land are necessarily different. The public entity holding the land will also affect how a site is pursued, but the initial public/private distinction is the most influential. Thus, the two decision tracks below overlap, but have important differences.

#### **Considerations for Public Land**

1. Based on interest expressed by stakeholders, initiate a site assessment.
2. Are there preservation issues?
  - Does the site need protection?
  - Are there erosion or other threats?
  - Does the site exhibit unusual or acute preservation needs?
3. Given the land's public status, to what extent is it protected from vandalism, collecting, and overuse?
4. Are there alternatives to listing under the Act that would enhance the protection, preservation, and interpretation of the site? What options are available?

#### **Considerations for Private Land**

1. Is the landowner interested in entering a cooperative agreement?
2. If not, is the landowner interested in selling the property to the BLM at fair market value?
3. Based on interest expressed by owner or stakeholders, initiate a site assessment.
4. Are there preservation issues or threats?
  - Does the site need protection?
  - Are there erosion or other problems?
  - Are there alternatives to listing under the Act that would enhance the protection, preservation, and interpretation of the site? What options are available? Should the state or Federal government pursue acquisition?
  - Is there a better alternative such as tribal ownership?

### **7.1.2 DELETIONS**

The Act allows the deletion of sites from the current list of protection sites, but as with additions, deletions may only be made by statute (i.e., Act of Congress). Sites may be considered for deletion if they do not fit the selection criteria outlined above. The Act states that “upon the written request of

an owner of private property included within the boundary of an archaeological site protected under this Act, the Secretary shall immediately remove that private property from within that boundary.”

### **7.1.3 BOUNDARY ADJUSTMENTS**

As outlined in the Act, the Secretary of the Interior may make minor boundary adjustments to listed sites by publishing them in the *Federal Register*. Boundary adjustments are warranted for all of the designated sites, based on recommendations resulting from the OAS site assessment study. The refinements to the site boundaries called for in this plan are based on the location of associated artifacts and features, as well as land ownership.

#### **WITHDRAWAL OF PRIVATE PROPERTY**

As noted above, the Act states that the Secretary of the Interior must immediately remove any portion of a site on private land if the private landowner submits a written request. Since the boundaries of archaeological sites are based on scientific observation and documentation of archaeological materials on the ground surface, the site boundary itself would remain unchanged. However, for the purposes of protection under the Act, the area of the site designated by the Act would be modified to exclude the portion of private land requested for removal by the landowner. Although such a change would be “immediate,” pursuant to Section 4(a)(2) of the Act, the boundary adjustment would be formally submitted to Congress with the next group of changes (see Procedures for Changes below).

Several of the current protection sites are located entirely on private land. In the event that a private landowner requests that an area of land comprising 100 percent of a protection site be removed from protection under the Act, this would constitute a deletion or complete withdrawal of the site, rather than a boundary adjustment. If the private portion of a protection site is excluded from protection under the Act pursuant to private landowner request, and the excluded portion is less than 100 percent but greater than 50 percent of the site area, the BLM will evaluate the site components within the remaining portion to assess whether the remainder still meets the criteria for protection under the Act. If the BLM determines that the remaining portion of the site does not meet the criteria for inclusion in the Act, the site may be recommended to Congress for deletion (see procedures for deletion below).

### **7.1.4 PROCEDURES FOR CHANGES**

Although minor boundary changes may be made by the Secretary of the Interior without Congressional approval, with the exception of removal of portions of private land from the site areas designated under the Act, additions and deletions require an Act of Congress. Section 4(a)(2) of the Act states that the Secretary of the Interior shall

submit to Congress, within 3 years after the date funds become available, and thereafter as needed, recommendations for additions to, deletions from, and modifications of the boundaries of the list of archaeological protection sites in Section 3 of this Act. (16 USC 470aa)

Recommendations for additions, deletions, and boundary adjustments are presented in this management plan in Chapter 9 (Plan Implementation). This management plan will be submitted to Congress within the required time frame. Recommendations for additions and deletions will

be subject to Congressional approval via statute; boundary adjustments will be provided to Congress for informational purposes only, as boundary adjustments do not require Congressional approval unless they constitute a deletion.

All changes made should be noted in subsequent updates to this general management plan.

#### **PROCEDURE FOR ADDITIONS**

Sites recommended for addition to the Act are listed in Chapter 9 of this document (Plan Implementation). These sites have been compiled from various sources, including public and Native American recommendations during the public scoping process and other consultations. All of the sites recommended for addition to the Act meet the selection criteria outlined above.

In the future, sites recommended for addition should be submitted to the BLM for preliminary approval. It is anticipated that the BLM will consult with its collaborators during the review of potential additions. If a recommended site meets the selection criteria previously outlined in this plan, and the addition receives preliminary approval by the BLM, the site will be included with the next group of changes sent to Congress. The BLM, through the Secretary of the Interior, will submit changes to Congress for approval via statute every five years.

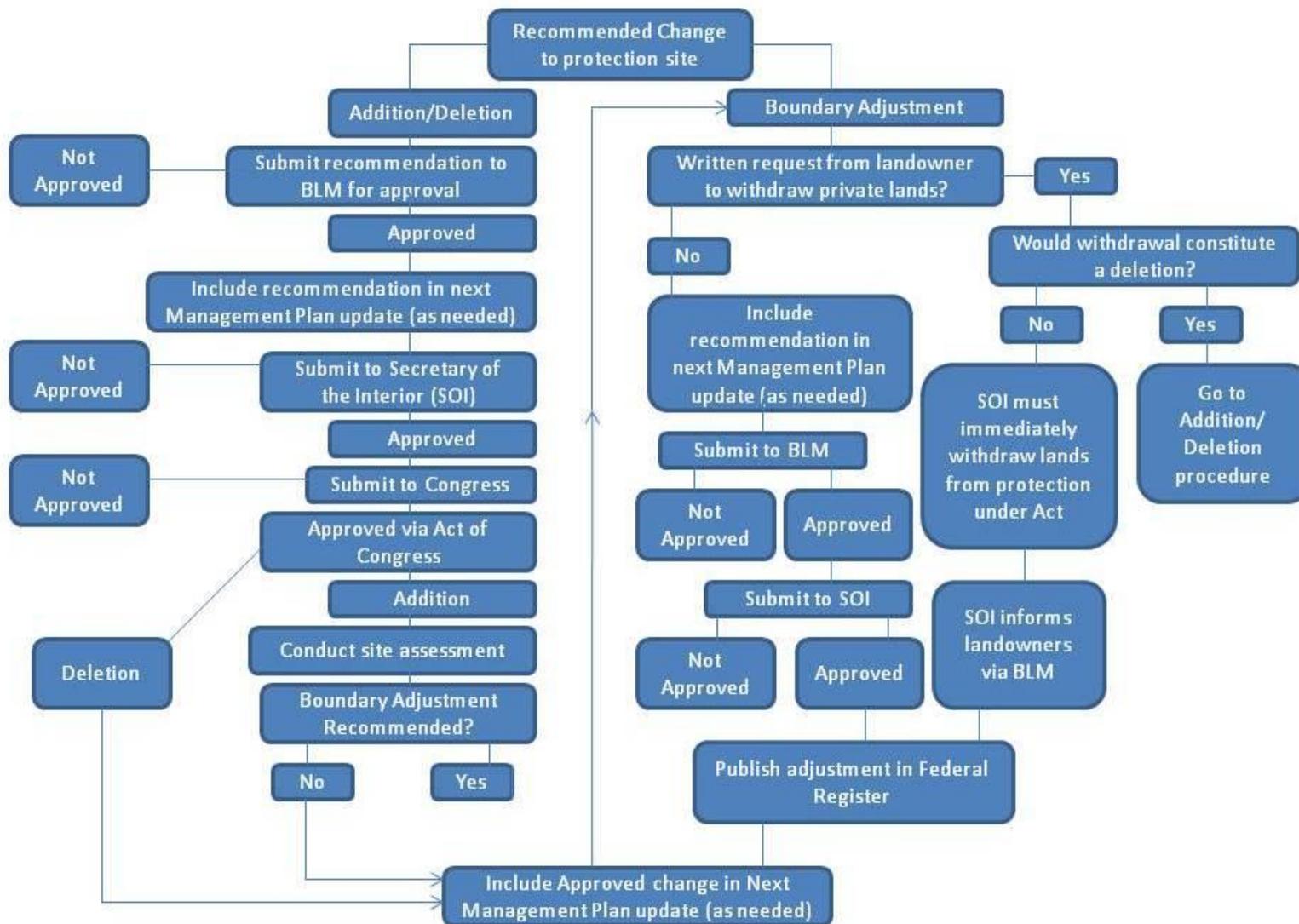
If approved by Congress, additions will be subjected to a site assessment, similar to the assessments conducted for the currently designated sites. If recent archaeological work has sufficiently updated records and reassessed the site boundary, the site assessment may be waived, subject to BLM approval. It is currently anticipated that assessments of additions would be conducted via assistance agreements and/or contracted by the BLM. The BLM will seek cooperative agreements with any private landowners or other land management agencies, as appropriate. A site-specific management plan will then be prepared for each addition.

#### **PROCEDURE FOR DELETIONS**

Similar to the procedure for additions, recommendations for deletions from the current site list are specified in Chapter 9 (Plan Implementation). In the future, recommendations for deletions should be submitted to the BLM for review, along with a written document outlining the rationale for recommending that the site be delisted under the Act. It is anticipated that the BLM will consult with its collaborators during the review of potential deletions. If a site recommended for deletion receives preliminary approval from the BLM, the deletion will be included with the next group of changes sent to Congress. The BLM, through the Secretary of the Interior, will submit changes to Congress for approval via statute every five years.

#### **PROCEDURE FOR BOUNDARY ADJUSTMENTS**

Sites recommended for boundary adjustments are listed in Chapter 9 (Plan Implementation). These recommendations are based on the results of the OAS site assessment study. In the future, recommendations for boundary adjustments should be submitted to the BLM for review and approval. It is anticipated that the BLM will consult with its collaborators during the review of potential boundary adjustments. If approved by the BLM, the recommendation will be forwarded to the Secretary of the Interior. If approved by the Secretary, the adjustment will be published in the *Federal Register* and reported to Congress with the next group of changes submitted by the BLM. Figure 7.1 shows the process for addressing boundary adjustments to designated sites, including additions and deletions. Deletions require an Act of Congress.



**Figure 7.1. Process for additions, deletions, boundary adjustments, and approvals.**

## **CHAPTER 8 Native American Concerns**

Communication and collaboration with Native American entities, including both government officials and cultural resource specialists within pueblos and tribes, are essential prerequisites for the successful long-term management of the archaeological resources designated by the Act. Beyond formal consultation required by Section 106 of the NHPA and other Federal mandates, the BLM seeks to establish long-term, working partnerships with interested pueblos and tribes. This section of the document outlines consultation efforts to date with pueblos and tribes, summarizes Native American recommendations for management of the designated sites, and provides guidance for the treatment of human remains identified at designated sites.

### **8.1 FORMAL CONSULTATION**

Pursuant to Section 106 of the NHPA, the BLM consulted with 24 pueblos and tribes with regard to the development of the management plan. Letters were sent to each of the following groups in November 2009 and April 2010:

- Apache Tribe of Oklahoma
- Hopi Tribal Council
- Mescalero Apache Tribe
- Wichita and Affiliated Tribes
- Pueblo of Isleta
- Pueblo of Laguna
- Pueblo of Ohkay Owingeh
- Pueblo of Pojoaque
- Pueblo of Santa Ana
- Pueblo of San Felipe
- Kewa Pueblo (Santo Domingo)
- Pueblo of Zia
- Comanche Indian Tribe
- Jicarilla Apache Nation
- Navajo Nation
- Pueblo of Cochiti
- Pueblo of Jemez
- Pueblo of Nambe
- Pueblo of Picuris
- Pueblo of Sandia
- Pueblo of Santa Clara
- Pueblo de San Ildefonso
- Pueblo of Tesuque
- Pueblo of Zuni

The groups consulted were selected based on geographic proximity and potential cultural affiliation with the prehistoric and historic Native American archaeological resources designated by the Act. Native American contact lists maintained by both the BLM and the NMDOT were used in an attempt to ensure that the appropriate current individuals were contacted within each group's government.

In addition to the groups listed above, the BLM seeks to establish long-term partnerships with other Native American groups, as well as Hispanic descendant communities. Representatives of any such groups not consulted to date by the BLM are welcome to contact the BLM to initiate a dialogue.

## **8.2 NATIVE AMERICAN RECOMMENDATIONS**

The BLM invited government officials and cultural resource specialists from all of the pueblos and tribes consulted to attend a series of meetings in 2010 and 2011. The purpose of the meetings was to introduce the goals of the Act and this management plan to interested Native American parties and to seek their input with regard to management of the designated sites.

The ethnographic study conducted by the BLM concurrent with the preparation of the management plan was also discussed at these meetings (Parametrix 2011), as was the EA being prepared for the management plan. Photographs and maps of sites were viewed, and field trips to selected sites were undertaken during several of the meetings. Management recommendations voiced by Native Americans at these meetings are outlined below, along with those recommendations from the ethnographic study. It is important to note that not all recommendations stemming from the ethnographic study and other consultation efforts have been carried forward by BLM; please refer to Chapter 9 (Plan Implementation) for the actions proposed by BLM in this management plan.

### **8.2.1 ETHNOGRAPHIC STUDY**

Congruent with ongoing efforts to incorporate Native American concerns and recommendations in the management of the designated sites, the BLM conducted an ethnographic study as a way to solicit and document tribal perspectives. The ethnographic study involved multiple meetings, interviews, and field trips with tribal representatives, cultural specialists, elders, and government entities (Parametrix 2011). Due to the sensitivity of the information presented in the ethnographic study, the document is considered confidential.

All of the pueblos and tribes consulted in the development of this management plan were contacted separately for the ethnographic study. In addition, presentations were made to the Eight Northern Pueblo Council and All Indian Pueblo Council meeting. More than 30 individuals from the following six Native American groups participated in the ethnographic fieldwork:

- Pueblo of Santa Ana
- Pueblo of Ohkay Owingeh
- Pueblo of Santa Clara
- Kewa Pueblo (Santo Domingo)
- Pueblo of Tesuque
- Jicarilla Apache Nation

The overall findings of the ethnographic study can be summarized as follows:

1. Multiple Pueblo, Apache, Comanche and other tribes maintain strong attachments to sites and landscape features in the Galisteo Basin, through oral histories and ongoing visitation for religious pilgrimages and natural resource collection trips.
2. These Native American communities are profoundly affected by, and deeply concerned about, development of all types in the Galisteo Basin.

3. Traditional tribal knowledge and practices can inform the protection and management of sites and landscape features in the basin, and Native American groups are eager to partner with government agencies, land managers, and private property owners in these efforts.
4. Site access for the purposes of performing traditional cultural practices and obtaining traditionally important natural resources is crucial to ensure long-term preservation of cultural heritage for Native American groups with ties to the Galisteo Basin (Parametrix 2011).

Site-specific concerns and recommendations resulting from the ethnographic study will be considered in the future development of site-specific management plans for each of the designated sites. However, for the purposes of this general management plan, only general concerns and recommendations with regard to management of the designated sites are discussed herein.

### **8.2.2 GENERAL NATIVE AMERICAN CONCERNS AND RECOMMENDATIONS**

The general concerns and recommendations identified by and presented in the ethnographic study generally mirror those voiced at collaboration meetings. The following summary of Native American concerns and recommendations is derived from the meetings and the ethnographic study (Parametrix 2011). These recommendations are not BLM guidance; rather, the Native American recommendations summarized below have been considered by the BLM in the preparation of this management plan.

#### **COLLABORATION**

Collaborative meetings are a critical forum for discussion of the protection and management of designated sites and the Galisteo Basin in general. Regular meetings and field trips should continue, and include private landowners in addition to the land managers, tribal representatives, and other interested parties currently collaborating. Selected meetings could be held entirely at a designated site or hosted by tribes at particular Native American communities (Parametrix 2011).

Tribal representatives would like the collaborators to support, and potentially assist with identification of funding sources for, Native American intergenerational cultural preservation programs. One suggested program could entail overnight visits to culturally significant places, providing a traditional timeframe for the transmission of oral history about the region to tribal youth (Parametrix 2011).

Tribal representatives wish to work with the collaborators to ensure that any archaeological research conducted at designated sites is limited to non-ground-disturbing methods (Parametrix 2011).

#### **VISIBILITY OF NATIVE AMERICAN CONNECTIONS**

Tribal representatives are interested in exploring effective ways to inform lawmakers and Galisteo Basin landowners/managers of their traditional ties to the area, and to make their current concerns associated with resource protection and management heard, especially with regard to land management policies and site interpretation (Parametrix 2011).

An important aspect of promoting the visibility of Native American connections to the Galisteo Basin is the widely shared tribal desire to rename place names in the region. Tribal representatives involved in the ethnographic study recommend that Keres, Tewa, and other Native American place names replace or coincide with Spanish and English names in interpretative materials. It was suggested that pueblos and tribes should confer with each other to select the appropriate Native American name(s) for each site or location (Parametrix 2011).

#### **NATIVE AMERICAN ADVISORY COMMITTEE**

A permanent Native American Advisory Committee should be established for the Act to ensure that consultation among tribal representatives, landowners, and agencies continues in the future (Parametrix 2011).

#### **DEVELOPMENT**

The majority of the Native American groups consulted for the management plan and ethnographic study are concerned about residential and oil and gas development occurring in proximity to designated sites, because of the increased potential for increased public access and other indirect impacts. The building of residential developments close to known, significant archaeological sites increases the ease of access to such sites by residents and has the potential to lead to increased trespassing, vandalism, illicit artifact collection, and erosion from pedestrian or other modes of travel. Indirect impacts including noise, vibration, and diminished integrity of setting and feeling are also possible, as well as visual impacts associated with building modern buildings in the viewshed of designated sites. Similar concerns apply to the development of oil and gas infrastructure.

During the course of the ethnographic study, tribal representatives requested that a notification process be established to alert tribes to changes in land use status of lands within or adjacent to sites designated under the Act (e.g., proposed development or sale) (Parametrix 2011).

#### **COLLABORATION WITH PRIVATE LANDOWNERS**

Tribes are interested in working closely with private landowners to develop permanent conservation easements that protect sites and landscape features, regardless of future changes in land ownership (Parametrix 2011).

Private landowner contact list(s) are requested from BLM, to facilitate future collaboration and allow tribal representatives to initiate the process of petitioning for access to private lands containing archaeological sites and traditional use areas (Parametrix 2011).

Some tribes would like to establish tribal acquisition plans for private properties for which they have ancestral connections and are eager to work with landowners who may be interested in selling their property (Parametrix 2011).

Tribal representatives are also interested in developing land-exchange agreements or other transfers of lands containing designated sites or other areas important to Native Americans from private owners to tribes or to state/Federal government agencies (Parametrix 2011).

### **SITE ACCESS**

Contemporary Native American pueblos and tribes require access to certain sites and areas in the Galisteo Basin in order to conduct traditional cultural practices and collect natural resources important for these practices. During the course of the ethnographic study, tribal representatives indicated their desire for site access and natural resource collection rights on public and private lands to be protected by new legislation or amendments to existing laws (e.g., the Act). Specifically, tribal representatives seek to establish formal protections for the right to access sites and adjacent areas for the following purposes: collection of plants, minerals, and animals used for traditional purposes; pilgrimages and other religious purposes; and cultural education and intergenerational learning programs. Tribal representatives wish to develop site access and collection agreements promoting collaboration and cooperation between multiple tribes and landowners/managers (Parametrix 2011).

A related concept noted at one of the collaboration meetings is that Native American access to and visitation of designated sites for ritual or traditional collection purposes should be by small groups only.

### **BLM ROLE**

The BLM should continue to serve as a liaison between tribes and pueblos and other land-managing agencies and private landowners in control of designated sites and portions thereof. BLM efforts in this regard should not preclude direct contact between tribal representatives and private landowners, however.

### **TRADITIONAL CULTURAL PROPERTIES**

Traditional resource procurement areas, landforms of religious significance, and other TCPs should be considered for protection in the Act. The importance of such TCPs to contemporary pueblos and tribes and the associations of such TCPs with archaeological sites in the Galisteo Basin represent important connections between the past and present. A number of culturally sensitive and sacred sites were identified during the course of the ethnographic study and other consultation efforts, but these places have not been formally evaluated, nominated, or designated as TCPs at this time.

### **SITE ADDITIONS**

The ethnographic study recommended several sites for addition to the Act. At this time the Plan is not incorporating these recommendations, but BLM will continue to evaluate sites for potential addition to the Act every five years.

- Pueblo Tunque
- Pueblo La Bajada
- Pueblo Dolores
- Mount Chalchihuitl
- Castilian (Castellano) and Tiffany Mines

Additional sites will be recommended for addition in the future as part of the ongoing collaboration among tribal representatives, the BLM, other land-managing agencies, private

landowners, and other collaborators. More information on the tribal recommendations for site additions can be found in the ethnographic study (Parametrix 2011). Please see Chapter 9 for the sites that BLM has carried forward as formal recommendations for addition to the Act, and preliminary recommendations requiring further evaluation for addition to the Act. Additions recommended through the ethnographic study or other means that are not carried forward by BLM in this general management plan are not excluded from potential future addition to the Act.

#### **LANDSCAPE FEATURE ADDITIONS**

In addition to the archaeological sites listed above, pueblos and tribes have recommended that the following landscape features be added to the Act:

- Cerro de la Cruz
- Los Cerrillos (multiple sites)
- Ortiz Mountains (multiple sites)
- Tunnel Springs
- San Pedro Mountains
- Sandia Mountains traditional use area
- Galisteo Basin watershed and Galisteo Creek

Additional landscape features may be recommended for addition in the future. More information on the tribal recommendations for site additions can be found in the ethnographic study (Parametrix 2011).

#### **BOUNDARY ADJUSTMENTS**

The ethnographic study also resulted in tribal recommendations for boundary adjustments at several of the currently designated sites. The following sites are recommended for expansion, to include associated archaeological and natural features of importance to tribes and pueblos:

- San Cristobal Pueblo
- La Cienega Pueblo and Petroglyphs
- Las Huertas
- Pa'ako Pueblo

Additional boundary adjustments or expansions may be recommended in the future. More information on the tribal recommendations for site additions can be found in the ethnographic study (Parametrix 2011).

#### **OTHER AREAS RECOMMENDED FOR ADDITION**

Tribal representatives involved in the ethnographic study have also recommended several other areas for listing under the Act, as they are culturally associated with sites and groups in the Galisteo Basin. These areas have been recommended by the tribal representatives participating in the ethnographic study due to their importance with regard to migration routes, as well as archaeological resources located within them:

- Chilili
- Frijoles Canyon
- Mesa Verde
- Edgewood area
- Villanueva area
- Moriarty area

Additional areas may be recommended in the future. More information on the tribal recommendations for site additions can be found in the ethnographic study (Parametrix 2011).

#### **PROTECTION OF THE GALISTEO BASIN LANDSCAPE**

The ethnographic study revealed the interconnectedness of sites and natural features in the Galisteo Basin, as viewed and understood by the tribal representatives involved. Two specific recommendations stem from this widely shared view that a broader, cultural-landscape model should be developed for the holistic understanding and protection of the Galisteo Basin:

1. Nomination of the Galisteo Basin as a Cultural Landscape, and
2. Designation of the basin as a National Heritage Area (Parametrix 2011).

#### **FUTURE AREAS OF INVESTIGATION**

The recommendations outlined in the ethnographic study include suggestions for future study and investigation, with the goals of better understanding and protecting the diverse cultural and natural resources of this extensive, culturally complex region.

1. Conduct follow-up ethnographic research and nomination work with tribes and pueblos that participated in the current ethnographic study;
2. Undertake new ethnographic research and nomination work with tribes who were unable to participate in the current study but who expressed a vested interest in the management and protection of the Galisteo Basin's cultural heritage;
3. Further explore and define the types of sites, districts, or landscapes that can and should be recommended for addition to the Act;
4. Obtain funding for Native American representatives to coordinate and travel to both local and national institutions where archaeological materials from the Galisteo Basin are curated, to facilitate the NAGPRA repatriation process and to engender local exhibition of artifacts to local tribal audiences; and
5. Conduct a detailed cultural landscape study examining both Native American and non-Native American groups with historical connections to the basin.

More detail on these proposed avenues of future investigation can be found in the ethnographic study (Parametrix 2011), from which the above summary was taken. The Native American recommendations resulting from the ethnographic study, summarized above, do not constitute the recommendations of the BLM.

### **8.2.3 NATIVE AMERICAN COLLABORATIVE SUBGROUP**

A subgroup of Native American collaborators developed in 2005, with the purpose of engaging the Native American community in the collaborative management of the designated sites. This management plan provides for the Native American collaborative group to continue to be engaged to ensure that Native American interests and concerns are considered and prioritized in the ongoing management of the designated sites.

### **8.2.4 NATIVE AMERICAN INVOLVEMENT WITH SITE-SPECIFIC MANAGEMENT PLANS**

Non-confidential information compiled from tribal elders and cultural specialists during the current ethnographic study should be incorporated into the site-specific management plans that will be prepared for each designated site in the future. Tribal recommendations regarding relative sensitivity of different features within each site will be incorporated and addressed in the site-specific management plans, as well as the need for Native American access to sites for ceremonial purposes. The site-specific management plans will list the pueblos and tribes specifically affiliated with each site. The BLM, assisted by its collaborators as appropriate, will coordinate between Native American entities and landowners with regard to specific sites to ensure that the recommendations and concerns of all parties are considered in the site-specific management plans.

### **8.2.5 DISCOVERY OF HUMAN REMAINS**

Many of the designated sites comprise villages where people lived, died, and were buried. As such, it is highly likely that human remains will be encountered at one or more designated sites in the future. Treatment of human remains discovered at designated sites will be largely dictated by the ownership of the land on which the discovery is located. Discoveries on BLM lands must be handled in accordance with NAGPRA and ARPA (16 USC 470ee); discoveries on state, county, or private lands must be treated in accordance with the New Mexico State Burial Act. Section 18-6-11.2 of the New Mexico Cultural Properties Act, which applies to state, county, and private (but not tribal) lands, requires a state permit for excavation of human remains. Within the overarching rules provided by these legislative mandates, the following guidelines are suggested for discoveries at designated sites.

If human remains are identified on the ground surface or during the course of ground-disturbing activities at the designated sites on private, state, or county land, the pueblos and tribes affiliated with that site will be contacted immediately, along with the appropriate county coroner and the landowner or land-managing agency. If human remains are identified on BLM land, the BLM archaeologist or BLM law enforcement personnel will be notified immediately. Affiliation will be based on the archaeological context within which the remains are located and on results of the ethnographic study. Affiliated Native American groups will be identified in the site-specific management plan prepared for each of the designated sites. Site-specific plans should also consider the potential for human remains of non-Native, or European ancestry, to occur at sites with historical Spanish colonial features. If non-Native remains are anticipated or considered a likely possibility, the site-specific plan should include protocols for determining ancestral affiliation based on archaeological and osteological evidence, as well as for determining the treatment and disposition of the remains. All excavation and reinterment must comply with applicable laws and regulations, including formal tribal consultation concerning disposition.

In the event that such a discovery occurs prior to the completion of the site-specific management plan for the site where the discovery occurred, existing protocols for notification and consultation will be followed, depending on the ownership of the land where the discovery was made. Weathering and erosion are natural processes that may result in the exposure of human remains. Intervention to stabilize remains in place or other measures to protect them will be considered on a case-by-case basis, with tribal consultation, depending on the risks of attracting unauthorized disturbance (looting) of either the remains or associated grave goods.

Data recovery on Federal land, including excavation of human remains, requires an ARPA permit from the land-managing agency. Formal tribal consultation, including consultation regarding NAGPRA, must be carried out prior to issuing ARPA permits. Data recovery, including excavation of human remains, on private or state lands requires an individual burial excavation permit that must be obtained from the New Mexico Cultural Properties Review Committee. Data recovery on private or state lands requires a permit that must be obtained from the New Mexico Cultural Properties Review Committee (CPRC). If data recovery includes the excavation of human remains, a one-time permit application to excavate unmarked human burials must be obtained from the CPRC. These permits are obtained in accordance with the New Mexico Cultural Properties Act, New Mexico Statutes Annotated 1978, and implementing regulations.

For all actions at designated sites involving ground disturbance in areas where human remains might reasonably be expected to be present, burial treatment plans must be proposed in advance so that human remains, if encountered, can be dealt with respectfully and expeditiously.

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## **CHAPTER 9 Plan Implementation**

### **9.1 COLLABORATION**

Effective communications among agencies, landowners, Native Americans, and other stakeholders will be critical in ensuring the successful implementation of this plan. Collaboration is imperative to the success of the implementation of this plan. The BLM will ensure an appropriate forum is provided to facilitate continued collaboration in plan implementation, inter-governmental coordination, and future management efforts for the designated sites. Congress charged the Secretary of the Interior with responsibility for implementing the Act, and as a division of the Department of the Interior, the BLM has taken the role of lead Federal agency for the preparation of the management plan and associated EA. However, other governments are involved (e.g., tribes, State Parks, and Santa Fe County), and collaboration and communication between all participating agencies is critically important to successful execution of the Act. Collaboration with other stakeholders in the community, including landowners, archaeologists, and other interested parties, is equally as valuable as agency and tribal cooperation.

Several options for collaboration exist, as described below.

#### **9.1.1 FRIENDS GROUP**

A private advocacy group could be established as a 501(c)(3) non-profit organization and could be called “Friends of the Galisteo Basin.” Such a group could serve to promote the objectives of the Act by providing data and other information relevant to the management of the designated sites, promoting educational and interpretive opportunities, seeking sources of funding, and serving in other supportive capacities other than advisory.

#### **9.1.2 FEDERAL ADVISORY COMMITTEE ACT ADVISORY COMMITTEE**

Collaboration could be facilitated by a chartered advisory committee pursuant to the Federal Advisory Committee Act (FACA) and BLM regulations at 43 CFR 1784.

#### **9.1.3 SUBCOMMITTEE TO EXISTING RESOURCE ADVISORY COMMITTEE**

The collaborative group may be organized as a subcommittee to an existing resource advisory committee (RAC)—a provision of the BLM regulations and recognized under FACA—if the group reports directly to the RAC rather than to the BLM. If organized as such, the subcommittee would be exempt from the procedural requirements of FACA.

#### **9.1.4 COLLABORATIVE GROUP**

The informal collaborative group that has been working with BLM for the past several years could be continued without establishing a formal non-profit, FACA, or RAC subcommittee.

#### **COLLABORATIVE GROUP COMPOSITION**

Regardless of its format, the collaborative group could also serve to accommodate communications between the BLM and other agencies at the Federal, state, and county levels,

and offer the BLM expert assistance, information, and recommendations. The collaborative group would convene on a regular basis to assist the BLM with regard to interagency coordination of management efforts, review of research proposals, development of site-specific management plans for each of the designated sites, and updates to this general management plan, as requested by the BLM.

It is expected that some of the key individuals who have been involved in the collaboration efforts over the past several years would continue to participate in the effort to maintain continuity. At minimum, the group should include at least one representative from each of the following agencies:

- BLM
- New Mexico State Land Office
- Santa Fe County

These three entities are the only government agencies with designated sites currently located on lands under their management. The University of New Mexico is also a non-private entity with jurisdiction over one site (Pa'ako Pueblo). The TAC is a private entity with jurisdiction over six Act sites.

Other agencies are also encouraged to participate, including, but not limited to:

- Pueblo/Tribal governments
- New Mexico Department of Cultural Affairs (OAS and Historic Preservation Division)
- Sandoval County
- Bernalillo County
- State Parks
- Cerrillos Hills State Park
- NMDOT
- Office of the Governor of New Mexico

Other non-governmental entities that may choose to become involved in the group may include:

- Descendant Hispanic communities
- Members of the professional archaeology and anthropology community
- Historical societies
- Affected communities
- Other interested parties

### **COLLABORATIVE GROUP'S ROLE IN INTERAGENCY COMMUNICATIONS**

The collaborative group will provide a venue and mechanism for communication between the BLM and other agencies, Native American entities, and stakeholders. Although the BLM will be the first point of contact for proposals and recommendations involving the designated sites, the group will be available to assist the BLM with review of such proposals, at the BLM's request. The group may recommend approval of a specific proposal, but approval authority for various projects lies with the landowner(s) and/or managing agency or agencies for the site or sites in question.

### **COMMUNICATION WITH OTHER STAKEHOLDERS**

An email distribution list has been used by the collaborative group to inform a broad spectrum of stakeholders about meetings and other developments with regard to management of designated sites. A similar approach should be employed by the BLM and the group to ensure consistent and regular communications with interested individuals and organizations such as SiteWatch and the New Mexico Archaeological Council. The BLM will serve as a clearinghouse for disseminating information, as well as a liaison and central point of contact for communications, with assistance from the group, as appropriate.

## **9.2 MANAGEMENT PLAN UPDATES**

This general management plan, and its updated versions, should be reviewed by the BLM and the collaborative group every five years. Updates and revisions should be made accordingly and approved by the BLM. Any additions or deletions will be noted, as well as any site boundary modifications and changes in land ownership or site integrity. The BLM will forward plan updates to the Secretary of the Interior. The BLM may opt to update this management plan on a less than 5-year cycle under special circumstances.

## **9.3 SITE-SPECIFIC MANAGEMENT PLANS**

The purpose of this management plan is to provide a framework for management of the currently listed sites, outline protocols for communication, and set forth measures for the implementation of the Act. As noted above, the management plan will be reviewed and updated on a regular basis. However, the unique attributes of, and issues faced at, each of the designated sites warrant the development of site-specific management plans for each Act site. The site-specific management plans will tier to this general management plan, incorporating the concepts and guidance outlined herein, but each plan will be tailored to the individual site that it addresses. Only sites on BLM lands or those with signed cooperative agreements would be subject to these future site-specific management plans; additions that meet the above criteria would be subject to site-specific management plans once formally added to the Act by Congress.

TAC has successfully employed a similar two-tiered strategy for the development of management documents on the preserves that they own. Indeed, TAC has already crafted site-specific management plans for the five designated sites that it owns and the additional designated site for which it has a conservation easement. The existing plans may suffice for these six sites, possibly with revisions to ensure consistency with the Act and this general management plan.

Furthermore, TAC site-specific management plans should be referred to in the development of plans for other designated sites without TAC ownership or easements.

Each site-specific management plan should detail and prioritize threats to and issues facing the individual site that it addresses. The plan should outline a specific management strategy, including roles and responsibilities, and include a schedule and budget for implementation. Site-specific Native American recommendations, landowner wishes, and terms of applicable cooperative agreements should also be incorporated. Each site-specific management plan should address access and security concerns, and include an interpretive plan providing a strategy for interpretation of the site to the general public, whether on- or off-site.

Sites should be evaluated as potential TCPs during the site-specific management planning process, utilizing the results of the ethnographic study (Parametrix 2011), recommendations from Native Americans or groups with an affiliation to the site in question, and other sources of information, as appropriate.

The BLM will work jointly with landowners to develop a site-specific management plan for each designated site that has a cooperative agreement in place, in close coordination with the collaborative group and Native American groups or individuals that have provided recommendations regarding the specific site in question. Management plans for BLM-owned sites and sites with cooperative agreements in place will be prepared to set priorities for implementation of protection, research, and interpretation projects. All plans shall be reviewed and approved by the BLM prior to implementation.

## **9.4 FUNDING**

The vast majority of the measures outlined in this management plan will require funding of some kind. Funds may be available through a variety of sources, including Federal, state, and county governments, as well as private sources. For example, funding will be required for developing interpretive materials, implementing site protection and preservation measures, and acquiring new lands (additions).

### **9.4.1 FEDERAL FUNDING**

Federal funding will be critical for the successful implementation of the Act and the guidance outlined in this plan. In addition to programmed or budgeted funds, funding through grants may also be available and should be pursued by the BLM, with assistance from the collaborative group, as appropriate.

### **9.4.2 STATE FUNDING**

The State of New Mexico is currently funding projects at Cerrillos Hills State Park, which could include interpretive displays and other facilities or programs encouraging public education regarding the Act and its designated sites. The BLM will work with State Parks and the collaborative group during the planning stages of such projects, especially if sites within Cerrillos Hills State Park are added to the Act. The BLM, State Parks, and the collaborative group will work together to develop interpretative materials and exhibits and seek additional

funding from the state for the installation of interpretive displays and at Cerrillos Hills State Park. In addition to programmed or budgeted funds, funding through state grants may also be available and should be pursued by the State Parks and/or collaborative group.

#### **9.4.3 COUNTY FUNDING**

Santa Fe County should coordinate with the BLM and the collaborative group regarding projects that could affect existing designated sites and incorporate BLM guidance and collaborative group recommendations to ensure that such projects are consistent with the Act. Furthermore, funding for acquisition of additional designated sites could come indirectly through Santa Fe County's efforts to acquire open space. The Open Space and Trails Program features an ongoing program of property acquisition, using funds generated through voter-approved bond measures. Historical areas and sacred sites are included among the types of properties that Santa Fe County proposes to acquire under this program. Archaeological sites acquired by Santa Fe County in the future could be considered for designation under the Act.

#### **9.4.4 PRIVATE FUNDING**

The collaborative group may wish to establish a private advocacy group to capitalize on the broad public support for heritage preservation in the local area. This group could be set up as a 501(c)(3) non-profit organization and could be called "Friends of the Galisteo Basin." Such a group could serve as a vehicle for fundraising through private donations, membership dues, special events, and other means. Beyond simply raising money, such a group could facilitate public education about the archaeology of the Galisteo Basin, raise awareness of the threats to archaeological site integrity, enhance communication between Native American groups and the general public, and provide a pool of volunteer labor for stabilization and other projects.

### **9.5 ADDITIONS/DELETIONS**

The addition or deletion of archaeological sites to the list of designated sites requires Congressional approval. Future recommendations for additions and/or deletions will be included in future updates to this plan.

#### **9.5.1 ADDITIONS**

Many sites not currently listed in the Act have been proposed for addition to the Act. Several of these recommended sites meet the criteria for addition as defined in Section 7.1.1.2 of this plan. Recommendations for sites to protect under the Act have been provided by Native American elders and cultural resource specialists with the pueblos and tribes consulted during preparation of this management plan and the concurrent ethnographic study, as well as by OAS, TAC, and the collaborative group.

The BLM evaluated these recommended additions to the Act and concluded that, while all of these areas contain important cultural values, only a select few will be carried forward for formal recommendation and further evaluation in this management plan. In most cases, current management of the portions of these areas under Federal jurisdiction, as well as applicable laws and regulations, are sufficient to adequately protect these resources. While inclusion in the Act could provide some

benefit, the spirit of the Act is meant for a more specific list of sites grouped by proximity in the Galisteo Basin area. The addition of large geographic areas for designation under the Act is not a feasible alternative. Although most of the recommended additions are not carried forward in this management plan, this does not exclude these sites and areas from possible future addition to the Act.

Recommended additions carried forward in this management plan have been grouped into two categories: 1) formal recommendations for addition to be forwarded to Congress for approval, and 2) preliminary recommendations requiring further evaluation for potential addition to the Act. NRHP nominations should be prepared for each new site designated under the Act.

#### **FORMAL RECOMMENDATIONS FOR ADDITION**

Two sites are formally recommended for addition to the Act: Colina Verde and Galisteo Spring (Figure 9.1, Table 9.1). Both sites have been subject to recent formal site assessments and ground truthing by OAS. Maps showing the locations and boundaries of the two sites proposed for addition are provided in Appendix C. These maps have been detached from the management plan document itself, but are available from BLM upon request.

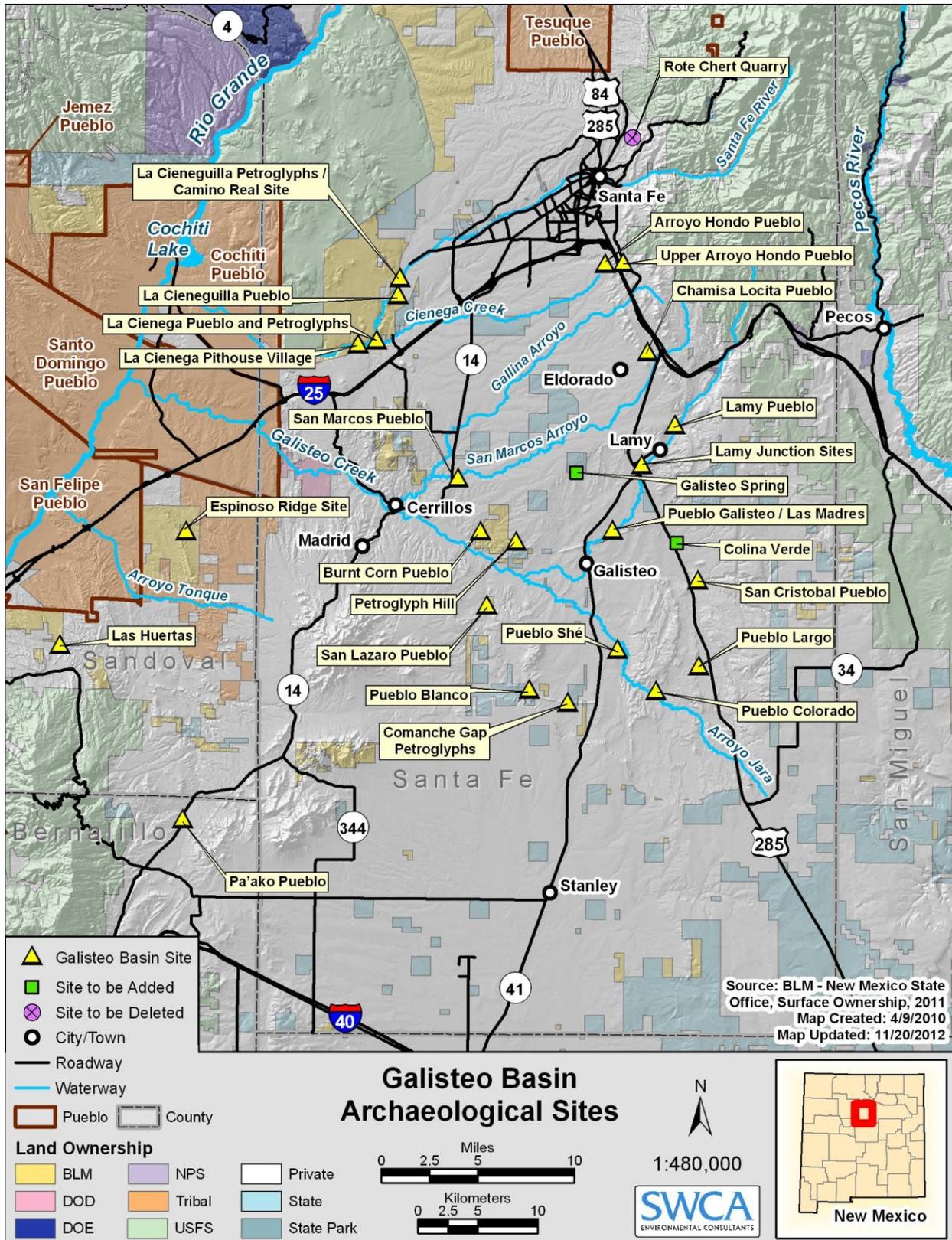


Figure 9.1. Site designated by the Act with recommended additions and deletion.

**Table 9.1. Formal Recommendations for Additions to the Act**

Site Name	Area	Site Number	ARMS	Formal Assessment	Recommended By	Type	Owner	Acreage
Colina Verde	San Cristóbal	LA 309, LA 1307, LA 170800	Yes, and In preparation	Yes, in preparation	OAS	Coalition period pueblo	Singleton	70.4
Galisteo Spring	Galisteo	LA 159306–LA 159312, more to be added	Yes, and In preparation	Yes, in preparation	OAS	Archaic through historic pueblo, homestead	Galisteo Preserve, State of New Mexico	508

*COLINA VERDE*

Colina Verde, a substantial construction dating to the late thirteenth century and early fourteenth century A.D., appears to be an important Coalition period site when occupation of the Galisteo Basin was increasing. Built on a natural rise, the building would have been imposing, despite its moderate size (H.W. Toll, personal communication 2011). Dubbed Colina Verde by Dutton in the 1950s or 1960s, the site was later erroneously referred to as Piedra Lumbre by Lang in the 1970s. Apparently Dutton had assigned the name Piedra Lumbre to a much smaller site in the same drainage, and Lang misapplied the Piedra Lumbre name to Colina Verde (J. Snead, personal communication 2011). Early research at Colina Verde by Stallings in 1931 and 1933 (Robinson et al. 1973:15–18) included the collection of dendrochronological samples (Lang 1977:389–393) that produced more than 250 dates from five rooms. The tree-ring dates reveal a cluster between A.D. 1290 and 1308, and another in the A.D. 1320s and 1330s. Located on the San Cristóbal Ranch, this site is an important link in the settlement history of the Galisteo Basin (H.W. Toll, personal communication 2011).

*GALISTEO SPRING*

The Galisteo Spring is an apparently permanent water source at the northern edge of the Galisteo Basin. The spring shows on some nineteenth century maps, and routes from the village of Galisteo to Santa Fe pass by the spring. The archaeology around the spring shows that it was an important location and crossroads for many centuries before the nineteenth. For many years the spring was on the Thornton Ranch, which has been incrementally acquired by the Commonwealth Conservancy and Santa Fe County. In a cooperative agreement among the Commonwealth, the Department of Cultural Affairs, and the Department of Energy and Minerals, the area around the spring has been established as a conservation easement (H.W. Toll, personal communication 2012).

Not surprisingly the cultural landscape around the spring is especially complex and varied. Architecture around the spring is confined to a small masonry homestead and the remnants of a small Classic Pueblo structure, but there are scores of features indicating frequent visitation for resource exploitation. The landscape also includes a number of grid gardens. A feature such as the spring was clearly a significant landscape feature for all users of the Galisteo Basin. Its viewshed includes many of the major pueblos in the basin, most prominently Galisteo Pueblo.

The archaeological sites on the property are fragile, and their abundance and the significance of the spring make it highly worthy of designation under the Act (H.W. Toll, personal communication 2012).

**PRELIMINARY RECOMMENDATIONS REQUIRING FURTHER EVALUATION FOR ADDITION TO THE ACT**

Four sites are recommended for formal assessment and further evaluation for addition to the Act (Table 9.2). Site assessments and ground truthing should be conducted at each of the sites proposed for addition to the Act. Other sites, landscape features, and geographic areas have been recommended for addition by various parties, and the BLM has considered all of these recommendations. Some sites recommended for addition have been evaluated as meeting the criteria for addition as defined in Chapter 7; however, these sites have not been selected for addition at this time. Appendix D (for agency use only) lists sites that were considered for possible addition to the Act. Other sites recommended for addition to the Act did not meet the criteria. Sites may be recommended for addition in the future with updates to this general management plan.

**Table 9.2. Preliminary Recommendations Requiring Further Evaluation for Addition to the Act**

Site Name	Area	Site Number	ARMS	Formal Assessment	Recommended By	Type	Owner
Pueblo La Bajada	La Bajada	LA 7	Yes	No	Santa Clara Pueblo, OAS, ethnographic study	Pueblo	Cochiti
Wildhorse Mesa Group	Pueblo Largo	LA 3333, LA 50306, LA 68731, LA 145210, LA 148442	Yes, new	No	OAS	Earlier pueblo	Singleton, NMDOT
Mt. Chalchihuitl	Cerrillos Hills	LA 5027	Yes	No	Collaborative Group, ethnographic study	Resource procurement	Unknown private
LA 149	La Cienega	LA 149	Yes	No	TAC	Pueblo	TAC (pending)

***PUEBLO LA BAJADA***

Located next to the Santa Fe River at the bottom of La Bajada, Pueblo La Bajada (LA 7) represents what can be identified as a Keres pueblo in what is principally the Tano-Tewa landscape of the Galisteo Basin. Interest in protecting the site under the Act has been expressed by the Pueblo of Cochiti, who is at least a partial owner of the site. An evaluation of existing documentation will be conducted at Pueblo La Bajada, at which time any problems with site or boundary representation will be addressed. This evaluation will incorporate any recent characterizations of the site conducted by the Bureau of Indian Affairs and the Office of Contract Archaeology (on behalf of the National Park Service) during a study of the Camino Real Site (H.W. Toll, personal communication 2011). The Act does not include a provision for sites on tribal lands or reservations, but the Act could possibly be amended to include sites on tribal lands at the request of the tribe concerned. Additional information is needed regarding the extent and

composition of the site. As such, Pueblo La Bajada is recommended for further evaluation and formal assessment, rather than addition to the Act, at this time.

#### *WILDHORSE MESA GROUP*

This group of sites (LA 3333, LA 50306, LA 68731, LA 145210, and LA 148442) is important to our understanding of the history of pueblo habitation in the Galisteo Basin and is a necessary and logical addition to the Act. The Wildhorse Mesa Group represents a large cluster of pre-A.D. 1400 habitation sites east of Pueblo Largo and is likely contemporaneous with both early and later occupations of Pueblo Largo. Aspects of these sites have contributed to important research in the area, including Hannaford's documentation in conjunction with San Cristóbal Ranch of the most extensive of the site clusters and Merrin's study of travertine shell bead production and distribution, in which she included beads from the area. LA 3333 was partially excavated for mitigation of impacts associated with construction and widening of U.S. 285. Dendrochronological and pit structure data from excavations at LA 3333 suggest that this group's puebloan habitation is some of the earliest in this region of the Galisteo Basin (H.W. Toll, personal communication 2011). Additional information is needed regarding the extent and composition of this group of sites. As such, the Wildhorse Mesa Group is recommended for further evaluation and formal assessment, rather than addition to the Act, at this time.

#### *MT. CHALCHIHUITL*

Located within the Galisteo Basin, Mt. Chalchihuitl was used as a quarry for turquoise from roughly A.D. 1000 until the twentieth century. The site is known to, and was used by the ancestors of, several of the Native American groups consulted in the development of this management plan, and they maintain an active interest in its preservation, as noted in the ethnographic study (Parametrix 2011). Mt. Chalchihuitl can be interpreted at the nearby Cerrillos Hills State Park Visitor Center, where the public can learn how turquoise was extracted, used, and exchanged by Ancestral Pueblo peoples, historic-era settlers, and more recent miners. Finally, the current owners of the property have expressed interest in long-term preservation of Mt. Chalchihuitl. Although this site has been recorded as LA 5027, additional information is needed regarding the extent and composition of the site. As such, Mt. Chalchihuitl is recommended for further evaluation and formal assessment, rather than addition to the Act, at this time.

#### *LA 149*

LA 149 is a pueblo site in the La Cienega area with remains of a multi-room structure and well-preserved archaeological deposits. At least five major pueblos have been identified by archaeologists between Santa Fe and La Cienega in the Santa Fe River and Cienega Creek watersheds, among them LA 149. Occupied from the late thirteenth century through the early fifteenth century, these major pueblos, together with a number of smaller outlying pueblos, comprise the cultural landscape around La Cienega. Originally recorded in 1925 by H. P. Mera, the site had not been afforded much attention by archaeologists due to the amount of alluvium accumulated at the site over the years, but was brought to light again in the 1990s when it was "rediscovered" during construction of a new house. Following county protocol, construction was halted and through the course of events a treatment plan for the site was developed. The site was re-recorded and the boundaries redefined, and testing identified extensive intact subsurface cultural deposits. TAC is in the process of acquiring the land which LA 149 occupies

(S. Koczan, personal communication 2011). Additional information is needed regarding the extent and composition of this site. As such, LA 149 is recommended for further evaluation and formal assessment, rather than addition to the Act, at this time.

### **9.5.2 DELETIONS**

#### **ROTE CHERT QUARRY**

The Rote Chert Quarry should be deleted from the list of sites designated by the Act for several reasons. The Rote Chert Quarry is an archaeological site where chert gravel used to make stone tools was gathered. However, the site is not considered to represent the rich cultural heritage of the Galisteo Basin, due to its paucity of cultural material and features, limited research and interpretive potential, and low level of interest from the Native American community. Furthermore, because the site belongs to TAC, it is being protected. As such, the Rote Chert Quarry is not in any immediate or near-term danger of destruction if it is removed from the Act.

The Rote Chert Quarry is geographically separated from the archaeological sites of the Galisteo Basin (see Figure 9.1). The site may well have been used by people from the Galisteo Basin as a place from which to quarry stone material used to make flaked stone tools (knives, scrapers, projectile points, etc.). However, even if objects made of similar material were identified at archaeological sites in the Galisteo Basin, there would be no way to tie these objects specifically to the Rote Chert Quarry. The chert that outcrops as nodules at the Rote Quarry also outcrops at several other locations along the west side of the Sangre de Cristo Mountains, and it is not possible to distinguish among these sources.

With very little cultural material and no architectural features, the Rote Chert Quarry would be difficult to interpret in any educational materials developed for the Galisteo Basin. The site lies within a housing development immediately adjacent to three occupied residential properties. It would be not be appropriate for public visitation or archaeological research or to indicate the site location on any maps or interpretive documents.

Native Americans involved in the current collaborative effort did not indicate any particular affiliation with the site or interest in having access to it that would require facilitation through the Act or this management plan (i.e., tribal members can contact TAC should they wish to visit the site).

Inclusion within the Act of a site that demonstrates resource extraction activities of the diverse cultures who occupied the Galisteo Basin from ancient to modern times is critically important. For that reason, Mt. Chalchihuitl is recommended as a potential future substitute for the Rote Chert Quarry (see Section 9.5.1.2.3, above).

## **9.6 BOUNDARY ADJUSTMENTS**

Boundary adjustments are recommended for each of the currently designated sites, with the exception of La Cieneguilla Pueblo, as the boundaries defined in the Act have been further refined to reflect conditions on the ground, as documented during the site assessment project (Toll and Badner 2008). The recommended boundary adjustments for 18 of the currently listed sites would expand the site boundaries. Four of the sites would be reduced in area, and one

would remain unchanged. Table 9.3 shows the acreage for each designated site as currently defined and the proposed acreage subsequent to boundary adjustment. Both types of site boundary are depicted for each of the designated sites in Toll and Badner (2008). The boundary adjustments called for in this plan are largely based on the revised archaeological site boundaries recorded during the site assessment project; however, in some cases, the adjusted site boundaries are also based on land ownership lines. Maps depicting the existing and recommended boundaries for each designated site are provided in Appendix E. These maps have been detached from the management plan document itself, but are available from the BLM upon request.

**Table 9.3. Designated Site Areas with Boundary Adjustments**

Site Name	Current Area (acres)	Proposed Area with Boundary Adjustment (acres)
Lamy Junction sites	80	92
Burnt Corn Pueblo	110	341
Lamy Pueblo	30	26
Chamisa Locita Pueblo (Pueblo Wells)	16	18
Pueblo Largo	60	128
Pueblo Shé	120	232
Pueblo Colorado	120	370
Pueblo Blanco	878	1,002
San Cristobal Pueblo	520	546
Pueblo Galisteo/Las Madres	133	265
San Lazaro Pueblo	360	656
San Marcos Pueblo	152	189
Petroglyph Hill	130	137
Comanche Gap Petroglyphs	764	797
La Cienega Pithouse Village	179	186
Upper Arroyo Hondo Pueblo	12	14
Arroyo Hondo Pueblo	21	16
La Cienega Pueblo and Petroglyphs	126	96
La Cieneguilla Pueblo (Tzeguma)	11	11
La Cieneguilla Petroglyphs / Camino Real Site	531	460
Rote Chert Quarry	1*	N/A (to be deleted)
Espinoso Ridge Site	160	167
Pa'ako Pueblo (San Pedro Pueblo)	29	32
Las Huertas	44	52
<b>Total</b>	<b>4,587</b>	<b>5,833</b>

\* Although the Act lists the acreage of the Rote Chert Quarry Site (LA 65206) as 5 acres, this is incorrect. The OAS Site Assessment Study shows the correct site area as 1 acre (Toll and Badner 2008:305). Therefore the total combined area of the currently listed sites is actually 4,587 acres, not 4,591 acres (as stated in the Act).

## **9.7 EXPANSION OF SITE STEWARD PROGRAM**

The BLM and the collaborative group should work closely with SiteWatch and other volunteer groups in an effort to expand the existing site steward program with the goal of designating multiple coordinated volunteer site stewards for each designated site, if possible.

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## **CHAPTER 10            Conclusion**

This general management plan has been prepared, as mandated by Section 5(b)(1) of the Act, for the identification, research, protection, and public interpretation of the sites listed in the Act. The plan addresses the nuances between management of sites on Federal land and those on state, county, and private lands. The BLM has developed this plan in consultation with the Governor of New Mexico, the New Mexico State Land Commissioner, and affected Native American pueblos and tribes, as well as other interested parties including State Parks and Santa Fe County, among others.

The management plan reaffirms the national significance of the sites designated by the Act and provides readers with information about each designated site, as well as the cultural context within which they are considered important. The plan identifies a broad array of measures, mechanisms, and tools that will be employed to protect the sites listed in the Act, as well as the lands that they occupy. The plan has complied with Congress's directive to add or delete sites and has presented interpretive programs that will be used to enhance the public's appreciation of them. Tribal concerns and recommendations expressed during meetings and consultation, as well as through the related ethnographic study, have been presented in the plan. The positive response by landowners, land managing agencies, and the general public, in combination with the approval of this plan, will ensure fulfillment of Congress's original intent to preserve and protect our collective heritage, as expressed in the archaeological resources of the Galisteo Basin.

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## **Appendix A**

### **Galisteo Archaeological Sites Protection Act**

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118 STAT. 558

PUBLIC LAW 108–208—MAR. 19, 2004

**Public Law 108–208  
108th Congress**

**An Act**

Mar. 19, 2004  
[H.R. 506]

To provide for the protection of archaeological sites in the Galisteo Basin in New Mexico, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

Galisteo Basin  
Archaeological  
Sites Protection  
Act.  
16 USC 470aa  
note.

**SECTION 1. SHORT TITLE.**

This Act may be cited as the “Galisteo Basin Archaeological Sites Protection Act”.

**SEC. 2. FINDINGS AND PURPOSE.**

(a) FINDINGS.—The Congress finds that—

(1) the Galisteo Basin and surrounding area of New Mexico is the location of many well preserved prehistoric and historic archaeological resources of Native American and Spanish colonial cultures;

(2) these resources include the largest ruins of Pueblo Indian settlements in the United States, spectacular examples of Native American rock art, and ruins of Spanish colonial settlements; and

(3) these resources are being threatened by natural causes, urban development, vandalism, and uncontrolled excavations.

(b) PURPOSE.—The purpose of this Act is to provide for the preservation, protection, and interpretation of the nationally significant archaeological resources in the Galisteo Basin in New Mexico.

**SEC. 3. GALISTEO BASIN ARCHAEOLOGICAL PROTECTION SITES.**

(a) IN GENERAL.—Except as provided in subsection (d), the following archaeological sites located in the Galisteo Basin in the State of New Mexico, totaling approximately 4,591 acres, are hereby designated as Galisteo Basin Archaeological Protection Sites:

Name	Acres
Arroyo Hondo Pueblo .....	21
Burnt Corn Pueblo .....	110
Chamisa Locita Pueblo .....	16
Comanche Gap Petroglyphs .....	764
Espinosa Ridge Site .....	160
La Cienega Pueblo & Petroglyphs .....	126
La Cienega Pithouse Village .....	179
La Cieneguilla Petroglyphs/Camino Real Site .....	531
La Cieneguilla Pueblo .....	11
Lamy Pueblo .....	30
Lamy Junction Site .....	80
Las Huertas .....	44
Pa'ako Pueblo .....	29
Petroglyph Hill .....	130
Pueblo Blanco .....	878
Pueblo Colorado .....	120
Pueblo Galisteo/Las Madres .....	133

Name	Acres
Pueblo Largo .....	60
Pueblo She .....	120
Rote Chert Quarry .....	5
San Cristobal Pueblo .....	520
San Lazaro Pueblo .....	360
San Marcos Pueblo .....	152
Upper Arroyo Hondo Pueblo .....	12
Total Acreage .....	4,591

(b) AVAILABILITY OF MAPS.—The archaeological protection sites listed in subsection (a) are generally depicted on a series of 19 maps entitled “Galisteo Basin Archaeological Protection Sites” and dated July, 2002. The Secretary of the Interior (hereinafter referred to as the “Secretary”) shall keep the maps on file and available for public inspection in appropriate offices in New Mexico of the Bureau of Land Management and the National Park Service.

(c) BOUNDARY ADJUSTMENTS.—The Secretary may make minor boundary adjustments to the archaeological protection sites by publishing notice thereof in the Federal Register.

(d) WITHDRAWAL OF PRIVATE PROPERTY.—Upon the written request of an owner of private property included within the boundary of an archaeological site protected under this Act, the Secretary shall immediately remove that private property from within that boundary.

**SEC. 4. ADDITIONAL SITES.**

(a) IN GENERAL.—The Secretary shall—

(1) continue to search for additional Native American and Spanish colonial sites in the Galisteo Basin area of New Mexico; and

(2) submit to Congress, within 3 years after the date funds become available and thereafter as needed, recommendations for additions to, deletions from, and modifications of the boundaries of the list of archaeological protection sites in section 3 of this Act.

Deadline.

(b) ADDITIONS ONLY BY STATUTE.—Additions to or deletions from the list in section 3 shall be made only by an Act of Congress.

**SEC. 5. ADMINISTRATION.**

(a) IN GENERAL.—

(1) The Secretary shall administer archaeological protection sites located on Federal land in accordance with the provisions of this Act, the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470aa et seq.), the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 et seq.), and other applicable laws in a manner that will protect, preserve, and maintain the archaeological resources and provide for research thereon.

(2) The Secretary shall have no authority to administer archaeological protection sites which are on non-Federal lands except to the extent provided for in a cooperative agreement entered into between the Secretary and the landowner.

(3) Nothing in this Act shall be construed to extend the authorities of the Archaeological Resources Protection Act of 1979 or the Native American Graves Protection and Repatriation Act to private lands which are designated as an archaeological protection site.

(b) MANAGEMENT PLAN.—

118 STAT. 560

PUBLIC LAW 108-208—MAR. 19, 2004

Deadline.

(1) IN GENERAL.—Within 3 complete fiscal years after the date funds are made available, the Secretary shall prepare and transmit to the Committee on Energy and Natural Resources of the United States Senate and the Committee on Resources of the United States House of Representatives, a general management plan for the identification, research, protection, and public interpretation of—

(A) the archaeological protection sites located on Federal land; and

(B) for sites on State or private lands for which the Secretary has entered into cooperative agreements pursuant to section 6 of this Act.

(2) CONSULTATION.—The general management plan shall be developed by the Secretary in consultation with the Governor of New Mexico, the New Mexico State Land Commissioner, affected Native American pueblos, and other interested parties.

**SEC. 6. COOPERATIVE AGREEMENTS.**

The Secretary is authorized to enter into cooperative agreements with owners of non-Federal lands with regard to an archaeological protection site, or portion thereof, located on their property. The purpose of such an agreement shall be to enable the Secretary to assist with the protection, preservation, maintenance, and administration of the archaeological resources and associated lands. Where appropriate, a cooperative agreement may also provide for public interpretation of the site.

**SEC. 7. ACQUISITIONS.**

(a) IN GENERAL.—The Secretary is authorized to acquire lands and interests therein within the boundaries of the archaeological protection sites, including access thereto, by donation, by purchase with donated or appropriated funds, or by exchange.

(b) CONSENT OF OWNER REQUIRED.—The Secretary may only acquire lands or interests therein with the consent of the owner thereof.

(c) STATE LANDS.—The Secretary may acquire lands or interests therein owned by the State of New Mexico or a political subdivision thereof only by donation or exchange, except that State trust lands may only be acquired by exchange.

**SEC. 8. WITHDRAWAL.**

Subject to valid existing rights, all Federal lands within the archaeological protection sites are hereby withdrawn—

(1) from all forms of entry, appropriation, or disposal under the public land laws and all amendments thereto;

(2) from location, entry, and patent under the mining law and all amendments thereto; and

(3) from disposition under all laws relating to mineral and geothermal leasing, and all amendments thereto.

**SEC. 9. SAVINGS PROVISIONS.**

Nothing in this Act shall be construed—

(1) to authorize the regulation of privately owned lands within an area designated as an archaeological protection site;

(2) to modify, enlarge, or diminish any authority of Federal, State, or local governments to regulate any use of privately owned lands;

(3) to modify, enlarge, or diminish any authority of Federal, State, tribal, or local governments to manage or regulate any use of land as provided for by law or regulation; or

(4) to restrict or limit a tribe from protecting cultural or religious sites on tribal lands.

Approved March 19, 2004.

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LEGISLATIVE HISTORY—H.R. 506 (S. 210):

HOUSE REPORTS: No. 108-346 (Comm. on Resources).

SENATE REPORTS: No. 108-7 accompanying S. 210 (Comm. on Energy and Natural Resources).

CONGRESSIONAL RECORD:

Vol. 149 (2003): Nov. 4, considered and passed House.

Vol. 150 (2004): Mar. 4, considered and passed Senate.



**Appendix B**  
**Example Cooperative Agreement**

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**Galisteo Basin Archaeological Sites Protection Act  
Individual Property Cooperative Agreement**

**(Name of archeological site) (Name of Owner)**

Through enactment of the Galisteo Basin Archaeological Sites Protection Act (Public Law 108-208), the United States Congress has recognized that the Galisteo Basin and surrounding areas of New Mexico are the location of many well preserved prehistoric and historic archaeological resources. These include some of the largest Pueblo Indian settlements in the United States, spectacular examples of Native American rock art, and ruins of Spanish Colonial settlements.

To provide for the protection, preservation, maintenance, and administration of the nationally significant archaeological resources identified in the Act, the Bureau of Land Management (BLM) and (name of property owner) voluntarily agree to strive to achieve the highest level of protection, preservation, maintenance, and administration of archaeological resources possible at (name of archaeological site) located in Township\_ Range\_ Section\_. Our cooperative efforts to attain these goals will be guided by the Galisteo Basin Archaeological Sites Protection Act”

More specifically, The BLM and (name of owner) agree to work jointly on planning, preservation, protection, resource management, and other matters, including preparation of a site assessment, site management plan, and a general management plan. (name of owner) also agrees to provide access to the site to members of the Galisteo Act implementation group for these purposes under such terms and conditions as the owner may stipulate.

If at any future time, the BLM, (name of owner), and any other parties agree to expend public funds for the purpose of archaeological resource preservation, protection, interpretation, or research, the work will be implemented through a cooperative or reimbursable agreement establishing the conditions and requirements of the work. Nothing in this agreement will require either the BLM or the property owner to expend any funds for these purposes, and nothing will constrain the property owner from expending private funds toward preservation efforts.

**(Name of private property owner) retains all legal rights to the property and to the quiet enjoyment thereof. Nothing in this agreement is to be construed as granting any legal authority to the BLM over the property or over any action by the owner. The owner or BLM can cancel this agreement at any time by providing written notice to the other party.**

If one party has a complaint regarding the performance of the other, both commit to a sincere and reasonable attempt to resolve the issue or concerns. This agreement will remain in effect unless cancelled by either party, or until the ownership of the property is transferred to another entity. This agreement will become effective on the date of the latest signature below.

I agree to work with the BLM to preserve and protect (name of site).

\_\_\_\_\_  
Date

On behalf of the Secretary of the Interior, I agree to work with (name of owner) to preserve and protect (name of site).

\_\_\_\_\_  
Sam DesGeorges  
Taos Field Office Manager  
Bureau of Land Management

\_\_\_\_\_  
Date

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## **Appendix C**

### **Maps Showing Location and Boundaries of Sites Recommended to be Added to the Act (Detached – Available from the BLM)**

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## **Appendix D**

### **Sites Considered for Possible Addition to the Act (For Agency Use Only)**

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**Table D.1. Sites Considered for Addition to the Galisteo Archaeological Sites Protection Act List**

Site Name	General Location	Site Number (LA #)	In ARMS Database	Recommended by	Type	Priority	Owner	Current Status and/or Reason Not Included in Final Recommendations
Colina Verde	San Cristóbal	309	Yes, poor	OAS	Earlier Pueblo	1	Singleton	Surveyed and reported for possible addition
Dike above Las Madres	Galisteo	–	–	OAS	Shrine	1	Nauman	Included in expanded boundaries
El Tuerto	Espinoso	38928, 5052	–	OAS/BLM	Pueblo	1	BLM and San Felipe?	Also problematic for Pueblo of San Felipe
Galisteo Spring area	Galisteo Spring	–	Partial	OAS	Archaic-Historic	1	Galisteo Preserve	Surveyed and reported for possible addition
Petroglyph area north of Act area	Cieneguilla Rock Art	–	–	OAS	Rock art	1	BLM?	Included in expanded boundaries
Pueblo La Bajada	La Bajada	7	Yes, good	OAS	Pueblo	1	Cochiti	Already belongs to Cochiti Pueblo
Tonque	San Felipe	240	Yes	OAS	Pueblo	1	San Felipe	Pueblo of San Felipe rejected inquiries
West Galisteo Dike	Galisteo	–	–	OAS	Rock art	1	Unknown?	Should be considered, in Galisteo Village
Wildhorse Mesa group	Pueblo Largo	145210	Yes, new	OAS	Earlier Pueblo	1	Singleton	Permission to survey withheld
Boulder	Pueblo Colorado	–	–	OAS	Rock art	2	Singleton	Isolated rock art; between Colorado and Largo
Roomblocks south of pueblo	San Cristóbal creek	–	–	OAS	Earlier Pueblo	2	Singleton	Would even further expand San Cristóbal
Deep burn	Galisteo	–	–	OAS	Archaic	2	Nauman	Included in expanded boundaries
East of El Pipo	Galisteo	–	–	OAS	Earlier Pueblo	2	Nauman	Included in expanded boundaries
Far west Galisteo Dike	Kennedy	159160–159171	–	OAS	Rock Art	2	BLM	ASNM recording
Mocho	Arroyo Hondo/Santa Fe	191	–	OAS	Earlier Pueblo	2	Terrell? Schoen contact	Unsuccessful owner contacts, no visit
Piedra Lumbre	San Cristóbal	404	Yes, poor	OAS	Pueblo	2	Girls Ranch?	Sounds minimal
Pine Canyon	San Cristóbal	134770	–	OAS	Rock Art	2	Singleton	Would even further expand San Cristóbal
Pine Canyon shelter	San Cristóbal	–	–	OAS	Rock Art	2	–	Would even further expand San Cristóbal
San Lázaro agricultural area	Montoya Ranch	–	–	OAS/Santa Fe County	Ag. rock art	2	–	County research; acquired?
South of pueblo	San Cristóbal	–	–	OAS	Earlier Pueblo	2	–	Included in expanded boundaries
Spirit Haven	Chamisa Locita	125568	Yes	OAS	Shrine	2	Miller	Included in expanded boundaries
West of U.S. 285	San Cristóbal	–	Yes, SAR	OAS	Various	2	–	Permission to survey withheld
	Arroyo Hondo	–	–	RedVine	Archaic	2	–	–
	La Cienega	177, 10692	–	RedVine	Basketmaker	2	–	–
	La Cienega	164	–	RedVine	Historic	2	–	–
	Pa'ako	72040	–	OCA	Pueblo	2	–	Across highway, mostly historic
	Pueblo Blanco	–	Yes, good	OCA	–	2	–	Included in expanded boundaries
Gipuy	Lower Galisteo	182	–	–	Pueblo	3	Kewa	Location and condition unclear
Lamy's Ranch	Manzanares	–	–	OAS	Historic	3	–	Not visited or recorded
Madera Chert locations	Rote Chert	65206	And others	OAS	Quarry outcrops	3	–	Widespread, complex
Manzanaria No. 1	Manzanares	–	–	OAS	Pueblo	3	–	Location and condition unclear
Pindi Pueblo	Santa Fe	1	–	OAS	Pueblo	3	–	Complex ownership, lack of owner response
Tsinat Pueblo	La Cienega	–	–	RedVine	Pueblo	3	–	Location and condition unclear
Los Aguajes	La Cienega	5	–	–	Pueblo	–	U.S. Forest Service	Known to and protected by U.S. Forest Service

Note: BLM = Bureau of Land Management; OCA = Office of Contract Archaeology, University of New Mexico; OAS = Office of Archaeological Studies, New Mexico Department of Cultural Affairs; Red Vine = RedVine Consultants

**Table D.2. List of Sites/Landscape Features for Potential Nomination to the Galisteo Archaeological Sites Protection Act List**

Common Name	Tribal Name	Area	Site Number (LA #)	In ARMS Database	Visited by	Recommended by	Type	Owner
Tunque Pueblo	–	Tunque/Espinoso	240	–	–	Santa Clara	Pueblo	San Felipe
El Tuerto	–	–	232	–	–	Santa Clara	Pueblo	–
La Bajada	<i>Tzenatay</i>	La Bajada	7	–	–	Santa Clara	Pueblo	Cochiti
Dolores	<i>Oro harah-stich</i>	Ortiz Mountains	–	–	Kewa	Kewa	Pueblo	Private
Mount Chalchihuitl	<i>Tsi-wa-mo-coach</i>	Los Cerrillos	–	–	Kewa	Kewa, Tesuque	Mine/Traditional use area	Private
Castellano Mine, also Castillian	–	Los Cerrillos	–	–	–	Kewa	Mine/Traditional use area	Private
Tiffany Mine	–	Los Cerrillos	–	–	–	Kewa	Mine/Traditional use area	Private
<b>Landscape Features/Districts</b>								
Cerro de la Cruz	<i>Mas-sana</i>	Los Cerrillos	–	–	Kewa	Kewa	Pueblo Revolt site	Private?
Los Cerrillos	–	–	–	–	Kewa	Kewa	Traditional use area/ mine	Multiple
Ortiz Mountains	–	–	–	–	Kewa, Santa Ana	Kewa, Santa Ana	Traditional use area	Multiple
San Pedro Mountains	–	San Antonio	–	–	Santa Ana	Santa Ana	Traditional use area	Multiple
Sandia Mountains (undisclosed sites)	–	Sandia Mountains	–	–	–	Santa Ana	Traditional use area	U.S. Forest Service, private?
Galisteo Basin Watershed and Galisteo Creek	Galisteo River: <i>Di' Chi'na</i> Keres meaning “the river or water that flows from east to west.”				Kewa	Kewa	Cultural landscape/multiple	Multiple
<b>Expansion of Existing Sites/Districts</b>								
San Cristobal expansion: Tipi Rings	–	San Cristobal	80	–	Jicarilla	Jicarilla	Tipi rings	Singleton
San Cristobal expansion: Pine/Bull Canyon	–	San Cristobal	?	–	–	Tesuque	Traditional use area/ habitation	Singleton?
La Cienega area	–	Cienega	3116	–	–	Tesuque	Traditional use area	Private?
La Cienega expansion	–	Cienega	3	–	Kewa, Ohkay Owingeh	Kewa, Ohkay Owingeh	Traditional use area	Private?
Mesa opposite Santa Fe River from La Cienega	–	Cienega	?	–	Ohkay Owingeh	Ohkay Owingeh	Traditional use area	Private?
Cottonwood Pueblo and Las Huertas expansion	–	Las Huertas	25816	–	Santa Ana	Santa Ana	Pueblo	Private
Pa'ako outliers	–	Pa'ako	–	–	–	Santa Ana	Pueblo	?
<b>Sites/Districts outside the Act but Associated with the Galisteo Basin through Migration, etc.</b>								
Chilili	–	Chilili	?	–	–	Kewa	Pueblo/Migration	Private?
Frijoles Canyon	–	Frijoles Canyon	–	–	–	Kewa	Pueblo/Migration	–
Mesa Verde	–	Southeast Colorado	–	–	–	Kewa	Pueblo/Migration	–
Edgewood area	–	Edgewood	–	–	–	Tesuque	Migration	–
Villanueva area	–	Villanueva	–	–	–	Tesuque/Jemez	Migration	–

## **Appendix E**

### **Maps Showing Boundary Adjustments for Protection Sites (Detached – Available from the BLM)**