

Section 3.6

Cultural Resources

This environmental issue focuses on the impacts of a project on cultural resources including, but not limited to, the adverse change to a significant historical or archaeological resource. Other areas of concern include the potential for a project to adversely impact a unique paleontological resource, geologic feature or disturb any human remains.

3.6.1 Environmental Setting

Prehistoric Setting

Although early Holocene (10,000-12,000 years ago) peoples probably inhabited or passed through the San Joaquin Valley, few indications of their activities have been discovered, probably because of deep burial beneath accumulated silt. Examples of early Holocene cultural remains are known from the Tulare Basin in the southern San Joaquin Valley. Based on typological similarities with artifacts recovered in other parts of the western United States (fluted-point tradition), early occupation (Phase I) of the Tulare Basin may date to 11,500 years ago. Radiocarbon dating for material excavated in the Tulare Basin (specifically, Buena Vista Lake) established dates back to 8,250 and 7,650 years ago.

The prehistoric chronology of the western side of the San Joaquin Valley has been derived from the excavation of several sites discovered within reservoir project areas and can be divided into a series of complexes.

The Positas Complex, dating from approximately 3300 to 2600 B.C., is characterized by small shaped mortars, cylindrical pestles, milling stones, perforated flat cobbles, and spire-topped Olivella beads.

The Pacheco Complex is dated from approximately 2600 B.C. to A.D. 300 and is characterized by foliate bifaces, rectangular shell ornaments, and thick rectangular Olivella beads in the early phase and spire-ground Olivella beads, perforated canine teeth, bone awls, whistles, grass saws, large-stemmed and side-notched points, milling stones, mortars, and pestles in the later phase.

The Gonzaga Complex, dating from approximately A.D. 300 to 1000, is characterized by extended and flexed burials; bowl mortars; shaped pestles; squared and tapered-stem points; few bone awls; distinctive shell ornaments; and thin rectangular, split-punched, and oval Olivella beads.

The Panoche Complex is dated from approximately A.D. 1500 to 1850 and is recognized by large circular structures (pits), flexed burials and primary and secondary cremations, varied mortars and pestles, bone awls, whistles, small side-notched points, clamshell disk beads, and other bead types.

These complexes appear to indicate occupation of the valley by people engaged in acorn gathering and hunting. Material found in Pacheco to Panoche strata indicates a trade relationship with people of the Delta, the south coast, and southern inland areas.

Ethnographic Setting

The project area was once occupied by the Northern Valley Yokuts, who lived in the northern San Joaquin Valley from around Bear Creek near Merced north of Stockton to the bend in the San Joaquin River near Mendota. "Yokuts" is a term applied to a large and diverse number of peoples who inhabited the San Joaquin Valley and Sierra Nevada foothills of central California. The Yokut cultures include three primary divisions corresponding to gross environmental zones: the Southern San Joaquin Valley Yokuts, the Northern San Joaquin Valley Yokuts, and the Foothill Yokuts.

The Yokut language belongs to the Yokutsan family, Penutian stock, and has been divided into between two and 12 subdivisions. Each of the primary Yokut cultural groups included speakers of several dialects.

No Yokut tribal organization encompassed all the peoples speaking Yokutsan languages, nor was there even a tribal organization that encompassed an entire primary division, such as Northern Valley Yokuts. These are linguistic and geographic designations only. Similar to most Native American groups in California, the largest political entity among the Yokuts was that of the tribelet. A tribelet consisted of a large village and a few smaller surrounding villages. Larger villages and tribelets had a chief or headman, an advisory position that was passed from father to son.

In general, the Yokuts were seasonally mobile hunter-gatherers with semipermanent villages. Seasonal movements to temporary camps occurred to exploit food resources in other environmental zones. The primary differences between the various Yokut groups relate to the different resources available in their territories. The South Valley groups were adapted to a lake-dough-marsh environment and relied most heavily on fish, waterfowl, roots (especially tale roots), seeds, mussels, turtles, shellfish, and rabbits. Few insects or large mammals were consumed. Acorns were not readily available and thus were not as large a staple food source for these groups as for many other California Native Americans. In contrast, the North Valley Yokuts did rely heavily on acorns as a food staple, along with salmon and other fish.

The Yokuts first came into contact with Europeans when Spanish explorers visited the area in the late 1700s. These early visits were followed by expeditions to recover individuals who had escaped from the missions located further west. The North Valley Yokuts were far more affected by missions than were the other Yokut groups. The loss of individuals to the missions, the influence of runaway neophytes, various epidemics in the 1800s, and the arrival of settlers and miners contributed to the disintegration of Yokut culture.

Cultural Resources

Only a small percentage of the Waterford area has been surveyed for evidence of cultural

resources, and most of the area's archaeology is unknown. Types of archaeological sites that could occur in Waterford include (but are not limited to) occupation sites, indicated by structural features such as house pits, ceremonial ("dance house") locations, and remains of sweathouses and storage structures, which are often found in areas that have been organically enriched by the accumulation of domestic debris. Occupation site deposits, often called "midden sites", are rich in materials such as charcoal, burned bone, chipped and ground stone, fire-cracked rock, baked clay, shell and glass (trade) beads, and sometimes pottery.

Other types of archaeological sites include cemeteries, isolated burials, quarry sites, petroglyph (rock carvings) and pictograph (rock paintings) sites, kill sites where animals were butchered, and sites where certain types of resources (stone, vegetal, clay, paint pigments) were obtained or processed (bedrock mortars).

Historical Setting

Bordered by the Tuolumne River, the first modern record (1850s) of permanent residents in Waterford, other than the Native Americans that long frequented the area, were the homesteading and farming activities of William Wilkerson Baker. Because of his homestead the settlement was named Bakersville in 1857. Mr. Baker homesteaded 160 acres just south of the river near the Appling Road Bridge.

The main economic activities of the area were agriculture and fishing as well as commerce with the nearby gold mining communities. The city was a leader in early irrigation and farming practices.

In 1870 the post office was apparently having trouble delivering the mail as the name was being confused with other places (at the time the only other similarity was Bakersfield) so the post office suggested the name be changed. Reflecting the area's river fording characteristics, the name of Waterford was eventually chosen. So in 1870 the name was officially changed to Waterford.

Other Important Dates in Waterford History

- **1866** White Oak School District formed
- **1891** Southern Pacific Railroad reaches Waterford
- **1893** Community Baptist Church services began
- **1904** First telephone service reaches Waterford
- **1908** White Oak School changes to Waterford School
- **1912** First Waterford Library founded
- **1913** Waterford Irrigation District formed
- **1920** First post office building
- **1921** Electricity lights up the streets
- **1938** Grange Hall built at Bentley & Hwy 132
- **1969** Incorporated as a city. Richard M. Moon becomes first Mayor.

Historical Sites and Buildings

An inventory of historical sites and buildings has not been compiled for the city of

Waterford. The early railroad alignment of the city led to the early layout of the city and its street system. Most of the potentially “historic” assets of the city are located within this area or centered at the intersection of Bentley and “E” Street, the center of the present “downtown” portion of Waterford.

3.6.2 Environmental Impacts

To the extent that updating the general plan may result in future development within the city's sphere of influence, an increase in development and construction activity will result. This activity will most likely involve excavation that could disturb cultural resource sites presently unknown or impact historic buildings or structures.

Cultural Resources

As open land develops the potential for damaging or disturbing cultural resources becomes more likely. Disturbance or destruction of cultural resources may result from any type of activity that involves disturbing the earth or removing existing structures.

Historical Sites and Buildings

With residential growth and development in Waterford, there will be increased pressure on existing development in the established residential neighborhoods and the central downtown area of Waterford. With new development will come pressure to “modernize” or demolish older buildings and structures to make better use of increasingly valuable and limited land resources in the central and older portions of Waterford.

A. Thresholds of Significance

Appendix “G” of the CEQA Guidelines addresses potential impacts on Cultural Resources as follows:

Would The Project:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines?
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines?
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?
- Disturb any human remains, including those interred outside of formal cemeteries?

DEFINITION OF TERMS COMMONLY ENCOUNTERED:

Area of Potential Effects:

An Area of Potential Effects (APE) is established to define the boundaries of the area within which a proposed project might affect, either *directly* or *indirectly*, any historic properties. The APE should be large enough to include all listed, eligible, or potentially eligible properties which may reasonably be affected by the proposed project.

Direct APE Effect. Direct effects are associated with construction activity and have the potential to immediately alter, diminish, or destroy all or part of the character and quality of historic and archaeological resources (pre-historic and historic).

Indirect APE Effect. Indirect effects are related to the primary consequences of the completed project and may be several steps removed from the project in the chain of cause and effect. Indirect impacts can normally be expected to cause change in the character or use of built environment by the introduction of undesirable auditory or visual intrusions. Noise and vibration from construction activity itself may be considered indirect effects. Indirect impacts generally have little potential to alter archaeological resources because the significance of the archaeological resources usually lies only in the information they contain.

Historical Resource In accordance with Section 15064.5 of the CEQA Guidelines, a historical resource includes 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.
- (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 resource survey meeting the requirements of section 5024.1(g) of the Public Resources Code.
- (3) Any object, building, structure, site, area, place, record, or manuscript that the city determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, and the resource meets the criteria for listing in the California Register of Historical Resources.

Historic Register Criteria California Register of Historical Resources (Pub. Res. Code 5024.1, Title 14 CCR, Section 4852) includes the following criteria for determining the eligibility for listing a historical resource in the California Register of Historic Resources:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- (2) Is associated with the lives of persons important in our past;
- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- (4) Has yielded, or may be likely to yield, information important in prehistory or history.

Substantial Adverse Effect: A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.

- (1) Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.
- (2) The significance of an historical resource is materially impaired when a project:
 - (A) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, the California Register of Historical Resources; or
 - (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
 - (C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources.

Note: Generally, a project that follows the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource.

Historic Integrity Integrity is defined in Bulletin 15; “How to Apply the National Register Criteria for Evaluation, (U.S. Department of the Interior, National Park Service 1982) as:

“The authenticity of a property’s historic identity, evidenced by the survival of physical characteristics that existed during the property’s historic or prehistoric period. If a property retains the physical characteristics it possessed in the past then it has the capacity to convey association with historical patterns or persons, architectural or engineering design and technology, or information about a culture or peoples.”

Integrity is a quality that applies to resources in specific ways:

- Location,

- Design,
- Setting,
- Materials,
- Workmanship, feeling, and
- Association.

A resource must possess two, and usually more, of these kinds of integrity, depending on the context and the reasons why the property is significant.

The principal test to assess whether a property retains integrity is to ask if it still retains the identity or character for which it is important. While it is not necessary for the property to retain all the physical features or characteristics it had during its period of significance, it must retain the essential physical features that convey its past identity or character and, thus its significance.

Historical Significance A property must meet one or more of the following evaluation criteria to be considered representative of a significant theme or pattern in the history, architecture, archaeology, engineering or culture of an area. The criteria are applied after identifying relevant historical themes or patterns.

- (1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- (2) Is associated with the lives of persons important in our past;
- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- (4) Has yielded, or may be likely to yield, information important in prehistory or history.

Properties considered significant for their information potential (Criterion "4") must contain data sets that, when analyzed, will address important defined research questions. Research questions are typically developed as part of a research design, which specifies not only the questions to be addressed, but also the types of data needed to address the questions and the techniques to be used to recover and analyze the data.

ASSESSMENT OF HISTORICAL RESOURCES

DEFINITION OF HISTORIC RESOURCES

Historic Resources include, but are not limited to, any object, building, structure, site, area, or place that has historic relevance to the development of city, county, the state of California, or the United States of America. The period of time inclusive of "historic resources" is generally considered to be the period of "post- contact" with European settlers, but can include archaeologically important items as well, i.e. archaeological resources can be historic resources, but historic resources are not always archaeological resources.

THRESHOLD CRITERIA

Any alteration, change, movement, relocation, or disturbance of a resource which would have a “*substantial adverse effect*” on “*historical resources*” as defined by CEQA is to be deemed “significant”. A substantial adverse effect may also result from activities undertaken within the “*area of potential effect*” (APE) of a project undertaken near a “*historical resource*”.

ASSESSMENT OF ARCHAEOLOGICAL RESOURCES

DEFINITION OF ARCHAEOLOGICAL RESOURCES

Archaeological resources are the material remains (artifacts, structures, refuse, etc.) produced purposely or accidentally by members of prehistoric human cultures.

DEFINITION OF ARCHAEOLOGICAL TERMS

Archaeological Resources: The material remains (artifacts, structures, refuse, etc.) produced purposely or accidentally by members of prehistoric human cultures.

Record Search: Preliminary assessment of archaeological resource literature and other available data to determine whether prior survey, analysis, or excavation has occurred in the project area; and to provide initial interpretations of impact and significance.

Phase I Assessment: A surface survey of the project area conducted by a qualified consultant, combined with a detailed record search.

Phase II Assessment: A detailed assessment of archaeological resource sites or features, consisting of intensive surface analysis and, where appropriate, limited test excavations, auger-boring, etc., to help determine site spatial boundaries and temporal depth.

Phase III Assessment: A ‘mixed strategy reconnaissance’ involving a combination of archaeological site analysis techniques, as determined by the archaeological consultant(s).

Project Area: The area covered by the discretionary permit request, usually including that area within 500 feet of the land area to be directly impacted by the proposed project.

THRESHOLD CRITERIA

CEQA requires protection of unique archaeological resources that may be damaged or destroyed by a development project. For the purposes of CEQA, a unique archaeological resource is 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:

- (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- (2) Has a special and particular quality such as oldest of its type or best available example of its type.
- (3) Is directly associated with a scientifically recognized important prehistoric or

historic event or person.

The determination as to the “unique” status of the archaeological resource is a determination that must be made by a qualified archaeologist following a Phase I Assessment of the site. The determination of the limits of the site may require a Phase II Assessment.

A construction project involving grading and excavation in a unique archaeological resource or site will be considered to create a potential significant impact on the environment with respect to archaeological resources.

ASSESSMENT OF PALEONTOLOGICAL RESOURCES

DEFINITION OF PALEONTOLOGICAL RESOURCES:

Paleontological resources refer to the fossilized remains of plant and animal life. Careful scientific study of fossilized life forms preserved in the sedimentary and metamorphic rocks of the region can result in the identification of local paleo-environmental conditions and biological evolutionary trends.

DEFINITION OF PALEONTOLOGICAL TERMS

The following is a glossary of paleontological terminology.

Fossils The remains or indications of once-living organisms.

Vertebrate Fossils (Rare) Animals containing a spine or endoskeleton.

Megainvertebrate Fossils (Rare) Animals containing no bony or cartilaginous material.

Microinvertebrate Fossils (Abundant) Also known as Microfossils, and often of economic importance.

Floral Organic Remains (Abundant) Simple and complex non-faunal materials.

Paleoenvironment Indicators The use of fossilized plant and animal materials, particularly pollens, in reconstructing past environmental conditions.

Paleontological Resource Importance reflects the potential productivity of a formation or exposure and the importance of the particular fossils located in the formation or exposure.

PALEONTOLOGICAL IMPACTS

The geologic formation in which proposed projects would be located can be used to establish the likelihood of paleontological resources being present and their relative importance.

Fossil remains are considered important if they are,

- 1) well preserved,
- 2) identifiable,
- 3) type/topotypic specimens,

- 4) age diagnostic,
- 5) useful in environmental reconstruction,
- 6) represent rare and/or endemic taxa,
- 7) represent a diverse assemblage,
- 8) represent associated marine and non-marine taxa.

Vertebrate and Megainvertebrate fossils are considered highly important because they are comparatively rare and allow precise age determinations and environmental reconstructions for the strata in which they occur. Microinvertebrate fossils (microfossils) are much more abundant and, for this reason and because of their small size, would not be adversely impacted to the same degree as vertebrate and megainvertebrate fossils.

A variety of geologic formations are of undetermined paleontological importance due to a lack of data concerning the particular rock outcropping in question. In addition, Quaternary deposits, which represent the last 10,000 years of geologic history and includes alluvial deposits and landslides, have the potential for high to no resource importance.

Direct impacts to fossil sites include grading and excavation of fossiliferous rock, which can result in the loss of scientifically important fossil specimens and associated geological data. Indirect impacts include increased access opportunities and unauthorized collection of fossil materials. Cumulative impacts include all projects that contribute to the progressive loss of exposed rock in the area that can be studied and prospected for fossil remains.

THRESHOLD CRITERIA

A construction project involving grading and excavation in an area where vertebrate and megainvertebrate fossils are likely to be found will be considered to create a potential significant impact on the environment with respect to paleontological resources.

ASSESSMENT OF HUMAN REMAINS

DEFINITION OF ISSUE

Cemeteries contain important cultural and historic information regarding a community. The accidental discovery or recognition of any human remains in any location other than a dedicated cemetery can also contribute important information regarding historic or pre-historic development patterns of the area. The need to record this information in a scientific manner is necessary to assure that this information is not lost as a result of the disinterment, disturbance or relocation of human remains.

THRESHOLD CRITERIA

Excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains is considered significant unless all applicable provision of state law and local regulations have been complied with including, but not limited to, Public Resources Code sections 5097.98, 21082, 21083, 21083.2, 21084, 21084.1, and 21087.

B. Potential Significant Impacts:

Cultural Resource Impacts Found to be Potentially Significant:

As a result of project analysis, based on data collected in the evaluation of the city's general plan implementation, the following resource impacts could occur:

- *Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines?*

The adoption and implementation of the general plan is not likely to result in a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the CEQA Guidelines. The city contains buildings and structures that date from the turn of the century and are deemed to be locally significant. The city's permit and development review process is sensitive to any construction activities that could adversely impact the city's historic charm. Projects undertaken in accordance with the general plan may result in construction activities that could disturb a historic resource, however, these projects would be subject to individual review and approval and subject to the requirements of state law with respect to any disturbances to historical resources.

- *Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines?*

The adoption and implementation of the general plan is not likely to result in a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines. Due to the nature of the area, it is not likely that any archaeological resources exist in the city's planning area. Projects undertaken in accordance with the general plan may result in construction activities that could disturb an archaeological resource. However, these projects would be subject to individual review and approval and subject to the requirements of state law with respect any disturbances to archaeological resources.

- *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

The adoption and implementation of the general plan is not likely to result in the direct or indirect destruction of any unique paleontological resource or site or a unique geologic feature. Due to the nature of the area, it is not likely that any paleontological resources exist in the area. There are no unique geologic features within the city's urban area or the proposed urban expansion area. Projects undertaken in accordance with the general plan may result in construction activities that could disturb a paleontological resource, however, these projects would be subject to individual review and approval and subject to the requirements of state law with respect any disturbances to paleontological resources.

- *Disturb any human remains, including those interred outside of formal cemeteries?*

The adoption and implementation of the general plan is not likely to result in the disturbance of any human remains. Projects undertaken in accordance with the general plan may result in construction activities that could disturb human remains; however, these projects would be subject to individual review and approval and subject to the requirements of state law with respect any disturbances to a burial site.

C. Proposed General Plan Goals & Policies:

The Waterford General Plan contains policies and goals that aim to preserve the charm and economic attractiveness of the city. There are policies in the Land Use and Housing chapters of the general plan, while not directly aimed at cultural resource preservation, have the effect of preserving and protecting the city's cultural assets. The Sustainable Development Chapter of the general plan contains specific goals and policies for the preservation and enhancement of the city's cultural resources.

Overall Goals for Cultural Resource Preservation

Goal Area- Sustainable Development (SD)

SD-A Diverse and Rich Historic and Cultural Resource Environment

SD-A Long-Term Community Historic Preservation/Improvement Program

Policies

SD-2.1 Identify and preserve the city's archaeological resources.

SD-2.2 Identify and preserve the city's historic and cultural resources.

SD-2.3 Develop and promote financial incentive programs for historic preservation efforts.

D. Short-Term Impacts:

Adoption of the general plan will result in the drafting and adoption of implementing policies and provisions, such as zoning and subdivision standards, that will be utilized in the review of development proposals. These actions and activities will not have any adverse impacts on cultural resources of the area but will lead to improved regulation of development with respect to potential cultural resource impacts.

E. Long-Term Impacts:

As economic growth occurs in the city, changes will be proposed that will result to modification to, and around, some of the city's historic resources. These development proposals, which will be consistent with the policies and standards of the general plan, will be reviewed and approved based upon compliance with the cultural resource requirements of state and federal law. It can be expected that some changes in cultural resources will occur as older buildings are upgraded to comply with modern building codes such as the requirements of the American with Disabilities Act (ADA) or requirements for un-reinforced concrete structures. As a result of implementation of modern building codes, some cultural resources may be lost over time. It should be noted that this loss would most likely occur regardless of general plan implementation and the plan contains policies and standards that could minimize this expected future impact.

F. Cumulative Impacts:

Modifications to historic buildings that may occur as the city grows and develops will be part of the changing urban landscape and will also result in aesthetic changes in the city. These changes, based on the policies and guidance provided in the general plan, may be seen as an improvement over the existing visual and cultural setting.

G. Secondary Impacts:

As a result of these regulatory standards, it is expected that there will be an increase in the cost of construction and development on sites that contain cultural resources. These costs will be uniform within the region and the state and are not expected to be significant in most cases or create any substantial adverse economic impact that would hamper normal growth and development within the city.

3.6.3 Mitigation Measures

As part of the city's development review program, individual development projects may be required to prepare studies to evaluate the project's potential impact on cultural resources. As a result of these studies, specific project level mitigation measures may be required as part of the project's conditions of approval.

3.6.4 Level of Significance After Mitigation

Projects that are undertaken in a manner that is consistent with the policies and standards of the City of Waterford General Plan and comply with all appropriate federal and state cultural resource regulations will not result in the creation of a significance adverse physical impact on cultural resources within the city of Waterford.