

## 4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

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This section describes the potential impacts of the project to cultural resources on the sites proposed as part of the HDR GPA and Rezone project. This section also includes an assessment of significance for identified cultural resources and an evaluation of potential impacts to cultural resources that could result from implementation of the proposed project. Analysis in this section is based upon a literature review conducted for prehistoric and historic resources within the vicinity of the proposed project area, and information obtained from record searches performed at the North Central Information Center of the California Historical Resources Information System.

### 4.9.1 EXISTING SETTING

The following prehistoric and ethnographic background and discussion of paleontological resources is summarized from the City of Elk Grove General Plan Environmental Impact Report (2003).

#### PREHISTORIC AND ETHNOGRAPHIC BACKGROUND

The project area and the Central Valley of California have long held the attention of California archaeologists. The project area in particular has been of archaeological interest dating to the 1920s, and is significant in the development of both Central Valley and California archaeology. Indeed, archaeological work during the 1920s and 1930s led to the development of the first cultural chronology for central California presented by Lillard, Heizer, and Fenenga in 1939. This chronology was based on the results of excavations conducted in the lower Sacramento River Valley. The chronology identified three archaeological cultures. These cultures were named Early, Transitional, and Late. Their research in the lower Sacramento River Valley is significant in the development of archaeology in the Central Valley of California. Subsequently to the work of Lillard et al., Beardsley presented the Central California Taxonomic System (CCTS), which provided a cultural sequence for central California from the interior to the coast. The refinement of the CCTS has been a central theme in archaeological research in the project area. Therefore, the project area is not only interesting in terms of its archaeological sites and their constituents, but also in terms of the historical development of archaeology in Central California.

Prior to the arrival of Euroamericans in the region, California was inhabited by groups of Native Americans speaking more than 100 different languages and occupying a variety of ecological settings. Kroeber subdivided California into four subculture areas, Northwestern, Northeastern, Southern, and Central. The Central area encompasses the project area, which is in the territory of Plains Miwok. Plains Miwok inhabited the lower reaches of the Mokelumne and Cosumnes Rivers and the banks of the Sacramento River from Rio Vista to Freeport. The Plains Miwok are members of the Utian Language Family of the Penutian Stock.

The basic social and economic group of Plains Miwok was the family or household unit, with the nuclear and/or extended family forming a corporate unit. These basic units were combined into distinct, named village or hamlet groups, which functioned as headquarters of a localized patrilineage. Lineage groups were important political and economic units that combined to form tribelets, with the largest sociopolitical unit of Plains Miwok numbering between 300 and 500 persons. Each tribelet had a chief or headman who exercised political control over the villages that comprised it. Tribelets assumed the name of the head village where the chief resided. The office of tribelet chief was hereditary, with the chieftainship being the property of a single patrilineage within the tribelet. The office usually passed from father to son, but in the absence of a male heir a daughter could assume the office of chief. Plains Miwok built a variety of structures including residential dwellings, ceremonial structures and semi-subterranean sweat

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lodges (Levy 1978). They exploited a wide variety of resources including acorns, fish, birds, and both small and large mammals.

### HISTORICAL OVERVIEW OF ELK GROVE

The Sacramento River delta area was discovered and named by Spanish explorers passing through the region in the late eighteenth century. The area, however, was not thoroughly explored until the early nineteenth century. Father Narisco Durán, who led a Spanish expedition across the area in 1817, accomplished the most complete exploration of the Sacramento River region. This expedition was probably the first to pass the current location of the City of Sacramento. The Sacramento region, however, remained at the fringes of the Spanish settlement of California, with the northernmost mission and associated facilities located in Sonoma.

John A. Sutter came to California via the overland route with Captain Tripp of the American Fur Company in 1836 as part of a group on their way to Fort Vancouver. Sutter, however, returned to California in 1839 and petitioned the Mexican government for a land grant in the Sacramento Valley to establish a settlement. The Mexican government granted Sutter 11 leagues of land in current Sacramento County to establish a settlement that became known as Sutter's Fort. In addition to John Sutter, the Mexican government granted several other ranchos to immigrants in the Sacramento Valley during the 1830s and 1840s. These grantees included J. B. R. Cooper (Rancho Río Ojotska), John Sinclair (Rancho del Paso), W. A. Leidesdorff (Rancho Rio de los Americanos), and William Daylor and Jared Sheldon (Rancho Omochumnes).

The discovery of gold in 1848 at John Sutter's sawmill in Coloma dramatically affected California. The 1849 Gold Rush brought immigrants from all over the world to California and the Sacramento Valley. Indeed, once news of the discovery spread, a flood of Euroamericans began to enter the region, and gravitated to the area of the "Mother Lode". The population of California quickly swelled from an estimated 4,000 Euroamericans in 1848 to 500,000 in 1850. This large influx of immigrants had a negative effect on Native American cultures, and marks the beginning of a relatively rapid decline of both Native American populations and culture. Many miners, however, quickly turned from mining to other businesses such as farming and ranching because of the demand for agricultural resources by the growing population in the region. These businesses proved to be quite lucrative and many communities such as Elk Grove, which was founded by James Hall in 1850, developed as a result of an increasing demand for agricultural products. Many of the original structures in Elk Grove still exist, and the Elk Grove Historic District is listed in the National Register of Historic Places. Currently, Elk Grove is shifting from a rural/agricultural community to a suburban residential/commercial community.

### PALEONTOLOGICAL RESOURCES

Paleontology is defined as a science dealing with the life of past geological periods as known from fossil remains. Paleontological resources include fossil remains, as well as fossil localities and formations, which have produced fossil material in other nearby areas. This resource can be an important educational resource for the reasons mentioned before, and are nonrenewable once destroyed. The California Environmental Quality Act offers protection for these sensitive resources and requires that they be addressed during the EIR process.

A file search was conducted in the GeoRef database covering the years 1785 to the present. A broad reconnaissance-level field survey of the Planning Area for the purpose of inspecting the land surface and potential outcrops of fossiliferous geological formations was also conducted.

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While no fossils have been officially reported from the Planning Area, there have been informal finds. In 1959, a local Elk Grove farmer discovered a Pleistocene bone bed within the Riverbank Formation along the west side of Deer Creek. While the find was reportedly examined by a geologist from California State University, Sacramento, the find was apparently never published.

The fossils recovered to date from the Riverbank Formation are typically large, late Pleistocene vertebrates, although fish, frogs, snakes, turtles and a few plants such as *Prunus* (prune), *Platanus* (sycamore) and *Salix* (willow) are known as well (Hansen and Begg 1970, Hilton *et al.* 2000). The typically large, Rancholabran vertebrates include *Bison* (bison), *Equus* (horse), *Camelops* (camel), *Mammuthus* (mammoth), *Paramylodon* (ground sloth) and *Canis* (wolf).

### SITE BACKGROUND

A records search for cultural resources was conducted for each of the sites using information obtained from the North Central Information Center of the California Historical Resources Information System. A summary of the findings for each site is provided in **Table 4.9-1**.

**TABLE 4.9-1  
SURVEY STATUS AND FEATURES ON PROPOSED HDR GPA AND REZONE SITES**

Site	Surveyed?	Features
A	No	Contains several structures including one residential structure built prior to 1968.
B	No	Contains one structure that was constructed in 1979.
C	No	Peak and Associates conducted a survey along the transmission line corridor in 1979. However, the entire site has not been surveyed. Site C contains three structures, all single-story homes, built in 1951, 1966 and 1967.
D	No	The portion of the site along the creek has been surveyed by PMC in 2004. One single-family residence, built in 1920, is located on this site. The structure is approximately 983 square feet in size with three bedrooms and one bathroom.
E	No	The site contains three structures. Two were constructed in 1978 and one was constructed in 1977.
F	No	The site has not been surveyed. No structures are located on this site.
G	No	The site has not been surveyed. No structures are located on this site.
H	No	The site has not been surveyed. No structures are located on this site.
I	No	The site has not been surveyed. No structures are located on this site.
J	No	The site has not been surveyed. No structures are located on this site.
K	No	The site has not been surveyed. No structures are located on this site.
L	Yes	Site previously surveyed. No resources discovered.
M	No	Site M has been partially surveyed along the power line corridor. Two structures are located on the east central portion of the project site.
South Pointe Policy Area	Yes	In September 2001, the North Central Information Center, California Historical Resources Information System completed a records search for the South Pointe Policy Area. No prehistoric resources were identified on the property, but the search indicated that a historic road was located in the immediate vicinity of the project area. An 1855 GLO Plat Map showed the road running north to south on the project's western boundary. Survey of the area did not identify any cultural resources.

*Source: North Central Information Center, 2005.*

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In addition, the Cultural Resources Sensitivity Map included as Figure 4.11-1 in the Elk Grove General Plan EIR was examined to determine if any of the proposed sites are located within culturally sensitive areas. As shown in **Figure 4.9-1**, Sites A, B, D, F, G, K and L are all located within sensitive areas.

### 4.9.2 REGULATORY FRAMEWORK

#### FEDERAL

The National Historic Preservation Act (NHPA), enacted in 1966, was enacted to preserve the historical and cultural foundations of the American people. The congress found that historic properties significant to the Nation's heritage were being lost or substantially altered, often inadvertently. The preservation of this irreplaceable heritage was in the public interest so that its vital legacy of cultural, educational, aesthetic, inspirational, benefits would be maintained and enriched for future generations of Americans.

Federal regulations for cultural resources are governed primarily by Section 106 of the NHPA. Section 106 requires Federal agencies to take into account the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementing regulations, "Protection of Historic Properties" can be found in 36 Code of Federal Regulations (CFR) Part 800. The goal of the Section 106 review process is to offer a measure of protection to sites, which are determined eligible for listing on the National Register of Historic Places. The criteria for determining National Register eligibility are found in 36 CFR Part 60. Recent amendments to the Act (1986 and 1992) and subsequent revisions to the implementation regulations have strengthened the provisions for Native American consultation and participation in the Section 106 review process. While federal agencies must follow federal regulations, most projects by private developers and landowners do not require this level of compliance. Federal regulations only come into play in the private sector if the project requires a federal permit or if it uses federal money.

#### STATE

##### California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires that lead agencies determine whether projects may have a significant effect on archaeological and historical resources. This determination applies to those resources which meet significance criteria qualifying them as "unique," "important," listed on the California Register of Historical Resources (Register), or eligible for listing on the Register. If the agency determines that a project may have a significant effect to a significant resource, the project is determined to have a significant effect on the environment, and these effects must be addressed. If a cultural resource is found not to be significant under the qualifying criteria, it need not be considered further in the planning process.

CEQA emphasizes avoidance of archaeological and historical resources as the preferred means of reducing potential significant effects. If avoidance is not feasible, an excavation program or some other form of mitigation must be developed to mitigate the impacts.

LOCAL

**City of Elk Grove General Plan**

The City of Elk Grove General Plan contains one policy encouraging the inventory, protection, and interpretation of significant archaeological and historical resources. **Table 4.9-2** identifies this policy and analyzes the project’s consistency with the General Plan. While this EIR analyzes the project’s consistency with the General Plan pursuant to CEQA Section 15125(d), the Elk Grove City Council and the Planning Commission ultimately determine consistency with the General Plan.

**TABLE 4.9-2  
PROJECT CONSISTENCY WITH GENERAL PLAN CULTURAL RESOURCE POLICIES**

General Plan Policies	Consistency with General Plan	Analysis
<p><b>Policy HR-6:</b> Protect and preserve prehistoric and historic archaeological resources throughout the City.</p>	<p>Yes, with mitigation</p>	<p>No construction is proposed as part of the HDR GPA and Rezone. However, at the time individual development proposals are brought forward for each of the proposed HDR GPA and Rezone sites, mitigation measures proposed in association with discovery of known or previously unknown cultural resources.</p>

**4.9.3 IMPACTS AND MITIGATION MEASURES**

STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following State CEQA Guidelines Appendix G thresholds of significance:

- 1) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.
- 2) Cause a substantial adverse change in the significance of an archeological resource pursuant to Section 15064.5.
- 3) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- 4) Disturb any human remains, including those interred outside of formal cemeteries.

According the CEQA Guidelines Section 15064.5(a), “historical resources” shall include the following:

- 1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4850 et seq.).
- 2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in an historical

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resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or cumulatively significant.

- 3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852) including the following:
  - a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
  - b. Is associated with the lives of persons important to our past;
  - c. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possess high artistic values; or
  - d. Has yielded, or may be likely to yield, information important in prehistory or history.
- 4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

CEQA establishes statutory requirements for establishing the significance of archaeological resources (prehistoric-era) in Section 21083.2 and historical resources (historic-era) in Section 21084.1. Section 21083.2 defines a "unique archaeological resource" as "...an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- It has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event."

CEQA Section 21084.1 defines historical resources as those listed on or eligible for listing on the California Register. The two sections operate independently to ensure that significant potential

effects on archaeological and historical resources are considered as part of a project's environmental analysis.

The California Register of Historical Resources (Register) establishes a third set of criteria for determining the significance of historical resources, which by definition includes prehistoric-era and historic-era resources (the California State Register Bill, PRC 5020 et seq.). The Register establishes 50 years as the period in which sufficient time has passed to allow a scholarly perspective in understanding the historic importance of a resource. A historical resource must be significant at the local, state, or national level under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
2. It is associated with the lives of persons important to local, California, or national history;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or,
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

A historical resource must also retain the integrity of its physical identity that existed during the resource's period of significance and is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association.

All three sets of criteria must be addressed when evaluating the significance of archaeological and historical resources under CEQA. Resources that are not deemed significant through formal evaluation need not be considered further in the CEQA process. In practice, however, ascertaining that a resource is not "unique," not "important," and does not meet Register criteria may involve more research, analysis, and testing than if the resource could be avoided or standard mitigation measures adopted for project impacts.

### METHODOLOGY

A records search for cultural resources was conducted for each of the sites using information obtained from the North Central Information Center of the California Historical Resources Information System. No pedestrian surface surveys of project sites were conducted as part of the review process because no development proposals are included as part of the HDR GPA and Rezone project.

### PROJECT IMPACTS AND MITIGATION MEASURES

#### Impacts to Paleontological, Archaeological, and Historic Resources

**Impact 4.9.1** Implementation of the proposed HDR GPA and Rezone project could result in the disturbance of both known and unknown archaeological, paleontological and historic resources on the sites identified as part of the project. This is considered a **potentially significant** impact.

The HDR GPA and Rezone sites are located within the Elk Grove Planning Area. The City of Elk Grove General Plan EIR (City of Elk Grove, 2003) identified that the Planning Area is located

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within the Pleistocene non-marine sedimentary rock (Riverbank Formation) and Quaternary alluvium geologic units. These geologic units are considered to have paleontological resource sensitivity. Any future development could potentially affect undiscovered paleontologic resources. These geologic units are mostly located around the Sacramento and Cosumnes Rivers. As described in **Table 4.9-1**, most of the project sites have not been surveyed. Seven of the sites (A, B, D, F, G, K and L) are located within archaeologically sensitive areas, (refer to **Figure 4.9-1**) especially given the discovery of prehistoric Indian villages. Many of the sites are vacant and have been previously disturbed by grading, discing, etc. Nevertheless, the potential to disturb unknown and known paleontological, archaeological and historic resources is possible.

Site C contains a structure built in 1951. Site D also contains a structure built in 1920. As such, these buildings are older than 45 years of age and may be considered historic. Sites A, B, E, F, G, H, I, J, K, L, and M do not contain structures exceeding 45 years of age.

While no development proposals are included as part of this HDR GPA and Rezone project, future development of the project sites could impact both known and unknown paleontological, archaeological and historic resources resulting in a potentially significant impact. General Plan Policy HR-6, Action 1 and 2 would apply to future development on the project sites. The following mitigation is provided to implement General Plan policy and mitigate potential impacts.

### General Plan Policies and Action Items

Implementation of General Plan Historic Resources Element policy HR-6 and associated action items would reduce project and cumulative impacts to paleontological, archaeological, and historic resources through protection and preservation.

### Mitigation Measures

**MM 4.9.1a** Prior to project construction, paleontological, archaeological and historical investigations shall be conducted on Sites A through K and Site M. These investigations shall be conducted by a professional archaeologist and shall include, but are not limited to: a records search at the North Central Information Center; a sacred lands search conducted by the Native American Heritage Commission; consultation with the Native American community and the Elk Grove Historical Society; pedestrian surface survey of the project sites; and determining the historical significance of buildings/structures more than 50 years old that are present on project sites.

Should any cultural resources be identified during archaeological and historical investigations the project proponent shall be required to implement any mitigation deemed necessary by the professional paleontologist, archaeologist or historian for the protection of cultural resources. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures.

*Timing/Implementation:* Prior to approval of grading, building or development plans.

*Enforcement/Monitoring:* City of Elk Grove Development Services, Planning.

**MM 4.9.1b** If any prehistoric or historic artifacts or other indications of archaeological or paleontological resources are found once the project construction is underway, all work in the immediate vicinity must stop and the City shall be immediately notified. An archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, or paleontologist as appropriate, shall be retained to evaluate the finds and recommend appropriate mitigation measures.

*Timing/Implementation:* As a condition of project approval, and implemented during construction activities.

*Enforcement/Monitoring:* City of Elk Grove Development Services, Planning.

**MM 4.9.1c** If human remains are discovered during construction, all work must stop in the immediate vicinity of the find and the County Coroner must be notified, according to Section 7050.5 of California's Health and Safety Code. If the remains are Native American, the coroner shall notify the Native American Heritage Commission, which in turn shall inform a most likely descendant. The descendant shall then recommend to the landowner appropriate disposition of the remains and any grave goods.

*Timing/Implementation:* As a condition of project approval, and implemented during construction activities.

*Enforcement/Monitoring:* City of Elk Grove Development Services, Planning.

Implementation of the above mitigation measure would result in **less than significant** impacts to historic resources.

### 4.9.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

#### CUMULATIVE SETTING

As identified in the records search conducted by the North Central Information Center for the Elk Grove General Plan EIR, the City of Elk Grove Planning Area is known to be rich in cultural resources. While many prehistoric and historic sites and resources have been identified, the probability is high that many of these resources remain undiscovered and should be taken under consideration upon any grading, excavation, or construction.

#### CUMULATIVE IMPACTS AND MITIGATION MEASURES

##### Cumulative Impacts to Historic Resources

**Impact 4.9.2** Implementation of the proposed HDR GPA and Rezone project along with foreseeable development in the region could result in the disturbance of historic resources. This contribution is considered **cumulatively considerable**.

While no development proposals are included as part of this HDR GPA and Rezone project, future development of the project sites could impact both known and unknown paleontological, archaeological and historic resources contributing to the loss of these

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resources. Implementation of mitigation measures MM 4.9.1a, MM 4.9.1b, and MM 4.9.1c and compliance with General Plan Historic Resources Element Policy HR-6, Action 1 and 2 would mitigate potential impacts to paleontological, archaeological, and historic resources historic resources. As a result, cumulative impacts to historic resources are considered **less than significant**.

### Mitigation Measures

None required.

### REFERENCES

City of Elk Grove Development Services. 2003. *City of Elk Grove General Plan*. Elk Grove, CA.

City of Elk Grove Development Services. 2003. *City of Elk Grove General Plan EIR*. Elk Grove, CA.

North Central Information Center of the California Historical Resources Information System. Records Search. November 14, 2005.

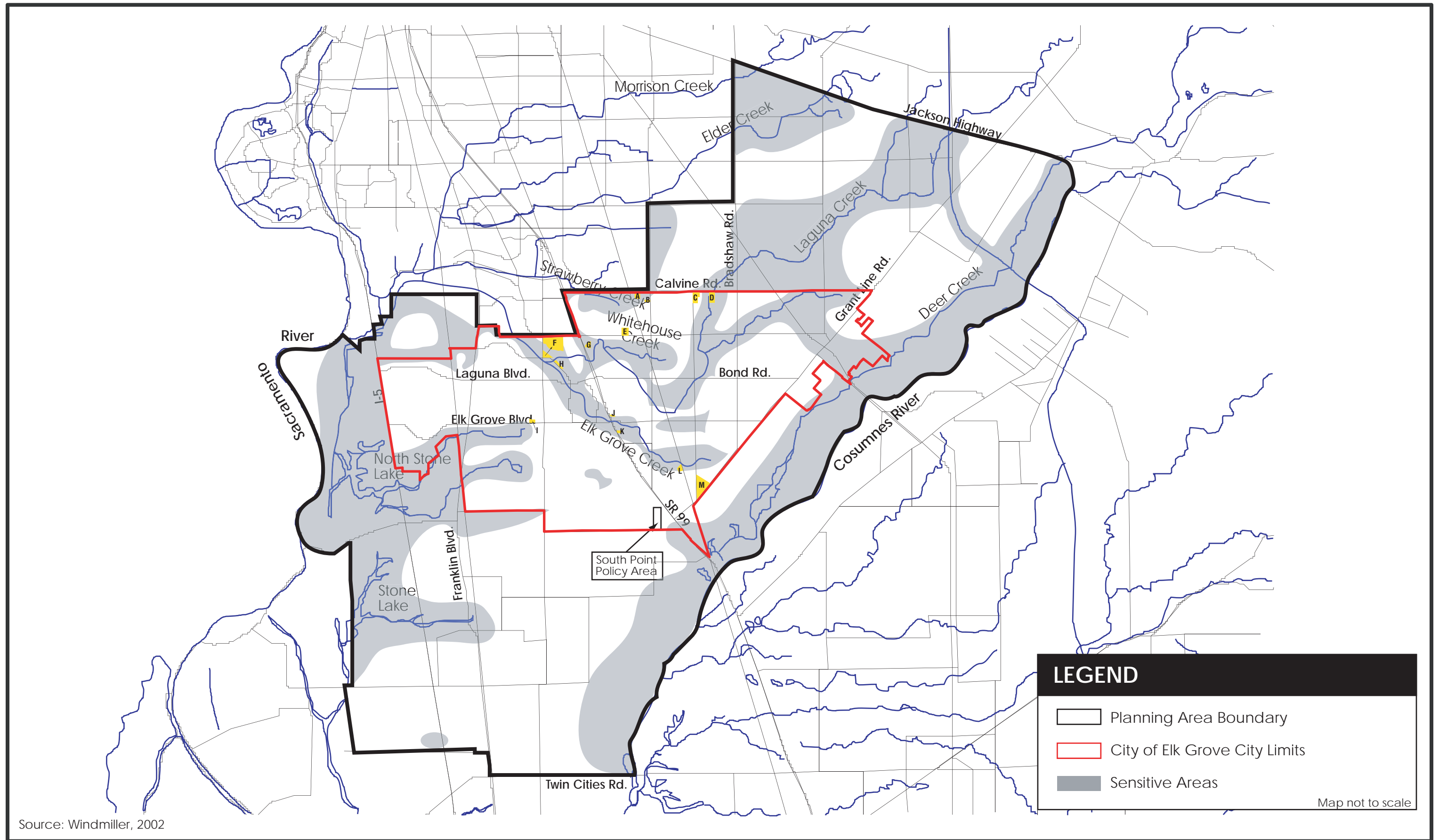


Figure 4.9-1  
Cultural Resources Sensitivity Map