

Chapter 6.

ANCIENT ONES OF THE SOUTHWEST – AND THOSE WHO FOLLOWED

Part I. VOICES FROM THE PAST, LESSONS FOR THE PRESENT

Introduction. History is a work in progress. Every day of our lives we collectively produce the material goods, cultural objects, and ideas that future historians will study and write about. And based on ongoing research, present-day historians and archeologists continuously amend and in some cases re-write the story of our collective past.

This is nowhere truer than of the archeological sites of the American Southwest. Every time we dig a hole in the ground wide enough, deep enough, and carefully enough, we find evidence of the lives of those who lived here long, long before. Depending on their interpretation, these artifacts either confirm existing theories (a.k.a. educated guesses) about how these ancient peoples lived in Southwestern landscapes, or call those theories into question and require new interpretations.

All of the chapters in *Sustainability and the Sacred* deal in two ways with questions of cultural continuity. The first is how the preservation of sacred landscapes and evidence of past human habitation on the public lands of the United States (especially lands managed by the National Park Service) can aid contemporary indigenous culture groups to maintain continuity with their own history and relationships with their ancestors. For traditional groups whose cosmology does not

include linear time, this relationship is a living and intimate one, but depends partly on protection of physical evidence of their ancestors' existence and of the places where they lived.

The other form of cultural continuity at play here concerns the future of us all, to the extent that cultural resilience is dependent on sustainable habitation of the environment on which any culture subsists. And it is in this regard that the study of the Ancient Ones in the landscapes of the American Southwest—especially as preserved for our edification by the National Park Service—may have the most to teach American society about how to live wisely on the land and what happens when we don't.

Pre-Columbian Lifestyles and Cultural Diffusion. Over the last century or so, archeologists and historians have devised several different theories and classificatory schemes for breaking down the pre-historic and ancient human history of the Southwest into its constituent elements and dimensions. Broadly speaking, these dimensions can be described as environment, culture, and time. When did what groups of people arrive where, and from where? How are these groups distinguishable from each other, and how were they alike? How did the three dimensions of environment, culture, and time interact to create the rich tapestry of ancient southwestern human history that the Park Service seeks to protect today?

The relative influences of these three dimensions are debated continuously in scientific circles. It is not the purpose of this chapter to either revisit the debate or to take sides within it. Rather, the following narrative simply describes the interaction of

all three, by way of gaining a deeper understanding of how the ancients of the Southwest came to leave the marks they did on the landscape; and how the lessons they learned—as handed down over the centuries to their current descendants—may yet help contemporary American society live more sustainably on the land. In offering this description, it will also gradually become apparent why preserving evidence of the lives of ancient Southwesterners can be a source of cultural enrichment for us all, though especially for their direct descendants.

Environment. The region most often referred to as the Southwest consists of three sub-regions: the desert floors of southern Arizona and southern New Mexico; the mountains of east-central Arizona and west-central New Mexico to the north of the deserts, collectively referred to as the Mogollon Rim; and the Colorado Plateau, a landscape characterized by high elevation mesas and deep canyons, generally covering the “Four Corners” area in which the borders of Arizona, Colorado, New Mexico, and Utah intersect.

While the terrain varies dramatically, like a great staircase rising northward from the Mexican border from desert floor to mountain to high plateau, the one feature the entire region shares is aridity. The southern deserts generally receive less than 10 inches of rain a year, and most of that in either a short winter-spring burst or the towering thunderheads and dramatic torrential downpours characterizing the late summer monsoon season. In the mountains to the north, the erratic precipitation takes the form of snow in the winter, sometimes sufficient to provide a steady flow in the streams and few rivers making their way to the desert floor, and sometimes not.

The high plateau tends to get somewhat more precipitation, but it is still relatively sparse, erratic, and unpredictable. So the ability of all the ancient culture groups populating the Southwest to survive and prosper required them to find ways to sustain themselves in sparse and undependable environmental circumstances.

Culture. In Chapter 1, I referred to philosopher Martin Heidegger's distinction between *contemplative* and *calculative* knowledge. The former is intuitive and relational—the source of artistic or religious vision, and of a sense of intimate connection with all living beings. The latter is dispassionate and detached—the source of rational discourse. Calculative knowledge is empirical in nature, much of it the product of the scientific method.

The student projects presented in *Sustainability and the Sacred* are for the most part their depiction in words and images of some of the contemplative knowledge passed on to them by their elders. By contrast, the brief overview of the cultural history of the Southwest given here is based most heavily on the findings of the social sciences, and is thus calculative in nature. I reiterate the distinction here, because otherwise we in mainstream American culture tend view the findings of archeologists and anthropologists as *the* story of the ancient peoples of the Southwest, rather than as only the scientific narrative.

It's also important to remember this distinction because the origin stories of most of the traditional indigenous cultures in this region hold that their ancestors have lived in these landscapes from time immemorial, having first emerged from the Earth in their homelands. Although to an outside observer this might seem like a quaint

religious myth, like the Adam and Eve story in Genesis, this commonality in origin stories may help us to understand why traditional cultural knowledge in all these groups stresses the intimate personal connection between their members and their landscapes.

Currently available archeological evidence suggests habitation of the Four Corners region by hunters of large mammals (mostly mammoth and bison) at least as early as 9,500 BCE¹; but they drifted eastward with the mammal herds when the climate changed. Immigrants began to repopulate the region from various directions by about 7000 BCE, each adapting pre-existing cultural practices to their new surroundings.

All three sub-regions of the Southwest began to see a gradual population rise about 3000 BCE; and the three great culture groups who would come to inhabit the Southwest during ancient times—the Hohokam, the Mogollon, and the Ancestral Puebloans²—are each associated with one of those subregions. Over time some cultural similarities began to develop as they all began to make the transition from hunting and foraging to agriculture. And the primary source of this cultural alignment seems to have been Mexico, in part because the region’s most important life-sustaining agricultural crop also originated there: corn.³

By 3000 BCE, residents of the central Mexican highlands had already begun to domesticate this genus of wild grasses, selecting for those species yielding the most abundant and nutritious seed. It grew well in the foothills of Mexico’s Sierra Madre,

and made its way north from there with human migration into the Southwestern region.

Corn cultivation appears to have begun in earnest first in the Mogollon Rim sub-region (the stairstep between the desert floor and the Colorado Plateau), because the conditions there were most similar to the Sierra Madre. So of the three great culture groups that would come to populate the Southwest in ancient times, Mogollon peoples may have been those most responsible for disseminating the techniques and tools for growing and storing corn to both the Hohokam peoples of the desert floor and the Ancestral Puebloans up on the Colorado Plateau.

Even as they undertook the growing of corn (and later beans and squash, also domesticated in and brought north from Mexico), members of the Mogollon culture also had access to a fairly wide variety of wild game owing to their location in the central mountains. As a result, it would be the Hohokam peoples of the southern deserts who built the most extensive, elaborate, and effective irrigated agriculture infrastructure in the region, in that they had little else to rely on for sustenance.

Of the three sub-regions, the environmental conditions of the southern deserts are perhaps the harshest. Very low rainfall and very high temperatures place severe limits on the ability of any life form to eke out a living. The most successful of them are the ones exhibiting the most flexibility in adapting to these conditions. The Hohokam began by building low-head check dams across the arroyos storm runoff had carved into the desert hills. These dams slowed the flow of floodwaters, captured the silt and biological nutrients carried by the waters, and so created early forms of small-

scale but productive agricultural terraces. Increasing proficiency in pot making and basketry made it possible to store the food grown in these narrow weather-dictated growing seasons when water was abundant and other conditions favorable.

To the north, the Ancestral Puebloans came to large-scale agriculture later than the Mogollon or Hohokam peoples, when the Puebloans communities began to grow to a size that subsistence hunting and gathering were no longer sufficient to support them. Though they never developed extensive irrigation systems (e.g., deep canals, laterals, headgates, graduated field leveling) in the way the desert dwellers did, they did make sophisticated use of low check dams, diversions, erosion control structures, and cisterns.

What this allowed them to do was create a subsistence base large enough to support construction of the largest and most elaborate dwellings and storage structures ever created by the ancient peoples of North America. In its prime, Ancestral Puebloan urban centers such as Chaco Canyon housed thousands of persons, with multi-level structures connected by systems of paved roads. These were also great trade centers, facilitating the flow of goods made in places as distant as Florida, the California coast, and MesoAmerica.

Time. The Mogollon, Hohokam, and Ancestral Puebloan cultures all had their periods of growth, of flowering and maturation, and of decline. And these all occurred over a period of about a thousand years, from about 300-400 CE until about 1300-1400 CE. Their respective periods of ascending, peaking, and receding from the regional stage do not track each other exactly over time. But they are close enough in

both the timing and the shape of the arc that it lends credence to the argument that the combined influences of intensive resource exploitation, environmental change, and external cultural challenges eventually wrote the closing chapters in their common history.

While turning irrigation water onto seemingly barren desert lands and bringing forth a nutritious crop of corn, squash, and beans can seem like a miracle, it also has its shadow side. Southwestern desert lands used to be at the bottom of an ocean—an ocean that evaporated and left all its salts and minerals behind. So desert soils are alkaline to begin with. When water flows through them it dissolves the salts and minerals and carries them along for deposit wherever the flow slows and stops, such as on an irrigated field.

If the fields are not flushed and drained periodically, and if nutrients are not added to balance the pH, eventually the land becomes less able to sustain productive crop growth. This is a problem throughout the Southwest and southern California today, just as it was for the Hohokam six or seven hundred years ago. Additionally, the elaborate system of deep canals and extensive laterals that were the circulatory system of this agricultural empire began to silt up and disintegrate—the accumulated effects of not having devoted sufficient effort to infrastructure maintenance and repair during the culture’s period of decline. By about the 14th or 15th century CE, the Hohokam culture had become sufficiently decentralized, diffused, and depopulated that it ceased to exist as the cohesive whole it had once been understood to be. Many anthropologists consider the present day Pima and O’Odham tribes of Arizona’s

central and northern Sonora Deserts to be direct descendants of the Hohokam, as do these tribes themselves.⁴

The Mogollon culture was the first established, and it was also the first to lose its identity as a cohesive culture group. Its decline coincided with the rapid expansion of the Ancestral Puebloans to the north. There is no evidence of armed conflict—just a steady infiltration of Puebloan agricultural practices, agricultural styles, and the social organization necessary for them to be sustained.⁵

Of the three, the Ancestral Puebloan culture is the most storied, the most studied, and in some ways the most enigmatic. Coming later to intensive agriculture than the Mogollon and the Hohokam (perhaps because of its greater distance from Mexico), it also receded into history more abruptly and more dramatically than the other two.

The Puebloans are best known for having built massive, elaborate cliff dwelling structures (such as those in present day Mesa Verde National Park) into the walls of canyons and (in Chaco Canyon, for instance) on the canyon floors of the Colorado Plateau. These architectural feats were unmatched anywhere in North America at the time, and would remain so until the arrival of Euro-American settlers in the 19th century. Yet only a century or so after the completion of some of their most extensive and elaborate architectural masterpieces, they abandoned them, which began to occur in the latter half of the 13th century CE.

Though still a matter of some debate, most archeological evidence points to the combined effect of two forces—one cultural and the other environmental—that

compelled the sudden mass exodus of the Ancestral Puebloans from their urban centers. And both of these were also a function of time.

In *Collapse: How Societies Choose to Fail or Succeed*,⁶ Jared Diamond chronicles the rise, decline, and—in some cases—rejuvenation of societies that stressed their environments beyond their carrying capacity, exploiting life-sustaining resources at an environmentally unsustainable rate. His chapter on the Anasazi (the term he uses) mostly summarizes existing research on the collapse of the urban center at Chaco Canyon.

Packrat midden analysis (a means of assessing what vegetation immediately surrounded preserved packrat nests of ancient times) shows that for several hundred years after farmers started tilling the soil in Chaco Canyon about 600 CE, the canyon was thickly forested with piñon pines and juniper bushes, the former having been used as structural support for roofs in early dwellings. But by the time Chaco residents abandoned their urban complex 600 years later, they had completely deforested the canyon, and the surrounding lands were barren.

Evidently, as the size of the community grew (estimated population at its peak was about 6,000 residents), the immediate environment became less able to support the burgeoning population. Farming moved further and further away from the city center, and the ponderosa pine trunks used in some of the city's largest (and most recently built) structures had to be carried from the mountains many miles away.

So Chaco, like Mesa Verde, was living at the very edge of the environment's carrying capacity at the very time environmental change was about to deliver a mortal

blow to these and other Ancestral Puebloan communities in the region. Tree ring analysis shows that prolonged droughts struck the Four Corners area of the Colorado Plateau starting in the 12th century CE. The most severe, lasting throughout the fourth quarter of the 13th century, coincides roughly with the culmination of the Ancestral Puebloan exodus from much of the Four Corners region.

Some archeologists and anthropologists argue that it had to have been more than the intersecting arcs of population growth and unsustainable resource exploitation that crashed these societies, however. They posit that prolonged conditions of privation and increasing competition for dwindling food supplies also led to the disintegration of social institutions that had performed functions such as equitable resource allocation, providing for the common defense, and dispute resolution. In this thesis, mounting environmental stress created more social stress; and as the society became less able to wisely and effectively manage a shrinking resource base, the environmental degradation only accelerated.⁷

As these great culture groups were internally dissembling (at least in their pre-historic locations), their *coup de gras* came in the form of external incursions by new culture groups. One group was indigenous immigrants, and the other came from Europe: Spanish *conquistadores*, priests, and colonists.

Those Who Followed. The retreat of Ancestral Puebloan peoples from their great urban centers to the Hopi Mesas, the Zuni highlands, and the Upper Rio Grande Valley coincided with immigration into their former homelands by hunting and gathering tribes from far to the north. Anthropologists broadly categorize the tribes of

indigenous peoples now living on the lands once inhabited by the Hohokam, the Mogollon, and the Colorado Plateau by language group, which is in turn a function of where the tribes came from and when.

Ute-Aztecan is a language group name reflecting the northward migration of indigenes from Mexico intermingling with the Ute peoples living to the north of the Ancestral Puebloans in the mountains of Colorado and Utah. This language family grew from roots established by earlier entrants into the region (from at least 300 BCE). The second major language group—Athabaskan (named for homelands in western Canada)—began to appear in large numbers in the Southwestern landscape in the 15th century CE.

Though the Hohokam, Mogollon, and Ancestral Puebloan cultures were nearly dissembled or at least diminished in their places of origin by the time of the arrival of the Athabaskan peoples—principally the Navajos and the Apaches—in the 14th and 15th centuries, these hunting and gathering warrior-based cultures no doubt hastened the demise of the ancient cultures. For these early cultures were agrarian and fixed in place, while the early Navajos and Apaches made their living by roaming the landscape in search of sustenance.

That landscape included the farms and villages of the Pueblos, the Zunis, and the Hopi (present-day descendants of the Ancestral Puebloans) in the Colorado Plateau and Upper Rio Grande Valley to the north; and of the Pimas and Tohono O'odham (present-day descendants of the Hohokam) in the southern deserts. So raiding became a way of life for the Navajos and Apaches, even as being raided by

them was the fate of the Ancestral Puebloans and Hohokam's progeny. The Utes in the high country of the northern Colorado Plateau also suffered predation from Navajo and Apache raiders, but generally proved more effective in repelling them.

The Navajos eventually settled into the lower left quadrant of the Colorado Plateau, encompassing the Four Corners area—much of which is now also part of their present-day reservation. Various Apache tribes dispersed more broadly across the Southwest. The Jicarillas stayed in the Four Corners area in northern New Mexico, while the Mescaleros moved further south into the Mogollon and desert floor of central/southern New Mexico. The Mimbres and Chiricahua moved far to the southwest, in desert mountain ranges of New Mexico and Arizona near the border with Mexico. As they settled in and gradually ceased their nomadic ways, these Athabascan-speaking peoples took up agriculture and (after the arrival of Spanish colonists) herding, though agriculture never reached the scale and sophistication of the Hohokam, the Mogollon, and the Ancestral Puebloans. They maintained a mixed portfolio of survival strategies, however. Navajos and Apaches still regularly raided villages of the agrarian tribes, taking provisions, livestock, and slaves.

So when the Spanish entered the Southwest and undertook its colonization during the 16th century CE, in addition to a varied and dramatic landscape, they also found an equally rich intermingling of indigenous cultures inhabiting those landscapes over time. Both the descendants of ancient cultures (Pueblo, Zuni, Hopi, Pima, Yavapai, O'odham, and some Utes) and the more recent arrivals ("recent" being a relative term, since Athabascan speakers have been there about 700 years now) such

as the Navajo and the Apaches were well established; and none seemed thrilled at the idea of uninvited foreigners making claims on their territories.

The Spanish, Mexican, and American entrants onto the stage of the American Southwest introduced yet another level of cultural complexity to the history of the region, while at the same time they introduced powerful new technologies and equally powerful diseases. The colonial immigrants also quickly established their own preferences among the indigenous inhabitants of the region — deciding who were the “good Indians” and who were the “bad Indians”, and deciding their fates accordingly.

Tumacacori National Historical Park on the highway from Tucson south to the Mexican border is a preserved Spanish Catholic colonial mission compound established by the Franciscan priest Eusebio Kino and Indian workers in the late 17th century. The journals of the friars who served there speak in loving terms of the peaceful “Mission Indians” (the Hohokam-descended O’odham) who built the mission structures, tended the fields, sheep flocks, and cattle herds, came to Mass, and sent their children to the mission school. These were the friars’ “flocks”, as they referred to them — Indians who had been civilized to walk the Christian path.

But the priests wrote in their journals of the Apache raiders in very different terms. Far from being yet another family of God’s children awaiting pacification and enlightenment, in the priests’ view the Apaches were “savage devils” whose only salvation lay in the fires of extermination. They lamented that the Spanish Army had not proven more effective in removing this scourge upon the land. So the colonists — first the Spanish, then the Mexicans, and lastly the Americans — clearly chose sides in

terms of the “good Indians” who would be allowed to live on their lands in peace, and the “bad Indians” whom Providence and public policy condemned to confinement, removal, or outright eradication.⁸

Preserving the Past as a Key to the Future. Given their past history, present-day tribes of indigenous peoples in the American Southwest do not agree on many issues. The entire Hopi Reservation, for instance, lies within the Navajo Reservation (an arrangement imposed on both by the federal government). Inevitably, disputes over land claims, water rights, resource exploitation and its attendant environmental impacts have characterized this relationship, even as tribal leaders search for common ground on other issues when they can. Outsiders who don’t understand why these tribes don’t always find it so easy to get along also don’t generally know very much about the 700-year long history of conflict and competition among them. Little wonder, then, that the Navajo regarded the Ancestral Puebloans as “Ancient Enemies”, and vice-versa.

But there is one major public policy issue on which virtually every tribe in the Southwestern United States does agree: the necessity of honoring their forebearers in how we manage the public lands. From time to time, Congress has joined in that agreement, with legislation such as the 1906 Antiquities Act,⁹ 1935 Historic Sites Act,¹⁰ 1966 National Historical Preservation Act,¹¹ 1978 American Indian Religious Freedom Act,¹² and the 1979 Archeological Resource Protection Act,¹³ which provides significant criminal penalties for the unauthorized removal of indigenous artifacts or human remains from public lands. At other times, though, Congress also passed

resource-exploitative legislation the intent of which runs directly counter to the preservation goals embodied in the acts cited above.

In one way or another, the preservation statutes regard physical evidence of ancient indigenous peoples' presence on the public lands as a treasured national historic and scientific resource. Furthermore, all such physical evidence is considered to be federal property, unless and until it can be shown that title should vest in either a private person or in a clan, band, or tribe of indigenous people.

But the situation is actually more nuanced than that. Many tribal representatives hold the view that the best way to honor their ancestors is to leave their remains and artifacts undisturbed. For public lands managers, this view potentially presents two problems. First, if intended future land uses may entail some form of disturbance or resource reallocation, the potential for disturbance of the sacred nature of a site on public lands is significant.

One example of this problem is the ski resort the U.S. Forest Service authorized to be built and later expanded on sites held sacred by the Hopi and other tribes on the San Francisco Peaks of northern Arizona. Another such example is the inundation of the base area of Rainbow Bridge National Monument by the raising of Lake Powell behind the U.S. Bureau of Reclamation's Glen Canyon Dam.¹⁴ These two cases exemplify the management dilemma into which Congress has thrust, in encouraging activities such as outdoor recreation and hydropower development in one set of laws, while voicing historical conservation concerns on the other. In both of these cases, historic preservation and sacred site integrity lost out

The other management problem is that many of the older statutes in particular emphasize archeological research as the prime motive for preservation. But in the view of many southwestern Indian tribes, much of the archeological work done in the first half of the 20th century by universities and natural history museums was little more than scientifically rationalized graverobbing. So the indigenous peoples' interest lies in assuring that their ancestors can rest in peace, even as scientists want to have a closer look at how these ancient ones lived and died, searching for clues as to how we might avoid the fate of those cultures whose needs grew to exceed the ability of their environment to meet them.

Having all these federal laws on the books (as well as some parallel state statutes) is one thing, but effectively implementing and enforcing them can be quite another. Like the various American Indian tribes that have made the American Southwest home over the last several hundreds or thousands of years, each with its own culture and its own history of use/misuse of lands and resources, so too does a varied array of public land management agencies co-habit the same landscape. Each of these agencies has its own organizational culture, its own set of land management policies (some of them in direct conflict with each other) handed to it by Congress, and its own evolutionary history. Their organizational culture shifting with the changing legal mandates imposed by Congress and the competing demands of various interest groups wanting to the public lands managed in ways that favor their interests.

Among the major federal public land and water management agencies—the National Park Service, and Bureau of Land Management, and the Bureau of Reclamation within the Interior Department; and the U.S. Forest Service and Soil

Conservation Service within the Agriculture Department—the congressional charge to the National Park Service is perhaps the most straightforward (though some NPS managers may beg to differ). Overall, its organic act directs the Park Service to protect and preserve the national parks, monuments, and historic parks entrusted to them on the one hand, while providing for their use and enjoyment by the visiting public on the other.

Like librarians managing a rare book collection, what the NPS enabling act directs the Park Service to do is perform an ongoing balancing act. If the NPS managers are too protective of the resource, the public cannot use and enjoy it fully. But if public and private sector concessionaire behavior goes largely unregulated, historic resources can be either gradually or immediately threatened with irreparable harm.

What seems to make public lands management at times one of public management’s “impossible jobs”¹⁵ is that fact that, over time, Congress has given the agencies radically different sets of instructions as to how they should manage the public estate. Relative to the “multiple use” agencies,

To complicate matters further, Congress and recent presidential administrations have begun to assign management of some newly created national monuments and historical parks not to the National Park Service but to the Bureau of Land Management. Though both are administratively located within the U.S. Department of the Interior, they walked very different historical paths over the course

of the 20th century, and those paths are only now beginning to regularly intertwine, as they are very likely to continue to do in the future.

Whereas the Park Service has from its inception been conservation-oriented, the BLM's historical mission has been to facilitate natural resource exploitation on the public lands. Whether overseeing implementation of hard rock mining and energy minerals extraction statutes, logging, or livestock grazing, throughout most of the 20th century, Congress seemed intent on empowering the BLM to allocate and exploit natural resources on the public lands just as vigorously as it was urging the Park Service to protect them. Thus did the BLM earn the unwanted early nickname of "Bureau of Logging and Mining".

All that changed in 1976 (at least on paper), when Congress passed the Federal Land Policy and Management Act (FLPMA). Whereas Congress had previously enacted statutes ordering BLM to encourage access to one or another natural resources on lands it managed, FLPMA was an environmental-era statute that fundamentally rewrote the BLM's charter. Now the agency was charged with and empowered to adopt a multiple use perspective, in which the agency would decide which tracts of land were best suited to mining, grazing, logging, hunting and fishing, outdoor recreation, or other more conservation-oriented uses.

Further expanding its outdoor recreation and related environmental preservation portfolio, recently Congress has begun to experiment with assigning management responsibility for some newly created national monuments and historical parks to BLM instead of the Park Service, presumably because of an expectation that

BLM might be more flexible in its interpretation of its resource protection and conservation mandate than is the Park Service.

What this means for the preservation of sites and artifacts sacred to indigenous peoples on lands managed by the BLM remains to be seen, and very much speaks to the future of the agency's organizational culture. In terms of acreage, the BLM manages far more public land than either the National Park Service or the U.S. Forest Service. And all three agencies are subject to other congressionally assigned management goals, as exemplified by statutes such as the Wilderness Act and Endangered Species Act.

About 30% of the land mass of the United States is public land. The vast majority of these public holdings located in the states of the mountain west); and they are at least as rich in archeological and historical artifacts as they are in energy minerals, the exploitation of which is the principal resource extraction demand being placed on BLM by the oil and gas industry. As a result, the agency finds itself at something of a historic crossroads. The oil and gas development boom being visited upon the American Southwest since late in the 20th century is happening at just the same time that the BLM is seeking to demonstrate its ability to be just as careful a steward of the newly created national monuments and historical parks being entrusted to its care by the Congress as the Park Service traditionally has been.

The energy future of the United States is being written on the shifting sands of the public lands' southwestern mesas and canyons just as surely as the same agencies responsible for guiding its path are seeking to protect their ancient past. The National

Park Service's mandate is fairly clear-cut: to preserve and protect the ancient and more recent historical heritage while providing for its use and enjoyment. But the BLM has more difficult choices to make. In giving it management responsibility over some newly minted national monuments, recreation areas, and historical parks, Congress evidently wants it to become more like the Park Service on the one hand (preserving and protecting the historical resource while providing for its use and enjoyment); while still maintaining a more liberal stance toward accommodating various forms of resource extraction on the lands entrusted to their stewardship at the same time.

All of the layers of archaic, pre-and-post-Columbian, and more recent history of the American Southwest summarized in this narrative are but a prelude to what the future of the region holds in store. The most pressing and incessant demands the ancient peoples of the Southwest made of their environment consisted of using proven technologies to extract an ever-greater toll on the resource base to support the population. Eventually the demands proved too great, and both the life-supporting infrastructure and cultural cohesion of the ancient societies failed as a result.

The lessons on sustainability transmitted from the Ancestral Puebloans to their modern progeny (e.g., the description of the Taos Pueblo Deer Dance in chapter 1 of this text), the archeological evidence of unsustainable resource extraction and societal implosion (see Diamond, *Collapse*), and the living teachings of tribes such as the Navajo on environmental integrity and harmonious interaction (see Russell Keith, Part II, below) may sufficiently inform the arc of our own future history in the Southwest to point it toward either long-term sustainability, or to yet another partial implosion and societal retrenchment. Observers such as Jared Diamond think that the choice is

ours to make, if we can but learn from what the ancient history of the region has to tell us. And the Taos Pueblo teachings seem to agree.

PART II. CARING FOR THE SACRED, WHEREVER IT MAY BE FOUND

In the summer of 2009, Russell Keith, a member of the Navajo Nation, served as a cultural resource interpreter at Natural Bridges/Hovenweep National Monument, in southeastern Utah. During his tenure there, Russell taught how each of the cultures that inhabited these sacred sites had their own stories to tell about their relationship with the land, and what the land had to teach them about living there wisely.

All of the ancient and contemporary indigenous culture groups now living in the American Southwest have their own traditional teachings related to their environment. They have legends and rituals embedded with moral significance related to forms of plant and animal life, landscape formations, and weather events. Though the legends vary from tribe to tribe, there are two aspects common to all. The first is that their environment has something to teach them, and that they are personally related to it. And the second aspect is that of stewardship responsibility for the environment and all its features.

In the federal court litigation over the Forest Service's decision to allow a ski resort to be built atop the San Francisco Peaks, a treasured sacred site for both the Hopi and the Navajo, tribal representatives testified in court that although adversarial disputes were anathema to their own customs of conflict management, they were appearing in court out of a sense of moral responsibility to the deities who resided there, to their ancestors who had performed rituals there for hundreds of years, to

their own progeny in terms of maintaining cultural continuity, and to the life forms on the site itself. They were called to witness against desecration of a holy site and the long-term cultural damage it would do to their tribes. In the legal world of “multiple use”, however, their pleas were ultimately unavailing.¹⁶ The same dynamic played out in the Navajos’ unsuccessful efforts to keep Lake Powell from inundating the base of Rainbow Bridge.

At Natural Bridges/Hovenweep National Monument, Place and Native Voice intern Russell Keith told me a somewhat similar story, regarding his people’s attempts to preserve a sacred landscape associated with the Big Serpent from irreparable damage from a highway construction project. The “natural bridges” at this monument were created by the silt-laden rivers cutting their way downward through the soft sandstone of the landscape. They cut wide arcs in the canyon floors, expanding and deepening outward curves where the water flowed faster, and building embankments in the inner curves where the water velocity slowed and deposited its load of silt. Sometimes the meanders became so tight that they doubled back on themselves, eating away at their banks, until they eroded away all the riverbed soil yet left an arch of sandstone earth above. This is how the rivers carved the “natural bridges”.

Viewed from the canyon rim above, the deep meandering chasm and flowing water that carved these bridges resembles an enormous snake, like a sidewinder or diamondback, slithering along in S-shaped curves way across the desert floor. And thus the landscape reminds the *Dine* (Navajo people) of the presence of the Big Serpent, as do the ridgelines atop some of the great escarpments of the area.

The serpent has many meanings in the religious teachings of all the tribes native to the Four Corners region — sometimes beneficent (potent lifegiver), sometimes destructive (life taker, as when associate with lightning strikes). But for all, it signifies the function of rebirth and renewal. Just as in the Hindu and Buddhist cultures of south-central and southeast Asia, indigenous peoples of the Southwest revere the serpent's ability to rebirth and renew itself, through the periodic shedding of its skin. And as it renews itself, it also renews its relationship to its environment.

So for the Dine and other Southwestern indigenes to look down into the meandering, canyon-carving rivers and streams of the Colorado Plateau or the vertebral spine of some canyon escarpments is to be reminded of the longevity of their own cultures as continuously renewed by the lessons their landscape has to teach them. That which promotes renewal is revered, just as that which portends destruction is feared.¹⁷

Approaching National Bridges/Hovenweep National Monument from the east entails driving along State Highway 86, which also meanders over and around the steep escarpments, ridgelines, and chasms that characterize the landscape. On one particularly high and steep ridge, highway planners decided to cut down through it instead of going around it. Unfortunately for the Navajo, this particular outsized ridge symbolized for them the Great Serpent swirling across the landscape before plunging down into NB/HNM.

When they learned of the planned route, the Navajos did what they could to bring the problem to the attention of transportation planners, and urged them to adopt

an alternative route, which—though a little longer and involving more curves, likely would not have been as costly. Ultimately, however, the costs were imposed on Navajo culture. As Russell explained it to me, for his people the deep dramatic fissure blasted down through the rock to accommodate the straightened highway was like breaking the snake’s back, destroying the potency of the landform as a teaching and as a place of connection between the people and the land.

And herein ultimately lies the problem with efforts by indigenous peoples to preserve their sacred sites and landscapes, and thus their living connection to their ancestors and what the ancestors have to teach. Many if not most of these sites and landscapes lie off-reservation and outside tribal jurisdiction or control. If the tribes are unsuccessful in making the case for preservation, both they and mainstream society lose, in terms of preserving traditional cultural and ecological knowledge as well as the sites and landscapes themselves.

Throughout the American West, in some ways the past itself is nearly as endangered as many of the animal species whose habitats lie in the shadow of the bulldozer’s blade. Whether it’s residential development at park boundaries or the robust pace of hydrologic fracturing-assisted oil and gas extraction on BLM lands, the only defense the ancient past and associated sacred landscapes have is the equally vigorous implementation of the historic preservation statutes enumerated earlier. And that will happen only if there is enough public support and enthusiasm for achieving this goal as there seems to be for more consumptive uses of our public lands.

¹ Robert Lister and Florence Lister, *Those Who Came Before*. Tucson, AZ: Southwestern Parks and Monuments Association, 1993; at 18.

² In 1927, archeologists specializing in the American Southwest devised a common system for classifying culture groups and eras in their development over time. They adopted the name “Anasazi” for this culture best known for its architectural and engineering skills and dryland farming prowess. However, Anasazi is a Navajo word variously translated as *ancient ones* or *ancient enemies*. Understandably, then, the present-day Pueblo peoples who are the direct descendants of these ancient architects resent the use of a derogatory Navajo word to describe their ancestors. It is the present-day practice of National Park Service personnel at sites where these ancestors lived to use the term *Ancestral Puebloans*, inasmuch as (1) this is the term of choice for their ancestors by present-day Pueblo Indians; and (2) it is increasingly becoming the term of choice in both common and scientific use. This is why Ancestral Puebloans is used in preference to Anasazi throughout this text. See Lister, *id.*

³ *Id.*

⁴ Stephen Plog, *Ancient Peoples of the American Southwest*. London: Thames & Hudson, 2nd ed. 2008.

⁵ Lister, at 31.

⁶ Jared Diamond, *Collapse: How Societies Decide to Succeed or Fail*. NY: Penguin, 2005.

⁷ Plog, at 153.

⁸ Oral dramatization of journals of the Tumacacori friars of the 17th, 18th, and 19th centuries in an interpretive film clip viewed by the author, visitor theater, Tumacacori National Historical Park, Tumacacori, Arizona, March, 2008.

⁹ 16 USC 431.

¹⁰ P.L. 74-292; 16 USC 461.

¹¹ 16 USC 470.

¹² P.L. 95-431; 42 USC 1996.

¹³ 16 USC 470aa et seq.

¹⁴ See Lloyd Burton, *Worship and Wilderness*. Madison, WI: University of Wisconsin Press, 2002; chp. 7.

¹⁵ See generally Erwin Hargrove, *Impossible Jobs in Public Management*. Lawrence, KS: University Press of Kansas, 1990.

¹⁶ See Burton, chp. 7.

¹⁷ From the website of the Cosmic Serpent Project. *Cosmic Serpent* is a Collaborative project led by Indigenous Education Institute and UC Berkeley Space Sciences Laboratory. Cosmic Serpent is funded by the National Science Foundation under grants No.DRL-0714631 and DRL-0714629. Accessed 13 August 2012: <http://cosmicserpent.org>.