Strategies for Protecting Archeological Sites on Private Lands

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Introduction

Following its publication in 1993, the National Park Service's publication, *Protecting Archeological Sites on Private Lands*, received favorable reviews and soon required reprinting to meet continuing demand for information on the subject. This booklet, *Strategies for Protecting Archeological Sites on Private Lands* is an outgrowth of the interest generated by the book and numerous requests for more "nuts-and-bolts" guidance on archeological site protection.

To respond to this interest, the Heritage Preservation Services Division, National Park Service, initiated the "Protecting Archeological Sites on Private Lands Project." Coordinated by Heritage Preservation Services Division, the Project received partial funding from the National Park Service's "Partnerships in Cultural Resource Training" Initiative. Project cosponsors included the Archeology and Ethnography Program of the National Park Service, the Society for American Archaeology, the Society for Historical Archaeology, the Archaeological Conservancy, the National Trust for Historic Preservation, and the National Conference of State Historic Preservation Officers.

The Project concentrated on archeological site protection during private and non-federal public actions. There is already a lot of attention being paid to protecting sites as part of federal activities, such as during the processes associated with Section 106 of the National Historic Preservation Act, the Archaeological Resources Protection Act, and the Native American Graves Protection and Repatriation Act. The Private Lands Project addressed the broader arena where there is no federal involvement, in situations where landowners and local communities are faced with decisions about the fate of their valued archeological resources. In addition, the Project focused on protecting the site in place, not on protecting the site's information after it has been excavated.

The goal of the project was "To raise awareness and to stimulate and facilitate action on the part of public and private agencies and organizations, landowners, and the general public on responsible strategies for protecting archeological sites on private lands." Major project activities included: (1) sending a request to all individuals who had received a copy of *Protecting Archeological Sites on Private Lands*, asking for case study information on actual archeological site protection, which was compiled to form background information for the working meeting discussion; (2) a working meeting of a small group of experts to discuss current practice, strategies, lessons learned, and keys to success, held in conjunction with the Society for American Archaeology's annual meeting in New Orleans, Louisiana, April 9-10, 1996; (3) a forum with panelist presentations on preliminary results from the working meeting and continued discussion with a broader range of participants, also held in conjunction with the Society for American Archaeology's annual meeting in New Orleans (see Appendix 7 for a list of participants); and (4) preparation of this *Strategies* booklet.

This booklet, *Strategies for Protecting Archeological Sites on Private Lands*, expands upon the "Summary of Protection Strategies" chart that appeared as Appendix A in the book, *Protecting Archeological Sites on Private Lands*. Some of the case studies compiled for the working meeting are included to show how some of the strategies have been used to protect sites in various situations. Major findings from both the working meeting and the forum are interspersed throughout the booklet.

In a format that is easy to use and understand, *Strategies* identifies a wide variety of tools that are being used to protect archeological sites, summarizes the benefits of each, and notes features of these tools that merit special attention. Case study examples of actual archeological protection projects are presented to illustrate the use of selected protection strategies. Information on lessons learned and keys to success highlight experiences in communities all across the country. Finally, excerpts from selected documents provide examples of language that has been used in easements, ordinances, and plans for protecting archeological sites.

*Strategies* is not intended to serve as the definitive word or as a legal "how-to" on protecting archeological sites on private lands. This is not the only reference that you would want to consult in order to protect a site. Rather, *Strategies* is a general guide to the range of tools that could be, or are currently being, used to protect archeological sites in local communities. If you are thinking about taking action to protect a specific site, you will
want more detailed information and advice from experts in using these strategies. If you are interested in learning more about protecting archeological sites, contact information is noted for each case study, and the Bibliography contains a number of sources that you may find helpful.

It is hoped that this booklet helps you become familiar with the "tool kit" of strategies for protecting archeological sites that are important to you and your community. After DeKalb County, Georgia passed an ordinance protecting the Archaic-period Soapstone Ridge archeological complex, DeKalb County Historic Preservation Commission member Thomas R. Wheaton commented that "The biggest lesson to be learned is that real protection of sites is greatly enhanced, and may only be possible, at the local level." (Wheaton 1998:29).
CONSIDERATIONS FOR PROTECTING ARCHEOLOGICAL SITES ON PRIVATE LANDS

Laws directed at protecting archeological sites frequently target those located on state or federally owned property, but many sites are located on private property. These sites represent a significant portion of the identified sites in many states, meaning that large numbers of our nation’s archeological resources are not protected.

-- “The Kentucky Archaeological Registry”
-- Gwynn A. Henderson

INTRODUCTION

For at least 12,000 years, men, women, and children have lived, worked, and played in what is now the United States. Archeological sites can tell their stories. A jasper projectile point embedded in the rib of a deer tells of a successful hunt. A ring of charcoal-blackened stones tells of many meals cooked for the hunter and his family. A trash pit contains the debris of 19th-century household domesticity - a worn-out scrub brush, a favorite tea cup accidentally broken, wine bottles and plate scrapings from a holiday dinner, a child’s marble, and a cameo brooch lost but not forgotten. A rectangle of cut stone painstakingly laid by hand forms the foundation of a long-gone house that was home to five generations of cotton farmers.

As repositories of information about 12 thousand years of human history, archeological sites are more than soil layers containing objects discarded, lost, abandoned, or intentionally buried. But since most archeological sites have little or no above-ground evidence, they are often difficult to recognize. More often than not, this means that archeological sites, and the historical information they contain, can be damaged or destroyed by well-intentioned but uninformed landowners who continue using their land or seek to improve its value through development.

Private landowners and local communities are becoming increasingly aware of their archeological heritage and are seeking ways to protect it and to explain archeology's stories to the public. Although federal agencies are required by law to consider the effects their projects may have on archeological sites and other historic places, such federal law does not generally apply to private actions if there is no federal involvement in the activity.

Archeological protection guidance currently available focuses primarily on how federal agencies can combat site looting and vandalism by implementing the provisions of the Archaeological Resources Protection Act and other federal laws; how the Native American Graves Protection and Repatriation Act can ensure sensitive treatment of burials and repatriation of Native American cultural items;¹ and how possible impacts of federally assisted projects on important sites can be considered in compliance with Section 106 of the National Historic Preservation Act and with other federal laws. Information is also available on historic preservation techniques at the local level, but this guidance tends to focus on buildings rather than archeological sites. There is little guidance on how to protect archeological sites on private lands, especially those sites that may be facing development by non-federally assisted private and public actions.

Before taking steps to apply any site protection strategy, it is important to understand what archeology is, the many values of archeological sites, actions that threaten those values, and legal aspects of archeological site protection. These issues help in deciding which protection strategies may be effective in particular situations. A number of protection techniques rely on the law for their effectiveness. Owning full or partial interest in an archeological site can be a very effective protection strategy. Promoting the compatibility of land use with archeological site protection through local ordinances and development processes and by incorporating archeology in local historic preservation ordinances are important techniques that focus on regulating uses and activities on lands that contain archeological sites. Laws specific to archeology ensure that appropriate professional
standards are followed in investigating archeological sites, that archeological materials are properly cared for, and that penalties are imposed on those who violate the law. A number of tax benefits are available as incentives for protecting archeological sites and other valued historic and natural areas.

Archeological site protection cannot be accomplished effectively by regulation alone. Non-regulatory techniques are important strategies for protecting archeological sites. Voluntary stewardship programs not only help protect sites, but they also help build a preservation ethic and a sense of community responsibility and pride in the community's archeological heritage. These programs also offer opportunities for the public to learn about archeology and get involved in archeological site protection activities. Long-term management programs are essential in strengthening archeological site protection. Various site stabilization techniques help protect archeological sites from erosion and vandalism. Signs not only educate the public about the history of the site, but also warn of relevant legal protection and penalties. Community archeology programs strengthen archeological site protection through professional administration of relevant ordinances. These programs also provide an important focal point for community interest in archeology through citizen involvement and education in archeological activities.

It is important to include a variety of protection strategies in the site protection "tool kit" to consult legal and strategy experts, and to be creative in applying combinations of protection techniques.

The developer of this townhouse project in Fairfax County, Virginia allowed the County Archeologist and volunteers from the Northern Virginia Chapter of the Archeological Society of Virginia to rescue important information from this site, but it was a hazardous undertaking. There are more effective strategies for protecting archeological sites than "hard-hat archeology." Archeological site protection depends upon balancing archeological site values, the interests of the public to know about the past, the legal rights of landowners, and community values and goals. (Photo courtesy of Heritage Resources Branch, Fairfax County, Virginia, Office of Comprehensive Planning)

**WHAT IS ARCHEOLOGY?**

Archeology evokes varying images for different people. For many, archeology is an adventure - the escapades of Indiana Jones and the curses of King Tut's tomb. For others, archeology is romance, mystery, and the "thrill of discovery" - being able to hold objects that haven't been touched by human hands for hundreds or thousands of years. In reality, archeology is all of this and more. Archeology is also the scientific study of past human lifeways through the systematic observation and analysis of the material remains of human activities.
Archeologists in the United States study human lifeways of all time periods. The period from at least 12,000 years ago up until Old World explorers and settlers arrived encompasses the rich history of Native American life on the North American continent. This time period has been traditionally called *prehistory* by archeologists because there are no written records of these times. For this time period, archeology is one of our best ways to understand the long, rich history of Native American life. The arrival of explorers and settlers from Europe, Africa, and Russia occurred at different times in various parts of the country and ushered in what archeologists call the *contact* period. Archeological sites of this period document the political, military, economic, and social interactions between Native Americans and Old World explorers and settlers. *Historical archeology* covers the period for which there are written records. Historical archeologists use written information together with archeological information to produce a richer and more complete understanding of the past than either could if used alone.

The primary focus of archeological attentions is the *site* -- a place where human activity occurred. Native American sites include short-term camps, villages, hunting stations, and quarries. Historic period sites are quite varied, and include farmsteads, stores, mills, mining complexes, craft shops and factories, wharves, canals, villages, taverns, schools, and urban centers.

An archeological site has horizontal and vertical dimensions. Horizontally, a site may be a few feet across, or may cover several hundred acres or more. Vertically, a site may contain archeological materials only on the ground surface, such as the scatter of stone chips remaining after an Indian hunter has sharpened his weapons and moved on, or archeological materials may be as much as a several dozen feet deep, such as a 200-year-old ship hull sunk as a foundation for urban waterfront landfill. Some archeological sites may be underwater, such as inundated dry-land sites, shipwrecks, or wharves.

Few archeological sites are simple and straightforward. Most are complex, containing diverse elements, or *components*, each of which may represent a different activity, time period, or, often, both. For example, a 19th-century farmstead with a house, a springhouse, a barn, three sheds, a well, a privy, a garden, and several livestock enclosures has at least ten components. These components represent household and personal activities, dairy production, livestock husbandry, gardening, and other farming activities. Studying only one component of this site -- the remains of the house, or one of the trash dumps, for example -- would give a very limited picture of the richness and diversity of farmstead life. All site components bear a relationship to one another, and all components, including the buildings and landscapes, need to be studied in order to understand the way of life once carried out at this site.

Soil layers provide an additional dimension to components in a site, by providing information about the passage of time. For example, the alternating layers of soil, rubble, and debris in an old cellar hole tell about the use, abandonment, and gradual filling of the cellar through superimposed lenses and layers of discarded items, structural collapse, ashes, soil washed through a breached wall, and episodes of trash dumping. An archeological site can also be created over hundreds of years through the gradual accumulation of debris during regular, periodic use of a particular place by generations of human occupation. Soil layers help archeologists understand site chronology, or the time periods when different activities took place at the site. Generally, the lowest soil layer represents the oldest activities, and the top-most soil layer represents the most recent site activities.

Each component and soil layer of an archeological site contains the data of archeological study - artifacts, features, and ecological evidence. *Artifacts* are objects manufactured by hand or machine, such as pottery bowls, porcelain plates, metal hinges, glass bottles, shell beads, and stone projectile points and scrapers. Features are immovable manufactured objects, larger than artifacts, such as buildings, walls, trash pits, fire pits or hearths, and wells. *Features* often contain artifacts, or have artifacts associated with them. *Ecological evidence*, or *ecofacts*, provides information about the site's environment, which may or may not have been altered or affected by human actions at the site. This evidence can include soils, seeds, pollen, other plant remains, animal bone, shells, and charcoal.

The spatial and temporal relationships among the site's soil layers, artifacts, features, ecological evidence, and components, and between one site and others, are critical to understanding the past human activities and social processes. A basic assumption underlying all archeological study is
that human behavior is not random, and that the patterning observable in the relationships among a site's elements is directly related to that behavior. It is this aspect of archeological study that enables archeologists to explain what happened at a site, when, and why, thereby increasing our knowledge about the past.

Aerial view of Cliff Palace, a ca. 1200 A.D. Anasazi cliff dwelling in Mesa Verde National Park, Colorado. Archeological study of this magnificent village, carried out since the late 19th century, has taught us how these people lived in the high desert. About 250 people lived here in cluster of apartment-like rooms that have been associated with family groups or clans. Ceremonies were held in circular, below-ground rooms called "kivas." In irrigated farm plots on the nearby mesa top, corn, beans, and squash were cultivated, and turkeys were raised. The Anasazi exercised great artistry in making baskets, pottery, sandals, cotton cloth, netting and cordage, ornaments of turquoise, shell, and copper, and stone, bone, and wood tools. (Photo courtesy of Bruce J. Noble, Jr.)
THE VALUES OF ARCHEOLOGICAL SITES

One of the fundamental values of archeological sites lies in the information that sites contain and the knowledge that can be gained from their study. Closely related is a site's research or scientific value - the ability of a site's information to be used in answering important questions about the past - and a site's interpretive or educational value - the ability to use the site itself or the results of research to teach others about the past.

The key characteristic of archeological sites that gives them their information value is the intact quality of their information content. Intact spatial and temporal relationships among soil layers, artifacts, features, ecological evidence, and components, and, for historic period sites, the existence of documentary information, enable archeologists to identify patterns that can be associated with human behavior and social processes. Where these relationships have been damaged or destroyed, our ability to study and learn about the past is markedly impaired or lost forever. At most, what we have left are objects, curiosities, that may be interesting or even pleasing to look at, but which have lost most if not all of their information value.

THE PUBLIC RIGHT TO KNOWLEDGE ABOUT THE PAST

We are none of us born in a vacuum. We all are products and recipients of tens of thousands of years of biological and cultural history. This history, working with our present-day surroundings, affects our every thought, our every action. Knowledge of this past, just as knowledge about our environment, is essential to our survival, and the right to that knowledge is and must be considered a human birthright. Archeology, the recovery and study of the past, thus is a proper concern of everyone. It follows then that no individual may act in a manner such that the public right to knowledge of the past is unduly endangered or destroyed. ... Archeological data, including the archeological objects themselves, falls into the domain of public interest and concern. Even though private funds may finance archeological research and private citizens may collect relics using their own resources, no one owns exclusive rights to an archeological object or, even more important, to archeological data any more than the owner of a Rembrandt has exclusive rights to that painting. An individual or a corporate body may be the legal owner or repository of such data or such an object, but in a certain undefined, perhaps undefinable but nonetheless very real sense, objects of art and scientific information belong and are rightfully a part of the heritage of everyone. Legal possession does not automatically carry with it the right of destruction, and no individual or corporate body possesses the right permanently to deprive the public of any significant part of that heritage.

Public Archaeology
Charles R. McGimsey III

NOTE: The public's right to knowledge about the past in no way implies a legal right to the objects that help convey that knowledge.

Archeological sites may also possess other values for communities and particular groups of people. These values, often called community values or traditional cultural values, are ascribed by a community, ethnic group, or Indian tribe to archeological sites and other places associated with its cultural practices or beliefs that are rooted in the community's history and are important in maintaining the continuing cultural identity of the community. The kinds of sites that can have these values include a site where a community has traditionally carried out economic, artistic, or other...
cultural practices important in maintaining its historical identity; a site where Native American religious practitioners have historically gone, and are thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and a rural community whose organization, buildings, and patterns of land use reflect cultural traditions valued by its long-term residents. Traditional cultural values are often central to the way a community or group defines itself, and maintaining such values is often vital to maintaining the group's sense of identity and self respect. Archeological sites to which traditional cultural value is ascribed can take on this kind of vital significance, so that any damage to or infringement upon them is perceived to be deeply offensive to, and even destructive of, the group that values them.²
GIFT FROM THE PAST

The ancient Makah Indian village of Ozette, located on the Pacific Coast of Washington state, was occupied continuously for several thousand years. Although a portion of the village was buried by a catastrophic mudslide about 500 years ago, some Makah people stayed on until the 1930s, when they moved north to Neah Bay, the social and economic center of the Makah reservation.

In the winter of 1970, high tides and large, storm-driven waves eroded and undermined the hillside, exposing timbers from five plank houses. Archeological excavations were carried out to rescue the cultural materials from being washed away into the sea. This work revealed a complete material culture record that paints a uniquely rich picture of ancient tribal lifeways. Makah elders call the archeological collection a "Gift from the Past."

The Ozette archeological collection is housed, curated, and exhibited in accordance with appropriate Makah traditions at the Makah Cultural and Research Center, which was established to oversee and coordinate programs affecting the culture and cultural education of the Makah people. Through the Center, the Makah have control and management of their own cultural patrimony, which helps them maintain cultural ties with their ancestral village. A Makah tribal member lives at the Ozette site to monitor its condition, protect it from vandalism, and to answer visitors' questions.

Listed on the National Register of Historic Places, the Ozette Archeological District contains a number of other places of traditional cultural value for the Makah in addition to the Ozette village site, shown in the foreground of this photo. In the background is Cannonball Island, which was used in the past, and is still used today, as a navigation marker for Makah fishermen. The island was also a lookout point for seal and whale hunters and for war parties, and a kennel for dogs raised for their fur.

For additional information on traditional cultural values associated with physical places, see National Register Bulletin 38, Guidelines for Evaluating and Documenting Traditional Cultural Properties, by Patricia L. Parker and Thomas F. King, and Keepers of the Treasures, by Patricia L. Parker.

(Photo from the files of the National Register of Historic Places, National Park Service, Washington, D.C.)
CAUSES OF SITE DAMAGE
Archeological sites are fragile, and there are a variety of agents that can change, damage, or destroy not only the spatial and temporal relationships of archeological information, but also the self identity of groups that ascribe traditional cultural values to archeological sites. There are four general categories of forces that can damage or destroy archeological sites and their values: natural forces, human action, institutional action, and legal and regulatory procedures (see box).

CAUSES OF SITE DAMAGE

<table>
<thead>
<tr>
<th>NATURAL FORCES</th>
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<tbody>
<tr>
<td>Erosion from wind or water</td>
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<tr>
<td>Flooding, inundation</td>
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<tr>
<td>Weathering</td>
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<td>Freezing, thawing</td>
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<td>Animal action (e.g., burrowing)</td>
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<td>Vegetation</td>
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<td>Soil chemistry</td>
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<td>Earthquake, volcanic eruption</td>
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<td>Fire</td>
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<td>Landslide</td>
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<th>HUMAN ACTION</th>
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<td>Looting, theft</td>
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<td>Vandalism</td>
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<td>Recreation (e.g., off-road vehicles)</td>
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<td>Noise, vibration (traffic, aircraft)</td>
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<td>Ignorance, lack of knowledge</td>
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<tr>
<th>INSTITUTIONAL ACTION</th>
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<td>Archeological excavation</td>
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<td>Agriculture (e.g., plowing)</td>
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<td>Mining, quarrying</td>
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<td>Timbering</td>
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<td>Oil and gas exploration, extraction</td>
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<td>Land modifications</td>
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<td>Land reclamation</td>
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<td>Flood control</td>
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<td>Grading, filling, earthmoving</td>
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<td>Land development (large/small scale, private/public)</td>
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<td>Transportation (trails, highways, airports)</td>
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<td>Residential</td>
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<td>Commercial</td>
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<td>Industrial, manufacturing</td>
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<td>Public utilities</td>
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<th>LEGAL, REGULATORY PROCEDURES</th>
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<tr>
<td>Incompatible laws, regulations, procedures</td>
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Natural Forces

Forces of nature act continually on archeological sites, and range from the relatively minor activities of earthworms and freeze-thaw cycles to major catastrophic events such as earthquakes and volcanic eruptions. Many natural forces have acted in conjunction with human action over time to form the archeological site, and archeologists have developed techniques to understand how natural forces affect the formation of archeological sites (see, for example, Formation Processes of the Archaeological Record by Michael B. Schiffer). Other destructive actions, such as erosion and patterns of plant growth, have actually helped archeologists find archeological sites. Some natural forces have worked to encapsulate sites that were later discovered and productively studied by archeologists. Notable examples are the Italian city of Pompeii, buried by the volcanic eruption of Vesuvius in the first century A.D., and the Makah village of Ozette that was covered by a massive mudslide on the Northwest coast of the United States. In general, however, natural forces change and even destroy archeological information by increasing the decay of perishable organic materials such as fabrics, basketry, and leather, and by disrupting the spatial and temporal relationships of archeological information.

Human Action

By far the most varied and damaging forces on archeological sites are caused by human actions, and by associated institutional actions and legal or regulatory procedures (discussed below). Looting and vandalism are major sources of site damage and destruction. Several studies have begun to identify the magnitude of the problem. According to the report of the Society for American Archaeology's Conference on Preventing Archaeological Looting and Vandalism:

Recent statistics indicate that vandals and looters have:

- attacked 90 percent of known sites on federal lands in the Four Corners area of the American southwest, including over 800 of the known sites on Fish and Wildlife Refuge lands alone;
- assaulted nearly all of the Classic Mimbres sites in southwestern New Mexico;
- increasingly invaded private and Indian lands, including a 1000 percent increase of looting and vandalism on the Navajo reservation alone between 1980 and 1987;
- ransacked historic shipwrecks on both coasts, including priceless Spanish galleons ripped apart in search of gold;
- overrun historic Revolutionary and Civil War battlefields tearing up land looking for coins, guns, and bottles.

Motivation for site looting and vandalism varies. Archeological sites are "mined" for commercial profit in the Southwest where artifacts have monetary value on the national and international art markets. In other areas, sites are looted to acquire relics for personal collections or smaller scale profit at hobby shows. This kind of activity is illegal on federal, tribal, and most state and local public lands, and the number of successful prosecutions is increasing. However, site looting is rarely prohibited on private lands.

Although site damage and destruction from looting is deliberate and intentional, other damaging human and institutional actions occur largely because of ignorance of a site's existence or importance. Despite a general, widespread public fascination with archeology and learning about the past, consideration of archeological sites is not usually a factor in the daily conduct of individuals, government, and business.

Institutional Actions

Although it may seem strange to include archeological excavation as an action that damages or destroys sites, this is what happens. The act of removing soil layers and artifacts disrupts the relationships of information within the site, impairs its traditional cultural values, and can result in the
loss of some information. This is why archeologists insist on high levels of professional competence, use precise excavation techniques, and keep
detailed written and photographic records of the excavation process. Archeological information can be lost through inadequate record-keeping, lack
of analysis and reporting, ineffective land management, and inadequate or incomplete assessment of impacts on sites. From our vantage point in
today's highly technological world, it is easy to find fault with losses of information on archeological sites that were investigated decades ago using
older methods. We need to ensure that our "modern" archeological methods do not produce similar criticisms by the archeologists of the future.

Land development and resource exploitation activities continue to increase as the nation's growing population demands ever more food, housing,
and manufactured goods. Each of the actions listed in the Causes of Site Damage box involve land modifications that can damage or destroy
archeological sites. While not intentional, some of these activities take a greater toll on archeological sites than do others. Agricultural activities,
such as land-leveling and plowing, may either move archeological materials around and mix materials from separate and distinct soil layers, or
totally destroy the site, depending upon the shallowness or depth of the archeological remains. Massive land modifications that accompany flood
control projects, large-scale residential developments, and interstate highway construction, for example, can cause the loss of hundreds of
archeological sites that represent entire communities that thrived in the past.

Legal and Regulatory Procedures

Laws and regulations may require or prohibit individual or institutional actions that unintentionally cause archeological damage or loss. For example,
in many local communities the major legal mechanism for protecting historic properties is the historic district ordinance. Only a handful of these
ordinances, however, have provisions that consider archeological sites. In those communities whose historic district ordinance lacks such a
 provision, archeological sites can easily be overlooked as actions approved under the ordinance are carried out. Many local governments manage
future growth of their communities through a comprehensive or master plan. When archeological sites and other historic properties are not
considered in such a plan, local government decisions about land use and development can lead to the loss of archeological sites. Regulatory
procedures, such as those for approving grading or construction permits, can also have the same effect if the presence of archeological sites is not
considered.

ARCHEOLOGICAL SITE PROTECTION AND THE LAW

"Protecting archeological sites" means shielding them from actions or forces that could damage or destroy the information they contain or the values
the community places on them. There are a variety of such forces facing archeological sites, and protection strategies need to be tailored to the type
and magnitude of the force to be protected against.

All of the causes of site damage described previously have one characteristic in common - disturbance of soil, which disrupts the fundamental
nature of archeological information and the link between the site and the group that values it. Archeological sites are an inherent part of the land, at
least until they are excavated properly or destroyed through any of the activities previously discussed. Individual or institutional decision-making that
governs how the land is used, or what activities can occur there, will affect archeological sites. Therefore, site protection depends on the extent to
which these decision-making processes take archeological values into consideration. In certain situations, these processes are outlined in law, such
as land-use or real property law. In other cases, influencing decisions to be sensitive to archeological sites depends upon overcoming ignorance of
archeological values through educating the decision-makers and the general public.

The highest priority strategy for protecting archeological sites is preservation in place. Protecting a site in place, undisturbed, with long-term
management, is a strategy of banking the site in order to maintain its value to the community or, when appropriate, until research and excavation
can be properly accomplished. Preservation in place and site management does protect the site from damage, but when an archeological site has
value for the information it contains, this value cannot be fully realized until it is systematically excavated, its information analyzed, and the resulting
knowledge widely shared. Banking the site provides the necessary time and opportunity to raise the funds needed to carry out carefully planned investigations of the site. In addition, the ongoing development and application of advanced scientific technologies to the study of archeological sites means that we can learn even more about the past than we could using archeological techniques considered state-of-the-art just decades ago. Protecting archeological sites in place creates a bank of sites for future investigation using even more sophisticated technologies that will further increase our knowledge of the past.

Not all sites should be excavated. Traditional cultural values often rely on a site remaining undisturbed and unstudied. Establishing a mechanism to preserve the site in place, or avoiding the site during construction activities, without providing for its long-term management and appropriate future study is short-sighted. This merely delays the site's destruction or protection until another threat arises. Strategies for preservation in place should always be accompanied by a long-term preservation management and research plan that sets in motion specific activities, such as maintenance, monitoring, interpretation, or fund-raising.

**Special Considerations**

Protecting an archeological site requires a different preservation approach than that used to protect historic buildings, which can continue to be economically productive while being protected. Archeological site protection strategies depend on limiting the kinds of activities that can occur on a piece of land, and resemble more closely those mechanisms used to protect land and natural resources.

Since archeological sites are legally owned by the title holder of the land in which the sites exist, protecting them by limiting the uses of that land creates a tension among the rights of landowners to use their land, the interests, even "rights," of the public to know about the past, and the rights of certain groups to visit and use sites to which they ascribe traditional cultural value. It is important to keep in mind that many archeological sites and other places that have traditional cultural value for Native American tribal groups are located not on Indian lands but on privately owned lands. As reported by Patricia L. Parker in *Keepers of the Treasurers*:

> American Indians often retain deep emotional ties to the ancestral lands that were ceded by treaty or lost in war. In those ancestral places lie the graves of their ancestors and other significant sites that the tribes are seeking to protect.

The interests of Native American tribes in their ancestral places, especially in their burial sites, are supported by legal statutes at the federal level and in many states.

While courts have upheld the authority of state and local governments to regulate the uses of private property, recent U.S. Supreme Court and lower court rulings on Fifth Amendment " takings" cases have made private property rights headline news. The Fifth Amendment " takings" clause states, "nor shall private property be taken for public use without just compensation." When private property is physically taken, as for a highway, the owner must be compensated for the land taken. The issue is not so clear in regulatory takings, when government enacts a law that regulates what an owner may or may not do with his or her property. This is a complicated issue, and courts review each case individually. In general, if the owner retains reasonable economic use of the property, if the regulation promotes a valid public purpose, and if there is a direct relationship ("nexus") between the legislative purpose and the means to achieve it, then there is not a "taking" that requires compensation, according to Richard J. Roddewig and Christopher J. Duerksen in *Responding to the Takings Challenge*.

An additional complication is that while archeological sites are not, in and of themselves, marketable commodities, and it is difficult if not impossible to assign a market value to them, the land of which they are a part does figure heavily in the marketplace and does have market value. Market value also forms the basis for real estate taxes and land values. In fact, land tends to be treated primarily as an investment commodity, rather than as a resource deserving stewardship.
While it would be tempting to build a fence around an archeological site and put up "Keep Out" signs, protecting archeological sites is not that simple. The rights of the property owner, the interests or rights of the public in learning about the past, the interests and rights of Native American tribes, other community goals, and state and local laws must be balanced against the values of the archeological site in order to create workable and successful protection strategies.

The owner and developer of this project in Northern Virginia have every right to build these homes, provided the project complies with local land-use regulations and other state or federal requirements that may apply. The appearance of such signs on a property is not the time to raise issues of archeological site protection. The owner and developer have already invested large sums of money and have complied with relevant laws and received government approvals for the project, or are in the process of doing so. Protecting archeological sites requires not only a knowledge of the relevant laws, but also a respect for the rights of private landowners. (Photo courtesy of Heritage Resources Branch, Fairfax County, Virginia, Office of Comprehensive Planning)

¹ Cultural items are defined in the Native American Graves Protection and Reparation Act as human remains, funerary objects, and objects of cultural patrimony. For additional information, see "Managing Reparation: Implementing the Native American Graves Protection and Reparation Act" by Francis P. McManamon.

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The Archaeological Conservancy - www.americanarchaeology.com

Archaeological Institute of America - www.archaeology.org

National Conference of State Historic Preservation Officers - www.sso.org/ncshpo

National Association of State Archaeologists - http://nasa.uconn.edu/

National Park Service

- Archeology and Ethnography - www.cr.nps.gov/aad/
- CRM Magazine - www.cr.nps.gov/crm
- Heritage Preservation Services - www2.cr.nps.gov
- National Register of Historic Places - www.cr.nps.gov/nr/publications/

Society for American Archaeology - www.saa.org

Society for Historical Archaeology - www.sha.org
## LAND OWNERSHIP STRATEGIES FOR PROTECTING ARCHEOLOGICAL SITES ON PRIVATE LANDS

### LAND OWNERSHIP

The strongest and surest way to protect an archeological site is outright ownership by a public or private organization, or even by an individual, with protection goals and site management capabilities. Possessing full title to the land and all the rights associated with it offers the landowner virtually total control, limited only by laws that regulate that control, over the land and permanent protection for the archeological site. A landowner can have a site vandal or looter arrested for trespass and property damage. An easement holder may need a court order to stop the landowner or an intruder from damaging a site. An individual or group with no legal right in the land, however, usually has no right to dictate what happens there, even if an archeological site is being destroyed. Whether a site is owned outright or protected by an easement, the landowner or easement holder has a major responsibility to guarantee site protection through effective property management or easement monitoring programs.

### TYPES OF OWNERSHIP

<table>
<thead>
<tr>
<th>STRATEGY</th>
<th>BENEFITS</th>
<th>PAY SPECIAL ATTENTION TO</th>
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<tbody>
<tr>
<td>Fee Simple. Ownership of full title and all legal rights associated with a parcel of land and everything it contains, including minerals and archeological resources. <a href="#">See Case Study 1</a></td>
<td>Full ownership is the strongest way to protect archeological sites, since the owner has complete control over the land (within certain limits), and resource protection is easier to manage. The owner can invoke laws of trespass and property damage.</td>
<td>Owner must be able to assume liability and responsibility for long-term management and site stewardship.</td>
</tr>
</tbody>
</table>

Easement. Partial interest or some specified legal right in a parcel of land that is less than the full, fee simple interest. A conservation, historic preservation, open space, or scenic easement is designed to protect sensitive natural, historic, and/or cultural resources. Uses that are incompatible with protecting these sensitive resources are typically restricted. Easements can be acquired by a nonprofit or government agency through purchase, donation, gift, exchange, will, or eminent domain. An easement may be for a specified period of time or in perpetuity, and runs with the land, despite changes in ownership. Easements can also be called deed restrictions. Can be an effective way to protect archeological sites if fee simple ownership is not feasible. Easement provisions can be tailored to landowner goals and site needs. Only those rights or interests needed to protect the site are transferred in the easement, leaving all other rights with the landowner, who retains ownership and use of the land. There is potential for property, income, and estate tax benefits for the donation or less-than-fair-market-value sale of an easement. Reduces costs for site protection when easements are acquired at less than fair market value for the protected area. | Thorough survey is needed to identify the nature of archeological sites present. Less control over site protection than in fee simple ownership. Easement purchase can be costly, and requires careful negotiation. Easement terms must be carefully and clearly outlined, and they must be carefully monitored and enforced; landowners may need frequent attention. Easement holder must possess sufficient expertise and be financially able to monitor and enforce the easement. Property resale opportunities may be limited due to easement restrictions. Tax benefits depend on landowner's financial status and may not be sufficient motivation for landowner to donate or sell the easement.
See Case Study 2; Case Study 3; Appendix 1

**Lease.** Renting the land in order to protect and manage a sensitive resource.

- Low cost approach to site protection. Rent is paid to the landowner, who retains control of property.
- Short-term protection strategy since lease does not offer full control of property.

**Undivided Interest.** A number of parties share ownership in a parcel of land, with each owner's interest extending over the entire parcel.

- Changes in or to the property cannot be made unless all owners agree.
- Property management can be complicated, especially related to payment of taxes.

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**PUBLIC & PRIVATE OWNERSHIP**

**STRATEGY**

**Private Ownership & Management.** Land owned and managed by private individuals or by national, regional, or local nonprofit organization such as land trusts or nature or archeological conservancies.

*See Case Study 1; Case Study 4; Case Study 5*

**Nonprofit Acquisition & Conveyance to Public Agency.** Nonprofit buys a parcel of land and resells it to a public agency.

*See Case Study 4; Case Study 5; Case Study 6*

**Government Ownership.** Federal, state, and local government parks, conservation, natural resource, or historic preservation agency owns and manages land.

**BENEFITS**

- Offers strongest legal control for site protection when land is kept in undeveloped condition. Ownership by local nonprofit keeps control within community, where there is greater likelihood of responsible management and stewardship.
- Nonprofits can often participate in the real estate market more easily than government agencies, and can hold land until the public agency is able to buy it. If property was purchased at less than fair market value, public agency acquires land at reduced cost.
- Federal, and some state, law and regulations require management practices sensitive to resources. Local agencies may (or may not) be required to manage resources sensitively.

**PAY SPECIAL ATTENTION TO**

- Individual owner or small nonprofit may not be prepared for long-term management responsibilities and costs. Protection needs of property may not be consistent with the mission of the nonprofit.
- Public agency must be willing and able to purchase land, and to assume management responsibilities.
- Agency budgets and acquisition criteria may restrict acquisitions, and acquisition opportunities may be missed due to agency procedures. Agency commitment to sensitive resource
See Case Study 7; Case Study 8; Case Study 9

management can vary, and site protection and agency mission may come into conflict. May remove land from the tax base, except where federal government owns lands in fee simple and reimburses local governments for loss of tax revenue. May require public visitation, which can conflict with site protection needs.

<table>
<thead>
<tr>
<th>Intergovernmental Partnership. Federal, state, and local agencies form joint partnerships to own and manage land.</th>
<th>Larger and/or more expensive properties can be protected by sharing the responsibilities and costs of acquisition and management.</th>
<th>Management approaches need to be agreed upon to reduce potential for conflict.</th>
</tr>
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<tbody>
<tr>
<td><strong>Public-Private or Private-Private Partnership.</strong> The joint venture partnership is a strategy used by public agencies and private organizations to accomplish projects serving mutual goals that neither could carry out alone. Some government funding programs require a private contribution, and some private programs support public agency programs. <strong>See Case Study 5; Case Study 9</strong></td>
<td>The benefits, as well as the responsibilities and costs of acquisition and management of the protected resources are shared among the partners. Coalition of support from several groups increases the possibility of protecting diverse resources. Brings diverse sources of knowledge and expertise to solve resource protection issues.</td>
<td>Multiple partners can complicate property management and decision-making.</td>
</tr>
<tr>
<td><strong>Acquisition &amp; Saleback or Leaseback.</strong> Private organization or public agency acquires land, places protective restrictions or covenants on the land, and resells or leases land.</td>
<td>Proceeds from the sale or lease reimburse the costs of acquisition, reducing protection costs. Land may be more attractive to buyer due to lower sale price resulting from restrictions. New tenant or owner assumes management responsibilities.</td>
<td>Complicated procedures. In a leaseback, owner retains responsibility for the land but may have reduced control over the property. Not all protected land may be suitable for leasing.</td>
</tr>
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</table>
# ACQUISITION OPTIONS

<table>
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<tr>
<th>STRATEGY</th>
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<tbody>
<tr>
<td><strong>Fair Market Value Sale.</strong></td>
<td>Acquisition process is fairly uncomplicated. Provides substantial income to the seller.</td>
<td>Makes resource protection more costly, and can result in high capital gains for the seller. Appraisers can be unfamiliar with valuing lands with sensitive resources, especially archeological sites.</td>
</tr>
<tr>
<td><strong>Bargain Sale.</strong></td>
<td>Reduced costs for acquisition of resource lands. There may be smaller capital gains taxes for the seller, who may also earn tax benefits for a charitable donation.</td>
<td>Seller may not be willing to accept a bargain sale price, which may still be costly.</td>
</tr>
<tr>
<td><strong>Donation.</strong></td>
<td>Simpler and less costly than other land acquisition strategies. Donations may qualify the donor to receive income and/or estate tax benefits.</td>
<td>Donations without management endowments can strain budgets of nonprofits and public agencies. Recipient must be able and willing to manage the donated property. Some landowners may not be able to afford to donate land. Careful estate planning is necessary to make donation by bequest successful.</td>
</tr>
<tr>
<td><strong>Land Exchange.</strong></td>
<td>Low acquisition costs. Scattered properties can be exchanged for a single, larger parcel.</td>
<td>Complicated process and not widely known. Subject to IRS regulations. Property owners must be willing to participate, and properties must be of equal value.</td>
</tr>
<tr>
<td><strong>Restricted Auction.</strong></td>
<td>Lower acquisition costs since restrictions placed on the property reduce the price.</td>
<td>Acquisition costs may be high since auction sales go to the highest bidder. Auction properties may not be suitable for resource protection. Government may be unwilling to reduce its sale</td>
</tr>
</tbody>
</table>
Agency Transfer. Government transfers land not needed by one agency to another that can assume resource protection and management responsibilities.

Eminent Domain. Government has the authority to take private property for public purposes (such as highways, schools, libraries, and parks), and pay the landowner fair market value. If the landowner is unwilling to sell, government has the authority to condemn the land, providing fair market value compensation.

Increased government resource protection and management with little additional expenditures.

Should be used as a last resort, but can be useful if other techniques are not working or in emergency situations.

Excess agency property may not be suitable for resource protection. Government may be more interested in obtaining fair market value for the property.

Can alienate the public and owners who are unwilling to sell; can be expensive.
# FINANCIAL STRATEGIES FOR PROTECTING ARCHEOLOGICAL SITES ON PRIVATE LANDS

## FINANCIAL OPTIONS

Protecting archeological sites requires adequate and often continuing financial resources. There are a variety of methods and sources of funding for site protection; effective site protection may depend upon taking advantage of more than one strategy.

## NONPROFIT FINANCING OPTIONS

<table>
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<tr>
<th>STRATEGY</th>
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<th>PAY SPECIAL ATTENTION TO</th>
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<tbody>
<tr>
<td>Conventional Loan</td>
<td>Process is familiar and less time-consuming than fundraising. Large, up-front financial resources are not needed, since payments are spread over a specified period of time.</td>
<td>May still need to fundraise a sizeable down payment. Requires a lengthy financial commitment, and interest rates may be high unless the nonprofit can take advantage of low-interest loan programs.</td>
</tr>
<tr>
<td>Fundraising</td>
<td>Can generate publicity and community support for the resource protection purchase. Easier to raise funds for a specific project than for an ongoing program.</td>
<td>The processes of fundraising and applying for funding grants can be difficult, complicated, and time-consuming. Competition for funds can be fierce.</td>
</tr>
<tr>
<td>Revolving Fund, Loans, or Grants</td>
<td>Lowers acquisition costs for the nonprofit or local community. Agency or nonprofit with a revolving fund can often respond quickly to emergencies by acquiring threatened properties.</td>
<td>These financial programs may not provide full funding, so the recipient can be required to contribute financially. Funding focus on revenue-generating projects may have limited use for protecting archeological sites in place.</td>
</tr>
<tr>
<td>Partial or Limited Development</td>
<td>Sale of developed parcels finances resource protection and management. If entire property is to be sold as a unit, it may be more affordable</td>
<td>Developer will expect a financial return on his or her investments. Process can be complex and financially risky. Public may misunderstand the</td>
</tr>
</tbody>
</table>
and restricting the uses on the remainder of the property so the sensitive resources there can be protected, either through easement, donation, or jointly by owners of the developed parcels.

to a buyer since resource protection restrictions can lower the price.
resource protection component of the development project.

<table>
<thead>
<tr>
<th>GOVERNMENT FUNDING SOURCES</th>
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<tbody>
<tr>
<td><strong>STRATEGY</strong></td>
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<tr>
<td><strong>Federal Historic Preservation Fund.</strong> Federal funds provided to states on a 60-40 matching basis to fund grants for the identification, evaluation, registration and treatment of historic places. Administered by State Historic Preservation Offices, at least 10% of the state’s allocation must go to Certified Local Governments.</td>
</tr>
<tr>
<td><strong>General Fund Appropriation.</strong> Funds are allocated from the state or local government treasury for acquisition. <a href="#">See Case Study 7; Case Study 10</a></td>
</tr>
<tr>
<td><strong>Bond Issue.</strong> Issuing bonds to borrow money, which are repaid with interest in a certain period of time, is a common technique used by governments to finance the acquisition of open space and conservation lands. The issuance of bonds usually must be approved through general public referendum vote. <a href="#">See Case Study 10</a></td>
</tr>
<tr>
<td><strong>State Grants, Low Interest Loans.</strong> Some</td>
</tr>
</tbody>
</table>
states provide matching grant or low interest loan programs to support local government or nonprofit acquisition of open space, conservation lands, or easements.

**Payment in Lieu of Dedication.** A developer may have the option or may be required to pay a fee instead of dedicating specified lands for open space or other public use.

Provides funding to acquire more appropriate resource protection lands than may be available in development projects.

**Impact or Project Review Fees.** Some communities charge impact fees to defray the costs of infrastructure and amenities needed by new development. Other communities charge a fee to cover costs of reviewing development project proposals and plans.

Development pays for its impact on the community. Fees could be used to fund salaries of professional review staff, as is done in St. Augustine, Florida (see Appendix 4 for excerpts from St. Augustine’s Archaeological Preservation Ordinance).

Availability of funds depends upon the rate of development. The state must grant the local government the authority to levy impact fees.

**Real Estate Transfer Tax.** A small portion of the local tax on real estate transfers is allocated to a fund set up for the acquisition of resource protection lands.

Funds are generated and used within the local community, decreasing reliance on state or federal financial assistance. In high growth communities, a sizeable fund can accumulate.

Fund income fluctuates based on the real estate market. Can cause higher real estate prices, resulting in higher costs for resource protection lands.

**Other Funding Sources.** Funding for resource protection lands can also be provided from a variety of sources, such as state income tax return check-off, user fees, document recording stamp taxes, dedicated commodity taxes, and lottery sales. Tax return check-offs allow the taxpayer to allocate a certain amount of his or her tax to a special fund for resource protection. Other taxes and fees, such as sales, gasoline, cigarette, and vending machine taxes, as well as resource exploitation and specialty license plate fees, are also used to fund acquisition and historic preservation activities. In some states, lottery or gambling proceeds provide major funding for resource protection, conservation, and historic preservation activities.

These sources can provide a relatively consistent funding source targeted specifically to the acquisition and management of resource protection lands.

There may be heavy competition for most of these funding sources, and fund amounts may not be adequate to meet the need. Those who pay these taxes may want a voice in how the taxes are spent. Establishing new taxes is not popular. Portion of funds needs to be allocated to managing the lands and resources that are acquired.
### FINANCIAL INCENTIVES

<table>
<thead>
<tr>
<th>STRATEGY</th>
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<tbody>
<tr>
<td><strong>Actual Use or Preferential Assessment.</strong></td>
<td>Property tax burden is reduced, encouraging owners to retain properties in open space or other resource-sensitive uses. Penalty payments can be dedicated to a fund for acquiring resource protection lands.</td>
<td>Owner participation is voluntary. Programs are usually temporary, and may not transfer with the land when the property is sold. Amount of tax savings may not outweigh sale income for development. Reduces local community tax revenues.</td>
</tr>
<tr>
<td><strong>Property Tax Reduction.</strong></td>
<td>Landowner's property tax bill is reduced.</td>
<td>Local government property tax revenues are reduced. Some property tax reduction programs may be temporary. Owner may not view the property tax reduction to be a sufficient incentive. Determination of easement's value may vary depending on level of local assessor's expertise.</td>
</tr>
<tr>
<td><strong>Income Tax Reduction.</strong></td>
<td>Landowner's income tax is reduced.</td>
<td>Must meet IRS rules of charitable donation. Size of tax reduction is usually not enough to be a major motivation for owners to donate land.</td>
</tr>
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*See Case Study 7; Case Study 10*

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**Office of Archeology and Historic Preservation**

**Colorado Historical Society**

**Publication # 1617 (extended version)**
Case Study 12

Estate Tax Reduction. The donation or bargain sale of partial interest in land reduces the assessed value of the land due to the restriction placed on its use. The resulting lowered land value is reflected in a lower estate value, which reduces estate taxes.

Reduction in inheritance taxes. Heirs may not need to sell land to pay the tax. Careful estate planning can ensure effective site protection.

Must meet IRS rules for estate taxes. For farmland with reduced value due to actual use assessment to qualify under federal law for reduced estate taxes, certain criteria must be met which may be different than under state law.
DEVELOPMENT REGULATION STRATEGIES FOR PROTECTING ARCHEOLOGICAL SITES ON PRIVATE LANDS

DEVELOPMENT REGULATION

Since archeological sites are part of the land, the preparation and uses of land can be major threats to archeological sites and the values associated with them. Approaches to archeological protection, therefore, can logically be found in those processes that govern how land can and cannot be used. Many local communities, under authority from state enabling legislation, have the power to regulate the uses of private land through planning, zoning, subdivision, development and permitting review, and other similar mechanisms. A developer is, in fact, a landowner - a special kind of landowner with very particular goals for the use of the land, which usually requires approvals from the local government. Development projects can be either beneficial or catastrophic to archeological sites depending upon whether or not archeological resources are carefully considered during development planning and design, and during zoning, subdivision, and permit review. Local regulatory programs can be very effective in protecting archeological sites. See Case Study 18

PLANNING

STRATEGY

Comprehensive Land-Use Planning. Local land-use plans are critical components of local government's power to regulate land use. Planning is a systematic process for establishing the public policy framework for a community's future growth and development. As a statement of public policy, the plan guides decision-making by the planning commission and elected officials and staff. Plans are typically implemented through zoning and subdivision ordinances, building codes, permitting procedures, and capital improvement budgets. See Case Study 13

BENEFITS

Archeological site protection is officially affirmed as community public policy. Opportunities for archeological site protection are routinely considered early in the community's land-use decision-making process.

PAY SPECIAL ATTENTION TO

Planning's open public process can alert vandals to the presence of archeological sites. Consideration of archeological site protection can be neglected if it is not an integrated component of the community's policies and goals. When archeological protection issues are raised late in the process, such as during public hearings, options for protection can be very limited and conflict-laden.
# ZONING AND SUBDIVISION

## STRATEGY

<table>
<thead>
<tr>
<th>Large Lot Zoning</th>
<th>Performance Zoning</th>
<th>Cluster Zoning, Open Space Zoning, or Planned Unit Development (PUD)</th>
<th>Overlay Zoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large minimum lot sizes, such as one, five, or ten acres per dwelling unit, reduce density by spreading development over a large area.</td>
<td>Zoning categories are defined on the basis of permitted impacts, such as noise or air pollution, or those to natural or historic resources, instead of being based on the more traditional permitted uses. A variety of uses may be permitted in a single zone, as long as the impacts are within acceptable ranges and types.</td>
<td>Concentrating units together in smaller lots on a portion of the property, yet maintaining the overall density of traditional zoning, allows sensitive resources to be protected on the remainder of the property. A PUD is a mixed-use development usually on a large tract of land.</td>
<td>Additional or stricter development standards and criteria are established to protect particular features of an existing land-use zone, such as historic districts, landscape features, scenic views, agricultural areas, or watersheds. Historic district zoning is a commonly used overlay.</td>
</tr>
</tbody>
</table>

## BENEFITS

| Maintains low density and reduces impact on certain resources, such as water resources, in rural and forested areas. Provides space for flexibility in building design and location to allow site protection. | The local comprehensive plan, including consideration of resource protection, guides the location of development to resource compatible areas. Provides flexibility in types and designs of projects. | Cluster development allows for flexibility in design suitable for the resource protection needs of the parcel of land. Construction and infrastructure costs are reduced. | Standards and criteria are developed specifically to meet the needs of the resources in the zone. Effective in protecting specific resources from development pressures. |

## PAY SPECIAL ATTENTION TO

| Major factor in suburban sprawl. Resource-protection lands may be scattered and discontiguous, which can complicate the management of protected resources. Contributes to high real estate prices. Zoning can be changed to allow in-fill development. | Effectiveness is based on thorough understanding of resources and effects of impacts on them. Requires a detailed plan and a professional planning staff to develop, administer, and monitor the program. | Protected lands are often scattered and discontiguous. Clustering does not enjoy widespread popularity, especially in rural areas. Homeowner association may be unprepared to take on the responsibility for long-term management of common open space. | Overlay zone’s standards must be defined clearly so that requirements are not misinterpreted, and to ensure that archeological sites can be protected. Zoning can be changed. Does not address protection needs outside the zone. |

**See Case Study 14**
Subdivision. Partitioning land into smaller parcels for future development is often regulated by a local subdivision ordinance, which establishes design criteria for lots, streets, utilities, open space, and other public facilities and amenities. Subdivision design and plats must be reviewed and approved by the local government before the subdivision is legal. Some local communities require consideration of archeological site protection and other environmental issues in their subdivision ordinances and regulations.

See Case Study 14

Agricultural and Forestal Districts. Special district established to promote continuation of agricultural and forestry activities by protecting against suburban expansion and assessing property based on its actual use.

Potentially powerful strategy for site protection. Developers consider, and have opportunities to incorporate, archeological site protection early in the subdivision design process. Increases possibilities for site protection.

Voluntary participation. Minimum acreage criteria. Does not provide long-term protection. Reduces local government tax revenue. Most effective in areas with development pressure.

Mandatory Dedication or Exaction. In order to receive subdivision approval, developer is required to dedicate a portion of the property (or pay a fee) to the local government for open space or parkland.

Maintains land in agricultural and forestry use. Reduces owner’s property tax through actual use assessment.

Local community receives open space and protected lands and little cost.

Care must be taken that the land being dedicated includes resources to be protected, and that these areas can be linked up to other protected areas. Homeowner associations may be unprepared to manage such protected areas.

Transfer or Purchase of Development Rights (TDR or PDR). The rights to develop one parcel of land are sold or transferred to another parcel of land, providing the opportunity to protect the resources on the first, in exchange for increasing development density on the second. TDR and PDR programs are carefully designed with "sending" (protection) areas and "receiving" (development) areas clearly identified.

An effective growth management tool for local communities with the skill and expertise to establish and administer such a program.

Resources can be protected with little financial outlay by the local community. Large tracts of protected land can be created in "sending" areas. Owners who sell development rights receive an income and continue to use their land. Property taxes should be reduced.

Complicated program to establish and administer. There may be landowner resistance to being located in either "sending" or "receiving" areas. Purchasing development rights can be expensive.
**Development or Site Plan Review.** Process of reviewing, approving, negotiating and approving with conditions, or denying specific development project proposals for particular parcels of land. Applications for several kinds of permits, including grading and demolition, are also reviewed. See Case Study 15; Case Study 16; Case Study 17; Appendix 5; Appendix 6

**Avoidance.** A fairly common technique in which a project is designed so that construction avoids the archeological site, thereby “avoiding” impact and not damaging it. Diverts impacts, particularly those caused by construction and other ground disturbing activities. May be useful in the short term if no other strategies are feasible.

**Environmental Review**

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<tr>
<td><strong>Federal and State Review.</strong> Under federal law, and under some state laws, environmental impact studies, assessments, or permit reviews that consider project impacts on natural, historic, or cultural resources, can be required of specific types of development. Depending upon the results of the review, the project may need to be redesigned or activities undertaken to ensure impacts to sensitive resources are mitigated.</td>
<td>Provides the opportunity for all interested parties to consider the impacts of development on sensitive resources and to evaluate alternative strategies for resource protection.</td>
<td>Review needs to be done early in the project for maximum benefit; often-lengthy process can stall development and increase costs. Can duplicate local review process.</td>
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Local Environmental Ordinances. Local communities have the authority to regulate land uses and development in areas containing sensitive resources, such as floodplains, coastlines, wetlands, and wildlife habitat. Some of these regulations may require environmental assessments similar to federal and state programs.

Environmental ordinances can be tailored to the needs of the particular resources to be protected. Compliance, monitoring, and enforcement of local ordinances is likely to be more effective than for federal or state regulations.

Strength of local ordinances depends upon the specific authority granted by state enabling legislation and on political will of the local community. The review process can be complicated and time-consuming.
**LAWS SPECIFIC TO ARCHEOLOGY FOR PROTECTING ARCHEOLOGICAL SITES ON PRIVATE LANDS**

**LAWS SPECIFIC TO ARCHEOLOGY**

Virtually every state has adopted laws specifically to protect archeological sites. Protection tends to be achieved through controlling the practice of archeology, such as how or by whom a site is excavated, rather than regulating the uses of the land of which the site is a part. The establishment of a permit system and prohibitions on unscientific investigations, sometimes called looting, pothunting, or relic-hunting, are common. Many of the state laws mimic those at the federal level that govern activities on federal lands.

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<td>Antiquities Statutes. Protects archeological sites by requiring a permit to excavate sites on public land or specially designated sites. Provides penalties for violations. Federal government and nearly all states have enacted antiquities legislation; some local communities may have adopted ordinances to prohibit unauthorized excavation and metal detecting on public lands. The antiquities statutes of some states cover private lands. <strong>See Case Study 19</strong></td>
<td>Permit process ensures that archeological work is carried out according to professional standards. Prosecutions of looters and vandals can serve as a deterrent.</td>
<td>Effective only when application is made. Needs monitoring and enforcement to catch violators. May not cover private lands. Doesn't control land uses that can damage or destroy sites.</td>
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**Burial Laws.** Similar to antiquities laws, burial laws regulate the archeological removal of human burials by a permitting system, and often require the return of human skeletal remains and associated funerary objects that can be related to modern tribes or descendants. Provides penalties for violations. Other relevant state and local laws regulate the establishment and operation of active cemeteries; establish procedures for authorized removal and reinterment of burials; provide penalties for vandalism, desecration, and unauthorized disinterments; and often address abandoned or unmarked cemeteries.

Permit process ensures that archeological work is carried out according to professional standards. Prosecutions of looters and vandals can serve as a deterrent.

Only applies if burial is to be disinterred or excavated. Requires monitoring and enforcement. May not cover all types of burials, or other types of sites. Does not control land uses that can damage or destroy human burials.
**Abandoned Shipwrecks.** The federal Abandoned Shipwreck Act of 1987 gives states title and management responsibility to certain abandoned shipwrecks in their waters. States followed with laws of their own to protect underwater sites and allow sport diving.

Permitting system ensures that archeological work is carried out according to professional standards. Penalties for violations can deter looters.

Effective only when permit application is made. Needs monitoring and enforcement. Multiple agency jurisdictions can complicate statute administration. State laws vary in their effectiveness in protecting shipwrecks.
### VOLUNTARY STRATEGIES FOR PROTECTING ARCHEOLOGICAL SITES ON PRIVATE LANDS

#### VOLUNTARY STRATEGIES

Archeologists, preservation organizations, and state and local government officials have had great successes in protecting archeological sites through legal mechanisms described in the previous sections. It may, however, be unrealistic or even impossible to try to protect all archeological sites using these approaches. Legal means may not suit an individual landowner's needs and situation, and protecting ALL important archeological sites is simply too large a task for only a few organizations or agencies. Important archeological sites are, nevertheless, being damaged and destroyed. There are a number of voluntary strategies that, either alone or in combination with regulatory approaches, can be helpful in protecting archeological sites.

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<td><strong>Registers of Historic Places.</strong> Federal, state, and local registers of historic places contain listings of historic and cultural resources that meet certain criteria of significance as evaluated by an established review body. Nominations are made voluntarily by property owners or others, with the owner's concurrence. Registers identify those important properties worthy of preservation and consideration in land-use or other planning processes.</td>
<td>Registers formally and publicly recognize the importance and significance of historic and cultural resources. Most registers offer an informal measure of protection derived from the honor and prestige associated with having the property judged to be historically important. However, register listing can also be a first step in protecting the property, especially where federal, state, or local laws or ordinances link protective regulation to register listing. There can also be financial incentives, such as property and income tax reductions, when a property is listed on a register.</td>
<td>Simply listing a property on such a register does not confer protection. Register listing is frequently misunderstood as automatically placing restrictions on the property owner's use of the property, which is not true unless laws or ordinances have been enacted to do so. This misunderstanding can generate ill will against resource protection programs and activities.</td>
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<td><strong>Education Programs.</strong> Programs and activities, such as publications, workshops, site interpretations, and museum exhibits, help increase knowledge and raise awareness among the public and decision-makers about archeology and its values.</td>
<td>Education programs help build a preservation ethic, and increase and enhance understanding about archeological values and protection strategies. A well-informed public provides strong support for archeological protection. Education can be an effective deterrent against the casual site vandal.</td>
<td>Adequate financial and staff support must be available for educational programs to be effective.</td>
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<td><strong>Stewardship Programs.</strong> Voluntary community participation in site protection through field survey, site recording, site monitoring, site</td>
<td>Relatively low cost. Builds preservation ethic and sense of community responsibility and pride, as well as a constituency for</td>
<td>Programs are voluntary. Success depends upon participants' strength of commitment. Steward group programs require coordination and</td>
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management, and other activities. There are two major types of programs: one depends on a group of "site stewards" who carry out a variety of survey, recording, and monitoring activities; another relies on encouraging landowners to serve as stewards of sites on their property, through personal relationships and technical assistance. See Case Study 4; Case Study 8; Case Study 9; Case Study 20

Community Archeology Programs. Local community administration and management of archeological protection and stewardship programs, which could be housed in a local government agency, park, museum, or other facility, and include such activities as archeological site survey, recording, monitoring, historical research, site interpretation, and other educational activities.

Professional staff administration of local archeology ordinance. Provides focal point for community interest in archeology. Offers opportunities for citizen involvement and education in archeology. Tourism benefits from interpreted archeological sites. Long-term relationships can be established among landowners, the public, decision-makers, and archeological protection advocates.

May be costly for some smaller communities to fund professional staff and facilities.

Avocational and Professional Archeological Organizations. Membership organizations typically for the purposes of sharing information among members, learning about archeology, carrying out archeological projects, and promoting archeological values to others.

Organized group of people committed to archeology can be very effective in doing field survey, monitoring protected sites, conducting other projects, educating the public, reaching out to landowners, and influencing decision-makers, especially in situations where government officials may not be welcome.

Effectiveness of organizations depends on nucleus of active members and ability to coordinate with other groups with similar goals.
# SITE MANAGEMENT STRATEGIES FOR PROTECTING ARCHEOLOGICAL SITES ON PRIVATE LANDS

## SITE MANAGEMENT

An archeological site cannot be protected merely by buying it, acquiring an easement on it, or setting it aside as open space in a residential development. Responsible site protection can best be achieved through an aggressive, long-term management program. See Case Study 21

## STRATEGY

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<td><strong>Planning and Management</strong></td>
<td>Careful, thorough site planning and management can minimize or even eliminate forces that could damage or destroy the site, ensuring long-term protection.</td>
<td>Requires long-term commitment and knowledgeable staff; can be costly and time-consuming.</td>
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<td><strong>Site Protection and Stabilization</strong></td>
<td>Combined with periodic monitoring, these techniques can protect sites from damage or destruction.</td>
<td>Specialized skills and expertise are needed to apply some of these techniques. Extent of physical and chemical changes resulting from site burial are not yet fully known. None of these techniques protect in perpetuity; periodic monitoring is required.</td>
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<td><strong>Monitoring</strong></td>
<td>Regular human presence and ongoing maintenance at the site is a strong deterrent to vandals and looters, and potential site damage can be identified and corrected before it becomes serious.</td>
<td>Requires long-term commitment and knowledgeable staff.</td>
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**Planning and Management**. Protecting the site after acquisition requires an aggressive, long-term management program that includes thorough documentation of site characteristics and condition, site stabilization, security, maintenance, monitoring, compatible use, and, where appropriate, eventual research. Effective long-term management begins with the preparation of a site management plan that addresses these activities.

**Site Protection and Stabilization**. In order to protect the archeological site from damage, a number of techniques are available, such as revegetation, erosion control, burial, fencing, and signs.

**Monitoring**. A program for periodic site visits to check on site condition, perform routine maintenance, and determine if the site is being damaged or is in imminent danger of damage or loss is essential in any long-term site protection program.
In communities all across the country, the strategies described in this booklet are being applied in diverse and creative ways. Since no community is exactly like another, the effective local protection program is one that is empowered by a variety of regulatory, planning, incentive, and educational tools designed to serve the community’s unique circumstances and interests. Likewise, the protection needs of archeological resources are unique to each site. Effective site protection depends upon a combination of various strategies carefully designed for each particular site. No single protection strategy, or combination of strategies, will be the right one in all cases.

As you embark upon efforts to protect archeological sites that you value, the following guidance may be helpful:

- Include a wide variety of strategies in your site protection tool kit, and be prepared to use them in creative ways.
- Both the “carrot” and the “stick” need to be in your site protection tool kit.
- Know about all the strategies in your tool kit - be able to explain their strengths and weaknesses, how they work, and contacts for using each. Don't try to become an expert in any of the strategies. Stick to your own expertise, and partner with others who specialize in using the strategies.
- Learn about existing funding sources and incentives, and seek creative ones.
- Protection in place is the first option to consider.
- Remember that ownership is power.
- Establish priorities for site protection so that you and/or others can move quickly when the need or opportunity arises; and have a clear, fair, objective, and systematic process to identifying which sites merit protection efforts and funding.
  - Develop a top priority list of the 101 most important sites in your community or state that really should be targeted for protection.
  - Identify the landowner's name and address, and make contact.
  - Visit each site on the list to verify condition.
  - Establish an ongoing and long-term relationship with the landowner that is respectful, courteous, friendly, proactive, informative, and helpful.
  - Update the priority list as sites receive protection.

- Develop and strengthen partnerships and networks with the archeological community, land trusts, local and state agencies, local and state elected officials, and other groups with similar interests; capitalize on existing coalitions; and share information about these groups and the strategies they use to protect resources.
- Share information about archeological sites with our partners and decision-makers - it's difficult to protect a site if its existence is not known. Learn how advanced technologies such as the World Wide Web and computerized mapping systems such as GIS can be used creatively in this effort.
- Know the roles and authorities of different levels of government, including relevant laws and regulations.
- Know and educate members of your state legislature and your local elected and appointed officials.
- Work to make archeology an integral part of your community's planning and zoning process. As a taxpayer and voter, you can have a lot of influence with local officials.
  - Serve on a local review board or the planning or zoning commission.
  - Get to know staff in city hall, in the planning department, and learn how the planning, zoning, and development review processes operate.
Explain to city/county staff and the public the importance of protecting archeological resources.

Attend public meetings and make your voice heard.

Participate in plan development activities to incorporate archeological protection issues.

- Serve as an archeological site steward to help monitor and record the condition of protected and unprotected sites in your community.
- Support land trust activities by becoming a member, volunteering to help on projects, actively participating in the activities of the organization, including serving on its board of directors, and sharing information on archeological values.
BIBLIOGRAPHY


**WEB SITES OF INTEREST**

American Farmland Trust - [www.farmland.org](http://www.farmland.org)

American Planning Association - [www.planning.org](http://www.planning.org)

The Archaeological Conservancy - [www.americanarchaeology.com](http://www.americanarchaeology.com)
Archaeological Site Stabilization - dhr.dos.state.fl.us/culturalmgmt/stabilization.html
Land Trust Alliance - www.lta.org
National Conference of State Historic Preservation Officers - www.sso.org/ncshpo

National Park Service

- Archeology and Ethnography - www.cr.nps.gov/aad/
- CRM Magazine - www.cr.nps.gov/crm
- Heritage Preservation Services - www2.cr.nps.gov
- National Register of Historic Places - www.cr.nps.gov/nr/publications/

National Trust for Historic Preservation - www.nthp.org
Society for American Archaeology - www.saa.org
Society for Historical Archaeology - www.sha.org

State Historic Preservation Laws (searchable database jointly developed by the National Conference of State Historic Preservation Officers and the National Conference of State Legislatures) - www.ncsl.org/programs/arts/statehist.htm

Stewardship Programs

- Arizona - www.pr.state.az.us/partnerships/shpo/shpo.html
- Florida - dhr.dos.state.fl.us/culturalmgmt/stewardship/index.html
- Kentucky - www.state.ky.us/agencies/khc/regist.htm
- Texas - www.thc.state.tx.us/osa.html

Trust for Public Land - www.tpl.org

Waterways Experiment Station, US Army Corps of Engineers, Vicksburg, Mississippi - www.wes.army.mil/el/ccspt/ccspt.html
APPENDICES

Please use the navigation buttons on the left or the links below to view the Appendices:

- Appendix 1 - Vermont Archaeology Preservation Easement
- Appendix 2 - Cultural Resources Element, Boulder County, Colorado, Comprehensive Plan
- Appendix 3 - Alexandria, Virginia, Archaeology Ordinance, 1989 and 1992
- Appendix 4 - Excerpts from the City of St. Augustine, Florida, Archaeological Preservation Ordinance
- Appendix 5 - City of Cottage Grove, Minnesota, Stand-Alone Historic Preservation Ordinance
- Appendix 6 - Archaeological Review Process, Ann Arbor, Michigan
- Appendix 7 - Participants in the Working Meeting and the Forum on Protecting Archaeological Sites on Private Lands
APPENDIX 1
TEXT OF VERMONT ARCHEOLOGICAL PRESERVATION EASEMENT

GRANT OF PRESERVATION EASEMENT AND RESTRICTIONS

WHEREAS, the DIVISION FOR HISTORIC PRESERVATION is a department of the State of Vermont (hereafter "Grantee"), whose purposes include identifying, documenting, preserving significant historic resources;

WHEREAS, the VERMONT HOUSING AND CONSERVATION BOARD is an instrumentality of the State of Vermont created, in part, for the purposes of perpetually conserving significant historic resources;

WHEREAS, the Grantee is authorized to accept preservation and conservation easements to protect property significant in Vermont history and culture under the provisions of Title 22 V.S.A. Chapter 14;

WHEREAS, [Landowner] of [Town], Vermont (hereafter "Grantor") is owner in fee simple of certain real property located in [Town], ___ County, Vermont, which is an archaeologically significant property as more particularly described below;

WHEREAS, the Grantor and Grantee recognize the historical, cultural, and aesthetic value and significance of the property, and have the common purpose of conserving and preserving the aforesaid significance of the property;

WHEREAS, the Grantor and Grantee desire to preserve for future generations the information gained from properly conducted archeological investigations of the property;

WHEREAS, the grant of a preservation easement by Grantor to Grantee will assist in preserving and maintaining the property and its archeological, historical, and cultural features and will assist in preserving and maintaining the aforesaid value and significance of the property;

WHEREAS, to that end, Grantor desires to grant to Grantee, and Grantee desires to accept, a preservation easement on the property, pursuant to 22 V.S.A. §723;

WHEREAS, the portion of the property preserved by this easement is herein referred to as "the Settlement Area" (as more particularly described in Schedule A), and is depicted on a plan entitled "Certain Proposed Easements on Lands of [Landowner], ___ County, [Town], VT" dated [month, day, year], and prepared by [plan preparer name] (hereafter "the Plan").

NOW, THEREFORE,

KNOW ALL PERSONS BY THESE PRESENTS that [Landowner] of [Town], Vermont, on behalf of self and __ heirs, successors and assigns (hereinafter "Grantor"), in consideration of Ten Dollars and other valuable consideration paid to __ full satisfaction, does freely give, grant, sell, convey and confirm unto the VERMONT DIVISION FOR HISTORIC PRESERVATION, a division of the State of Vermont with its principal offices in Montpelier, Vermont, and the VERMONT HOUSING AND CONSERVATION BOARD, an instrumentality of the State of Vermont with principal offices in Montpelier, Vermont, and their successors and assigns, forever, a perpetual archeological preservation easement and restrictions (as more particularly set forth below) in a certain tract of land situated in the Town of [Town], Vermont (hereinafter "Settlement Area"), said Settlement Area being more particularly described in Schedule A attached hereto and incorporated herein.

The archeological preservation easement and restrictions hereby conveyed to the Grantee consist of covenants on the part of the Grantor to do or refrain from doing, severally and collectively, the various acts set forth below. It is hereby acknowledged that these covenants shall constitute a servitude upon the land and run with the land. Grantee accepts such covenants in order to achieve the Purposes set forth in Section I, below.

I. Purposes of the Grant.

Grantor and Grantee acknowledge that the Purposes of this Grant are as follows (hereafter "Purposes of Grant"):

1. To contribute to the implementation of policies of the State of Vermont designed to foster the in situ preservation of significant archeological sites and to preserve, for the benefit of future generations, important cultural and historical information that is contained within the Settlement Area and that may be recovered in the future through professional archeological investigations.

2. The objective of preserving archeological values will be advanced by conserving the Settlement Area because it is the site of the remains of pre-Revolutionary War dwellings and because the Settlement Area has been designated a State Archeological Landmark pursuant to 22 V.S.A. §763.

Grantor and Grantee recognize these historic, archeological, and cultural values of the Settlement Area, and share the common purpose of conserving these values by the conveyance of this archeological preservation easement and restrictions to prevent the use or development of the Settlement Area for any purpose or in any manner which would conflict with the preservation of these historic, archeological, and cultural values.
Grantees accept such archeological preservation easement and restrictions in order to conserve these values for present and future generations.

II. Documentation of the Settlement Area.
In order to make more certain the full extent of Grantor's obligations and the restrictions on the Settlement Area, and in order to document the existing condition of the Settlement Area as of the date hereof, incorporated herein by this reference is a Documentation Report (including a set of photographs) which describes and depicts the physical appearance of the Settlement Area. It is stipulated by and between Grantor and Grantee that the Documentation Report contains a complete and accurate description of the existing condition of the Settlement Area as of the date hereof and as of the date this instrument is first recorded in the [Town] Land Records (hereafter "documented state").

III. Grantor's Covenants.
In furtherance of the easement herein granted, Grantor undertakes to do (and to refrain from doing as the case may be) within the Settlement Area each of the following:

1. Except as provided in paragraph III(5), below, the Grantor shall maintain the Settlement Area in its documented state, and shall take all reasonable precautions to protect the archeological site from looting, vandalism, mutilation, or destruction from any cause. Toward this end, Grantor shall neither perform nor permit others to perform any of the following:
   (a) The placement of any earth material or other substance on, above or below ground, or any other activity which alters the existing surface contours of the Settlement Area; excepting that Grantor may cover the Settlement Area with a layer of soil and sod.
   (b) The excavation or removal of any earth material, mineral substance or other substance or material, except archeological resources retrieved pursuant to paragraph III(2), below.
   (c) The dumping of trash, rubbish, or other debris.
   (d) The construction of any building or placement of any structure or physical improvement (such as driveways, utilities and related facilities) on, above, or below the ground surface; excepting that Grantor may erect minor improvements (such as fencing or small out buildings) providing such improvements do not include a permanent foundation and do not involve any excavation greater than six inches in diameter or six inches deep. Grantor shall secure Grantee's written approval prior to erecting any such improvement, which approval shall not be unreasonably withheld or conditioned, provided the improvement is consistent with the Purposes of the Grant and provided further than Grantee shall have the opportunity to recover artifacts during the course of any excavation required for such erection.
   (e) Any other activity which by disturbing, altering or otherwise affecting the existing surface or subsurface of the Settlement Area would be detrimental to the appropriate preservation of the archeological resources therein.
   (f) No use shall be made of the Settlement Area, and no activity thereon shall be permitted which, in the reasonable opinion of the Grantee, is or may possess the potential to become inconsistent with the purposes of this Grant as stated in Section I, above.

2. No field investigations, archeological excavation, subsurface testing or metal detecting activity, or operation for the recovering of artifacts shall be conducted within the Settlement Area without the prior written approval of the Grantee. Any such activities conducted pursuant to such approval shall be carried out in consultation with the Grantee and in a manner to ensure that the maximum amount of historic, scientific, archeological, and educational information may be recovered and preserved in addition to the physical recovery of objects.

3. Upon the written request of the Grantee based on a reasonable suspicion that the Settlement Area is or will be subject to looting or other human disturbance, Grantee shall post the Settlement Area against trespassing in the manner provided by law.

4. All artifacts and objects of antiquity recovered from the Settlement Area shall be the property of the State of Vermont.

5. Within that portion of the Settlement Area depicted on the Plan as ____, Grantor may engage in the activities prohibited by paragraph III(1)(d), above, provided Grantor shall first comply with the following requirements:
   (a) Grantor shall provide Grantee with written notice by February 1 for any construction to be commended in the following construction season. Said construction shall not commence before August 1 of the same year written notice was given, which notice shall include a specific description of the location and scope of proposed activities;
   (b) Unless the site of any such activity has previously been the subject of a comprehensive investigation, excavation and recovery operation approved by Grantee pursuant to paragraph III(2), above, Grantor shall permit Grantee to undertake such operations at Grantee's own expense. Grantee shall complete any such operations by August 1, or such period fixed by mutual, written consent of Grantor and Grantee.

IV. Access by Grantee.
Grantor shall permit Grantee access to the Settlement Area as follows:
1. For the purpose of exercising Grantee's rights under Section III(5)(b); and
2. For the purpose of monitoring and enforcing this Grant under Section V; and
3. For the purposes of taking affirmative steps within the Settlement Area to protect archeological features from the effects of erosion provided that, prior to taking such steps, Grantee shall consult with Grantor, submit a written erosion protection plan to Grantor, and secure Grantor's prior written approval of said plan, which approval shall not be unreasonably withheld or conditioned.
4. For the purpose of conducting research related to the archeological and historical significance of the Settlement Area; provided, that access under this clause shall be from ___ or from the adjoining lands of ____, and provide further, that Grantee shall secure the prior written consent of Grantor. This Section IV shall not be construed to convey any right to the general public to have access to or otherwise use the Settlement Area.

V. Enforcement of the Restrictions.
Grantee shall make reasonable efforts from time to time to assure compliance by Grantor with all of the covenants and restrictions herein. In connection with such efforts, Grantee may make periodic inspection of all or any portion of the Settlement Area, and for such inspection and enforcement purposes, the Grantee shall have the right of reasonable access to the Settlement Area. In the event that Grantee becomes aware of an event or circumstance of non-compliance with the terms and conditions herein set forth, Grantee shall give notice to Grantor of such event or circumstance of non-compliance via certified mail, return receipt requested, and demand corrective action sufficient to abate such event or circumstance of non-compliance and restore the Settlement Area to its previous condition. Failure by Grantor to cause discontinuance, abatement, or such other corrective action as may be demanded by Grantee within a reasonable time after receipt of notice and reasonable opportunity to take corrective action shall entitle Grantee to bring an action in a court of competent jurisdiction to enforce the terms of this Grant and to recover any damages arising from such non-compliance. Such damages, when recovered, may be applied by Grantee to correct such action on the Settlement Area, if necessary. If such Court determines that Grantor has failed to comply with this Grant, Grantor shall reimburse Grantee for any reasonable costs of enforcement, including Grantee's staff time, court costs and reasonable attorney's fees, in addition to any other payments ordered by such Court. In the event that Grantee initiates litigation and the court determines that the Grantor has not failed to comply with this Grant and that Grantee has initiated litigation without reasonable cause or in bad faith, then Grantee shall reimburse Grantor for any reasonable costs of defending such action, including court costs and reasonable attorneys' fees. The parties to this Grant specifically acknowledge that events and circumstances of non-compliance constitute immediate and irreparable injury, loss, and damage to the Settlement Area and accordingly entitle Grantee to such equitable relief, including but not limited to injunctive relief, as the Court deems just. The remedies described herein are in addition to, and not in limitation of, any other remedies available to Grantee at law, in equity, or through administrative proceedings.
No delay or omission by Grantee in the exercise of any right or remedy upon any breach by Grantor shall impair Grantee's rights or remedies or be construed as a waiver. Nothing in this enforcement section shall be construed as imposing a liability upon a prior owner of the Settlement Area, where the event or circumstance of non-compliance shall have occurred after said prior owner's ownership or control of the Settlement Area has terminated; in the latter circumstance, the obligation to comply with the terms, conditions and limitations of this instrument, and liability for any breach shall reside with the successor owner.

VI. Miscellaneous Provisions.
1. Where Grantor is required, as a result of this Grant, to obtain the prior written approval of Grantee before commencing an activity or act, and where Grantee has designated in writing another organization or entity which shall have the authority to grant such approval, the approval of said designee shall be deemed to be the approval of the Grantee. When Grantee has authorized a proposed action requiring approval under this Grant, Grantee shall, on request, provide Grantor with a written certification in recordable form memorializing said approval.
2. It is hereby agreed that the construction of any buildings, structures or improvements, or any use of the land otherwise permitted under this Grant, shall be in accordance with all applicable ordinances, statutes and regulations of the Town of ____ and the State of Vermont.
3. Grantee shall transfer the archeological preservation easement and restrictions conveyed by Grantor herein only to a qualified conservation organization that agrees to enforce the preservation purposes of this Grant.
4. In any deed conveying an interest in all or part of the Settlement Area, Grantor shall make reference to the archeological preservation easement and restrictions described herein and shall indicate that said easement and restrictions are binding upon all successors in interest in the Settlement Area in perpetuity. Grantor shall also notify the Grantee of the name(s) and address(es) of Grantor's successor(s) in interest.
5. Grantee shall be entitled to rerecord this Grant, or to record a notice making reference to the existence of this Grant, in the Town of ___ Land Records as may be necessary to satisfy the requirements of the Record Marketable Title Act, 27 V.S.A., Chapter 5, Subchapter 7, including 27 V.S.A. §§603 and 605.

6. The term "Grantor" shall include the heirs, executors, administrators, successors and assigns of the original Grantor, [Landowner]. The term "Grantee" shall include the successors and assigns of the original Grantee, Vermont Division for Historic Preservation and Vermont Housing and Conservation Board.

INVALIDATION of any provision hereof shall not affect any other provision of this Grant.

TO HAVE AND TO HOLD said granted development rights, conservation easement and restrictions, with all the privileges and appurtenances thereof, to the said Grantee, VERMONT DIVISION FOR HISTORIC PRESERVATION, and VERMONT HOUSING AND CONSERVATION BOARD, their successors and assigns, to their own use and behoof forever, and the said Grantor, [Landowner], for himself, and his heirs and assigns, does covenant with the said Grantee, its successors and assigns, that until the ensealing of these presents, he is the sole owner of the premises and has good right and title to convey the same in the manner aforesaid, that the premises are free from every encumbrance, except those of record, and they hereby engage to warrant and defend the same against all lawful claims whatever.
APPENDIX 2
CULTURAL RESOURCES ELEMENT
BOULDER COUNTY, COLORADO, COMPREHENSIVE PLAN

Background

As time progresses, Boulder County faces the loss of more and more of its truly non-renewable resources. These resources are the archaeological and historic sites that give the County's modern day residents a tie to the past. Many of these cultural resources are being purposefully demolished or destroyed while others face the natural elements and slowly erode away. Encroaching development and modernization lend an urgency to the need for preservation of archaeologically and historically significant sites.

Prehistoric and Historic Preservation

Archaeologists typically describe the period of time between 12,000 years ago and the first contact by people of European, African, and Asian descent as prehistoric. The term "prehistoric" is used because written records of this period either are nonexistent or very rare. Instead of researching past cultures by studying their written records, archaeologists must study prehistoric cultures by excavation and similar techniques. Unlike historic sites that are above ground and visible, archaeological sites are often hidden from view, buried underground. Most of the archaeological data that is gathered in Boulder County relates to the Native American population that dominated the entire State of Colorado until the mid 1800s. The most common tribes in Colorado included the Apache, Comanche, Arapaho, Cheyenne, and Ute.

Prehistoric sites are protected through federal, state, and local historic preservation legislation. For each historical site listed in the Boulder County Historic Sites Survey, the archaeological potential of the site is evaluated. The exact location of sensitive archaeological sites may be withheld from the public in order to prevent artifact gathering and other forms of destruction. Additionally, archaeological sites must be addressed in a manner that is sensitive to the cultural beliefs of the affected population.

In 1991, Boulder County took action on the policy to preserve historic sites by requiring, for the first time, a permit in order to demolish a structure in unincorporated areas of the county. Soon after this initial action, a consultant was hired and public meetings were held to create the foundations for a historic preservation program. On September 29, 1992, the Board of County Commissioners adopted regulations that formulated Boulder County's Historic Preservation Program and led to Boulder County becoming the first county-level Certified Local Government for historic preservation in the State of Colorado.

The county's Historic Preservation Program is individualized for the specific needs of Boulder County. The unique landscape of this area, ranging from gently-rolling prairie with nationally significant agricultural value, to the alpine tundra along the continental Divide, attracted prehistoric peoples and, in later epochs, farmers and miners to the rural portions of the county.

In order to protect this diversity, the Historic Preservation Program requires that at least one member of the Historic Preservation Advisory Board be from the agricultural community, at least one member be from the mining community, and at least one member have professional experience in history.

Acknowledgement that pressures for growth place historic rural areas in danger, combined with education and respect for the past, create an atmosphere in which the goals and objectives of the county's Historic Preservation Program can flourish.

Goals

K.1. Every effort shall be made to identify and protect prehistoric and historic sites which meet national, state, or local criteria for historic designation from destruction or harmful alteration.

K.2. Whenever possible, the County shall further the goal of cultural resource preservation using education and incentives in lieu of stringent regulatory controls.
Policies

CR 1.01 Boulder County, utilizing staff, volunteers, and professionals, shall continue researching county historic structures, sites, and districts and archaeologically sensitive areas.

CR 1.01.1 A comprehensive historic sites survey shall be conducted which identifies the resources of historic significance within the county. This survey shall be updated as necessary to include those sites which, though not presently over 50 years of age, become so as time goes on.

CR 1.01.2 The county shall annually update its Historic Preservation Work Plan to assess the success of previous preservation efforts and determine the priority of preservation efforts throughout the coming year.

CR 1.01.3 Boulder County staff shall monitor landmark sites to ensure that the terms of the landmarking are being met by the property owner.

CR 1.02 Significant archaeological and historic sites and structures acquired by the county both in unincorporated and incorporated areas, shall be documented, protected, preserved, and where appropriate, restored.

CR 1.02.1 After acquisition, an inventory of cultural resources on the property shall be undertaken and the historic significance of each resource shall be determined.

CR 1.02.2 Resources that meet the criteria for local landmark, or State or National Register status should be nominated for such status by the county.

CR 1.03 The Boulder County Land Use Code and attendant regulations shall insure that historic and archaeological resources are protected.

CR 1.03.1 The Historic Preservation Advisory Board shall be a referral agency for all land use proposals where a possible impact to a historic or archaeological site has been identified.

CR 1.03.2 The applicant for land use proposals received for areas identified as being archaeologically sensitive may be required to conduct an investigation of the area's archaeological significance. The scale and location of the proposal will determine if such an investigation will be required.

CR 1.03.3 In communities where the county's zoning regulations are not consistent with the historical pattern of development, the county shall recognize the importance of the historical pattern by implementing zoning amendments or taking the historical pattern of development into consideration during the variance process.

CR 1.04 Boulder County shall encourage interjurisdictional cooperation to further the goals of historic and archaeological preservation.

CR 1.04.1 The county shall maintain Certified Local Government status with the State of Colorado and the United States Department of the Interior and participate in the nomination and designation of state and national landmarks.

CR 1.04.2 Through the use of intergovernmental agreements, the county shall cooperate with incorporated municipalities to offer the advantages of a local landmarking program to the municipalities within the county that do not have such a program.

CR 1.04.3 Boulder County shall pursue intergovernmental agreements with municipalities which address the issue of preservation of county historic landmarks after annexation by the municipality.

CR 1.04.4 Notice of Historic Preservation Advisory Board Hearings and a complete package of information shall be forwarded to each municipality within the county that requests to be regularly informed of the HPAB's activities.

CR 1.04.5 The City of Boulder Landmarks Board shall be a referral agency for proposals affecting cultural resources within the Boulder Valley. Examples of such proposals include, nomination of historic landmarks, and the demolition or alteration of historic properties owned by the City of Boulder.

CR 1.04.6 As necessary, the Boulder County Parks and Open Space Advisory Committees should be consulted when projects on county open space affect historic structures or sites. Similarly, the City of Boulder Open Space Board should be consulted when projects on city open space land affect historic structures or sites.

CR 1.04.7 The City of Longmont Landmarks Board shall be a referral agency for county landmark designation of structures, sites, or districts within the City's planning area.

CR 1.05 The county and specifically, the Historic Preservation Advisory Board, shall be an informational resource to Boulder County citizens interested in historic preservation.

CR 1.05.1 The Historic Preservation Advisory Board shall maintain expertise in architecture, agriculture, mining, and history in order to guide property owners with the technical experience necessary for preservation of archaeological and historic sites.
CR 1.05.2 The county shall distribute current copies of the Boulder County Historic Site Survey to local libraries that specialize in history and the Colorado Historical Society.  
CR 1.05.3 Pursuant to state and federal laws regarding disclosure of information pertaining to historic and archaeological sites, the location of extremely fragile sites shall not be public information in order to protect these sites.  
CR 1.05.4 The county shall maintain a current listing of structures, sites, and districts included in the Boulder County Register of Historic Landmarks.  
CR 1.05.5 A listing of all agencies, non-profit organizations, historical societies, history museums, libraries with history collections, and other entities and organizations involved in archaeology and/or historic preservation shall be maintained by the county as an educational resource for owners of cultural resources and other interested parties.  

CR 1.06 The county shall implement its historic preservation goals through education of the public and the offering of incentives whenever possible.  
CR 1.06.1 The county may offer the owners of properties that are designated as historic landmarks variations from the building code requirements, provided the variations support preservation of the landmark and the variation is not placing the health, safety, and welfare of county residents and visitors at risk.  
CR 1.06.2 The county shall provide information about state and national financial incentive programs and support grant and tax credit requests of the state by owners of designated properties.  
CR 1.06.3 Boulder County shall investigate the feasibility of a local incentive program for historic preservation. Such a program may include tools such as a revolving loan fund, the offering of bonus density for the preservation of significant archaeological sites or historic structures, and a local tax-credit program.  
CR 1.06.4 The county shall recognize its citizens by nominating outstanding preservation efforts for archaeological and historic site preservation for awards.  

CR 1.07 Sites within the county associated with traditional cultural practices may fall within the purview of the county's historic preservation regulations, provided that the use of the site can be documented and meets the criteria for designation at the local, state, or national level.  
CR 1.07.1 Applicants engaged in a discretionary land use proposal in a location where Native American artifacts have been found or where oral traditions indicate the site was used by Native Americans in the past, shall conduct research to determine the extent of the archaeological significance of the site. Prior to the removal of any artifacts or further development on any such site, the applicant shall confer with the affected Native American nation or nations to determine the appropriate mitigation measures necessary for protection of the site.  

Source: The on-line version of "Cultural Resources Element," Boulder County Comprehensive Plan, July 1994, at the Plan's Web site, www.co.boulder.co.us/lu/bccp/cultural_resources.htm. For more information, contact the Boulder County Land Use Department, P.O. Box 471, Boulder, Colorado 80306
APPENDIX 3
ALEXANDRIA, VIRGINIA ARCHAEOLOGY ORDINANCES, 1992 & 1989

ZONING ORDINANCE, SECTION 11-411: ARCHAEOLOGY PROTECTION
Adopted June 24, 1992

Section 11-411: Archaeology Protection

(A) Archaeological resource areas. A preliminary site plan which includes land designated as a potential resource area on the City of Alexandria Archaeological Resource Map, shall include reasonable archaeological evaluation reports and resource management plans when required under this section 11-411. The archaeological resource map, which is on file in the office of the director of historic Alexandria and the office of the city archaeologist, is hereby made a part of this ordinance.

(B) Application. This section 11-411 shall apply to all applications for preliminary or combined site plan or other development approval, otherwise subject to its provisions, which are filed subsequent to September 16, 1989.

(C) Administration. This section 11-411 shall be administered by the director of the office of historic Alexandria who may adopt reasonable procedures for its administration, consistent with applicable law.

(D) Preliminary archaeological assessment. Prior to filing an application for approval of a preliminary site plan to which this section 11-411 applies, the applicant shall confer with the director of the office of historic Alexandria in order for the director to conduct a preliminary assessment of the potential archaeological significance of any site plan area designated on the map, and of the impact of any proposed ground disturbing activities on such area. The applicant shall provide full and accurate information as to all ground disturbing activities proposed to be conducted on the site.

(E) Criteria for preliminary assessment. Such preliminary archaeological assessment shall be based upon the following criteria, and shall be conducted consistent with professionally recognized standards for archaeological site evaluation:

1. Research value. The extent to which the archaeological data that might be contained on the property would contribute to the expansion of knowledge.
2. Rarity. The degree of uniqueness the property's resources possess and their potential for providing archaeological information about a person, structure, event or historical process, for which there are very few examples in Alexandria.
3. Public value. The level of importance the property has to the community as a location associated with a significant person, structure, event or historical process.
4. Site integrity. The extent to which soil stratigraphy and original placement and condition of archaeological resources on the property have not been disturbed or altered in a manner which appreciably reduces their research or public value.
5. Presence of materials. The extent to which archaeological resources or evidence of historic structures are present on the property.
6. Impact on resources. The extent to which any proposed ground disturbing activities will alter or destroy resources which the director has determined to have substantial archaeological significance under sections 11-411(E)(1) through (5) above.

(F) Finding of archaeological significance.

1. If, at the conclusion of the preliminary archaeological assessment, the director of the office of historic Alexandria determines either that the site plan area has no substantial archaeological significance, or that the proposed construction or development will not have a substantial adverse impact on any known or potential archaeological resources, the director of the office of historic Alexandria shall so certify to the planning commission, and no further review under this section 11-411 shall be required.

2. If, at the conclusion of the preliminary archaeological assessment, the director of the office of historic Alexandria determines that the site plan area has potential archaeological significance, and that the proposed development will have a substantial adverse impact on any known or potential archaeological resources, the applicant shall submit an archaeological evaluation report and a resource management plan as part of the preliminary site plan application.

3. The director of the office of historic Alexandria shall render a determination in writing, within seven working days after receiving the information, unless written consent to extend such period is given by the applicant.
(G) **Archaeological evaluation report and resource management plan.**

(1) When required under the provisions of this section 11-411, the applicant shall submit as part of the preliminary site plan application an archaeological evaluation report and a resource management plan, prepared by a qualified archaeologist or historian in conformity with professionally recognized standards for cultural resource management. The applicant or the authorized agent thereof shall confer with the director of the office of historic Alexandria prior to preparing any submission to define and agree upon guidelines for such report and plan.

(2) Such archaeological evaluation report shall include detailed evaluation of the archaeological significance of the site plan area, including but not limited to reasonable measures for historic research, archaeological surveys and test excavations.

(3) Such resource management plan shall include reasonable measures for the study and preservation of archaeological resources found within the site plan area, including but not limited to test and full-scale excavations, site construction monitoring, field recording, photography, laboratory analysis, conservation or organic and metal artifacts, curation of the collection (e.g., artifacts, notes, photographs) and preparation of reports.

(4) Such resource management plan may, and if required by the planning commission or city council shall, also provide reasonable measures for further archaeological study, restoration, reconstruction, disposition of recovered artifacts to an appropriate public or private collection or museum, and in situ preservation of archaeological resources found within the site plan area.

(H) **Review of archaeological evaluation report and resource management plan.**

(1) The archaeological evaluation report and resource management plan shall be reviewed and approved, disapproved or approved with modifications or conditions or both as part of the site plan review process.

In the event a site plan application and review is required exclusively on account of ground disturbing activities not otherwise subject to such application and review, then and in such an event, notwithstanding any other provisions of this ordinance, the required site plan application and review shall be limited to the purposes and requirements of this section 11-411, and the application fee shall be as prescribed pursuant to section 11-104.

**ARCHAEOLOGICAL ORDINANCE NO. 3413, Adopted Nov. 18, 1989**

AN ORDINANCE to amend Section 5-5-1 (DEFINITIONS) by adding thereto a new subsection (7.1) (GROUND DISTURBING ACTIVITY), to amend and reordain Section 5-5-4 (SAME—ALTERATION OF GRADE, ETC.), to amend Section 5-5-9 (PRELIMINARY SITE PLANS) by adding thereto a new subsection (I) (ARCHAEOLOGICAL PROTECTION), all to Chapter 5 (SITE PLANS), Title 5 (TRANSPORTATION AND ENVIRONMENTAL SERVICES) of the Code of the City of Alexandria, Virginia, 1981, as amended.

WHEREAS, the city Council of the City of Alexandria, Virginia, finds and determines that:

1. The General Assembly has declared that it is the policy of this Commonwealth to encourage, stimulate and support the identification, protection, preservation and rehabilitation of the state’s significant historical and archaeological sites, and underwater historical sites;
2. The General Assembly has declared that it is in the public interest to identify, evaluate, preserve and protect sites and objects of antiquity which have historic, scientific, archaeological or educational value, and to protect such archaeological sites and objects from neglect, desecration, damage and destruction, and to ensure that such sites and objects are identified, evaluated and properly explored so that adequate records may be made;
3. There exist within the city archaeological sites and underwater historic sites which have special public value because of prehistoric, historic, archaeological, scientific and educational features, relating to the cultural heritage of the nation, Commonwealth and city, and which have such significance as to warrant conservation, study and preservation, in order to protect and promote the general welfare and the public interest in the preservation and acquisition of knowledge and learning from the scientific study of such sites and the artifacts and antiquities found therein;
4. The inclusion of provisions for archaeological evaluation and resource management as a part of the land development review process of the city is necessary to afford adequate and reasonable opportunity for scientific study and to reduce the loss and destruction of sites and objects of antiquity which represent the cultural heritage of the nation, the Commonwealth and the city, to provide for the orderly and proper development of land and otherwise to contribute to the public welfare;
5. Scientific knowledge has been compiled by professional archaeologists in the city to provide a reasonable basis upon which to identify, assess and describe the existence, location and significance of archaeological sites, resources and objects of antiquity within the city, and to prescribe reasonable guidelines for the conservation, study and preservation of such sites, resources and objects;

6. The contemporary development of the city should include the preservation of the city's historic resources to help ensure a quality of life that is distinct to Alexandria; therefore, the cooperation of property owners, civic groups, realtors, developers, public officials and archaeologists in preserving the city's archaeological heritage is necessary to the continuation of Alexandria's special character;

7. Appropriate identification, assessment and description of archaeological sites, resources and objects of antiquity and the actions undertaken to conserve and preserve such resources should assure both accuracy and timeliness and take into consideration the schedule and needs of the property owner;

8. Based upon the foregoing findings and all other facts and circumstances of which the city council may properly take notice in its capacity as the legislative body of the City of Alexandria, adoption of this ordinance is necessary and desirable to protect the public health, safety and general welfare; now therefore,

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That Section 5-5-1 of The Code of the City of Alexandria, Virginia, 1981, as amended, be and the same hereby is amended by adding thereto a new subsection (7.1) to read as follows:

(7.1) **Ground disturbing activity.** Any movement of earth or substrate, manually or mechanically, including but not limited to any modification of existing grade by excavation or fill, grading, scraping, vegetation removal, landscaping, coring, well drilling, pile driving, undergrounding utility lines, trenching, bulldozing, and excavation for laying foundations, pilings or other purposes, for which any permit or approval is otherwise required under the provisions of this title.

Section 2. That Section 5-5-4 of The Code of the City of Alexandria, Virginia, 1981, as amended, be and the same hereby is amended and reordained to read as follows:

Sec. 5-5-4 Same—alteration of grade, etc.

Except as provided in section 5-5-6 of this code, it shall be unlawful for any person to alter the grade of any land in such a manner as to change existing contours in excess of 2 feet within 10 feet of adjacent land, or in excess of 3 feet elsewhere, construct any streets, alleys, sidewalks, curbs or gutters, build any retaining walls, construct any off-street parking facility, construct any drain or sewer or change or divert the flow of storm water or natural watercourses until a site plan has been submitted and approved in accordance with the provisions of this chapter; provided, that, notwithstanding the foregoing provisions of this section or the provisions of section 5-5-6(5), it shall be unlawful for any person to conduct or permit any ground disturbing activity on land subject to the provisions of subsection (I) of section 5-5-9, and for which an archaeological evaluation report and a resource management plan is required pursuant thereto, until a site plan has been submitted and approved in accordance with the provisions of this chapter.

Section 3. That Section 5-5-9 of The Code of the City of Alexandria, Virginia, 1981, as amended, be an the same hereby is amended by adding thereto a new subsection (I) to read as follows: *NOTE: this section and Section 4 were incorporated virtually verbatim at Section 11-411 of the Zoning Code in 1992, as presented at the beginning of this appendix.*

Section 5. That this ordinance shall become effective upon the date and at the time of its final passage.

JAMES P. MORAN, JR.
Mayor

Final Passage: November 18, 1989

*For more information on the implementation of the ordinance, contact Alexandria Archaeology at 105 S. Union Street, Alexandria, Virginia 22314; or visit Alexandria Archaeology’s Web site at [http://ci.alexandria.va.us/oha/archaeology/](http://ci.alexandria.va.us/oha/archaeology/).*
APPENDIX 4
CITY OF ST. AUGUSTINE, FLORIDA
ARCHAEOLOGICAL PRESERVATION ORDINANCE

EXCERPTS FROM CODE CHAPTER 6. ARCHAEOLOGICAL PRESERVATION

§6-2. Findings. It is the finding of the city commission that St. Augustine, as the oldest permanent European settlement within the United States of America, contains many areas that are historically and archaeologically important to the citizens of this city and the United States, from all periods of its history,... Further, in the preservation and understanding of the historical importance of St. Augustine, there is generally a direct relationship of archaeology to the economic well-being of the city and the present and future needs, public health, safety, morals and general welfare of its citizens and visitors. Further, there is an educational value and benefit to the city that would result from a viable program of archaeological activities and the preservation of related resources.

§6-3. Definitions. ...

Archaeological site means a property or location which has yielded or may yield information on the city's history or prehistory. Archaeological sites may be found within archaeological zones, historic sites, historic districts, private properties, city properties and other areas of the city. Archaeological sites are evidenced by the presence of artifacts and features below the ground surface indicating the past use of a location by people.

City archaeologist means the individual with general responsibility for assessing the archaeological resources of the city and directing, conducting or coordinating the monitoring, testing or salvage archaeology excavations of these resources. The individual may either be a city employee, employed by the city manager, or may be an individual or corporation employed by the city on a contract basis.

Cultural or historic resource means any prehistoric or historic district, site, building, object or other real or personal property of historical, architectural or archaeological value. The properties may include, but are not limited to, monuments, memorials, Indian habitations, ceremonial sites, abandoned settlements, sunken or abandoned ships, engineering works, treasure troves, artifacts or other objects with intrinsic historical or archaeological value, or any part thereof relating to the history, government and culture of the city, the state or the United States of America.

Disturbance means the cumulative digging, excavating, site preparation work or other such construction activities, regardless of the number of individual excavation or construction areas, related to an archaeological site. ...[Note: Major, minor and unrelated disturbance are defined based on depth and horizontal area covered.]

§6-4. Archaeological zones. In order to regulate and restrict subsurface disturbances as provided in this chapter, and to determine the extent and scope of work for archaeological investigations and excavations that may be required at a given archaeological site, the incorporated area of the city is hereby divided into zones as shown on the archaeological base map entitled "Archaeological Base Map For St. Augustine, Florida," and such map is hereby declared to be a part of this chapter. The zones, as delineated on the base map, are described as follows, with titles and abbreviations as indicated:

(1) Archaeological Zone Number I relates to areas containing the most significant archaeological sites in the city and includes the following subzones: [Note: five subzones I-A through I-E are identified.]

(2) Archaeological Zone Number II relates to areas containing important known archaeological sites and includes the following subzones: [Note: eight subzones II-A through II-H are identified.]

(3) Archaeological Zone Number III relates to areas having high potential for historic/prehistoric archaeological sites and contains the following subzones: [Note: four subzones III-A through III-D are identified.]

§6-6. Zone regulations.

(a) Within Archaeological Zones I, II or III, any proposed major or minor disturbance which requires a building permit, a city utility permit or a city right-of-way permit shall be subject to a review of the proposed disturbance, before each such disturbance takes place, by the city based on an application form (archaeological review application) to be prescribed by the city manager. No building, right-of-way or utility permit will be issued by the city until the archaeology application has been submitted and the applicable archaeology fees have been paid. The archaeological review shall
result in the determination of proposed archaeology efforts on the site and the application shall then be made a part of the city's prescribed permitting process. Only those disturbances that require a city building, utility or right-of-way permit will be governed by this chapter and, in addition, unrelated disturbances will not be applicable to this chapter. Furthermore, this chapter will apply only to the areas within the boundaries and confines of the proposed disturbances and any archaeology efforts shall be conducted so as not to cause any unnecessary damage to adjacent areas of the property. Any archaeology work proposed by the city concerning disturbances not relevant to this chapter may be conducted only based on written permission form the property owner to the city.

**(b) Disturbances applicable to this chapter shall be in compliance with the following regulations:**

1. **Within Archaeological Zone I, any major disturbance shall be subject to intensive salvage archaeology prior to the commencement of the disturbance**...by the city archaeologist. After the disturbance has commenced, it shall be subject to monitoring during construction...

2. **Within Archaeological Zone II, any major disturbance shall be subject to testing prior to the commencement of the disturbance. If it is determined that there will be a significant archaeological impact..., then salvage archaeology may also be conducted..., as recommended by the city archaeologist and approved by the city. In addition, ...it shall be subject to monitoring...**

3. **Within Archaeological Zone III, any major disturbance shall be subject to testing prior to the commencement of the disturbance. If it is determined that there will be a significant archaeological impact..., then salvage archaeology may also be conducted..., as recommended by the city archaeologist and approved by the city. In addition, ...it shall be subject only to monitoring...**

4. **Within Archaeological Zone I, any minor disturbance shall be subject to testing prior to the commencement of the disturbance. If it is determined that there will be significant archaeological impact..., then salvage archaeology may also be conducted..., as recommended by the city archaeologist and approved by the city. In addition, ...it shall be subject only to monitoring...**

5. **Within Archaeological Zones II and III, minor disturbances shall be subject only to testing prior to commencement of the disturbance and only to monitoring after commencement of the disturbance by the city archaeologist.**

6. **Within Archaeological Zone I, the city will impose a delay period for any proposed disturbance (or portion thereof) for a minimum of four (4) weeks for a major disturbance and a maximum of four (4) weeks for a minor disturbance, in order to conduct the appropriate archaeology efforts. If more time is required relative to a major disturbance, the city archaeologist may request from the city manager up to four (4) additional two-week periods...**

7. **Within Archaeological Zone II, the city will impose a delay period...for a minimum of four (4) weeks for a major disturbance and a maximum of three (3) weeks for a minor disturbance... If more time is required...two (2) additional two-week periods...**

8. **Within Archaeological Zone III, the city will impose a delay period...for a minimum of two (2) weeks for a major disturbance and maximum of two (2) weeks for a minor disturbance... If more time is required...two (2) additional one-week periods...**

9. **§6-7. Excavations on public property.** No individual shall be allowed to use a probe, metal detector or any other device to search or excavate for artifacts on public property, nor can any individual remove artifacts from public property without the written permission of the city. Furthermore, no disturbances or construction activities shall be authorized within properties belonging to the city, including public streets and rights-of-way, with a city right-of-way permit and without such archaeology efforts as may be addressed by this chapter. Any proposed archaeological work and delays relative to a disturbance or construction work shall be in accordance with provisions of this chapter relative to major and minor disturbances in Archaeological Zones I, II and III.

10. **§6-8. Fees.**

(a) **For the purposes of funding the city's archaeology program there shall be added to the fees collected for each applicable building, utility and right-of-way permit issued within Archaeological Zone I a nonrefundable minimum archaeology fee of one and one-half (1½) percent of the estimated project cost for which the permit is issued. In addition, there shall be added to the fees assessed for each applicable building, utility and right-of-way permit issued within Archaeological Zone II a nonrefundable minimum archaeology fee of one and one-fourth (1¼) percent of the estimated project cost for which the permit is issued. In addition, there shall be added to the fees assessed for each applicable building, utility and right-of-way permit issued within Archaeological Zone III a nonrefundable minimum archaeology fee of one (1) percent of the estimated project costs for which the permit is issued. ...[$50.00 minimum fee] If the percentage-based archaeological fees exceed fifteen thousand dollars ($15,000), the...**
applicant shall be required to pay fifteen thousand dollars ($15,000) at the time of application for the permit. In the event that the actual city costs expended in the archaeological efforts, as described in subsection (b) hereof, exceed fifteen thousand dollars ($15,000), the city shall submit a statement for such services to the applicant which shall include wages of city employees for time spent on site, reasonable fees for use of city equipment, and costs of outside labor and services at the actual rate billed to the city, and the additional amount expended by the city and billed shall be paid to the city prior to final issuance of a building permit for the subject property. (b) In the event that archaeology efforts, including research, testing, salvage archaeology, monitoring, analysis, curation, conservation, cataloging, recording, storage, reports and other related archaeology services are proposed to be performed by the city archaeologist, either prior to, during or after the conduct of any construction or disturbance, and the total estimated costs related thereto are in excess of the minimum archaeology fees prescribed herein, the city archaeologist shall request approval of the estimated additional costs for the archaeology efforts and, based on approval of the city manager, the city shall require the applicant to deposit with the city additional fees equal to the additional costs. Any of the additional fees not actually expended in the conduct of such research, testing, salvage archaeology, monitoring, analysis, curation, conservation, cataloging, recording, storage and reports, shall be returned to the applicant by the city at the time of final disposition of the work by the city archaeologist.

(a) All artifacts uncovered, recovered or discovered during the course of any testing, salvage archaeology or monitoring, as provided herein, on private property shall belong to the owner of the property upon which such artifacts are found. Likewise, artifacts uncovered, recovered or discovered during testing, salvage archaeology or monitoring on property belonging to the city shall belong to the city. However, the city shall retain possession of artifacts from private property for a period of up to two (2) years to allow for their proper analysis, cataloging, recording, and conservation, with written permission of the owner. Furthermore, the city shall attempt to obtain written permission from property owners to secure permanent ownership of the artifacts; otherwise, all retained artifacts are then to be returned to the property owner as soon as such analysis, cataloging, recording, and conservation is completed. Individuals and property owners are strongly urged to donate archaeological artifacts to the city for long-term storage, care, protection, and preservation.

(b) The removal of human skeletal remains recovered in archaeological contexts in all instances shall be coordinated with the local medical examiner, city, the city archaeologist and the state archaeologist. Such remains shall be dealt with in accordance with provisions of F.S. ch. 872 and they are not subject to private ownership. Such material shall be sensitively treated and, following their analysis by a physical anthropologist, shall be curated at a designated repository or appropriately reburied. If at all possible, human burials should not be removed and they should be left undisturbed in their original position.

§6-10. Curation of artifacts. Artifacts from monitoring, salvage archaeology and testing efforts will be washed, catalogued, analyzed, recorded and conserved by the city archaeologist in compliance with the U.S. Department of the Interior curation standards, with written permission of the owner.

§6-11. City archaeologist
(a) The city manager shall appoint a city archaeologist who shall meet the city's requirements and the standards for membership by the Society of Professional Archaeologists and shall have a demonstrated background in historic and prehistoric archaeology.

§6-13. Commencement of delay period and archaeological work.
(a) The delay period for any proposed project requiring compliance with this chapter shall be considered to begin:
(1) Forty-eight (48) hours after the payment of archaeology fees and the issuance of the building, utility or right-of-way permit; or
(2) After the resolution of any appeal; whichever is greater.

For more information contact the City of St. Augustine, Department of Planning, 75 King Street, St. Augustine, Florida 32084.
APPENDIX 5
CITY OF COTTAGE GROVE, MINNESOTA
STAND-ALONE HISTORIC PRESERVATION ORDINANCE

ORDINANCE No. 529

AN ORDINANCE FOR THE CITY OF COTTAGE GROVE, MINNESOTA
AMENDING CHAPTER 13A OF THE CITY CODE
REGARDING ESTABLISHING AN ADVISORY
COMMITTEE ON HISTORIC PRESERVATION
Adopted February 21, 1990

The City Council of the City of Cottage Grove, Washington County, Minnesota, does ordain as follows:

SECTION 1. AMENDMENT. "The Code of the city of Cottage Grove, Minnesota" shall be amended by amending Chapter 13A to read as follows:

Sec. 13A-1. Declaration of public policy and purpose.
The city council hereby declares as a matter of public policy that the protection, preservation, perpetuation and use of places, areas, buildings, structures and other objects having a special historical, community or aesthetic interest or value is a public necessity and is required in the interest of the people. The purpose of this chapter is to:
(a) Safeguard the cultural resources of the city by preserving sites, structures, districts and landmarks which reflect elements of the city's cultural, social, economic, political or architectural history;
(b) Protect and enhance the city's attractions to residents and visitors;
(c) Foster civic pride in the beauty and notable achievements of the past;
(d) Enhance the visual and aesthetic character, diversity and interest of the city; and
(e) Promote the use and preservation of historic sites and landmarks for the education and general welfare of the people of the city. (Ord. No. 355 §1.)

Sec. 13A-2. Definitions.
For the purpose of this chapter, the following words and phrases shall have the meanings respectively ascribed to them by this section:
Alteration. Changing the existing exterior of a property. Major alterations include construction work which is normally done with the aid of plans or specifications that substantially changes the physical appearance or use of a property. Minor alterations include work which is normally done without the aid of plans, specifications or skilled labor and which do not radically change the external appearance of a property.
Cultural resources. Any work of man or nature that is primarily of interest for its historical, archeological, natural, scientific or aesthetic value including, but not limited to, old houses and other structures such as barns, schools, kilns, archaeological sites, American Indian burial grounds and earthworks, buildings identified as the work of an architect, developer or master builder whose work has influenced the city and structures noteworthy because of their design, detail, materials or craftsmanship.
Historic District. A discrete, geographically definable area containing buildings, structures, archaeological sites, lands and areas linked historically through location, design, workmanship, setting or association with people or events that have made an important contribution to our heritage.
Historic Site. Any area, place, structure, land or other object which has been duly designated as such by the city council; this includes prehistoric aboriginal sites.
Significance. The sense of time and place in history that is conveyed by cultural resources, their educational and scientific value and their capability for enhancing the visual and aesthetic character, diversity and interest of the city. (Ord. No. 355, §1; Ord. No. 402 §1.)

Sec. 13A-3. Advisory Committee on Historic Preservation Established.
(a) The city council shall establish an advisory committee on historic preservation, which shall consist of five voting members, adult residents of the City of Cottage Grove, to be appointed by the city council. This committee shall be the duly designated heritage preservation commission of the city of Cottage Grove, pursuant to Minnesota Statutes 471.193.

(b) Members of the advisory committee on historic preservation shall be persons with demonstrated interest and/or expertise in historic preservation. If available, at least two members of the committee shall be preservation-related professionals who meet the professional qualification standards established by the United States Secretary of the Interior and the state historic preservation office. The city historic preservation officer, along with representatives of the planning and zoning commission and the parks, recreation and natural resources commissions, shall be ex-officio non-voting members. The Washington County Historical Society shall also be invited to appoint a representative to the committee who shall serve in an ex-officio non-voting capacity.

(c) The city council shall initially designate three appointees to serve a term of one year, and two appointees to serve a term of two years. All subsequent appointments shall be for a term of two years. Members shall continue to hold office until their successors have been appointed.

(d) Members of the advisory committee on historic preservation shall serve without compensation but may be reimbursed for expenses incurred in the performance of their duties.

(e) The city council shall provide the advisory committee with staff meeting the qualifications of the Secretary of the Interior to carry on the staff functions of the committee.

Sec. 13A-4. Designation of historic sites and landmarks -- Generally; hearing; eligibility criteria.
The city council, upon the request of the advisory committee on historic preservation, may by resolution designate an historic site, landmark, or historic district. Prior to such designation the city council shall hold a public hearing, notice of which shall have been published in a newspaper of general circulation at least ten days prior to the date of the hearing; notice of the hearing shall also be mailed to all owners of property which is proposed to be designated as a historic site, landmark or historic district and to all property owners within one hundred meters of the boundary of the area to be designated. Every nomination shall be forwarded to the Minnesota Historical Society for review and comment within sixty days of the advisory committee on historic preservation's request.

In considering the designation of any area, site, place, district, building or structure in the city as a historic site or landmark, the advisory committee on historic preservation shall consider the following factors with respect to eligibility:

(a) Its character, interest, or value as part of the history or cultural heritage of the city, the state or the United States;

(b) Its association with persons or events that have made a significant contribution to the cultural heritage of the city;

(c) Its embodiment of distinguishing characteristics of architectural type of style, or elements of design, detail materials or craftsmanship; and

(d) Its unique location or singular physical appearance representing an established and familiar visual feature of a neighborhood or community of the city.

The advisory committee on historic preservation shall conduct a continuing survey of cultural resources in the city which the committee has reason to believe are or will be eligible for designation as historic sites or landmarks. The committee shall also prepare a comprehensive cultural resource management plan for the city.

Sec. 13A-6. Register of historic sites and landmarks.
The city shall maintain a register of historic sites and landmarks. (Ord. No. 355, §1.)


(a) The advisory committee on historic preservation shall review and make recommendations to the council concerning proposed alterations to a landmark or historic site.

(b) Every application for a building or land use permit which may result in the alteration of a designated historic site or landmark in the city shall be reviewed by the advisory committee on historic preservation; thereafter, the committee shall make a recommendation and may recommend conditions regarding approval to the city council concerning the proposed permit. No permit will be issued by the city building official unless a certificate of appropriateness has been granted by the city council. This certificate may contain conditions of approval that the council deems reasonable and appropriate.
(c) Every application for a preliminary or final plat, variance or conditional use permit in relation to a designated historic site or landmark in the city shall be reviewed by the advisory committee on historic preservation and their recommendation shall be forwarded to the planning commission and to the city council to be considered by the planning commission in making their recommendation to the council.

(d) The advisory committee on historic preservation, upon receipt of the permit application and plans, shall determine if the work to be performed adversely affects the designated historic site or landmark. In determining whether or not there is an adverse effect to the historic site or landmark, the commission shall consider the following factors:

1. Whether the work will significantly alter the appearance of the building or structure so as to remove the features which distinguish the historic site or landmark as a significant cultural resource.
2. Whether the use of the property will destroy, disturb or endanger a known or suspected archaeological feature.

(e) The advisory committee on historic preservation shall review and make recommendations to the council concerning the issuance of city permits to do any of the following in a historic district in the city:

1. New construction.
2. Move a building.
3. Excavation.
4. Demolition.

(f) The comprehensive cultural resource management plan adopted by the city shall be the authoritative guide to reviewing permits in relation to designated historic sites, landmarks and historic districts. The Secretary of the Interior's standards and guidelines for archaeology and historic preservation shall be the required basis for permit review decisions.

(g) Any party aggrieved by a decision of the advisory committee on historic preservation shall, within ten days of the committee's action approving or denying a certificate of appropriateness, have a right to appeal such decision to the city council. The advisory committee on historic preservation in denying a certificate of appropriateness, shall advise the applicant of his/her right to appeal to the city council. The aggrieved party shall file with the city administrator a written notice requesting council review of the action taken by the advisory committee on historic preservation. Upon receipt of the notice, the city administrator shall transmit one copy to the advisory committee on historic preservation.

Sec. 13A-8. Violations and penalty.
It shall be a misdemeanor to alter, disturb, deface or materially change the appearance or use of a designated historic site, structure or landmark without a permit. (Ord. No. 355 §1; Ord. No. 355, §2.)

The office of the city administrator is designated as the repository for all studies, surveys, reports, programs, and designations of historic sites and landmarks. (Ord. No. 355 §1.)

Sec. 13A-10. Designation of historic districts on zoning map.
The city shall place all duly designated historic districts on the official city zoning map. (Ord. No. 402, §4.)

SECTION 2. EFFECTIVE DATE. This ordinance shall be in full force and effect from and after its passage and publication according to law.
APPENDIX 6
ARCHAEOLOGICAL REVIEW PROCESS
ANN ARBOR, MICHIGAN

The City of Ann Arbor, Michigan has incorporated archaeological protection as part of its development review process since 1983. Rather than employ archaeologists on staff, the Ann Arbor Planning Department works with professional staff at the University of Michigan's Museum of Anthropology, located in Ann Arbor. The review process is outlined in Attachment B of Chapter 57, Land Development Regulations of the Ann Arbor City Code, as follows:

1.1 When a development petition is submitted to the City Planning Department for review, staff will determine if the site meets one of the following criteria:
   - Location of the development site within a "high site potential" area (map available in the Planning Department).
   - Existence of a known archaeological site within a half-mile of the development site.
   - The development is on a site of five acres or greater.

1.2 If Planning Department staff determines that the petition meets one of the criteria, a copy of the proposal will be sent to the University of Michigan Museum of Anthropology for review.

1.3 Museum of Anthropology staff will complete a file assessment to determine if there is a need for a field survey to document any archaeological finds and notify the Planning Department of its findings.

1.4 If a field survey is necessary, the Planning Department will notify the petitioner and supply a consultant listing and the specifications for a field survey.

1.5 The petitioner is responsible for making arrangements for the field survey to be prepared. The petitioner must submit the report to Planning Department staff before final approval of the development petition will be scheduled. In the event that a field survey cannot be done due to frozen ground conditions, approval of a development petition will be made conditional upon completion of such a report.

1.6 If archaeological finds of significant impact are determined to exist on the site, the Planning Department will set up a meeting with Museum of Anthropology staff to review the report and determine whether modifications to the development plans are necessary.

In their 1998 article in CRM (see Bibliography), John M. O'Shea and William Parkinson accredit the successes of this review process to its simplicity and predictability, clear statements of participants' responsibilities, existence of the Museum and its staff, and to low turn-over in process participants and their commitment to making the process effective.

[For more information, contact the Ann Arbor Planning Department, Municipal Building (City Hall), 6th Floor, 100 N. Fifth Avenue, Ann Arbor, Michigan 48017.]
APPENDIX 7
PARTICIPANTS IN THE WORKING MEETING AND IN THE FORUM ON
PROTECTING ARCHAEOLOGICAL SITES ON PRIVATE LANDS

April 9-10 and 12, 1996
Society for American Archaeology Annual Meeting
New Orleans, Louisiana

Kathleen Byrd, Former Louisiana State Archaeologist
Donald Craib, Manager, Government Affairs and Counsel, Society for American Archaeology
Diana Christensen, Archaeologist, Arizona Strip District, US Bureau of Land Management
Ed Curtin, Castleton, New York
Hester Davis, Arkansas Archaeological Survey and Society for Historical Archaeology
Mary Dieter, Yardley, Pennsylvania
Paul Edmondson, Deputy General Counsel, National Trust for Historic Preservation
Bill Green, Iowa State Archaeologist
Gwynn Henderson, Archaeologist, Kentucky Archaeological Site Registry
Christopher Judge, Archaeologist, Heritage Trust Program, South Carolina Department of Natural Resources
Teresita Majewski, Archaeologist, Statistical Research, Inc., Tucson, Arizona
Linda Mayo, Cultural Resources Manager, Pima County, Arizona
Sydne Marshall, Foster-Wheeler Environmental Corp., Lyndhurst, New Jersey
Pat Mercado-Allinger, Texas State Archaeologist
Mark Michel, President, The Archaeological Conservancy
Jim Miller, Florida State Archaeologist
Jane A. Morrison, City of Vancouver, Washington
Daniel Pagano, Archaeologist, New York City Landmarks Preservation Commission
Scott Parker, Montpelier Archaeologist, National Trust for Historic Preservation
Sharron Santure, Archaeologist, Illinois State Office, Natural Resources Conservation Service
Joe Saunders, Regional Archaeologist, Louisiana Division of Archaeology
Cherie Scheick, Rio Grande Foundation, Santa Fe, New Mexico
Faline Schneiderman-Fox, New Fairfield, Connecticut
Brent Weisman, Faculty, University of South Florida
Robert Vogel, Historic Preservation Officer, City of Cottage Grove, Minnesota
Strategies for Protecting Archeological Sites on Private Lands

"The best time to buy and protect a site is before it’s threatened." -- Mark Michel, President, The Archaeological Conservancy

"The more people who know about sites, the more who will care about them and watch out for them." -- Jim Miller, Florida State Archaeologist

"Legal procedures for the protection of archeological and historical properties do not develop without the establishment of public policies that are backed by popular support." -- Linda L. Mayro, Cultural Resources Manager, Pima County, Arizona

View of the 11,000-year-old Thunderbird Site in Warren County, Virginia. The reproduction of one of the earliest human structures in the Western Hemisphere was based on archeological evidence from the site. The Archeological Society of Virginia and the Thunderbird Research Corporation are purchasing undeveloped house lots to protect the site from destruction. (Photo courtesy of Heritage Resources Branch, Fairfax County, Virginia, Office of Comprehensive Planning)

Strategies serves as a guide to the wide variety of tools available for protecting archeological sites on private lands. It contains information on strategies that are currently being used throughout the country, contact information, and other sources of useful information.

Key strategies include:

- **Land Ownership** -- The strongest and surest way to protect an archeological site is through outright ownership.
- **Financial Strategies** -- A variety of methods and sources of funding exist for site protection.
- **Development Regulation** -- Archeological protection can be found in those processes that govern how land is used.
- **Laws** -- Protection is achieved through controlling how or by whom an archeological site is excavated.
- **Voluntary Strategies** -- Legal means sometimes are not enough. Voluntary strategies alone or in combination with regulatory approaches can be very helpful.
- **Site Management** -- Responsible site protection can best be achieved through a long-term management plan.
CASE STUDY 1
THE ARCHAEOLOGICAL CONSERVANCY PROTECTS SITES BY BUYING THEM

This case study is an example of the following strategies:

- Fee Simple Ownership
- Private Ownership and Management
- Donation
- Fundraising

The Archaeological Conservancy, a non-profit membership organization headquartered in Albuquerque, New Mexico, puts its money where its mouth is, so to speak, and spends its hard-earned dollars to buy sites threatened with damage and destruction. Recent fund-raising literature explained the Conservancy's approach: "Our method is simple. We don't picket, protest, or sue to save sites. We just buy them." Funding to buy sites comes from membership dues; from individual, corporation, and foundation contributions; and from gifts and bequests of money, land, and securities. Since The Archaeological Conservancy was established in 1980, it has established over 180 archeological preserves in more than 33 states, using the same strategy used by The Nature Conservancy and numerous state and local land trusts across the country.

Sites acquired by The Archaeological Conservancy are managed as permanent archeological preserves. The sites are stabilized and fenced, if needed, and a long-term management plan is prepared for each preserve. A volunteer advisory committee, whose members include archeologists, local officials, and interested citizens, helps the Conservancy manage each preserve.

According to Mark Michel, President of the Archaeological Conservancy, "If you want to protect or control some land, then the most effective way to do that is to own it. If you have fee simple ownership, then you hold the cards. Ownership is power."

For more information, contact The Archaeological Conservancy at 5301 Central Avenue NE, Suite 1218, Albuquerque, New Mexico 87108-1517; e-mail: archcons@nm.net; Web www.americanarchaeology.com
CASE STUDY 2
BURIED CITY SITE, OCHILTREE COUNTY, TEXAS

This case study is an example of the following strategies:

- Easement
- Landowner as Steward

The Buried City site consists of a series of low mounds containing the remains of semi-subterranean stone structures, possibly puebloan influenced, dating to about A.D. 1200 to 1400. The mound/structures are situated along a quarter- to half-mile section of floodplain, with a central concentration of 7 mounds within an area of about 40 acres. The Buried City site's significance derives, in part, from its recognition as the location of the earliest scientific excavations in Texas by Professor R. L. Eyerly of the Canadian Academy, Canadian, Texas, in 1907.

In 1984, the ranch land containing the Buried City site was offered for sale. It was believed that the land was destined to be subdivided and developed. A local rancher and president of an oil and gas exploration company bought the land. Because the site was well known locally, it had suffered some vandalism, and there was some concern about its fate.

The Office of the State Archaeologist approached the new landowner about either donating or granting an archaeological easement to the Texas Historical Commission to ensure that the site would be protected. Incentives offered by granting such an easement included tax benefits as well as positive publicity. At the same time, the Texas Historical Commission asked to be allowed to nominate the site to the National Register of Historic Places.

The landowner agreed to allow the Commission to nominate the site to the National Register and to grant the agency an archaeological easement on the site. This was the first site in Texas to have the 1983 Texas Conservation Easement Act applied. The easement covers only those areas of the site that have demonstrated archaeological deposits, but it was also worded to automatically extend protection to include additional deposits as they are identified. The easement allows the landowner to continue using the land as he wishes as long as the archaeological deposits are not disturbed or impacted.

The archaeological easement for the Buried City site has been an effective preservation tool. In 1986, the landowner granted a second easement which protects two additional sites on the property. In 1987, the landowner not only allowed the Texas Archeological Society to hold its annual field school at the site, but also financed a portion of the excavations and report writing. In recognition of his role in the preservation of the Buried City site, the landowner was presented with the Texas Historical Commission's Texas Award for Historic Preservation.

For more information, contact the Office of the State Archaeologist, Texas Historical Commission, P.O. Box 12276, Austin, Texas 78711-2276; e-mail: osa@thc.state.tx.us.
CASE STUDY 3
VERMONT ARCHEOLOGICAL PRESERVATION EASEMENT

This case study is an example of the following strategy:

- **Easement**

Mid-18th-century French archeological sites are quite rare in Vermont. Several pre-Revolutionary War French cellar holes in Addison County, Vermont were threatened by lake erosion, looting, and vandalism. Since the location of one of these sites was previously unknown, it was thought to be undisturbed, but was facing impending development. The 30-acre tract of land containing this site was being marketed by the landowner for construction of a lake-front home. Experiencing financial difficulties, the landowner wanted to sell, not only this 30-acre parcel, but also the development rights on cropland that was leased to a neighboring farmer. For a variety of reasons, funding to acquire the development rights was unlikely to be available unless other conservation enhancements were part of the deal. Placing the archeological sites under easement was enough to leverage the funding needed to conserve the nearby farmland. An archeological preservation easement was drawn up to protect the pre-Revolutionary War site on the 30-acre parcel, with the Vermont Division for Historic Preservation and the Vermont Housing and Conservation Board as the easement holders (see Appendix 1 for the text of the easement). Despite the landowner’s fears that presence of the easement would cost him the sale, this lot sold two days after closing on the easement.

For more information about this and other similar easements, please contact the Vermont Division for Historic Preservation, 135 State Street, Drawer 33, Montpelier, Vermont 05633-1201, or visit the Division’s Web site at [www.uvm.edu/~vhnet/hpres/vermont/vermontpreservation.html](http://www.uvm.edu/~vhnet/hpres/vermont/vermontpreservation.html). See also Barrett and Nagel 1996, and Diehl and Barrett 1988 in the Bibliography.
CASE STUDY 4
LAND TRUSTS - A POWERFUL ALLY

This case study is an example of the following strategies:

- Private Ownership and Management
- Nonprofit Acquisition & Conveyance to Public Agency
- Donation
- Fundraising
- Local Volunteer Stewardship

With their expertise in protecting lands, land trusts have the potential to play an extremely significant role in protecting archeological resources.

Land trusts are private, non-profit organizations established to protect lands and the sensitive resources they contain. The majority of land trusts focus their attention on protecting forests, open spaces, wetlands, watersheds, shorelines, wildlife habitat, and other kinds of natural resources. Many also protect lands with historic and cultural values, such as farmland, rural landscapes, historic estates, and scenic areas. Few land trusts, however, actively work to protect archeological resources as their primary goal, although most are undoubtedly protecting sites without even knowing it.

Local, regional, statewide, and national land trusts use a variety of methods to protect lands, such as fee simple ownership, conservation easements, and estate planning, as they work closely with landowners to help them protect valued family lands. The majority of land trusts are small, grass-roots, volunteer organizations, while a number are larger, with full- or part-time staff. Land trusts are funded primarily by donations and membership dues, but fund-raising campaigns may be used to finance specific land purchases. Although land trusts do buy land, more typically they acquire lands by gift, charitable donation, or bequest. Some land trusts acquire land in order to transfer it to a public agency or non-profit group.

In 1998, a National Land Trust Census was conducted by the Land Trust Alliance, the nationwide membership organization for land trusts established in 1982. This survey identified over 1200 land trusts across the country, including Puerto Rico and the Virgin Islands, that are protecting about 4.7 million acres. More than 7000 conservation easements protect 1.4 million of these acres. National land conservation organizations, such as the Nature Conservancy, are protecting 7 million additional acres.

Another national land conservation organization is the Trust for Public Land, established in 1972 to help protect a diverse range of lands possessing conservation, recreation, historic, cultural, community character, and quality of life values. The Trust also helps communities develop creative financial and planning strategies for carrying out land protection activities. The Trust for Public Land doesn't hold land permanently, but acquires land in order to turn it over to public agencies for long-term conservation and protection. Over one million acres in 45 states have been protected with the assistance of the Trust for Public Land.

For more information about land trusts, contact the Land Trust Alliance, 1319 F Street, NW, Suite 501, Washington, D.C. 20004; or visit the Alliance’s Web site at www.lta.org. For more information about the Trust for Public Land, contact the Trust at 116 New Montgomery Street, 4th Floor, San Francisco, California 94105; or visit the Trust’s Web site at www.tpl.org.
CASE STUDY 5
MILLINGTON SITE, PRESIDIO COUNTY, TEXAS

This case study is an example of the following strategies:

- Private Ownership and Management
- Nonprofit Acquisition & Conveyance to Public Agency
- Public-Private Endeavor
- Local Volunteer Stewardship

The Millington Site is the location of the Spanish Colonial Mission San Cristobal just north of the Rio Grande/Texas-Mexico international boundary. The site contains the remains of an extensive agricultural pithouse village about three acres in size and dating about 1200 to 1400 AD. The prehistoric remains at the site include semi-subterranean pithouse structures, burials, hearths, sotol-baking pits, and many other cultural features. Cultural deposits extend more than 1½ meters deep. The site was investigated in the 1930s by distinguished archaeologist Dr. J. Charles Kelley, who excavated 29 pithouses and recovered large amounts of archaeological data. Since that time, no additional investigations have been conducted at the site, which is listed on the National Register of Historic Places.

The site remained largely undisturbed until 1982 when a developer acquired a sizable amount of property that included part of the site. The developer began to subdivide the land into smaller tracts for residential and commercial development, and road construction had damaged a portion of the site. As a result, the State Archaeologist initiated discussions with the developer regarding the preservation of the site. The developer initially expressed little concern that a significant cultural resource was being threatened. Further discussions with the developer centered around the idea that donation of the site to the state could provide certain tax benefits. Another option discussed was State Archaeological Landmark status, which would provide stringent protection for the site while possession of the site would remain with the landowner. The developer was not persuaded and proceeded with selling the subdivided tracts of land.

The Texas Historical Commission then turned to the Texas Historical Foundation, a private foundation dedicated to the preservation of the cultural heritage of Texas, for help in preserving the Millington Site. As a result of an active public appeal, the Foundation received a donation of $15,000 from an Austin philanthropist to purchase that portion of the site being threatened by development. The site was subsequently donated to the THC and designated an official State Archaeological Landmark in 1987. As such, the site is protected under the provisions of the Antiquities Code of Texas. Soon after the site was purchased, the Foundation also granted funds for fencing the site area and the installation of signs in English and Spanish identifying the site as a protected State Archaeological Landmark. In 1987, a local member of the Texas Archaeological Stewardship Network persuaded the adjacent landowners to donate to the Texas Historical Commission the small portions of the site that extended onto their properties.

For more information, contact the Office of the State Archaeologist, Texas Historical Commission, P.O. Box 12276, Austin, Texas 78711-2276; e-mail: osa@thc.state.tx.us.
CASE STUDY 6
AD AIR-STEADMAN SITE, FISHER COUNTY, TEXAS

This case study is an example of the following strategy:

- Nonprofit Acquisition & Conveyance to Public Agency

The Adair-Steadman Site is a Folsom camp site, approximately 25 acres in size, that was occupied about 10,000 to 11,000 years ago. This is one of the few well-preserved and professionally excavated Folsom-age camp sites in the country. The site has yielded more than 50,000 artifacts related to the Folsom occupation of the site.

In the early 1960s, the Adair-Steadman Site was exposed when the surface soils of the area, already cleared for farming, began to be eroded by the wind. The importance of the site was recognized by a local resident who brought it to the attention of the Texas Historical Commission's Office of the State Archaeologist. The State Archaeologist approached the landowner and was successful in convincing the landowner of the importance of the site. The landowner was most cooperative in permitting several seasons of investigation of the site by the Texas Historical Commission and in assuring its permanent preservation.

The State Archaeologist approached the Texas Conservation Foundation about purchasing the site so that it could be permanently preserved. The Foundation agreed to attempt to purchase the land and initiated discussions with the landowner, who agreed to sell the land on which the site was located. After purchasing the site, the Foundation donated it to the Texas Historical Commission. The Commission subsequently nominated the site to the National Register of Historic Places.

For more information, contact the Office of the State Archaeologist, Texas Historical Commission, P.O. Box 12276, Austin, Texas 78711-2276; e-mail: osa@thc.state.tx.us.
CASE STUDY 7
SOUTH CAROLINA HERITAGE TRUST ARCHEOLOGICAL SITE ACQUISITION PROGRAM

This case study is an example of the following strategy:

- Government Ownership
- Donation
- General Fund Appropriation
- Other Funding Sources

The South Carolina Heritage Trust, a program of the South Carolina Department of Natural Resources, was established in 1976 to protect and preserve representative examples of the state's most important natural and cultural heritage that is increasingly threatened by growth and development. The Heritage Trust acquires these resources in fee simple or lesser interest when they cannot be protected through other means, and permanently holds them in trust for present and future South Carolinians to study and enjoy.

Heritage Trust staff work with other agencies and organizations to identify rare plants, endangered wildlife, important archeological sites, and other significant examples of the state's natural and cultural heritage. The Heritage Trust Advisory Board, whose 15 members possess relevant expertise and represent broad interests, oversees the program and approves protection activities and land acquisition expenditures.

Program Funding

The program's funding comes from state appropriations, the Endangered Wildlife Fund supported by a check-off on the state income tax form, the Endangered Species auto license tag, and part of a documentary stamp tax fee required on property transactions. Income from these sources goes into the Heritage Land Trust Fund for acquiring lands that contain important natural and cultural resources. The Heritage Trust also accepts donated property or assets. If donated lands contain significant resources, these are turned into heritage preserves; if they don't, the lands may be sold to obtain funds to acquire other significant lands.

Accomplishments

By late 1998, over 74,000 acres had been protected in 54 heritage preserves, 12 of which were established to protect critically significant cultural resources such as the Buzzard's Island Shell Ring Heritage Preserve and the Pacolet River Heritage Preserve. With some restrictions, preserves are open to the public for visiting, education, and recreation; hunting, fishing, and camping are allowed only in specially marked areas.

Top 100 Sites

By the late 1980s, the Heritage Trust Program and the Advisory Board realized that, rather than reacting to crises or opportunities as they arose, they needed a proactive and systematic approach to archeological site identification, evaluation, and acquisition. In 1990, the Advisory Board approved funds, matched by a grant from the South Carolina Department of Archives and History, to conduct a statewide assessment to identify "critically significant" archeological sites and to develop a priority list of ranked sites for the Board's consideration in making decisions about site acquisition.

The statewide assessment project had two components: (1) identification of the top 100 "critically significant" sites that represented the cultural breadth in the state; and (2) development of a site ranking and evaluation system.

Site Identification. In order to identify the top 100 sites, project staff reviewed existing inventories, selected likely sites as candidates for the list, and visited a number of these sites to verify information about condition, integrity, components, and boundaries. They asked the state's professional archeological community for site suggestions. Sixteen archeologists with wide-ranging expertise in South Carolina archeology were invited to participate in a workshop.
The workshop's goals were to review and comment on a draft ranking system and to refine the initial list of sites that had been compiled. The workshop resulted in a consensus among participants on the refined list of sites and the ranking system, and in a level of confidence in the system that it was as objective as possible.

Site Ranking System. Following a review of ranking systems used elsewhere, project staff developed a two-tiered system: first, evaluating sites against criteria of "critical significance," with the results determining whether or not a site was placed on the list of 100; and secondly, evaluating and ranking the sites using a point system, which helped prioritize the list of sites by placing sites in relation to each other.

To be listed, a "critically significant" site had to meet some or all of the following criteria:

- The site has archeological integrity;
- The site has already produced, or has potential to produce significant scientific data for understanding past cultures;
- The site is a rare site type, best preserved of a particular site type, is only surviving example, or may contain rare or unique deposits or features;
- The site is currently being threatened by development, vandalism, or looting;
- The site reflects special interests of the public or is a site of major ethnic or historic importance.

The point categories used in the ranking system are listed below. Each has several subcategories used to refine the scoring. The higher the number, the higher the rank.

- Rarity, 0-75 points
- Threat, 1-75 points
- Integrity, 1-100 points
- Research Value, 1-100 points
- Educational Value, 1-50 points

The project was completed in a little over one year, and resulted in a prioritized list of 100 "critically significant" archeological sites considered by the professional and avocational archeological community to be worthy of protection. This list is being used by the Heritage Trust Advisory Program and Board to guide decision-making about acquisition of archeological properties.

Lessons Learned

Several lessons were learned from the project:

1. The weakest aspect of the process was the ranking of most sites by only one archeologist. Project staff recommended that greater reliability and confidence in the ranking results could be achieved in future if several archeologists ranked each site and reached consensus on their different scores.
2. The list of 100 "critically significant" archeological sites is not a final list; it reflects the current state of knowledge and, as new knowledge is gained and as sites are acquired and protected, the list will need to be re-evaluated.
3. An accurate ranking of a site is based on the amount of information available on the site's integrity, components, etc. The more complete and thorough this information, the more confidence one can have in the site's ranking.
4. The ranking system is not statistically based, nor is it statistically rigorous or precise. The system is, however, based on uniform criteria that place sites in relationship to each other. All sites ranked on the list of 100, by virtue of having been evaluated and placed on the list, are the most "critically significant" out of all known sites in the state.
5. The list of 100 sites is a management tool for the Heritage Trust; it was created only for that purpose, and might not serve other purposes well or at all. It is kept confidential to preclude site damage, property speculation, and artificial increases in property values.

6. The Heritage Trust program and Board recognizes that archeological sites, once acquired, require ongoing, active management, maintenance, and monitoring. These activities, therefore, should be supported by a management budget in addition to acquisition funds, and should be guided by a management plan.

7. Acquiring an archeological site to protect it for future study puts the site in a "bank" for future "withdrawal." Since sites are protected for the long term, the Heritage Trust does not permit complete excavation of a site on a reserve unless it is threatened, although carefully designed sampling of a small portion of a site might be allowed. However, to realize the site's full value for research and knowledge, at some point in the future the site would need to be excavated, studied, and interpreted in accordance with a carefully designed research plan.

For more information about this program, see Judge and Smith 1991, and Smith and Judge 1992 in the Bibliography; or contact the Heritage Trust Archaeologist, South Carolina Heritage Trust Program, S.C. Department of Natural Resources, P.O. Box 167, Columbia, South Carolina 29202; or visit the Program's Web site at www.dnr.state.sc.us/wild/heritage/preserve.html.
CASE STUDY 8
BUZZARD'S ISLAND SHELL RING HERITAGE PRESERVE SOUTH CAROLINA

This case study is an example of the following strategies:

- Government Ownership
- Stewardship

Buzzard's Island Shell Ring is a Late Archaic/Early Woodland site (Stallings Island Phase, Thoms Creek Phase, and Awendaw Phase), dating approximately 5,000 to 3,000 years old, and located on the coast northeast of Charleston, South Carolina. Only about 20 shell ring sites are known from the coast of South Carolina. These features range from 130 to 250 feet in diameter and from two to 10 feet in height. Buzzard's Island ranked 40th on the list of the state's most significant cultural sites. The limited number of this site type, and the fact that they occur on the coast, the most rapidly developing region of the state, makes it extremely important to act quickly to preserve a number of these sites.

The South Carolina coast has been developing at an accelerated pace during the last several decades, and the area in close proximity to Charleston is no exception. Shell ring sites are highly visible and susceptible to vandalism. Shell sites provide for enhanced preservation of organic artifacts, in particular bone and antler objects that are highly sought after by collectors. These sites are being systematically looted. Thus it is imperative that a representative sample of this site type be preserved for the future.

The mission of the South Carolina Heritage Trust Program is threefold. The program is charged with protecting rare and endangered plant communities, rare or endangered species animal habitat and archeological sites. The Buzzard's Island site acquisition was a unique opportunity to fulfill all three areas of the program's mission on a small, three-quarter-acre tract. Besides the archeological site, the acquisition provided for the protection of roosting habitat for the wood stork, an endangered species, as well as habitat for one of the state's rarest plants, the tiny leafed buckthorn, which thrives in the alkaline rich soils provided by the shell ring.

A difficulty not yet resolved, however, is stewardship and site protection. The site can only be reached by boat, or by trespassing on private land at low tide. Establishing a stewardship committee has been hampered by this difficult access. In the meantime, State game wardens assigned to this district are keeping an eye on the site.

For more information about the archeological site protection activities of the South Carolina Heritage Trust Program, contact the Heritage Trust Archaeologist, S.C. Department of Natural Resources, P.O. Box 167, Columbia, SC 29202; or visit the Program's Web site at www.dnr.state.sc.us/wild/heritage/preserve.html.
CASE STUDY 9
PACOLET RIVER HERITAGE PRESERVE SOUTH CAROLINA

This case study is an example of the following strategies:

- Government Ownership
- Public-Private Partnership
- Local Grass-Roots Stewardship

The Pacolet River Heritage Preserve is located along the Pacolet River in Spartanburg County, South Carolina. This 257-acre preserve protects two of the 16 Native American soapstone quarries in the vicinity that are listed on the National Register of Historic Places. These quarry sites were used by Native Americans some 3000 to 5000 years ago to manufacture spear weights, bowls of various sizes, and other objects. The preserve also has river frontage and is covered in mixed hardwood and pine forest.

By 1992, more than four of the Pacolet Soapstone Quarries had been destroyed or seriously damaged, and residential development would eventually occur. A partnership was formed between the South Carolina Heritage Trust Program, the Heritage Trust Advisory Board, and the Spartanburg Area Conservation Endowment (SPACE), a local land trust. The Pacolet Quarries ranked as number 12 on the Heritage Trust Program's list of 100 most critically significant cultural sites, and served as the first site acquisition following implementation of the ranking system developed for the Statewide Assessment of Cultural Sites project initiated by the Heritage Trust Advisory Board.

Acquisition of two of these quarries ensures that they are protected in perpetuity. The greatest success of the site acquisition project has been in the response from the local community. SPACE formed a stewardship committee whose members take turns visiting the site on a regular basis, and put the Heritage Trust staff archeologist in touch with Eagle Scouts who have carried out improvements as part of their Eagle requirements. Land trust members, local archeologists, and preserve neighbors have all volunteered to assist in site monitoring, management, and maintenance. Despite this high level of stewardship activity, all 257 acres of the preserve cannot be monitored 24 hours a day. An incident of vandalism occurred in 1994 when an unfinished soapstone bowl was removed with claw hammer and chisel from the quarry wall in one of the sites.

For more information about the archeological site protection activities of the South Carolina Heritage Trust Program, contact the Heritage Trust Archaeologist, S.C. Department of Natural Resources, P.O. Box 167, Columbia, SC 29202; or visit the Program's Web site at www.dnr.state.sc.us/wild/heritage/preserve.html.
CASE STUDY 10
VOTERS APPROVE FUNDING FOR LAND ACQUISITION

This case study is an example of the following strategies:

- General Fund Appropriation
- Bond Issue
- Real Estate Transfer Tax
- Other Funding Sources

Financial resources are available for protecting land and the resources it contains, including archeological resources. In one of the largest gains for land protection, voters in November 1998 approved 84% of the 148 open space acquisition measures placed on municipal, county, and state ballots. This balloting approved more than $5.2 billion in bonding authority, general treasury funds, lottery proceeds, and sales tax allocations for the acquisition of open space land, as reported by the Land Trust Alliance. The actual amounts to be made available will be higher since a number of these measures dealt with other funding sources, such as the real estate transfer tax, income tax, and sales tax, for which no actual dollar amounts were indicated.

The purposes of the approved ballot measures include acquisition and management of open space, parks, farmland, natural areas, recreation areas, watershed, wildlife habitat, trails, historic sites, and conservation easements; and various land and historic preservation projects. Although archeological resources may not be explicitly mentioned in any of these ballot measures, it might be possible to include archeological protection by participating in the development and implementation of the programs and procedures for carrying out these ballot mandates.

One of the ballot successes took place in Florida, where 76% of the voters approved a permanent reauthorization of the state's Preservation 2000 bond program that supports several land conservation programs. One of these is the Conservation and Recreation Lands (CARL) Program, which got underway in 1980. The CARL Program also receives funds from another major source, the CARL Trust Fund. The Trust Fund was established in 1979 by the Florida Legislature to support the acquisition of endangered sensitive lands, including those with important archeological and historic resources, and their management as parks, recreation areas, wildlife habitat, wilderness, and greenways. The Trust Fund receives income from various tax revenues, including the documentary tax stamp and phosphate extraction tax. Annually, the CARL Program receives an average of about $40 to $45 million from the Trust Fund and about $135 million from Preservation 2000 bond funds.

Each year, proposals for land acquisition, prepared by staff or submitted by the public, are ranked in priority order by the Land Acquisition Advisory Council, and approved by the Governor and Cabinet. Between 1980 and 1994, the CARL Program has acquired nearly half a million acres, which include archeological and historical sites. An example of such an acquisition is Mission San Luis, a 17th-century Spanish fort and mission complex acquired in 1983. This significant site in Leon County is co-managed by the Florida Bureau of Archaeological Research and the Museum of Florida History as a park where historic and archeological research is conducted and the public can visit to learn about Spanish and Indian life in 17th-century colonial Florida.

For more information on the November 1998 open space ballot results, contact the Land Trust Alliance, 1319 F Street, NW, Suite 501, Washington, D.C. 20004, or visit the Alliance's Web site at www.lta.org. For more information about the CARL Program, contact the Office of Environmental Services, Florida Department of Environmental Protection, 3900 Commonwealth Blvd., M.S. 140, Tallahassee, Florida 32399, or visit the CARL Program's Web site at www.dep.state.fl.us/stland/oes/carlmain.htm.
CASE STUDY 11

WISCONSIN PROGRAM REDUCES TAXES ON PROPERTIES CONTAINING PROTECTED ARCHAEOLOGICAL SITES

This case study is an example of the following strategy:

- **Property Tax Reduction**

In Wisconsin, owners of archaeological sites listed on the State or National Registers, who place protective covenants or easements on those properties, are exempt from paying property taxes. By the end of 1997, 21 property owners have participated in the program, protecting important archaeological sites such as Native American effigy mounds, quarries, and villages that date from 10,000 years ago to a few hundred years ago. [Wisc.Stats. 70.11(13) & 70.11(13m)]

Chapter 70 General Property Taxes

**70.11 Property exempted from taxation.** The property described in this section is exempted from general property taxes. ... Property exempted from general property taxes is: ...

**70.11(13) Cemeteries.** Land owned by cemetery associations and used exclusively as public burial grounds and tombs and monuments therein, and privately owned burial lots; land adjoining such burial grounds, owned and occupied exclusively by the association for cemetery purposes; personal property owned by any cemetery association and necessary for the care and management of burial grounds; burial sites and contiguous lands which are cataloged under s. 157.70(2)(a) [requires the director of the historical society to identify and record burial sites, including sufficient contiguous land to protect them]. ...

**70.11(13m) Archaeological sites.** Archaeological sites and contiguous lands identified under §44.02(23) [requires the historical society to identify archaeological sites and contiguous lands to protect them that are listed on the state and/or the national registers] if the property is subject to a permanent easement, covenant or similar restriction running with the land and if that easement, covenant or restriction is held by the state historical society or by an entity approved by the state historical society and protects the archaeological features of the property.

For more information on this program, contact the State Archaeologist, Division of Historic Preservation, The State Historical Society of Wisconsin, 816 State Street, Madison, Wisconsin 53706.
CASE STUDY 12
NEW MEXICO INCOME TAX CREDIT PROGRAM FOR ARCHEOLOGICAL SITE PROTECTION

This case study is an example of the following strategy:

- Income Tax Reduction

The state of New Mexico has had an income tax credit program for rehabilitating buildings and structures for some years, but state legislation adopted in 1994 expanded this program to include archeological site protection (7-2-18.2 and 7-8-18.6 NMSA 1978). Features include:

- Half of the costs of protecting an archeological site, up to a maximum of $25,000, may be deducted from the property owner's personal or corporate income tax; credit can be carried forward four years if necessary; and credit may taken repeatedly provided the project is approved.
- Site must be individually listed on New Mexico Register of Cultural Properties or listed as a contributing property in a register district, and the property owner must have consented to the property being listed.
- Site may be located on private property, income-producing, or non-income-producing property.
- Protection projects include stabilization or preservation, such as erosion control, fencing, or sign installation (archeological site excavation is not included).
- Cultural Properties Review Committee reviews and approves project proposals and certifies completed work.
- Project must be approved before any project money is spent, and work must be completed within two years of project approval.
- Project work must comply with regulations and standards established by the Historic Preservation Division of the Office of Cultural Affairs (Regulations for Credit to State Income Tax for Approved Restoration, Rehabilitation or Preservation of Registered Cultural Properties, 4 NMAC 10.9, effective November 15, 1997). See below for standards for archeological site preservation.

Standards for Archeological Site Preservation (4 NMAC 10.9.11.2)

The following archeological site preservation standards are derived from those set forth in the Secretary of the Interior's Standards for Rehabilitation [36 CFR 67] and the Ruins Preservation Guidelines, Pecos National Monument, NM.

1. The prehistoric or historic integrity of a property shall be preserved. The destruction of contributing features shall be avoided.
2. If standing features on a site are deteriorating, repair and stabilization measures shall be undertaken with sensitivity to the character of the feature. If replacement of materials is necessary, the new shall match the old, and appropriate documentation shall indicate restored areas.
3. Erosion control measures shall be undertaken if features or artifacts of significant sites are disturbed by natural agents. These measures shall not detract from the character of the site and shall not harm significant features.
4. Site fencing shall be undertaken if a significant site is suffering from human or animal caused disturbance. The location of fencing shall avoid significant features.
5. Sign installation shall be undertaken if an owner wishes to protect a significant site from unauthorized excavation. Sign wording must be approved by the Cultural Properties Review Committee. Signs shall not be posted in areas which would disturb archeological features.
6. Camouflaging a site with vegetation or soil shall be undertaken if an owner is concerned about vandalism. Appropriate documentation shall precede this activity.
7. Professional archeologists shall be consulted when performing site preservation activities.

For more information about this program, contact the Historic Preservation Division, Office of Cultural Affairs, 228 East Palace Avenue, Santa Fe, New Mexico 87503; or visit the Division's Web page at http://museums.state.nm.us/hpd/.
CASE STUDY 13
CULTURAL RESOURCES ELEMENT - BOULDER COUNTY, COLORADO
COMPREHENSIVE PLAN

This case study is an example of the following strategy:

• Planning

Boulder County, Colorado, has long been interested in identifying and protecting its historic and archeological sites. In fact, archeological resource preservation was part of the county’s Comprehensive Plan in 1978. In addition, between 1976 and 1981, a number of surveys were undertaken, resulting in a fairly extensive list of historic and archeological sites. This list, currently being updated, has continued to be useful for providing general historical information and in reviewing building and demolition permits.

In 1990, the Colorado legislature amended Section 30-11-107 of the Colorado Revised Statutes regarding the powers of local county governments, giving county Boards of Commissioners the authority to, among other things, "Provide for the preservation of the cultural, historic, and architectural history within the county" (HB90-1104). In response to this expanded authority, as well as in reaction to increasing demolition of historic buildings, preservation-minded citizens encouraged the Boulder County Board of Commissioners to establish a comprehensive preservation program. Funds were budgeted in 1991, and a consultant was hired to hold a public forum and prepare recommendations for such a program. Within a year the program was in place. The Board approved a program that emphasized education, incentives, and partnerships; historic preservation regulations were adopted; the Historic Preservation Advisory Board held its first meeting; and the county became a Certified Local Government under the national historic preservation program administered by the State Historic Preservation Office at the Colorado Historical Society.

In July 1994, the Planning Commission adopted the Cultural Resources Element of the County Comprehensive Plan, following a series of public hearings before the Historic Preservation Advisory Board and the county Planning Commission. See Appendix 2 for a summary of the Cultural Resources Element background information plus the goals and policies for cultural resources. With this foundation of legislative authority, plan goals and policies, and related regulations, county staff is able to protect archeological resources from potential development, designate them as county landmarks, and acquire them as part of the county open space program.

The county's regulations require a development review process that includes an evaluation of environmental and cultural resources. If archeological resources are expected to be present, the property owner is required to contact the Colorado Historical Society to determine if the property has been surveyed. If no survey has been done, the county may require a professional survey be done at the property owner's expense, especially if a large-scale development project is being proposed. If archeological resources are identified, the county requires any ground disturbance or development take place away from the archeological sites. Archeological sites are not often endangered by development however, since the county promotes a very slow-growth philosophy.

Although Boulder County does not have an archeologist on staff, a member of the Historic Preservation Advisory Board has experience as an archeologist, and the archeological staff at the Colorado Historical Society are available for consultation. When professional archeological services are needed, the county hires a consultant, or requires the applicant for a development proposal to hire a consultant.

For more information on this program, contact the Boulder County Land Use Department, P.O. Box 471, Boulder Colorado 80306; or visit the Web site at www.co.boulder.co.us/lu.
CASE STUDY 14
INTEGRATING ARCHEOLOGICAL PROTECTION IN THE DESIGN OF TWO MAJOR DEVELOPMENTS
IN JAMES CITY COUNTY, VIRIGNIA

This case study is an example of the following strategies:

- Subdivision
- Cluster Development
- Planned Unit Development

Governor's Land at Two Rivers is a 1,444-acre residential and golf course development that fronts on the James and Chickahominy Rivers. Located within the Chesapeake Bay Watershed, this was the first project in the area to identify resource protection areas in accordance with Virginia's Chesapeake Bay preservation regulations. Natural, historic, and cultural resources were thoroughly identified and mapped before the development was designed. All the resource maps were overlaid to create a single baseline map showing all sensitive resource protection areas. The development was then laid out to place these areas in open space and conservation easements.
Kingsmill on the James, a 2,900-acre planned unit development along the James River, contains corporate offices, government offices, a hotel, a resort/conference center, a theme park, a golf course, a marina, and cluster housing. This is the first large development in the region to conduct pre-development studies to identify sensitive environmental areas, historic sites, and archeological resources prior to development. These sensitive resources were subsequently protected within the development using a combination of scenic easements, open space, and greenway corridors.

For more information, see Jackson and Kleppinger 1991 in the Bibliography, or contact the James City County Planning Division, P.O. Box 8784, Williamsburg, Virginia 23187-8784. [Graphics used with the permission of the Lower James River Association.]
CASE STUDY 15
MICHAUD MOUND GROUP COTTAGE GROVE, MINNESOTA

This case study is an example of the following strategy:

- Development Review Process

The Michaud Mound Group is located in the City of Cottage Grove and Grey Cloud Island Township, Washington County, Minnesota, on Lower Grey Cloud Island in the Mississippi River. The Michaud site, originally surveyed in 1887, contains approximately 22 conical earth mounds of the Middle Woodland period. Several of the mounds have been disturbed by agricultural activities, road construction, and archeological excavation.

The significance of the Michaud Mound Group is derived from its archeological research potential and its association with prehistoric Native American occupation of the Grey Cloud Island locality. Archeological testing of two mounds in 1947 yielded human remains. The Michaud site is also regarded as significant as a Native American cemetery and sacred site, and because of its association with the development of scientific archeology in the Upper Midwest.

The Michaud Mounds are part of an approximately 80-acre farm owned by the late Martha Michaud. In 1995, Mrs. Michaud's heirs entered into an agreement with a St. Paul real estate developer to plat a residential subdivision. The developer applied to the township for subdivision and to the city for a permit to construct a private access road through part of the mound group.

Preservation, protection, and use of the Michaud site were complicated by several factors. First, part of the archeological site lies within the Cottage Grove city limits, while the rest is under the jurisdiction of the township. Although most of the residential development was planned to occur in Grey Cloud Township, the only access was through that part of the Michaud property lying in Cottage Grove. Second, the most practical road access was through the mound group; the mounds are protected as a human cemetery under state law and local ordinance, requiring the involvement of the Office of the State Archaeologist and the Minnesota Indian Affairs Council. Third, part of the mound group had already been impacted by a city street, Grey Cloud Drive, originally laid out as a rural road in the 1880s. The developer proposed to realign Grey Cloud Drive so that it bypassed the mound group (with an access roadway through the mound group into the proposed subdivision).

In addition to the developer and his consultants (including an archeological consultant), other entities involved included the Grey Cloud Town Board and Cottage Grove City Council, the township and city planning commissions, the county planning department (acting as the township planning agency), the Cottage Grove Department of Community Development (including its Planning and Historic Preservation Divisions), the State Archaeologist and the archeologist employed by the Indian Affairs Council. The site also lay within the boundaries of the Mississippi National River and Recreation Area and thus came under the jurisdiction of the St. Paul District, U.S. Army Corps of Engineers.

Generally, township officials supported the concept of developing the Michaud property because it would increase the local tax base. Cottage Grove officials were more cautious because of potential transportation and historic preservation issues. Washington County had targeted the Michaud farm for acquisition as part of the proposed Grey Cloud Island Regional Park, but at the time the project was proposed, no funds had been authorized for parkland purchases. The developer worked with the Cottage Grove City Historic Preservation officer to resolve the preservation planning issues; and the City Preservation Officer maintained close liaison with the Office of the State Archaeologist, the Minnesota Indian Affairs Council, and the Minnesota State Historic Preservation Office.
The Cottage Grove City Council reviewed the developer's plan and granted conceptual approval for construction of a private access road off Grey Cloud Drive, conditional on the developer's completing an archeological survey and a mound preservation plan acceptable to the City, the State Historic Preservation Office, the State Archaeologist, and the Indian Affairs Council. The developer's archeological consultant worked with the State Archaeologist and the Indian Affairs Council to prepare a mound preservation plan that (a) avoided impacts to known burial mounds and (b) realigned Grey Cloud Drive to mitigate impacts on the Michaud site. The Grey Cloud Town Board postponed its decision on the subdivision while the county parks department sought funds to acquire the Michaud property for the regional park.

The preliminary mound protection plan submitted by the developer was approved in concept by the Cottage Grove City Historic Preservation Officer and the Minnesota State Historic Preservation Office, pending review by the Office of the State Archaeologist and the Minnesota Indian Affairs Council. However, the developer did not carry out an archeological survey of the Michaud property, one of the conditions for the City granting a road construction permit.

Before the historic preservation review process was completed, Washington County purchased that part of the Michaud property lying in Grey Cloud Island Township, including part of the Michaud Mound Group. The subdivision and road permit applications were withdrawn. The remainder of the Michaud farm in Cottage Grove remained in private ownership. The city granted Washington County an easement to the parkland parcel through part of the mound group; as a condition of the easement, the county will implement a mound preservation plan and conduct the necessary archeological field surveys before any park development occurs.

The Michaud Mound Group case was an excellent test of the City of Cottage Grove's historic preservation program. The City assumed the lead role in the public effort to preserve and protect the mounds and demonstrated the potential for state and local government partnerships in archeological resource management. But for the City's actions, it is likely that the Michaud property would have been subdivided and developed; as a consequence, some of the mounds would have been disturbed during grading for the access road and home site construction. The City's track record of successful community heritage conservation also contributed to the outcome, as decision-makers based their decisions on a solid foundation of city policy and precedence that has been evolving since 1980.

Cottage Grove has several prehistoric Native American burial mound sites within the city limits. The Michaud case pointed out the need for some adjustments in city policy and procedure, especially regarding jurisdictional overlap between public agencies. Perhaps most importantly, the mound protection plan devised for the Michaud site may have laid the groundwork for mitigating the impact of Grey Cloud Drive on several of the mounds. The city is currently considering moving the public roadway and "reclaiming" the disturbed mounds as part of its capital improvement plan.

For more information, contact Robert C. Vogel, City Historic Preservation Officer, 7516 80th Street South, Cottage Grove, Minnesota 55016.
This case study is an example of the following strategy:

- **Development or Site Plan Review**

One of the most effective preservation strategies can be a local ordinance that requires the design of development projects to be sensitive to archeological site protection. What is so important about protecting archeological sites through land-use control mechanisms is that they integrate archeological considerations into existing processes that are already familiar to developers and local government decision-makers. This approach provides the opportunity to evaluate each case on its own merits, and usually does not require an additional layer of approval by a separate board or commission.

An example of one community that took such an integrative approach to archeological protection is Alexandria, Virginia. Prepared as a collaborative effort of the city's Archaeology Commission, the City Archaeologist, and the City Attorney's Office, the "Archaeological Protection Ordinance" was adopted by city council in November, 1989. Rather than a “stand-alone” ordinance, this ordinance instead amended certain sections of the City Code to provide for the consideration and protection of archeological sites in the city. The ordinance added a definition for “ground disturbing activity” that describes potentially site-damaging activities covered in the ordinance. The ordinance amended grading permit procedures to prohibit granting a permit for alteration of grade unless the project site plan has been approved. The ordinance also amended requirements for preliminary and final site plan to require that the applicant consult with the city archeologist for a preliminary assessment of archeological potential. If there is potential for significant archeological sites to exist, the applicant must, prior to filing for preliminary site plan approval, have a qualified archeologist prepare an archeological evaluation report and, if significant sites are present, a resource management plan. Only projects of certain sizes in any of eleven archeological resource areas are covered by the code amendments. See Appendix 3 for Alexandria's 1989 and 1992 ordinances.

This ordinance has been successful due to several key factors. The first factor is that developers are required to consider archeological protection very early in the planning stages of their projects. Secondly, the city employs professional archeologists to administer the ordinance. The archeological resource areas identified and mapped in the ordinance do not cover the entire city, and were defined on the basis of nearly 30 years of archeological and historical research in the city. Additionally, the process required in the ordinance had been tested and refined through voluntary cooperative efforts between developers and city staff over a number of years. With the experience gained by, and the goodwill established between, developers and city staff, and with the process codified, everyone involved in the process understands what is required and that the developers will be treated fairly.

For more information, contact Alexandria Archaeology, 105 S. Union Street, Alexandria, Virginia 22314; or visit the Web site at http://ci.alexandria.va.us/oha/archaeology/ [Map used with permission of Alexandria Archaeology.]
CASE STUDY 18
LOCAL REGULATORY PROGRAMS ARE SUCCESSFUL WHEN...

Archaeological sites can be acquired in **fee simple ownership**.
Archaeology is made an **integral part of public policy** and the planning and zoning decision-making process.
There are good, well-crafted incentive **"carrots,"** as well as planning and zoning **"sticks."**

There is an **ordinance** that...
- Recognizes as public policy that both public and private sectors in the community have a responsibility for archeological site protection.
- Defines and maps specific areas or zones within the community that are (and are not) subject to the ordinance's provisions, and that are based on thorough archaeological and historical research.
- Clearly defines terms, such as "cultural resource," "site," and other archaeological expressions.
- Requires the consideration of archaeological protection very early in the planning stages of development projects.
- Links site protection to review and approval processes for rezoning proposals, subdivision platting, grading and building permit applications, and other activities that might damage archaeological resources.
- Provides for regulations that are clear-cut, time-sensitive, predictable, legally defensible, and respectful of private property and due process rights.
- Is administered by professional archaeologist(s) whose services are obtained by the local government through employment or contract.
- Allows for flexibility and balance between site protection interests and private property rights.
- Is not too costly for either the regulators or the regulated to comply with.

There is a **review process** defined in the ordinance and/or regulation that...
- Has been tested and refined through voluntary cooperative efforts between developers and local government staff.
- Contains procedures and expectations that are clearly understood and predictable, and that treat developers and other landowners fairly.
- Clearly defines the responsibilities of all parties involved in the process.
- Incorporates archeological considerations early in the review process when there are more opportunities available for site protection.

There is an effective system in place for **administering and enforcing** the ordinance.

City/county **staff and decision-makers are knowledgeable** about the legal requirements, available strategies for protecting archaeological sites, issues associated with site protection, archeological practices, and the benefits of compliance with the ordinance.

**Communication and cooperation** is open and on-going among the various participants in the process, including local government agencies, commissions, planners, elected officials, consulting firms, archeologists, historians, developers, and landowners.

**Preservation planning** for archeological sites is proactive, rather than a result of regulatory review of individual development proposals.
The local comprehensive plan promotes public policies for the identification, protection, and interpretation of archeological sites. There is an on-going survey program to locate and identify archaeological resources; it is very difficult to protect sites if decision-makers don't know where the sites are, what they are, and how important they are. Up-to-date information about existing and potential archaeological sites and their importance is maintained and easily available to those who make planning and land-use decisions, such as planners, planning commissions, zoning boards, preservation commissions, city or county councils, and landowners.

There are strategies for sharing archaeological information with those who need it to make good preservation decisions while maintaining site confidentiality, such as:

- Trusting the landowner and decision-maker to help protect sites, and recognizing that when the ground does need to be disturbed, graded, plowed, or bulldozed, the landowner will need to know exactly what is where so that sites are not destroyed;
- Getting to know and establishing trust in those to whom information might be given, understanding how they will use it, and developing an ongoing relationship with them, especially if they are in a position to protect sites;
- Educating the landowners and decision-makers on the need for confidentiality;
- Providing maps with "fuzzy" detail, such as showing a blob for general site location, or "sensitivity" maps that highlight areas of high, medium, and low probability for sites to exist; and providing more detailed information when the decision-maker/planner has immediate need for it;
- Asking the user of confidential information to sign a security statement that he/she won't let the information out;
- Exempting certain kinds of information from Freedom of Information Act requests at local level.

There is strong and continuing public support for protecting archaeological sites. Developers receive good public relations for their archaeological site protection and stewardship activities.

(This text has been developed from information contained in site protection case studies, from the book "Protecting Archeological Sites on Private Lands" (Henry et al 1993), from discussions at the 1996 Private Lands Workshop and Public Forum, and from articles by McGrath, Mouriquand, Simon and Bell, Wheaton, and others in the 1998 CRM issue on "The Power to Preserve - Public Archaeology and Local Government" (see listings in the Bibliography).]
CASE STUDY 20
STEWARDSHIP PROGRAMS HELP PROTECT SITES IN TEXAS, ARIZONA, AND KENTUCKY

This case study is an example of the following strategy:

- Stewardship Programs

Stewardship programs offer a very effective technique for archeological site protection when used in tandem with existing site protection legislation, but are especially important when used in the absence of such laws. Stewardship programs tap the public's fascination with archeology and create opportunities for community members not only to learn about the past and embrace archeological values, but also to become involved in helping protect sites from potentially damaging forces.

A number of stewardship programs have been established around the country. Some, such as those in Texas and Arizona, are "watchdog" programs, whose stewards monitor archeological sites for damage. Other programs, such as Kentucky's, rely on site protection and management by landowners. All programs are characterized by voluntary participation, educational opportunities, and deterrence of site vandalism through human presence and vigilance.

The Texas Archaeological Stewardship Network, established in 1983, was one of the first programs in the country, and has served as a model for programs in other states. Administered by the Office of the State Archaeologist, the Stewardship Network consists of avocational archeologists who volunteer to be the eyes and ears of the State Archaeologist in different regions of the state. The Office of the State Archaeologist publishes a quarterly newsletter for stewards and holds Spring and Fall stewardship meetings to share information about fellow stewards' activities, archeological techniques, and stewardship strategies.

Stewards' duties may include monitoring known sites, recording newly discovered sites, helping nominate sites as Texas Archaeological Landmarks, helping professional archeologists in emergency site investigations, documenting private archeological collections, distributing educational materials, and giving slide presentations to students and civic groups. Applicants for membership in the Stewardship Network are asked to support and adopt the Network's code of ethics, which also calls for stewards to comply with federal, state, and local preservation laws, to honor local cultural values, and to respect the personal, privacy, and property rights of landowners. In just the first six months of 1998, the Network of 70 stewards volunteered as many hours as five full-time staff, visited 166 sites, monitored 581 sites, and gave lectures to 5,200 Texans.

The Arizona Site Steward Program. In 1985, then Governor of Arizona Bruce Babbitt directed the Arizona Archaeology Advisory Commission to explore the possibility of starting an archeological stewardship program based upon the successful Texas model. Jointly developed by the State Historic Preservation Office, Arizona State Parks, the Archaeology Advisory Commission, the State Land Department, the U.S. Bureau of Land Management, the U.S. Forest Service, and the Hopi Tribe, the Arizona Site Steward Program was off and running by mid-1988.

As in Texas, Arizona's stewards act as liaison between local communities and the State Historic Preservation Office, performing such tasks as documenting private collections or giving educational presentations to increase public awareness about archeology. The program's voluntary stewards, numbering over 550, are selected, trained, and certified by the State Historic Preservation Office and the Archaeology Advisory Commission. Arizona's program stresses the stewards' role as a deterrent to vandalism. For their own safety and for the security of the archeological resources, stewards are instructed not to participate in law enforcement activities, unless they are qualified to do so through formal law enforcement training.

In the Program's 13 years of operation, site stewards have contributed more than 50,000 hours monitoring over 1,000 archeological sites. In mid-1990, the Program received the Governor's Award for Historic Preservation in recognition of its significant accomplishments in protecting the Arizona's cultural resources. In 1996, the Program earned the U.S. Bureau of Land Management's "Making a Difference Award" for the Program's efforts in protecting Arizona's past for the future. In early 1999, the Site Steward Program and its coordinator received the prestigious Michaele Pitard Wynne Award for Excellence in Conservation Law Enforcement for their diligent efforts in protecting Arizona's valued prehistoric and historic resources.
The Kentucky Archaeological Registry takes a slightly different approach to that state’s stewardship program. Recognizing that landowners have nearly total control over the protection of archeological sites on private land, the Kentucky Heritage Council developed a landowner contact/site registry program, the Kentucky Archaeological Registry, in 1987.

A cooperative project of the Kentucky Heritage Council and the University of Kentucky, the Archaeological Registry emphasizes activities that educate landowners about the archeological sites under their control and encourage them to make a voluntary commitment to stewardship of the sites. Willing landowners are asked to preserve and protect their sites as best they can, and to notify the Kentucky Heritage Council of any damage or threat to the site and if they intend to transfer title to the site. In turn, the Registry agrees to provide site management assistance and, upon request, help the landowner select appropriate tools for stronger site protection.

To be considered for registration, an archeological site should have some clear archeological significance. Factors determining a site's significance include its integrity, rarity, potential research value, and the degree to which it is threatened. After an appropriate site is identified, a member of the Registry staff visits the landowner and inspects the site. In order to achieve its goals, the Registry seeks landowners who are genuinely interested in making a long-term commitment. Frequent communication, mutual respect, and trust between the landowner and Registry staff are critical to the program’s success. As important to this success is monitoring the site to ensure that damage does not occur.

The Kentucky Archaeological Registry currently has 19 sites registered, totaling more than 300 acres. Some of the participating landowners have inquired about other measures that could strengthen the protection of their sites. Despite limitations associated with the voluntary nature of the program and the uncertain stewardship commitment by new owners when property changes hands, the Registry has proven to be a successful, cost-effective strategy for protecting archeological sites on private land.

For more information about these stewardship programs, see the publications in the Bibliography by Arizona State Historic Preservation Office 1991, Henderson 1991, Hoffman 1991, and Parisi 1991; and contact the state offices below:

**Arizona**: Arizona Site Steward Program, State Historic Preservation Office, 1300 West Washington, Phoenix, Arizona 85007; on the Web at [www.pr.state.az.us/partnerships/shpo/shpo.html](http://www.pr.state.az.us/partnerships/shpo/shpo.html).

**Kentucky**: Kentucky Archaeological Registry, Kentucky Heritage Council, 300 Washington Street, Frankfort, Kentucky; on the Web at [www.state.ky.us/agencies/khc/regist.htm](http://www.state.ky.us/agencies/khc/regist.htm).

**Texas**: Texas Archaeological Stewardship Network, Office of the State Archaeologist, Texas Historical Commission, P.O. Box 12276, Austin, Texas 78711; on the Web at [www.thc.state.tx.us/osa.html](http://www.thc.state.tx.us/osa.html).
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EFFECTIVE SITE MANAGEMENT DEPENDS UPON...

- Commitment by the owner or easement-holder to long-term site stewardship and management.
- A thorough baseline of information about the protected site and its condition.
- A regular and well-documented program of monitoring site condition.
- Use of physical protection techniques (such as fencing) to provide site security and to reduce or eliminate forces that may damage or destroy the site, if and when needed (such as stabilization, reburial, revegetation, or signs).
- Compatible use options that may also provide income to defray some management costs and support other management and protection goals.
- Involvement of local community groups as site stewardship partners.
- A management system or administrative structure, such as a management board, oversight council, or on-site staff.
- A long-range management and protection plan that addresses issues of physical protection, maintenance, monitoring, site use, security, research, public interpretation, and professional and public access.
- Financial and human resources and physical facilities adequate for effective site management.
- Appropriate curation or collections management strategy for archaeological collections from the site, including artifacts, objects, and written and visual records.

[This has been summarized from information contained in "Protecting Archaeological Sites on Private Lands" (Henry et al 1993).]
For more information about site management, see "Florida Best Management Practices Handbook" at http://dhr.dos.state.fl.us/culturalmgmt/