## COLORADO PREHISTORY: A CONTEXT FOR THE SOUTHERN COLORADO RIVER BASIN



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The cover shows rock art found along the Mancos Canyon, on the Ute Mountain Ute Reservation. Pen-and-ink drawing by Paul Ermigiotti. Used with permission.

To Alden C. Hayes

Who by example taught us to respect the archaeological record and to take pleasure in the craft of archaeology

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Bill Lipe, Mark Varien, and Richard Wilshusen

## FOREWORD

The Colorado Historical Society is pleased to support the publication of the Prehistory of Colorado series. This set of volumes fills a vital need for background material that synthesizes our gray literature and provides contexts for evaluating new discoveries in our State:

Colorado Prehistory: A Context for the Arkansas River Basin, by Christian J. Zier and Stephen M. Kalasz.

Colorado Prehistory: A Context for the Northern Colorado River Basin, by Alan D. Reed and Michael D. Metcalf.

Colorado Prehistory: A Context for the Platte River Basin, by Kevin Gilmore, Marcia Tate, Mark Chenault, Bonnie Clark, Terri McBride, and Margaret Wood.

Colorado Prehistory: A Context for the Rio Grande Basin, by Marilyn A. Martorano, Ted Hoefer III, Margaret (Pegi) A. Jodry, Vince Spero, and Melissa L. Taylor.

Colorado Prehistory: A Context for the Southern Colorado River Basin, by Crow Canyon Archaeological Center.

We commend the Colorado Council of Professional Archaeologists (CCPA) for completing this project, just as they were instrumental in beginning the regional research design series published by our Office of Archaeology and Historic Preservation in 1984. The past fifteen years have seen an explosive growth in information about our shared past, and the turning of the millennium gives a symbolic opportunity to reassess our understanding of ancient Colorado.

A grant from the State Historical Fund enabled the CCPA to undertake this project, and all volume authors donated great amounts of their professional time during the two-year course of this project. These individuals and their businesses have made investments in knowledge. We are grateful to them for their efforts and for sharing what they have learned.

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This series of five volumes provides a new platform for understanding the long and complex history of Colorado. Improved knowledge about the complexity of past lifeways can help us to appreciate our common human heritage. We look forward to continuing partnership in our shared quest for discovery!


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## Chapter 1

# INTRODUCTION 

William D. Lipe

## GOALS AND ORGANIZATION OF THE STUDY

This report is intended to provide technical information needed in the development of prehistoric contexts for southwestern Colorado (specifically, the southern part of the upper Colorado River drainage basin in Colorado, Figure 1-1). "Prehistoric" means prior to the regular production of written documents in the study area-approximately A.D. 1850. An understanding of past human activities in the study area before that date must be based primarily on the archaeological record and on oral traditions. Comparative linguistics and ethnology may contribute information about the historical relationships of contemporary Native American groups that may have some applicability to understanding the prehistory of the study area, or at least of the broader Southwestern culture area. This does not mean that archaeology, oral traditions, or other methods are useless as sources of information about human activities in the study area after 1850; it is just that the information they can provide becomes increasingly supplemented by that obtained through the study of written records.

One of the primary uses of the context document will be to assist archaeologists and others in evaluating archaeological sites with regard to criteria of the National Register of Historic Places (NRHP). For a site to be placed on the NRHP or be determined eligible for the NRHP:
...it must represent a significant part of the history, architecture, archeology, engineering, or culture of an area, and it must have the characteristics that make it a good representative of the properties associated with that aspect of the past....The significance of a historic property can be judged and explained only when it is evaluated within its historic context. Historic contexts are those patterns, themes, or trends in history by which a specific occurrence, property, or site is understood and its meaning (and ultimately its significance) within history or prehistory is made clear.
[NRHP 1991:7]
Hence, the definition of historic contexts is essential to the successful evaluation of sites according to the NRHP. The historic context may relate to an event or pattern of an area's historical development (NRHP Criterion A); to an association with the life of an important person (Criterion B ); to characteristics of building form, style, engineering technique, materials, or method of construction that shaped an area's historic identity (Criterion C); or to a research topic (Criterion D) that presumably will help define or further illuminate one or more historic themes or pattern.

If an archaeological site qualifies for the NRHP, it is most likely to do so under Criterion D. Hence, our survey of the literature for each temporal period will conclude with a discussion of research problems and information needs-that is, what research is needed to achieve a better understanding of prehistory of the study area. Many archaeological sites may also qualify under Criterion A-that is, they may be shown to represent or symbolize a significant trend, theme, or pattern in the area's prehistory. For this reason, the context document will include statements about


Figure 1-1. Map of Colorado showing the location of the Southern Colorado context area relative to the other context areas.
the main patterns in the area's prehistory, as well as information and references to literature that will help others define additional patterns. It is also quite possible that some sites having standing structures (e.g., cliff dwellings, canyon-rim towers) could qualify under Criterion C, which refers to characteristics of buildings. An argument might also be made that a site could qualify under Criterion C on the basis of a particular type of architectural plan or of subsurface structures, even if the buildings were no longer standing. Certain site types may thus qualify under this criterion. Given the long history of archaeology in the area, and the important figures in Southwestern and American archaeology who have worked there, it is even possible that some sites or districts might be eligible based on their association with such figures (Criterion B).

These examples represent typical interpretations of ways that sites may be found eligible for the NRHP. Recently, representatives of some Native American tribes have argued for an expanded application of these criteria in order to take traditional Native American viewpoints into account. Thus, for example, early Puebloan habitation sites might be eligible under Criterion A because they are associated with clan migration histories, and under Criterion B because they are associated with tribal ancestors. These perspectives and related issues are discussed more fully in Chapter 11, which deals with Native American perspectives.

The definition of context noted above was developed to aid in the identification of historic places and properties that can be judged worthy of preservation because they exemplify particular contexts or can contribute information relevant to learning more about particular contexts. The definition is broad enough, however, to describe the goals of much if not most historical investigation. It is hoped that this context document will be generally useful to a variety of specialists concerned with archaeology, whether or not they are working within the framework provided by the NRHP and the National Historic Preservation Act (NHPA).

It is expected that users of this report will include archaeologists, cultural resource specialists, resource managers, graduate students in archaeology, avocational archaeologists, interpretive specialists, scholars from fields related to archaeology, and members of Indian tribes interested in accessing archaeologically based information about Native American cultures. It should help researchers and resource managers make better-informed decisions, and will provide an entry point to the professional literature for interpretive specialists, outside scholars, and other interested parties.

The report is also intended to provide background information for the writer selected by the context project's advisory committee, who will use this and four other comparable regional context documents to write a popular account of the prehistory of Colorado. This popular account will complement technical context reports such as this one. The popular account will serve as an introduction to the archaeology of the state for nonarchaeologically trained researchers, managers, and members of the public, who would like to learn more about Colorado's ancient past, but do not already have a strong background in archaeology or familiarity with the technical literature.

This report, entitled Colorado Prehistory: A Context For The Southern Colorado River Basin, has several parts. First are three chapters of introductory material, starting with this brief first chapter. Chapter 2 surveys present and past environments of the study area, and Chapter 3 provides a detailed survey of the history of archaeological research that also serves as a guide to the extensive technical literature that has been generated by research in the study area. The second or main part of the report includes Chapters 4-10, each dealing with a particular period of time (Paleoindian through Post-Pueblo). These chapters explore in some depth the principal "patterns,
themes, or trends" in the prehistory of Southwestern Colorado, and identify important problems requiring additional research. The final section consists of Chapter 11, which discusses Native American perspectives, and Chapter 12, which summarizes major trends through time in the area's archaeological record, and discusses issues important in decision-making about cultural resource management. Finally, the report concludes with a list of the references cited in the preceding chapters, followed by an annotated bibliography of major publications relating to the prehistory of Southwestern Colorado.

## RELATIONSHIP TO THE 1984 CONTEXT DOCUMENT

The existing Southwest Colorado Prehistoric Context document (Eddy et al. 1984) was prepared just prior to the veritable blizzard of new reports and publications produced by the Dolores Archaeological Program and numerous other cultural resource management-based studies, as well as through the activities of the Crow Canyon Archaeological Center and other problem-oriented researchers. Although Eddy et al. (1984) represents a competent summary of the state of archaeological knowledge as of the early 1980 s , much has been learned since that time. This report attempts to synthesize information available as of early 1999 , and to provide some guidance as to what questions need to be addressed by future research, so that understandings of the human past in this part of Colorado can continue to become richer and deeper.

Although the report in general covers the same ground as does the one of 1984, the treatment is organized somewhat differently. Some of the principal points of contrast between the 1984 document and the current one are as follows.

- Although the concept of drainage units is retained as a basis for discussing geographic variability within the study area, the presentation of information is not organized around these units, as was the 1984 report. The number of drainage units has been reduced from 11 to 7. The relationships between the current geographic scheme and the one used by Eddy et al. (1984) can best be appreciated by comparing Figure 1-2 of this report with Figure 2.1 of Eddy et al. (1984). Table 1-1 also provides approximate equivalencies. The drainage unit scheme used here also resembles the one used by Varien et al. (1996) in a summary of Northern San Juan region settlement patterns for the period A.D. 1100-1300.

Table 1-1. Comparison of Drainage Unit Classifications.

| Current Drainage Units | Equivalent from Eddy et al. (1984:Figure 2.1) |
| :--- | :--- |
| 1. Monument-McElmo | McElmo, plus Colorado portion of Monument |
| 2. Dolores | Dolores, plus portions of Mancos and McElmo |
| 3. Ute | Portions of Mancos, McElmo, and Middle Reach San Juan |
| 4. Mesa Verde-Mancos | Mancos |
| 5. La Plata | La Plata |
| 6. Animas | Animas |
| 7. Upper San Juan-Piedra | Pine, Piedra, Upper Reach San Juan |



Figure 1-2. Drainage units in the Southern Colorado context area. (Reprinted with permission of Crow Canyon Archaeological Center.)

After their survey of the Paleoindian and Archaic periods, Eddy et al. (1984) provided a summary of culture history and a discussion of research problems for each drainage unit. The authors here prefer to discuss the study area as a whole for each major temporal period, using drainage units in order to refer to geographic variability. Overall, drainage units are used primarily as convenient geographic subdivisions of the study area. They are based primarily on hydrology and physiography. Because they differ somewhat in resources such as arable soil and economically important plants and animals, they also differ in their attractiveness to human occupation at various temporal periods. In some cases, there may be low levels of interaction across particular drainage unit boundaries, leading to the formation of a culturally distinctive grouping of communities that corresponds more or less to the drainage unit. But this cannot be assumed at the outset; such patterns must be demonstrated rather than assumed. Theoretically, there may also be cases in which cultural and social differences may be demonstrable between groups of communities that are entirely within a particular drainage unit. In fact, for most temporal periods, it is believed there was substantial interaction between the populations of adjacent drainage units and that the cultural similarities across the study area outweigh the differences. In any case, for each temporal period, an attempt will be made to generalize about the study area as a whole, while recognizing geographic variability in population and in socio-cultural characteristics. Eddy et al. (1984) also discuss problems for future research in the context of drainage unit summaries; here the authors propose to do so by periods.

- Like Eddy et al. (1984), the discussion of culture history is organized in terms of temporal periods, starting with the Paleoindian and Archaic stages. For the Formative stage, the Pecos classification of Kidder (1927) is used, starting with Basketmaker II and continuing through Pueblo III. The concluding "Post-Pueblo" period is temporally equivalent to the "Protohistoric/historic stage" of Eddy et al. (1984). The "developmental" aspects of the Pecos scheme are ordinarily not used; unless otherwise specified, this familiar sequence is used only to refer to periods of time. That is, the authors do not assume that the course of change through this sequence is necessarily from simple to more complex. Nor is it assumed that the gross descriptive characteristics cited for the various periods in the original Pecos classification in fact occur in these periods throughout the study area. Again, the Pecos periods here are just that-periods of time.

Use is made of existing phase schemes where applicable. For most of the Basketmaker II through Pueblo III sequence, however, chronological control is good enough so that it is possible to sketch out the principal continuities and changes within the study area through time and space without resorting to the more static and typological approach of describing and comparing phases.

- Eddy et al. (1984:6-18) provided a comprehensive and logically coherent set of terms for discussing the archaeological record, the social and cultural units it represents, and the cultural history that can be inferred from it. In general, this terminological scheme follows the one established for the Dolores Archaeological Program ([DAP] Kane 1983; 1986a:353-360). Some of these terms continue to be commonly and consistently employed in Southwestern archaeology, and some do not. The authors prefer not to attempt to establish a technical lexicon for this study at the outset, but to rely primarily on terms that are in general usage, attempting to make clear what they refer to if there is a possibility for ambiguity. Many of the conceptual distinctions made by Eddy et al.
(1984:6-18) are useful, but it is believed that some of them are better made in the context of particular discussions rather than by attempting to codify them in terminology at the outset.
- This context document will treat the following topics more explicitly and in greater detail than did Eddy et al. (1984): history of archaeology; present and past environments; Native American issues; and cultural resource management considerations. The first topic was expanded because such a large amount of work has been done in our study area over the past 125 years. A relatively detailed history of research is needed in order to provide a useful introduction to this huge literature, as well as to give insights into how current research understandings and interests have developed through time. The environmental chapter was needed both because the environmental diversity within the study area has a bearing on the patterns of occupation in the several drainage units, and because a great deal of new information on past environments has been published since the 1984 report was written. Native American perspectives are essential because tribes have emerged as active stakeholders in federal and state decisions about archaeological resource management, research, and interpretation, and because archaeologists have an ethical responsibility to take into account the views of present-day ethnic groups who are culturally related to the materials they wish to study (Lynott 1997; Lynott and Wylie 1995). Finally, recommendations on cultural resource management (CRM) issues are needed because most archaeological fieldwork in the area is done within a CRM framework. Management decisions affecting site preservation, access, and interpretation need to take into account the potential of sites to yield information on the research issues discussed in this report. Other values that managers need to take into account are the heritage values recognized by tribes and the special values of certain sites for public education about archaeological research and Native American history and culture.

In addition to the 1984 context document covering the entire study area, a Multiple Property Documentation Form was prepared to provide additional context for assessing sites of the "Great Pueblo Period" in the McElmo Drainage Unit in southwestern Colorado (Gleichman and Gleichman 1991). This document defined seven property types, their significance, and research questions associated with each. The primary purpose of the study was to provide a framework for preparing NRHP nominations. The Gleichmans characterized the Great Pueblo Period as extending from 1075 to 1300 ; this covers not only the Pueblo III period as defined here, but the latter part of Pueblo II as well.

## THEORETICAL AND CONCEPTUAL CONSIDERATIONS

The theoretical orientation that underlies the interpretations presented in this report can be labeled "expanded processual" (Willey and Sabloff 1993:305). This label implies that the orientation is firmly grounded in the "processual" approach to archaeology that became dominant in America in the 1960s and 1970s (Redman 1991). Processual archaeology has multiple roots, but emerged as a fairly coherent theoretical and research agenda in the "New Archaeology" movement of the 1960s and early 1970s (see Binford and Binford 1968; Binford 1972).

Calling this report's orientation "expanded processual" recognizes that processual archaeology has continued to evolve, and has incorporated additional approaches and understandings since the days of the New Archaeology movement. For example, processual archaeology was expanded and strengthened in the late 1970s and the 1980s by the development
of "behavioral archaeology" (Schiffer 1976, 1987) and "middle range theory" (Binford 1977, 1978, 1979). These developments have led to greater understanding of the archaeological record and have proved compatible with the scientific goals of processual archaeology. In addition, selected insights derived from the work of "post-processual" archaeologists (Preucel 1991) are increasingly being integrated into the dominant processual paradigm. These insights refer to archaeological epistemology and in some cases, to the nature of human behavior and society.

In this report, the following general assumptions or principles are shared with the early processual or "New Archaeology" of the 1960s and 1970s:

- A basic cultural ecological orientation that views the interface between small-scale, lowtech human societies and their environments as an exceptionally useful starting point for the functional analysis of economic and social organization, as well as of the associated cultural patterns.
- A generally positivist and empiricist epistemology, that relies on explicit methods for gathering intersubjectively acceptable data about the archaeological record, and that grounds inferences about past human behavior in tangible evidence obtained by the use of such methods. The archaeological record is considered to reflect the past activities of humans as individuals and as social groups, and it is expected that new knowledge about these past activities can be gained through systematic application of archaeological methods of obtaining and analyzing evidence.
- A concern for the demographic, economic, and social aspects of past human life as well as for the strictly cultural; a confidence that the archaeological record can reveal a great deal about the demography and the economic and social organization of particular communities or sets of related communities at particular points in time.
- The view that classifications of archaeological materials should be relevant to the problems being researched, and are in any case means to various ends, and not ends in themselves. For example, in this report, standardized "Kriegerian" or "historical" typologies (Krieger 1944; Rouse 1960) are considered useful for time-space ordering, but not necessarily for other kinds of problems.
- A rejection of the "normative" assumption that most cultural traits are widely and uniformly shared by the members of a local community. Instead, variability in artifacts, features, structures, and other aspects of the archaeological record is expectable and is a source of evidence about the social and adaptive organization of the community.
- A concern for couching explanations of both stability and change in particular cultures in terms of the operation of processes that occur cross-culturally, e.g., subsistence intensification, or the operation of the domestic cycle, or competition for status.
- An appreciation for the difficulty of using cultural similarities and differences to trace the histories of particular human groups, due to the rapidity with which group boundaries can shift and be redefined, and to the rapidity with which cultural traits can disperse and change; a concomitant skepticism about the utility of traditional "culture historical" taxonomies in representing the history of particular human groups.

What then, makes this report's orientation "expanded processualist"? Several key theoretical and methodological developments since the 1970s qualify the approach for this label. The strongest contrast can be made between contemporary "expanded processual" archaeology and the early processual or "New Archaeology" of the late 1960s and 1970s. For example:

- Much of the New Archaeology assumed a particular view of society that is now widely rejected. At its worst, this view treated society as a kind of homeostatically regulated organism, with a social structure that controlled the activities of the its members. By contrast, the authors of this report expect structure to emerge from the activities and interaction of agents-individuals and groups of individuals having similar interests. Conflicts of interests between agents are expected to be frequent, so that the structured relationships that emerge from their interactions often represent an uneasy and unstable balance of interests.
- The authors also reject the implicit view of culture as a "superorganic" agent that also characterizes much of the New Archaeology. The symbolic and communicative abilities of humans support the development of a pool of cultural information that is larger than that held by any individual, and this pool of information can be drawn upon by individuals and social groups in order to address problems of various sorts, to find philosophical meaning in their lives, and so forth. But culture does not "do" anything without the agency provided by individuals and social groups.
- It is expected that a group's culture will provide a framework of historically derived meanings which individuals and groups can draw upon to justify their goals and actions; culture therefore can become a contested field, and culture change a way to tilt the playing field in one's favor. So thinking about culture history is important in attempting to understand how a particular community functioned and how and why it changed. This does not require construction of a "culture history" in the sense of fitting a particular community into a scheme of phases, traditions, and horizons, however useful that might be in time-space ordering of archaeological assemblages. Rather, it requires a consideration of how particular social and cultural elements and complexes have been associated through time in a region, whether there has been demographic continuity or discontinuity, and whether modes of social reproduction have been similar or different through time.
- Although it is recognized that the archaeological record of any particular time and place is the product of a distinct and unique cultural history, it is also expected that a common human nature, environmental constraints, and limits on the number of workable solutions to certain common problems of membership in social groups will result in some crosscultural regularities of process and outcome. Hence, the New Archaeology's commitment to a search for such regularities is maintained, but is tempered by a recognition that culture history produces varied and largely divergent outcomes. Generalizations are most likely to be achieved at the level of identifying processes that are responsible for crosscultural divergence and convergence in the cultural and social patterns that result from culture history.
- This view of culture history is consistent with a Darwinian (i.e., evolutionary) analysis of cultural change and stability that focuses on generation, transmission, and selection of cultural variants (although these processes remain inadequately understood). Identifying
cultural evolutionary analysis as the application of Darwinian models to culture history is another contrast with the New Archaeology, in which the prevailing model of cultural evolution was a Spencerian one of a succession of increasingly more complex stages, and the primary evolutionary process was thought to be "cultural adaptation." Nevertheless, the New Archaeology and "expanded processual archaeology" are linked by a commitment to understanding cultural change as the result of evolutionary processes.
- The New Archaeology assumed long-term continuity at the regional level, and its practitioners expected that demographic, social, and cultural change could be understood largely or entirely by reference to a regional-scale record. Instead, contemporary archaeology is more likely to view households and communities as operating in a much larger geographic framework that involved fairly detailed knowledge of environmental variation outside the locality, and of the social and cultural characteristics of numerous other groups. Adoption or rejection of culture traits, formation of alliances at various scales, and migration to new areas were options that individuals and small groups must have constantly been assessing against information about an area much larger than the local region.
- Although the nexus among population, technology, economic organization, and natural resources is a very useful starting point for the functional analysis of a community or society, the authors are much more likely than the early New Archaeologists to look to the political arena as a source of change. Within a community, households and kin groups are unlikely to have fully common interests; hence, conflict and its resolution are always important dynamics at the local level. Furthermore, disputes between individuals from different communities are likely to escalate to the level of intercommunity warfare; in response, the leaders of different communities may form alliances or other supra-community organizations. Finally, individuals will use a variety of techniques to enhance their own status and some will attempt to become leaders by gaining the support of other individuals and groups; these efforts will usually be opposed by still other individuals and groups.
- The archaeological record is a rather peculiar record of past activities, and cannot be assumed to represent these activities in a direct or self-evident way. The authors recognize that "Pompeii-like" archaeological contexts can be extremely informative, but concede that such contexts also are extremely rare. Hence, most archaeological inquiry must proceed with less tractable cases. Furthermore, the regular daily activities even of the residents of Pompeii are not directly represented in the archaeological record of that site, but must be inferred from multiple lines of evidence. The authors recognize that successful interpretation of the archaeological record depends on a broad range of studies that provide empirical generalizations and occasionally, general principles, that help link characteristics of the archaeological record to recurring patterns of human behavior. Such studies can be cross-cultural, ethnoarchaeological, or experimental, or can be based on computer simulations and on particularly well-understood "strong archaeological cases" (Varien and Mills 1997; Varien and Potter 1997). Because of such studies, understanding of the archaeological record is much improved as compared with how practitioners of the New Archaeology viewed this record in the late 1960s and 1970s.
- Although the authors reject the notions that 1 ) archaeologically-based accounts of the past are merely restatements of archaeologists' sociocultural biases and 2) archaeological
research should be designed to promote particular political agendas in the present, it is recognized that like all scientific and scholarly work, archaeology takes place in a cultural and social context. That is, the production of archaeological knowledge is to some extent affected by the biases and perspectives latent in archaeologists' sociocultural backgrounds and in the political structure and cultural conventions of the institutions within which they work. Furthermore, the work that archaeologists produce also has some potential to affect contemporary society and culture by offering particular interpretations of history, i.e., of how societies and cultures functioned in the past and how they came to be the way they are today. Archaeologists need to accept that they bring certain conscious and unconscious sociocultural biases to their work and must attempt to identify the influence of these biases to the extent possible. The authors believe that a scientific orientation provides the best framework for identifying such biases (e.g., the androcentric basis for ignoring gender differences in interpreting past societies) and for designing research that explicitly seeks to identify and control for biases.


## RESOURCE MANAGEMENT ISSUES

## Philosophical Orientation

The approach to resource management issues is guided by a philosophy that sees the overall goal of archaeological resource management as providing public benefits while conserving the archaeological record for long-term use. This position has been discussed by Lipe in a series of papers published over the past 25 years (e.g., Lipe 1974, 1984, 1985, 1990, 1996a, 1997).

The archaeological record is nonrenewable for any given period of the past, and is subject to continuing loss from natural erosion, vandalism, and looting, and the effects of economic development. The public agencies charged with managing the archaeological record as a resource have a serious responsibility. The starting point for thinking about resource management is the public benefits that the archaeological record can yield. These include:

- New knowledge about the past, derived from systematic archaeological research - Public education and enjoyment, derived from direct encounters by members of the public with preserved and interpreted sites and artifacts; with ongoing archaeological research in the field or laboratory; and/or with books, video productions, museum exhibits, etc. that display and dramatize what has been learned about the past from the archaeological record
- Preservation of cultural heritage values, through the protection of sites that represent important aspects of the cultural heritage of ethnic groups and that play a continuing role in the maintenance of their traditional histories, religions, or ways of life.

Archaeological resource managers are often in a position to weigh current uses of the archaeological record for public benefit (i.e., in research and education) against the value of denying such uses so that the archaeological record can be preserved for the future. The authors believe that management programs should not allow the archaeological record to be rapidly or thoughtlessly consumed through research or public education; on the other hand, neither should they establish management plans that automatically close off all present-day research or other public uses in order to save the record for the future. Denying legitimate users access to the archaeological record undercuts the rationale for managing this record in the first place (i.e., to provide public benefits). Thoughtful, balanced tradeoffs are needed between the dual goals of 1)
providing present-day public benefits through use of and access to the archaeological record and 2) ensuring that significant portions of the archaeological record are preserved for the future. Approaches that permit well-justified and frugal public uses on a continuing basis, with the future in mind, would appear to meet this demanding requirement.

Conserving and making frugal use of the archaeological record over the long term is a goal that requires more than the establishment of sound practices by public land managers. It requires private landowners to respect archaeological values as well. Proponents of archaeological resource conservation need to become involved in societal contexts larger than archaeological resource management per se in order to be effective over the long run. Increasing public awareness and appreciation of archaeological values, and convincing legislative bodies to support laws protecting archaeological resources are essential complements to the development of responsible management programs by public land managers.

One strategy for gaining broader public support for archaeological resource protection is to expand public awareness of the economic benefits that archaeological preservation, research, and public education can often bring to local communities. In the long-term, site protection and well-planned research and public education programs can promote the development of institutions such as archaeological parks, museums, and education centers that attract visitors. Certainly, the study area is one in which archaeology has become a major factor in the local economy. This would not have been the case if a series of public and private actions to preserve, study, and interpret archaeological sites had not been taken over a period of more than a century. On the other hand, tying the protection and management of archaeological resources too closely to presumed future economic benefits can provoke a backlash if the benefits do not materialize or can promote wasteful and ill-advised uses of archaeological resources in the name of economic development. Resource managers and the broader archaeological community must continue to educate the public about the broad non-economic benefits of archaeological conservation, research, and education, while supporting archaeologically-related developments that are consistent with the goals of longterm conservation and appropriate use of archaeological resources.

## Specific Issues

Archaeological resource managers repeatedly face the hard question of whether a particular archaeological site is worthy of protection. Because "significance" is not an intrinsic property of sites (as is size, or number of artifacts), this decision rests on an available intellectual and social context, as well as on the characteristics of the site in question (Tainter and Lucas 1983; Butler 1987). The major purpose of this context document is to provide intellectual frameworks and references to additional information that will allow resource managers to make informed judgments about the relative importance of sites.

Sites are by definition identifiable discrete concentrations of archaeological material; they occupy particular locations on the landscape. Proposed development projects can be determined to have either direct or indirect effects on particular sites or sets of sites. Hence, management decisions made in response to the effects of development necessarily focus on particular sites. Evaluating the significance of such sites, however, ordinarily requires considering them in a much larger comparative context. One level is the intellectual one addressed by this document: what do researchers already know about the main patterns and themes in the prehistory of the study area, and what do they need to know to improve our understanding of that prehistory? This information
will help archaeologists and research managers make decisions about whether particular sites or sets of sites meet NRHP criteria of significance.

At another level, however, what is needed is specific information about the archaeological resources of the particular locality in which a project is taking place. In most discussions of archaeological knowledge and significance, individual sites are viewed as elements in community patterns, settlement patterns, or regional populations of sites. Hence, evaluating specific sites ideally requires adequate knowledge of these larger local and regional patterns of which they are a part. This places a priority on high quality survey coverage, and on management systems that allow investigators to rapidly assess the extent and quality of survey in the vicinity of their study.

One of the major issues in resource management that has emerged strongly in the last 10 years is the active pursuit of a larger role in decision-making about archaeological resources by a number of Native American tribes and interest groups. This concern is tied to religious beliefs about the proper treatment of the dead and in some cases of other types of remains; to desires to protect and control access to sites believed to be important in maintaining or strengthening tribal cultural heritage and identity; and to legal and political concerns related to asserting tribal sovereignty and claims for access to or control of traditional lands and resources. Tribal representatives often differ quite profoundly from archaeologists in the kinds of values placed on particular sites and on what activities and uses are considered appropriate at sites. These differences stem-at a minimum-from different assumptions about the nature of the past, about what constitutes evidence, and about the value of disseminating cultural and historical knowledge. In particular, tribal representatives, as well as Native American intellectuals and advocates, frequently challenge archaeologically derived inferences about life in the past, and about relationships between present-day tribal groupings and past archaeological "cultures," if these conflict with traditional oral histories. Finding common ground with tribes on questions of archaeological resource management (including research access and educational uses directed at the broader public) is perhaps the most difficult and pressing issue facing archaeologists and archaeological resource managers over both the short and long term (cf. Swidler et al. 1997). These issues are discussed more fully in Chapter 11.

