Writing and Implementing Protection Measures

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Why are Cultural Resources Important?

• Each resource unique
• Fragile and non-renewable
• Scientific Information
  • Archaeological record only source of knowledge about most of human past
  • History limited in time depth and often biased
• Significant public interest in their preservation
• Special importance to Native Americans

Why Protect Cultural Resources?

• Maximize Information Potential
  • Maintain Integrity
  • Maintain Provenience
Integrity

• “Ability of property to convey its significance” (NPS 1990)
• “A cultural resource has integrity if it retains material attributes associated with its social values.” (NPS 2002)
• “Age and authenticity” (NPS 2002)

• Seven aspects: location, design, setting, materials, workmanship, feeling, and association

Integrity: Black Mountain Lookout

Integrity: Post-Alterations
Provenience

• “Three-dimensional context (including geographical location) of an archaeological find, giving information about its function and date” (AIA 2018)
• In situ: place of origin
• One method of verifying artifact/feature authentic
• Maintain association and thus maximize information potential
### Protection Measures

<table>
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<tr>
<th>14 CCR 929.2, 949.2, 969.2 (a)</th>
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<tbody>
<tr>
<td>1) The RPF shall describe in the separate Confidential Archaeological Addendum or Letter, measures to be taken to mitigate or avoid substantial adverse change to any known significant archaeological or historical sites.</td>
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<td>2) The RPF may propose, and the Director may agree to, site specific protection measures for any identified archaeological or historical site without evaluating the significance of the site. These proposed protection measures shall be designed to ensure protection of such archaeological and historical sites from damaging effects. Avoidance of activities which will cause damaging effects is a preferred protection measure.</td>
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• **14 CCR 895.1: Substantial Adverse Change** means demolition, destruction, relocation, or alteration such that the significance of an archaeological or historical site would be impaired.

### Protection Measures

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<tr>
<th>Archaeological Review Procedures for CAL FIRE Projects</th>
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<td>• 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.</td>
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<tr>
<td>If impacts to cultural resources cannot be avoided, CAL FIRE is responsible for developing specific, effective measures to ensure the mitigation of impacts to cultural resources in order to avoid or prevent a significant effect.</td>
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### Protection Measures

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<th>Can protect sites and still accomplish project goals</th>
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<tr>
<td>• Directionally fall trees away from sites</td>
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<td>• No ground-based yarding within sites</td>
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<td>• Establish Equipment Exclusion Zones (EEZ)</td>
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<td>• Avoid Skid Trail, Road, and Log Landing construction within sites</td>
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<td>• Avoid staging on sites</td>
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<td>• Avoid piling on sites (logs, burn/slash piles, etc.)</td>
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<td>• Construct hand lines/fuel breaks around sites</td>
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Potential Pitfalls

• Timber within 100 feet of the site shall be directionally felled away from the site.

• Broadcast burn: All prehistoric and historic sites will be flagged for avoidance.

• Site boundaries will be flagged as an EEZ.

Equipment Exclusion Zones

• Vegetation cover often masks full extent of site

• Sites often have subsurface component not visible on surface

• Midden: artifacts not always visible
Equipment Exclusion Zones

Protection Measures

- 14 CCR 929.1, 949.1, 969.1 (c)(11)
  - Description of any specific enforceable protection measures to be implemented both within the site boundaries and within 100 feet of the site boundaries.
- Instructions for Completing CAL FIRE’s Confidential Archaeological Addendum Report Form
- Archaeological Review Procedures for CAL FIRE Projects
  - List specific enforceable protection measures to be implemented for each identified site.
  - Describe measures designed to ensure protection within the site boundary and within 100 feet of the site boundary. Complete avoidance is the preferred treatment.

Specific and Enforceable

- The LTO shall be informed of the site and due diligence shall be used in timber operations to protect the structure from damage.
  - Trees shall be directionally felled away from the ditch to the extent feasible.
  - The site is protected due to its location within a WLPZ.
If Complete Avoidance Not Possible

- Archaeology Review Procedures/CAA Instructions: If complete protection is not possible or is impractical, the RPF/author will need to develop a detailed plan describing project activities and specific, enforceable protection measures.

If Complete Avoidance Not Possible

- Linear Features
  - Ditches, roads, etc. often do not maintain integrity throughout entire length
  - The non-intact sections are non-contributing elements of site and are thus not significant and may not require protection (still protect intact portions)

- Earthen Features
  - Importance of earthen features contained in contour of site
  - Broadcast burns should not affect such features

If Complete Avoidance Not Possible

- Falling trees within site boundaries
  - “Trees shall be directionally felled and yarded away from the features of the site” (Good)
  - “Trees felled from within the site shall be directionally felled and yarded so as to avoid impacts to the features/artifacts of the site” (Better)
  - Sketch map showing trees that will be felled and their direction of felling and yarding in relation to the components of the site (Best)

- Monitoring by trained surveyor or professional archaeologist
Existing Disturbances

- Use of existing Skid Trails/Roads/Log Landings
- Do not widen as that would increase disturbance
- Potential for cumulative impacts – over time, non-disturbed buried component of site may be uncovered
- If potential for impacts and avoidance not option, monitoring can be proposed as mitigation measure (must be approved)

Post-Review Site Discovery

- 14 CCR 929.3, 949.3, 969.3
  - Notify
  - Propose protection measures
  - No timber operations within 100 feet until protection measures approved
  - Minor deviation (d)
- *Archaeological Review Procedures for CAL FIRE Projects*
  - Halt project activities within 100 feet
  - Notify CAL FIRE archaeologist
  - Site should be recorded and protection measures proposed and implemented

References