



**National Park Service**  
**U.S. Department of the Interior**  
**Casa Grande Ruins National Monument**  
**Coolidge, Arizona**

---

## **Finding Of No Significant Impact**

### **Fire Management Plan**

#### **Background**

Casa Grande Ruins National Monument is in Pinal County, Arizona, north of the town of Coolidge, and approximately 15 miles northeast of the city of Casa Grande. It is 472.5 acres in area.

Casa Grande Ruins National Monument was set aside by President Benjamin Harrison on June 22, 1892 to protect the "Casa Grande" or Great House, a multistoried, earthen-walled structure surrounded by the remains of smaller buildings, a compound wall, and other prehistoric objects. Casa Grande Ruins Reservation, later named Casa Grande Ruins National Monument, was both the first prehistoric site and the first cultural site to be set aside by the US Government. The site became a national monument on August 3, 1918 under the authority of the Antiquities Act and management was transferred to the National Park Service for the preservation and interpretation of Casa Grande and sixty other archeological sites.

In compliance with the National Environmental Policy Act (NEPA), the National Park Service (NPS) prepared an environmental assessment (EA) to examine alternatives and environmental impacts associated with the proposed new Fire Management Plan (FMP) for Casa Grande Ruins National Monument.

The NPS *Management Policies 2006* and Director's Order #18 require that "each park with vegetation capable of burning will prepare a fire management plan to guide a fire management program that is responsive to the park's natural and cultural resources objectives and to safety considerations for park visitors, employees, and developed facilities". Parks with an approved fire management plan and accompanying NEPA compliance may use wildfire to achieve resource benefits in predetermined fire management units. The 2013 Interagency Standards for Fire and Fire Aviation Operations "Red Book" states that the Superintendent will "identify resource management objectives in a current FMP." The directions defined in the fire management plan will be implemented in accordance with agency and departmental policy, including, but not limited to, procedural updates contained in the following documents:

-Interagency Standards for Fire and Fire Aviation Operations (January 2013; updated annually)

-Guidance for Implementation of Federal Wildland Fire Management Policy (February 2009)

Casa Grande Ruins National Monument currently follows the 2004 *Fire Management Plan* to guide their wildland fire program. The plan was developed with the Saguaro National Park Fire Management Office, which leads fire management activities in ten park service units in southern Arizona. In the past, some national park system units utilized the 2003 Healthy Forest Initiative Categorical Exclusion in support of their Fire Management Plans. The Healthy Forest Initiative Categorical Exclusion was codified in "Interim Guidance Director's Order 12 Categorical Exclusions" on May 22, 2009. The reference for this categorical exclusion under Director's Order #12 guidance is 3.4 G, 1. Based on interpretation of fire management policy in response to recent case law, the National Park Service discontinued the use of the 2003 Healthy Forest Initiative Categorical Exclusion.

The current environmental assessment for a new fire management plan brings the monument into compliance with Director's Order #18 and NEPA requirements and allows Casa Grande Ruins National Monument to complete and implement the new plan.

A new FMP and supporting EA is necessary for these reasons:

- The NPS has directed discontinued use of the Healthy Forest Initiative categorical exclusion (HFI CE). The HFI CE was the supporting NEPA document for the 2004 Casa Grande Ruins National Monument FMP. A new NEPA document and new FMP is required by NPS direction, and RM-18.
- To incorporate current interpretation of federal fire policy (2009), and associated terminology.
- To incorporate most recent scientific and technological advances pertaining to fire management.

## **Selected Action**

In accordance with the NEPA, the NPS prepared an EA for the FMP to provide for public involvement in the planning process, and to examine alternatives and their potential impacts on the environment. Two alternatives were examined: the No Action Alternative and the Action Alternative. Topics of concern that were identified during scoping and evaluated in the EA include: soils; vegetation; archeological resources; historic structures; and cultural landscapes.

After a thorough review of fire management objectives, potential impacts of the alternatives, and consultation with US Fish and Wildlife Service, Affiliated Tribal Groups, Arizona State Historic Preservation Office, and other interested parties, the No Action Alternative has been selected for implementation. This alternative is consistent with Federal policy, which prioritizes public health and safety, protecting at-risk communities and infrastructure, managing for natural historic fire regimes, protecting sensitive resources, and collaborating with other agencies and stakeholders. Further, the No Action Alternative implements fire suppression

strategies found in the 2004 Casa Grande Ruins National Monument Fire Management Plan. Response to all wildland fires will be provided by local fire department, and firefighters will be assigned to suppress all fires. No planned fuel reduction projects would be implemented. Due to the sparse nature of vegetation and the very infrequent occurrences of wildland fire in the monument, NPS has determined that planned fuel reduction projects analyzed in the EA as part of the Proposed Action are unnecessary for protection to developed areas, infrastructure, human life, and monument resources.

### **Mitigation Measures**

The following practices will be incorporated into wildland fire suppression actions where appropriate, and when these measures can be applied safely.

- Areas with a high probability of soil erosion will be stabilized by utilizing the best available technology and rehabilitation methods.
- Crews will avoid or minimize walking over structural elements.
- minimize impacts to natural and cultural resources during wildfire, application of fire retardant requires approval from the Superintendent or their designated official.
- Monument resource advisors will immediately be notified of the fire ignition location and of the intent to manage the fire.

### **Alternatives Considered**

Two alternatives were evaluated in the EA including the no action alternative, and one action alternative. The no action alternative and the action alternative both address fire suppression actions in the same way. Planned fuel reduction projects are described in the action alternative, but is not included in the no action alternative. NPS has determined that planned fuel reduction projects are unnecessary for protection to developed areas, infrastructure, human life, and monument resources, because of the sparse nature of vegetation, and the very infrequent occurrences of wildland fire in the monument. Therefore, the no action alternative is the NPS preferred alternative.

### **Environmentally Preferable Alternative**

According to the CEQ regulations implementing NEPA (43 CFR 46.30), the environmentally preferable alternative is the alternative "that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources. The environmentally preferable alternative is identified upon consideration and weighing by the Responsible Official of long-term environmental impacts against short-term impacts in evaluating what is the best protection of these resources. In some situations, such as when different alternatives impact different resources to different degrees, there may be more than one environmentally preferable alternative."

The selected action is the environmentally preferable alternative for several reasons. NPS has determined that planned fuel reduction projects are unnecessary for protection to developed areas, infrastructure, human life, and monument resources due to the sparse nature of vegetation and the very infrequent occurrences of wildland fire at the Monument. Further, the impacts from planned fire management have a greater potential to adversely impact Monument resources than the selected action. The selected action will suppress all wildfires and provides mitigation measures to reduce the impacts to Monument resources.

### **Why the Selected Action Will Not Have a Significant Effect on the Human Environment**

As defined in 40 CFR §1508.27, significance is determined by examining the context (including duration) of an impact, and its intensity, including a consideration of the criteria that follow. Based on the analysis in the EA, which is summarized in the following sections, the NPS has determined that the selected alternative can be implemented without significant adverse effects. All impact threshold definitions (negligible, minor, moderate, major) referred to in this FONSI are defined in the EA.

#### ***Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial***

The EA analyzed potential impacts of the actions on all topics identified during internal and public scoping. There were no major impacts, either beneficial or adverse. There will be short-term adverse impacts for most impact topics as wildland fire suppression activities are implemented. Most adverse impacts will be negligible to minor and short term. The impacts from suppressing wildfires have the greatest potential for adverse impacts to resources. Resources of specific concern include archeological resources, historic structures, and cultural landscapes. A complete list of mitigation measures can be found earlier in this document.

Not all of the mitigation measures will be applied in all situations; the measures that will reduce or negate adverse impacts to resources will be applied to the greatest extent possible without compromising public and firefighter health and safety. The appropriate mitigation measures will be incorporated in responses to unplanned wildland fire ignitions, and they will most likely be successful.

#### ***The degree to which the selected action affects public health or safety***

Public health and safety is a primary concern of the selected action. Unplanned wildland fires pose inherent risk to the human environment. Suppression activities include construction of fire containment lines, which may increase air particulate matter. These air quality impacts will be negligible and short-term. Minimum Impact Suppression Tactics (MIST) will be

implemented to minimize unnecessary impacts to resources and also safeguarding human lives and without compromising safety.

***Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas***

Casa Grande Ruins National Monument preserves the remains of prehistoric structures dating back to the early 13<sup>th</sup> century. Casa Grande was both the first prehistoric site and the first cultural site to be set aside by the U.S. government. There are sixty other related archeological sites included in the protection and preservation of the Monument. The geographic area is relatively flat and sparsely vegetated. No wetlands, prime farmlands, or wild and scenic rivers exist within the Monument. There are no known federally listed threatened or endangered wildlife species as designated by the U.S. Fish and Wildlife Service or sensitive species as designated by the Arizona Game and Fish Department. One species of concern that has been supported by the Monument is the Western burrowing owl. The Tucson shovel-nosed snake is currently listed as a candidate species under the Endangered Species Act.

Impacts from the selected action were identified in the EA. It was determined that impacts will be negligible to minor and will cause no significant effects on archeological resources, historic structures, cultural landscapes, or species of concern.

***The degree to which effects on the quality of the human environment are likely to be highly controversial***

The NPS selected action is consistent with accepted fire management strategies that are currently employed at other NPS units and other adjacent Federal lands. Based upon public and agency involvement in the planning process and comments received during scoping efforts and on the EA, the effects of the selected action are not highly controversial, nor is it expected to have future controversial effects on the quality of the human environment.

***The degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks***

The risks to the quality of the human environment associated with the selected action will be adverse and beneficial. Unplanned wildland fires pose some inherent risk to the human environment. Impacts of these unplanned wildland fires, which are not unique, but which may be uncertain or unknown because of the many variables associated with such events. No additional unique or unknown risks to the quality of the human environment were identified.

***The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration***

The activities identified as part of the selected action are widely accepted under Federal fire management and NPS policies. Implementing the selected action neither establishes a NPS precedent for future actions with significant effects nor represents a decision in principle about a future consideration.

***Whether the action is related to other actions with individually insignificant, but cumulatively significant impacts***

No significant cumulative effects were identified in the EA. Impacts of the selected action on soils, vegetation, archaeological resources, historic structures and cultural landscapes were identified in the EA. Cumulative impacts were determined by combining the impacts of the selected action with other past, present, and reasonably foreseeable future actions. The selected action results in beneficial or adverse cumulative impacts ranging in intensity from none to minor. Therefore, the selected action will not contribute or result in significant cumulative impacts.

***The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources***

The Environmental Consequences section of the EA analyzed effects of implementing the proposed Fire Management Plan. Due to mitigation measures implemented during unplanned fire events, the analysis concluded a finding of *No Historic Properties Affected*, including archaeological resources, cultural landscapes, and historic structures. Site specific consultation would be completed for activities not included in the EA. The Arizona State Historic Preservation Office was included in the scoping effort in a letter dated March 10, 2011 for this project; no scoping comments were received from the Arizona State Historic Preservation Office. Any emergency responses to wildfire will comply with 36 CFR 800.12, Emergency Situations (National Historic Preservation Act).

***The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973***

Consultation with the United States Fish and Wildlife Service (USFWS) was initiated on March 10, 2011 with an NPS request for input on a species list and notice of proposed environmental assessment. That letter also served as a scoping letter to the USFWS. The USFWS, in an email dated April 11, 2011, agreed with our finding that the Monument does not support listed species or their habitat. Activities from the selected action will not impact listed threatened or endangered species.

***Whether the action threatens a violation of Federal, state, or local law or requirements imposed for the protection of the environment***

This action violates no federal, state, or local environmental protection laws.

**Public Involvement**

The environmental assessment was made available for public review and comment from January 10, 2013 to February 12, 2013. To notify the public of this review period, a letter was mailed to stakeholders, American Indian tribes, interested parties, and government agencies, and a copy of that letter was printed in local newspapers. Copies of the Environmental Assessment were available in local repositories, and the Environmental Assessment was posted on the NPS PEPC website at <http://parkplanning,nps.gov/cagr>. Three comments in total were received. All three comments came from affiliated tribal groups, including the Ak-Chin Indian Community, the Gila River Indian Community, and the Hopi Tribe. All three were in support of the preferred alternative and resulted in no changes to the Environmental Assessment. No substantive comments were received.

**Conclusion**

As described above, the selected action does not constitute an action meeting the criteria that normally require preparation of an environmental impact statement (EIS). The selected action will not have a significant effect on the human environment. Environmental impacts that could occur are limited in context and intensity, with generally adverse impacts that range from direct to indirect, short- to long-term, and negligible to minor. There are no unmitigated adverse effects on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly controversial or unique risks, significant cumulative effects, or elements of precedence were identified. Uncertain and unknown risks may occur from unplanned wildland fires. Implementation of the selected action will not violate any federal, state, or local environmental protection law.

Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Approved: *Sue E. Masica*

Sue E. Masica  
Regional Director, Intermountain Region

2/19/14

Date

**Errata Sheets**  
**Fire Management Plan Environmental Assessment**  
**Casa Grande Ruins National Monument**

According to NPS policy, substantive comments are those that 1) question the accuracy of the information in the EA, 2) question the adequacy of the environmental analysis, 3) present reasonable alternatives that were not presented in the EA, or 4) cause changes or revisions in the proposal.

Some substantive comments may result in changes to the text of the EA, in which case they are addressed in the *Text Changes* section of the Errata Sheets. Other substantive comments may require a more thorough explanatory response and are addressed in the *Response To Comments* section. NPS responds to all substantive comments in either or both of these sections.

Three comments on the Casa Grande Ruins National Monument Fire Management Plan Environmental Assessment were received during the public comment period. All three comments came from affiliated tribal groups the Ak-Chin Indian Community, Gila River Indian Community, and the Hopi Tribe. All three comments were in support of the preferred alternative and resulted in no changes to the EAAEF.

The Arizona State Historic Preservation Officer was issued a letter to be informed of our selected action; however, since there is no federal undertaking, concurrence was not required. The Arizona Ecological Services Office of the U.S. Fish and Wildlife Service issued a letter of agreement with our finding that the Monument does not support any listed threatened or endangered species or their habitats.

No substantive comments were received.



## Appendix A – Non-Impairment Finding

The National Park Service's *Management Policies, 2006* require analysis of potential effects to determine whether or not actions will impair NPS resources. The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. National Park Service managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values.

However, the laws do give the National Park Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the National Park Service the management discretion to allow certain impacts within park, that discretion is limited by the statutory requirement that the National Park Service must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible National Park Service manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. An impact to any park resource or value may, but does not necessarily, constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- Key to the natural or cultural integrity of the park; or
- Identified as a goal in the park's general management plan or other relevant NPS planning documents.

An impact would be less likely to constitute impairment if it is an unavoidable result of an action necessary to pursue or restore the integrity of park resources or values and it cannot be further mitigated.

The park resources and values that are subject to the no-impairment standard include:

- The park's scenery, natural and historic objects, and wildlife, and the processes and conditions that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils;

geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;

- Appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- The park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefits and inspiration provided to the American people by the national park system; and
- Any additional attributes encompassed by the specific values and purposes for which the park was established.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. The NPS's threshold for considering whether there could be impairment is based on whether an action will have significant effects.

The impact topics carried forward and analyzed for the NPS selected alternative in the EA, and for which a non-impairment determination was completed include: soils, vegetation, archeological resources, historic structures and cultural landscapes.

The Foundation Statement for Planning and Management document prepared in 2007 includes the Monument's purpose, significance, primary interpretive themes, and fundamental resources and values. This Fire Management Plan is consistent with the Foundation Statement for Planning and Management; all wildfire suppression activities will avoid and protect all known fundamental resources and planning strategies and firefighting resources will be available and positioned to safeguard them.

**Soils** Monument soils are largely derived from Quaternary age alluvial fans and terraces. They are moderately coarse to medium textured loamy soils that are well-drained to excessively well-drained. Wildfire and fire suppression activities could result in direct minor adverse impacts to soils from compaction and sterilization, and indirectly from erosion. The frequency of wildfires in Casa Grande Ruins National Monument is expected to be very low because the vegetation is so sparse. The selected action will not result in impairment because the activities associated with suppressing wildfires would be infrequent and minor adverse intensity.

**Vegetation** The dominant vegetation community is Sonoran Desert scrub and Mesquite Woodland. Common species include creosote bush, white bursage, saltbush, mesquite, and various cacti. The surrounding landscape adjacent to the Monument boundary is predominately agricultural fields. Wildfire and fire suppression activities could result in direct minor adverse impacts to vegetation from the loss of vegetation, and possibly the change in species composition. The frequency of wildfires in Casa Grande Ruins National Monument is expected to be very low because the vegetation is so sparse. The selected action will not result in impairment because the activities associated with suppressing wildfires would be infrequent and minor adverse intensity.

**Archeological Resources** The Monument includes sixty archeological sites listed or potentially eligible for listing on the National Register of Historic Places. Fire effects on archeological resources vary depending on temperature and duration of exposure to heat. Potential impacts on archeological resources from wildfire could include cracking, charring, sooting, combustive residue, fracture, scorching, and melting. Wildfire and fire suppression activities could result in direct minor adverse impacts to archeological resources. The locations of archeological sites are known, and sites will be avoided during wildfire suppression actions. The frequency of wildfires in Casa Grande Ruins National Monument is expected to be very low because the vegetation is so sparse. The selected action will not result in impairment because the activities associated with suppressing wildfires would be infrequent and minor adverse intensity.

**Historic Structures** The Monument contains 15 historic structures representing the Hohokam, Civilian Conservation Corps, and Mission 66 periods. Many of these structures are formally listed on the National Register of Historic Places, while others are eligible for listing. Wildfire and fire suppression activities could result in direct minor adverse impacts to historic structures and would vary depending on temperature and duration of exposure to heat; fire suppression activities may be ground disturbing which could also affect these resources. Water, foam detergents, and fire retardants could damage historic structures and features by causing swelling and subsequent contraction. Discoloration or warping of metallic surfaces could also occur. The locations of historic structures are known, and these resources will be avoided and protected during wildfire suppression actions. The frequency of wildfires in Casa Grande Ruins National Monument is expected to be very low because the vegetation is so sparse. The selected action will not result in impairment because the activities associated with suppressing wildfires would be infrequent and minor adverse intensity.

**Cultural Landscapes** The Monument includes a cultural landscape developed by various cultures, including the Hohokam, historic explorer and settlers, the National Park Service, and Depression-era work program enrollees. These landscape elements include borrow pits, irrigation canals, trash mounds, a ball court, and agricultural features. Some of these

elements are on the Monument's List of Classified Structures. The cultural landscape is also eligible for the National Register of Historic Places. Wildfire and fire suppression activities could result in direct minor adverse impacts to cultural landscapes due to ground disturbing activities. The locations of historic structures are known, and these resources will be avoided and protected during wildfire suppression actions. The frequency of wildfires in Casa Grande Ruins National Monument is expected to be very low because the vegetation is so sparse. The selected action will not result in impairment because the activities associated with suppressing wildfires would be infrequent and minor adverse intensity.

In conclusion, as guided by this analysis, good science and scholarship, advice from subject matter experts and others who have relevant knowledge and experience, and the results of public involvement activities, it is the Superintendent's professional judgment that there will be no impairment of park resources and values from implementation of the selected action.