

## E. PROTECTION OF CULTURAL RESOURCES

### CAL FIRE STANDARD PROTOCOL FOR THE PROTECTION OF CULTURAL RESOURCES IN VTP PROJECTS

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The CAL FIRE protocol for protecting cultural resources included below is excerpted from the CAL FIRE manual Archaeological Review Procedures for CAL FIRE Projects (Foster and Pollack, 2010, pages 6-18). The full document is available on the CAL FIRE website at [http://calfire.ca.gov/resource\\_mgt/archaeology-resources.php](http://calfire.ca.gov/resource_mgt/archaeology-resources.php) (accessed 12/30/14).

#### II. Procedures for Archaeological Reviews of CAL FIRE Projects

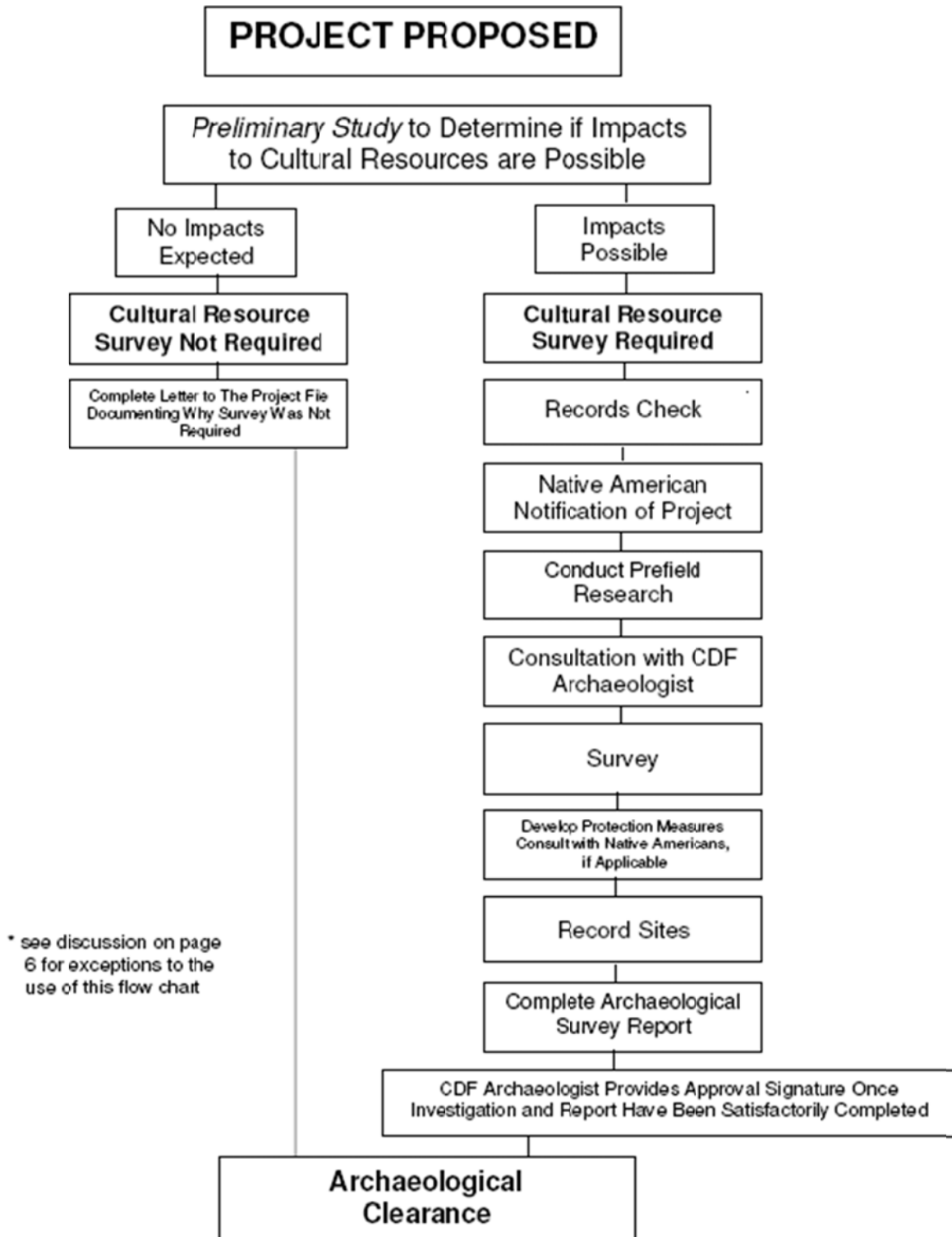
**Preliminary Study:** The first step in the process of conducting an archaeological review of a CAL FIRE project is the completion of a *Preliminary Study*. This study should be undertaken by the CAL FIRE project manager in consultation with the appropriate CAL FIRE Archaeologist. If the CAL FIRE project manager does not have current CAL FIRE archaeological training as described on pages 2 through 5, then the CAL FIRE project manager shall appoint a designee who has current CAL FIRE archaeological training, and who is familiar with the details of the proposed activities and locations. The purpose of the Preliminary Study is to determine if impacts to cultural resources are possible. This determination shall be made after considering the full range of specific project activities and practices, the location of the project, and other relevant factors.

The Preliminary Study will be conducted during a telephone conversation or face-to-face meeting between the CAL FIRE project manager and the appropriate CAL FIRE Archaeologist. Prior to this telephone conversation or face-to-face meeting, the CAL FIRE project manager shall provide the CAL FIRE Archaeologist with a copy of the project map(s) as well as a description of the proposed project in order to provide the adequate information the Archaeologists need to assess the likelihood of the presence of cultural resources. CAL FIRE Archaeologists are regularly available each week to participate in telephone consultations and assist in the completion of Preliminary Studies for CAL FIRE projects. The CAL FIRE project manager and CAL FIRE Archaeologist shall identify and evaluate the full range of project activities and compare those activities to the list of Exempt Practices provided in this document.

If the Preliminary Study concludes that the proposed project does not have the potential to affect cultural resources, pursuant to the list of Exempt Practices (listed below), or other circumstances, then an archaeological survey would not be required. The CAL FIRE Archaeologist must concur with this finding. In such cases, a records check, Native American notification, pre-field research, and survey report are not required. Archaeological clearance of the project must be documented in the form of a letter to the project file (prepared by the CAL FIRE project manager) that indicates the rationale supporting the decision to waive archaeological survey requirements. A copy of this letter shall also be sent to the appropriate CAL FIRE Archaeologist for his/her file.

The CAL FIRE project manager (or their designee) shall conduct an intensive cultural resource survey if the Preliminary Study reveals the potential to affect cultural resources. In most situations, this survey will include all of the procedural steps discussed below and shown on the *Cultural Resource Review Procedures* flow chart on page 7 of this document. Barring an unusual exception noted below, the list of tasks specified in *Cultural Resource Survey Procedures* shall be completed as part of the cultural resource review for every CAL FIRE project determined to have the potential to affect cultural resources. During the review of certain projects, the CAL FIRE project manager may determine that one or more of procedural steps 1 through 3 could be omitted. However, the concurrence of a CAL FIRE Archaeologist must be obtained in order to bypass any of these steps. The best way to track this concurrence is through email documentation.

In general, any project that includes ground disturbing practices shall be considered to have the potential to affect cultural resources and, consequently, shall require an archaeological survey. Typical examples of such practices include, but are not limited to, any type of use of heavy equipment to alter the landscape, site preparation, forestland conservation work such as erosion control, road repair, stabilization and abandonment of road beds, improvement of drainage facilities, and/or stream bank stabilization. Other types of projects may also require archaeological survey in spite of limited disturbance to the ground. Such projects include, but are not limited to, rural tree planting, prescribed burning, broadcast burning, and the burning of slash piles. CAL FIRE generally does not fund projects resulting in the planting of commercial species trees within the boundaries of archaeological sites. This practice is due to the possibility that eventual harvest of such trees might be prohibited by CAL FIRE enforcing California's Forest Practice Rules since timber harvesting operations can affect cultural resources. For this reason, archaeological survey shall be required prior to funding most tree planting projects in order to identify and avoid sites.



**List of Exempt Practices:** Because they are unlikely to impact cultural resources, the following practices are exempt from archaeological survey, investigation, and reporting requirements. An archaeological records check, notification to Native Americans, pre-field research, intensive cultural resource survey, or the completion of an archaeological survey report are not required for projects that involve only these practices.

1. Management Plan: A long term forest and land management plan to assist forest landowners in developing their land management objectives and feasible projects. The preparation of a forest land management plan is not, in itself, a ground disturbing practice and may be funded without an archaeological survey. In such cases, archaeological survey must precede any ground disturbing practice called for in the plan. However, CAL FIRE recommends the inclusion of some level of cultural resource planning in the management plan itself, such as a record search for the entire property, an overview of local archaeology, ethnography, and history as it relates to predicting the kinds of cultural resources likely to exist on the property, and a discussion regarding future archaeological survey work and how sites will be managed. This exemption also includes Coordinated Resource Management Planning, Fire Plans, and other forms of broadly scoped planning efforts by CAL FIRE that do not result in ground disturbing practices.
2. RPF Supervision: The practice of utilizing a Registered Professional Forester to supervise on-the-ground management activities.
3. Feasibility Studies and Market Analysis: The practice of conducting studies to determine the feasibility of future projects including, but not limited to, an investigation of the marketability of certain products derived from such projects.
4. Purchase of Tree Seeds and Seedlings The purchase of tree seeds and seedlings and costs of transporting and storing them. Note: The actual planting of seeds or small seedlings in rural forested areas is not an exempt practice. While such planting may be conducted without significant ground disturbance, CAL FIRE generally does not approve funding for projects resulting in the planting of commercial species trees within archaeological site boundaries. California's Forest Practice Rules may restrict or prohibit the eventual harvest of such trees since the harvesting of commercial size trees is a practice that has potential to damage or destroy cultural resources. For these reasons, archaeological survey is required prior to funding most tree planting projects in rural forested areas in order to identify and avoid archaeological and historic sites.
5. Tree Shelters: The purchase and installation of vexar netting for browse control and shelter cards for shade necessary to assure survival of seedlings.
6. Follow-up (Release): Practices necessary to promote the survival of seed or seedlings within 36 months of planting. Generally such work is intended to control insects, diseases, rodents, weeds or brush competition and may include the use of herbicide, chain saw, weed-eater, or hand-grubbing. These practices are only implemented within tree planting units where an intensive cultural resource survey, conducted in accordance with the specifications and standards listed in this document, was completed. This follow-up work is exempt from

further review because the cultural resource inventory work does not need to be repeated. If, for some reason, follow-up activities are considered for treatment units that were not previously subjected to intensive cultural resource survey, these activities shall not be considered exempt.

7. Timber Stand Improvement: Activities designed to improve timber stands include pre-commercial thinning of young commercial tree species to reduce the number of stems per acre, release of commercial tree species by removing competing noncommercial species of trees and shrubs, and pruning of young trees by removing lower branches from commercial tree species. This work will usually be done by crews using hand tools and the slash is just left on the ground, typically lopped and scattered. Note: if the slash will be piled and burned, or mechanically collected and removed for biomass utilization, those activities may not be exempt. Some biomass harvesting operations can cause significant ground disturbance and, therefore, have the potential to disturb/damage archaeological and historic sites.
8. Wildlife Habitat Improvement: The creation of snags, installation of nest boxes, roost poles, platforms, or artificial cavities for animal habitat improvement where the ground is not disturbed.
9. Reseeding: Hand or aerial applications of seed or nutrients.
10. Mulch: Hand application of mulch, placement of weed barriers, hay bales, or animal repellent.
11. Irrigation: Surface installation of trickle irrigation system.
12. Educational Materials and Events: Production and distribution of flyers, pamphlets, brochures, booklets, newsletters, telephone helpline, videos, etc.; conducting meetings, seminars, conferences, classes, etc. to educate and disseminate information to landowners; and, lastly, the funding of CAL FIRE staff and contractors to deliver technical assistance to landowners.
13. Conservation Easement and Fee Title Purchase: Acquisition of easements and fee title purchase of forest lands with the intention of keeping the lands in traditional forest uses and to prevent conversion to non-forest uses. The title will be held by either federal, state or local government.
14. Acquisition: Land acquisitions or transfers of administrative control to CAL FIRE, where the historic properties received are not considered in exchange for any historic properties relinquished.
15. Urban Forestry Projects: Purchase and transport of trees and the planting of native and non native species of trees in urban settings. Typically, these settings occur in areas previously landscaped such as within public parks or schools. Such projects also occur in street medians and along sidewalks within developed areas. Note: Most of these projects will not require archaeological survey unless known cultural resources exist in a planning location or the area possesses high archaeological sensitivity. If the urban forestry grant proposes to plant trees in

undeveloped wildland settings, such projects are not exempt and will require archaeological survey. Similarly, the planting of trees suitable for the purpose of creating a windbreak in a rural or agricultural setting is not exempt. Note: Trees can be an important part of a historic landscape in both rural and urban areas. CAL FIRE project managers should keep in mind that planting new trees in a historic district or on the property of a historic building may affect the setting of that historic property. In such situations the appropriate CAL FIRE Archaeologist should be consulted at an early stage of project planning.

16. Shaded Fuel breaks (Handwork Only): Thinning and pruning of trees, generally along both sides of a road or along the crest of a ridgetop, to create an effective fuel break to potentially stop a wildfire, provided such trees are not part of a historic landscape. The accomplishment of such projects involves removal of vegetation by hand, lopped and scattered or chipped and scattered. Note: Shaded fuel break projects involving mechanical timber harvesting or the piling and burning of slash are not exempt.
17. Fire-Safe Projects: Treatment of vegetation surrounding communities to reduce the risk of catastrophic wildfires through thinning and/or removal of vegetation by crews using hand tools. To be exempt such projects must involve the chipping and removal of woody material or the chipping and scattering of woody material. Note: Fire-Safe Projects involving the piling and burning of slash are not exempt.
18. Disposal of Piled Brush: This activity involves the disposal and removal of brush piles. CAL FIRE often administers federal grants to provide chipping and removal of biomass to homeowners doing their own legally mandated defensible space clearing required by PRC 4291. In these instances, the treatment of the vegetation is not a CAL FIRE project and CAL FIRE's responsibility for environmental review only pertains to the disposal of brush piles. A chipper may be utilized to chip and scatter woody material near the brush piles. If brush piles will be collected and transported to a location for biomass utilization, those activities must be carefully evaluated for potential effects to cultural resources.
19. Diseased Oak Removal: Activities related to the eradication, gathering and removal of diseased oak trees, limbs and slash from oak trees, including, but not limited to, infestation zones of *Sudden Oak Death* without causing significant ground disturbance. Note: Ground disturbing practices such as stump removal, mechanical yarding, site preparation, and/or the burning of slash piles, are not exempt activities and will require archaeological survey.
20. Fuelwood and Christmas Trees: The collection and personal use of fuelwood and the harvesting of Christmas trees.
21. Sign Posts: The installation of sign posts and monuments, when no new ground disturbance is involved.
22. Log Jam Removal: The removal of log jams and debris jams using hand labor or small mechanical devices.
23. One Cubic Meter Disturbance: Activities that involve less than one cubic meter of

cumulative ground disturbance per acre.

24. Disturbed Areas: Those activities or projects where the area of potential effect (APE) is entirely within obviously disturbed contexts, and the disturbance is such that the presence of historic properties is considered highly unlikely.
25. Pesticides: The application of pesticides where such application does not have the potential to affect use of plant resources by Native Americans. The CAL FIRE project manager may need to demonstrate how Native American plant gatherers will be protected.
26. Existing Borrow Pits: Work within the perimeter of existing material borrow pits. Expansion of the area of ground disturbance to outside of the existing borrow pit is not exempt.
27. Stream Channels: Activities limited within stream channels. Note: stream channel improvements resulting in alterations to streamside terraces or cut banks along the margins of stream channels are not exempt.
28. Handlines: The creation of narrow handlines using hand tools to establish a burn perimeter. Handlines are often used to keep prescribed fire from entering into an archaeological site. This includes hand grubbing around trees or near cultural resources to prevent fire from entering or damaging such resources. Such activities are limited to light brushing of vegetation to expose mineral soil using hand tools.
29. Trail Maintenance: Routine trail maintenance limited to brushing and light maintenance of existing tread with hand tools only.
30. Road Maintenance: Routine road maintenance and resurfacing where work is confined to previously maintained surfaces, ditches, culverts, and cut and fill slopes along road segments crossing no known archaeological or historic sites. Proposed road maintenance activities within known archaeological or historical sites must be carefully reviewed by the CAL FIRE project manager in consultation with the appropriate CAL FIRE Archaeologist.
31. Hazard Tree Removal: The felling of hazardous trees within recreation areas or other areas for health and safety reasons provided they are left in place or cut up for firewood using hand tools. This includes the felling and removal of hazard and windthrow trees from road prisms where deemed necessary for health, safety, or administrative reasons, so long as trees are felled into and removed from within existing road prisms (area clearly associated with road construction, from road surface to top of cut and/or toe of fill) where previous disturbance is such that the presence of historic properties is considered unlikely, and so long as ground disturbance is strictly limited to previously disturbed areas associated with road prisms.
32. Road Use Permits: The issuance of road use permits for commercial hauling over existing roads, whenever CAL FIRE's involvement is incidental to activities associated with the permit's purpose and where effects to traditional cultural properties are not expected. If the permit includes road maintenance work on state lands, consideration must be given to known cultural resources that might be affected (see Exemption #30).

33. Temporary Road Closure: Temporary road closures involving no new ground disturbance.
34. Snow Fences: The construction of snow fences where no new ground disturbance is involved.
35. Existing Nonstructural Facilities: The maintenance or replacement in-kind of existing nonstructural facilities that does not involve new or additional ground disturbance (e.g., maintenance or replacement of existing cattle guards, gates, fences, stock tanks, guardrails, barriers, traffic control devices, light fixtures, curbs, sidewalks, etc.).
36. Recent Facilities: Activities or alterations involving facilities or structures that are less than 50 years of age. For activities involving CAL FIRE buildings or facilities older than 50 years of age, consult the *Management Plan for CAL FIRE's Historic Buildings and Archaeological Sites* (Foster and Thornton 2001), available on the CAL FIRE Archaeology Program Web Site, for guidance.
37. Trash Removal: The removal of trash that is less than 50 years old and does not otherwise qualify as a cultural resource.
38. Installation of Law Enforcement Detection Devices: The installation of law enforcement detection devices within historic properties to assist investigations of site looting and to prevent site vandalism where such installation is unlikely to cause substantial adverse change to the site. The CAL FIRE Archaeologist must be involved in the planning of this type of project.
39. Purchase of Equipment: The purchase of tools and equipment (such as a chipper) that may be utilized in subsequent projects for the treatment of brush and other vegetation. The purchase of such equipment shall be considered an exempt practice.
40. Project Areas Previously Surveyed: Project activities which are entirely within areas previously surveyed for cultural resources where no cultural resources were found, if the previous survey work was conducted in accordance with the specifications and standards listed in this document.
41. Other Practices: Other practices on an individual basis as agreed to by a CAL FIRE Archaeologist. If the project is federally funded, the State Historic Preservation Officer (SHPO) and the federal agency funding the project must also agree that the practice is exempt.

**Cultural Resource Survey Procedures:** Archaeological surveys for CAL FIRE projects must include the following tasks (these match the flow chart on page 7):

Records Check: A *current archaeological records check* (defined in Section 895.1 of the Forest Practice Rules) shall be utilized in project planning. CAL FIRE may use an existing records check previously completed for another project on the same property if that records check is current (i.e., was conducted within the previous five years) and if all of the current project areas were covered in the previous records check. For CAL FIRE properties, consult with a CAL FIRE Archaeologist



first to find out if a records check has already been completed for the property. Typically, however, the CAL FIRE project manager or designee shall initiate a new archaeological records check specifically for the project being reviewed. It is recommended that the entire parcel be included in the request for a records check so that this information may be used if additional projects occur on the same property. This is particularly true if the records check is initiated as part of the preparation of a forest land management plan. The policies and procedures governing records checks for CAL FIRE projects are outlined in a 1996 Memorandum of Agreement (MOA) between CAL FIRE, SHPO, and the Information Centers, which is available on the CAL FIRE Archaeology Program Web Site. The Information Centers charge a fee for providing a records check and this fee must be paid in a timely manner. For some programs, the CAL FIRE Unit pays the fee. In other programs, the fee might be paid by the consulting RPF preparing a management plan or project in one of our cost-share programs. In such circumstances the records search fee may be reimbursed by CAL FIRE. In other circumstances the landowner or applicant may have to pay the fee. In some years, certain CAL FIRE programs establish a fund to be used for records check fees. The CAL FIRE Archaeology Program Web Site also contains a downloadable form to be completed when requesting an archaeological records check.

Native American Project Notification and Information Gathering: The CAL FIRE project manager shall send written notification of the proposed project to the appropriate Native Americans listed on the most current version of CAL FIRE's Native American Contact List (NACL) which is also available on the web site. The purpose of this notification is to inform Indian tribes, local Native American groups and the Native American Heritage Commission (NAHC) about the proposed project, and also to invite their views and comments about the project. It also serves as an information gathering step. Through this procedure, the CAL FIRE project manager shall request information concerning the location of any archaeological or cultural sites that may be known within the project area. In response, the NAHC will complete a check of its Sacred Lands File. CAL FIRE shall follow-up and investigate any potential positive result revealed through this request for information. We recommend this step be completed early in the process of developing a project (such as the same time as the archaeological records check) in order to avoid delays, allow time for Native American groups and/or individuals to respond, and create the opportunity to document the results of any consultation that may follow receipt of the notification letters and include this in the archaeological survey report. Use the most current version of the NACL available at the time the environmental impact review is being conducted. This list is updated monthly and the current list is usually posted during the first week of each month. The notification letter must include the following items:

- A request for information concerning their knowledge of archaeological, historical, or other cultural resources within the project boundaries,
- A description of the project location including the county, section, township, range, base and meridian, and the approximate direction and distance from the nearest community or well-known landmark,
- Two maps--a general location map such as a Thomas Brothers Map that shows the travel route from the nearest community or well known landmark to the project area and a copy of the relevant portion of the USGS topographic quadrangle map clearly depicting the location of the project boundaries as well as a map legend and scale,
- A statement that all replies, comments, questions or other information should be directed to CAL FIRE and provide the name, address, and telephone number of the CAL FIRE project

manager,

- A statement that CAL FIRE is requesting a response within thirty days from the date of the notice so the information can be utilized during project planning,
- A statement that the Native American groups and/or individuals may participate in the project review process by submitting written comments to CAL FIRE within 30 days,
- A statement that locations of sites disclosed will be kept confidential.

Additional guidance pertaining to consultation with Native Americans is provided on our web site at [http://www.indiana.edu/~e472/CAL FIRE/contacts/procedures.html](http://www.indiana.edu/~e472/CAL_FIRE/contacts/procedures.html)

Pre-field Research: The CAL FIRE project manager, designee, or archaeologist working on the cultural resources survey shall conduct appropriate levels of pre-field research as part of the investigation. The purpose of this research is to get prepared to conduct the survey, become familiar with the types of resources likely to be encountered within the project area, and to be ready to interpret, record, and evaluate these findings within the context of local history and prehistory. The investigator should review records, study maps, read pertinent ethnographic, archaeological, and historical literature specific to the area being studied, and conduct other tasks to maximize the effectiveness of the survey. The *Handbook of North American Indians - Volume 8 – California* (Smithsonian Institution 1978) and the *Handbook of the Indians of California* (Kroeber 1925) are two primary ethnographic sources; at least one of which should be reviewed. Determine which tribal group or groups occupied the area containing the proposed project and review information about those tribal groups. Another excellent source that should be checked every time is the General Land Office (GLO) plat maps for the township containing the project. Most GLO plat maps date from the 1850s to the 1870s although some are as late as 1900. The GLO surveyors often mapped homesteads, cabins, orchards, roads, trails, fence lines, mining areas, etc. that were observed during their survey. If any such features are depicted on the map within what is now the project area, a careful search should be made for surviving remnants of them or of unmapped associated features or artifacts. GLO plat maps can be an excellent source for dating historic features discovered on your archaeological survey. The GLO surveyor's notes usually accompany the plats and review of these is sometimes useful as well. GLO plat maps and records may be obtained through the mail or in-person at the Bureau of Land Management Office of Survey Records in Sacramento. It is prudent to call first: (916) 978-4330. The BLM usually charges a small fee per copy (24" X 36") but BLM has waived the fee for CAL FIRE. GLO plat maps are also kept on file at some of the Information Centers. Those Information Centers may provide a copy of a relevant portion of a GLO plat map as part of a Complete Records Check, if so requested. Old topographic maps, if available, should be examined for the locations of old houses, roads and other features that may have been displayed on these early maps but not on current USGS topographic quadrangle maps. Consulting a series of aerial photographs taken over a period of time can help date historic structures and aid in the assessment of the types of previous land-use practices and prior ground disturbances. Persons contacted should include individuals belonging to any local historical society, agency archaeologists, landowners, ranchers, neighbors, and/or other knowledgeable individuals that may have lived or worked in the area being studied. Pre-field research should also include a review of archaeological reports (either survey reports or excavation reports) and/or site records for the local area. This review will provide specific examples of the kinds of cultural resources that have been previously discovered in the general area, a discussion of archaeological,

historical, and ethnographic information pertaining to the area being studied, and examples of typical artifact assemblages. Look for site location patterning and the types of artifacts or features being recorded. For projects on CAL FIRE facilities or state-owned lands, be sure to review *CAL FIRE's Management Plan for Historic Buildings and Archaeological Sites* (Foster and Thornton 2001), and *A Survey and Historic Significance Evaluation of the CAL FIRE Building Inventory* (Thornton 1994). This two-volume report includes a complete listing of all CAL FIRE buildings and provides the date of construction for each building. For projects containing CAL FIRE lookouts, review *An Inventory and Historical Significance Evaluation of the CAL FIRE Lookout Stations* (Thornton 1993). This volume also provides the age and historical significance of each surviving CAL FIRE lookout facility.

Consultation with a CAL FIRE Archaeologist: After the records check, Native American project notification, and pre-field research steps have been completed, the CAL FIRE project manager shall consult with a CAL FIRE Archaeologist to review these findings and determine appropriate survey strategy and methods. It will be determined at this time whether or not a CAL FIRE Archaeologist is available to assist in the completion of the survey, or if this work will be conducted entirely by an archaeologically trained resource professional.

Survey: An intensive cultural resource survey shall be made of the Area of Potential Effect (APE) of the project area. Such a survey shall only be performed by a *professional archaeologist*, or an *archaeologically trained resource professional* as defined in the Forest Practice Rules – if determined appropriate by the reviewing CAL FIRE Archaeologist. In most cases the work will be done by the CAL FIRE project manager, possibly assisted by a CAL FIRE Archaeologist. It is possible, however, that the survey work will be completed by a consulting RPF or professional archaeologist retained by the landowner, as part of the grant, or retained by CAL FIRE. In all cases, however, the work will be completed under close supervision by a CAL FIRE Archaeologist. The objective of this survey is to identify the specific location of all cultural resources within the project area, including but not limited to: historic landscapes, prehistoric or historic archaeological sites, features, or artifacts, historic buildings or structures, or other types of resources that have significant cultural importance to Native Americans such as traditional cultural properties, cemeteries, gathering areas, and/or sacred sites. In some situations, archaeological survey work may be delayed until after the project has begun. For example, certain exempt practices may begin without archaeological survey, and this staggered approach may be necessary to determine the precise location of Areas of Potential Effect for subsequent activities. Fuels reduction projects involving hand cutting of brush and the burning of brush piles are typical examples of the kinds of projects where archaeological survey may take place after the exact location of the brush piles becomes known.

Survey methods and techniques employed to achieve adequate coverage will vary based upon a variety of factors. These include the physical characteristics of the property, especially topographic and other environmental attributes, and other information gathered during the records check, in response to the Native American information request, and/or other pre-field research, as well as the results of archaeological inventories in areas with a similar cultural and natural setting. There are four different levels of archaeological survey coverage intensity: complete, general, intuitive, and cursory. These are described below:

- **Complete** A complete reconnaissance is one in which archaeologically-trained individuals systematically traverse the area at 10 meter intervals or less, looking carefully for all evidence of prior human activity. Team members usually walk abreast. All archaeological phenomena in a given area may not be visible or as easily definable at the same time: different seasons, varying light conditions, differential erosion, and/or deadfall and duff cover may obscure the investigator's vision or reveal certain remains at different times. Nevertheless, most features should be observable to a trained surveyor walking over the entire area under investigation in a complete manner. Coverage shall be sufficient to allow the investigator to encounter the smallest of the archaeological sites likely to occur in the area under study. Spacing must be narrow enough and ground cover must be modified (if it is an observational problem) to the extent that will allow the investigator to locate the sites. If needed, ground cover modifications (e.g., systematic removal of duff) shall be used to allow inspection of mineral soil for evidence of human activity. During a complete reconnaissance areas will be encountered that could contain archaeological remains (such as prominent rock outcroppings, benches, suspicious-looking features, possible artifacts, etc.). These areas should be intensively examined to determine if archaeological remains are present before transect coverage is resumed.
- **General** A general reconnaissance is one in which an attempt is made to systematically cover an area as in a complete reconnaissance but with wider transect intervals. This might be due to steepness of slope, absence of water, or because of other physical conditions or observational constraints (e.g., deadfall, brush, steep slopes). Transect spacing may be increased to 30 meters.
- **Intuitive** Detailed inspection is given only to specific localities that exhibit previously identified characteristics that may be associated with the location of archaeological properties. Coverage is usually accomplished by traverses 30-50 meters apart. For example, if the reconnaissance is within a steep timberland and controlled studies show that remains of historic activities are not expected for the area and prehistoric sites occur only on benches and near springs, the investigator might then be justified in covering the area in a manner sufficient to locate those natural phenomena that have potential for association with the location of archaeological sites. Detailed inspection is reserved for those areas identified as archaeologically sensitive. Localities within low potential areas that shall receive detailed inspection in this study include springs, seeps, and low rises in flat plains.
- **Cursory** A cursory reconnaissance is one in which the inspector gives the areas a quick field inspection rather than intensive coverage. Sometimes these areas can be examined by walking briefly through and checking likely or probable spots close to the line of travel. Such methods should be employed along with visual aids (e.g., aerial photographs) to ensure that specific localities that exhibit characteristics that may be associated with archaeological site locations are not overlooked. The environmental factors that should be scanned for have been mentioned above.

Develop Protection Measures: CAL FIRE shall develop effective protection measures for all identified cultural resources located within project areas. These measures may include adjusting the project location or design to entirely avoid cultural resource locations or changing project activities

so that damaging effects to cultural resources will not occur. These protection measures shall be written in clear, enforceable language, and shall be included in the archaeological survey report. CAL FIRE shall exercise a strategy of avoiding all adverse impacts to cultural resources. If impacts to cultural resources cannot be avoided, CAL FIRE is responsible for developing specific, effective measures to ensure the mitigation/reduction of impacts to cultural resources in order to avoid or prevent substantial adverse change as defined in state law (PRC Sections 5020-5024, 210833.2, 21084.1, and CCR Sections 15064.5 through 15360).

Consultation with Native Americans: In the event that *Native American Archaeological or Cultural Sites* (defined in the Forest Practice Rules) are identified within a project area, CAL FIRE shall notify Native Americans regarding the existence of such sites, provide information regarding the proposed protection measures, and provide Native Americans the opportunity to submit comments and participate in consultation to resolve issues of concern.

If, during review of certain CAL FIRE projects, the typical practice of allowing 30 days for reply to this second notice will create difficulties, the CAL FIRE project manager may consult over the telephone or through a face-to-face meeting with each required tribal contact and document this consultation in Part 3 of the report.

Record Sites: CAL FIRE shall record all archaeological or historical sites discovered within project areas. This recording work shall be conducted in accordance with the policies specified in OHP's *Instructions for Recording Historical Resources* (1995). Additional guidance for site recording is provided in CAL FIRE's *Suggestions for Preparing Archaeological Site Records and Site Maps* (2001). Both of these documents on site recording procedures and the forms used to record them are available on our web site. CAL FIRE is occasionally requested by Native American groups to not record certain types of cultural resources (such as ceremonial or sacred sites) as a condition upon their disclosure. In such instances, CAL FIRE will honor the request and not record these types of sensitive cultural resources, although some information will be included in the Survey Report.

Complete Archaeological Survey Report: CAL FIRE shall ensure that an archaeological survey report is completed for every cultural resource survey conducted for a CAL FIRE project. This report will be prepared using CAL FIRE's *Archaeological Survey Report Form for CAL FIRE Projects* (available on our web site) or an equivalent format containing the same information in the same order. Detailed instructions for completing this report are provided in Chapter III beginning on page 18.

CAL FIRE Archaeologist Provides Approval Signature Following Satisfactory Completion of Investigation and Report: A CAL FIRE Archaeologist shall carefully review all archaeological survey reports prepared for CAL FIRE projects. This review shall include elements of completeness, accuracy, content, and professional adequacy. If necessary, this review shall include a field inspection to examine cultural resource discoveries, spot-check areas to test adequacy of survey coverage, and review of site records in field settings. Most importantly, this review shall include a careful review of the proposed protection measures to ensure that the project has been designed or redesigned to be in full conformance with applicable state laws, regulations, and other mandates such as Programmatic Agreements, EIRs, and/or current professional standards. The CAL

FIRE Archaeologist shall provide approval signature ONLY after the investigation and report have been satisfactorily completed. The CAL FIRE Archaeologist shall ensure that a clean, complete copy of the survey report is provided to the appropriate Information Center for permanent retention. The CAL FIRE project manager shall ensure that a copy is included in the appropriate project file to demonstrate compliance with these procedures.

Archaeological Clearance: Archaeological clearance shall be given only after all these procedural steps have been completed and documented in the project file. This documentation shall include either a letter to the file or a survey report signed and approved by a CAL FIRE Archaeologist.

**Procedures for Post-Approval Discovery of Cultural Resources:** If a cultural resource is discovered within a project area after the project has been approved, the following procedures apply:

1. Project activities within 100 feet of the newly discovered cultural resource shall be immediately halted.
2. The appropriate CAL FIRE Archaeologist shall be immediately notified.
3. The CAL FIRE Archaeologist shall evaluate the new discovery and develop appropriate protection measures.
4. The CAL FIRE Archaeologist shall investigate how the project was reviewed for cultural resources to determine if the cultural resource should have been identified earlier.
5. The CAL FIRE Archaeologist shall ensure that the newly discovered site is recorded and its discovery and protection measures are documented in the project files.
6. For discoveries made on federally funded CAL FIRE projects, the CAL FIRE Archaeologist shall notify and consult with the federal agency funding the project and the SHPO prior to authorizing recommencement of project activities near the newly discovered site.
7. If the newly discovered site is a Native American Archaeological or Cultural Site (defined in the Forest Practice Rules), the CAL FIRE Archaeologist shall notify the appropriate Native American tribal group and the NAHC, if appropriate.

**Private Landowner Involvement:** Many CAL FIRE projects are located on privately owned lands. CAL FIRE shall respect landowner's rights when implementing these procedures. This courtesy includes notifying the landowner(s) of CAL FIRE's cultural resource responsibilities and inviting their comments and participation. Landowners shall be notified regarding the scheduling of archaeological survey or other inspection work carried out by CAL FIRE and given the opportunity to comment on and participate in such inspections. CAL FIRE shall provide a copy of any completed survey reports to the appropriate landowner(s), if so requested. Landowners shall also be advised that such reports containing specific site locations are confidential and shall not be distributed to the public.