

# Decision Notice and Finding of No Significant Impact

## Oak Creek Fuel Reduction Project

(Healthy Forest Restoration Act Project - HFRA)

USDA Forest Service

Red Rock Ranger District, Coconino National Forest

Coconino County, Arizona

### Introduction

I am pleased to announce that we have completed the analysis process and Environmental Assessment (EA) for the Oak Creek Fuel Reduction Project under the Healthy Forest Restoration Act (HFRA). The Decision Notice documents my decision for this project.

It is my decision to implement fuel reduction activities that will reduce the impacts and potential loss of property and life as a result of a large wildfire in Oak Creek Canyon. The proposed treatments are intended to keep a fire on the ground near private property and developed recreation sites in order to more effectively fight fires near structures and expand the time for evacuation in case of a large fire. It is also intended to: 1) reduce the number of small fires that become large, 2) improve capabilities for state and volunteer fire organizations, 3) reduce the threat to life and property from extreme fire behavior, 4) reduce ladder fuels in selected areas, 5) and reduce potential resource damage that could occur from extreme fire behavior. However, due to the difficult, steep topography and closely interspersed locations of private property developments, fuels reduction activities in this project on federal lands will not be able to completely eliminate the potential for extreme fire behavior in Oak Creek Canyon.

This Decision Notice contains my decision on a selected alternative and describes my rationale for selecting it. My decision is supported by and based upon analysis in the EA. Copies of the EA are available upon request from the Red Rock Ranger District.

### Proposed Action

A "proposed action" is defined early in the project-level planning process. A proposed action serves as a starting point for the interdisciplinary team (IDT) and gives the public and other agencies specific information on which to focus comments. The proposed action for the Oak Creek Fuel Reduction (HFRA) Project is vegetative treatments on approximately 653 acres of National Forest System Land in response to the purpose and need for action. Actions included in this proposal are:

- Approximately 250 acres of thinning ponderosa pine to 60 square foot basal area density or crown spacing (subject to 9-inch diameter or smaller).
- 400 acres of tree and vegetation removal as follows:
  - Juniper and pinyon will be removed to 40 square foot basal area;
  - Oak 12-inches or greater diameter will be retained;
  - Limited removal of dead and down material in riparian areas; and
  - Removal of brush species.

- Broadcast prescribed burning over much of the 653 acres for maintenance after initial treatments (subject to mitigation measures, weather, containment lines and other safety considerations).
- Up to 653 acres of pile burning (subject to mitigation measures) or chipping and removal of slash, if economical.

The Proposed Action was designed by the Forest Service ID Team members in coordination with the Sedona Fire District to best meet the purpose and need for action of the project while meeting requirements of the Forest Plan and other guiding documents. A specific description of the Proposed Action, Alternative 2, by vegetation type and general location, can be found on pages 17-22 of the Environmental Assessment (EA).

## **Decision and Rationale**

### Background

The Forest Plan provides a framework that guides development of Desired Future Conditions at the site-specific project level, such as the Oak Creek Fuel Reduction (HFRA) project. Standards, guidelines, objectives and goals are identified in the Plan that guided the development of this project. Additionally, fire activities resulted in national initiatives to address wildfire and fuel concerns in locations such as Oak Creek Canyon.

The Oak Creek Fuel Reduction project is proposed in response to the fuels reduction element of the National Fire Plan and the Cohesive Strategy. The National Fire Plan focused fuel treatments on Wildland-Urban Interface (WUI) areas to reduce risk to people and property. The Cohesive Strategy set four priorities for treatment areas: wildland-urban interface, readily accessible municipal watersheds, threatened and endangered species habitat, and maintenance of existing low risk Condition Class 1 areas. Oak Creek Canyon and the proposed treatments are within a designated WUI area. The wildland-urban interface (WUI), areas where flammable wildland fuels are near homes and communities, is one of the highest priorities for treatment. Studies conducted in early 2004 indicate that Oak Creek Canyon is generally considered to be in Fire Regime III where fire intervals are between 35 -100 years with a mix of fire severity. Additionally, this same area is considered to be in Condition Class 3 where the fire regime has been significantly altered from its historic interval range. This increases the risk of losing key ecosystem components due to dramatic changes in fire size, intensity, severity and landscape patterns. There will be some variation to these findings within the proposed treatment areas due to the significant vegetative and topographic diversity. Oak Creek Canyon is also identified in the Arizona Department of Forestry's list of "Communities at Risk" of urban-interface communities that are at high-risk from wildfire in Arizona.

The Coconino National Forest has been coordinating with the Sedona Fire District for many years collaborating on fuels management, fire suppression and prevention activities. Oak Creek Canyon is an area that both the fire district and the Forest Service have identified as a high priority for fuel reduction treatment both within the private property and National Forest Service system lands. In addition, the project area was identified in the Greater Flagstaff Area Community Wildland Fire Plan (CWPP) as an area of high threat level, being within a Wildland Urban interface area and within 1-1/2 miles of a community at risk. The CWPP recommends low to intermediate thinning and burning in these areas (subject to site specific analysis and refinement).

## Purpose and Need

Oak Creek Canyon is a narrow canyon of National Forest that contains developed recreation facilities and interspersed non-federal lands, mostly residential home sites and private businesses along Oak Creek, north of Sedona, Arizona. Oak Creek is a State-designated “unique water” that requires a higher degree of protection for water quality. State Route 89A, a state designated scenic highway, bisects the length of the project area. Steep topography, rock cliff faces, narrow side canyons, designated Wilderness areas and very limited road access make fighting fires in the project area very difficult. Fire suppression activities in the area are usually limited to hand crews, air support and structure protection/burnout operations. Areas adjacent to private property and developed recreation sites pose the higher risk related to fires starting and therefore are places that are considered critical to reduce fuel loads through thinning, mechanical treatment of brush, brush piling and broadcast burning to reduce the potential for fire spread and extend the time period for fire control and evacuation without loss of life, property, and major resource damage.

The potential for a wildfire start is high in the proposed treatment areas due to residential development, recreation use and lightning. Vegetative types, particularly the ponderosa pine/mixed conifer, were historically dependent on more frequent low intensity fires. These low intensity fires have not occurred in recent history and therefore an unnatural buildup of dead materials has developed that could result in more intense and devastating effects from wildfires. Dense, closed canopies that include many smaller trees act as ladder fuels to larger over story trees. This results in wildfire easily traveling up to the crowns or tops of trees burning very intensely, instead of remaining on the ground and burning at a lower intensity.

Comparison of the existing condition as generally described in the background above and the desired conditions (EA pages 1-6) indicates a need for:

- reduced forest fuel loading;
- reduced ladder fuels;
- reduced risk of uncharacteristically intense fire;
- reduced risk to life, property, and natural resources;
- increased safety for fire suppression crews and improved evacuation capabilities for state and volunteer fire organizations;
- development of sustainable forest conditions;
- restoration of natural ecological systems.

## Decision

Based upon my review of all alternatives, I have decided to implement Alternative 2, the Proposed Action with the associated mitigation measures described in Appendix A of the EA.

Fuel treatments would be completed on approximately 653 acres. Mitigation measures would be used to minimize concerns related to various resources. These include avoiding fuel reduction activities within designated wilderness, mitigating impacts to Mexican spotted owl and other sensitive species habitat, and buffering riparian corridors. The larger areas are identified on the

map found in Appendix B, but some are too small to show up on the map. The fuel reduction activities will be accomplished by vegetation type as stated below and methods for cutting and disposal of vegetation and dead/down material will include chainsaw cutting, thinning and pruning, hand piling and burning, chipping, crushing, yarding of material for off-site disposal, under-burning and broadcast burning. The specific methods to be used on any given site will be selected prior to implementation of projects. Multiple treatment entries may be necessary to complete project objectives.

- Ponderosa pine, mixed conifer and oak woodlands:
  - Treatments will be within 200 feet of private property boundaries, developed recreation sites and on additional acres where less than 40% slopes exist, excluding designated Wilderness areas.
  - Treatments include:
    - Mechanical thinning of understory (trees less than 9 inches in diameter) to approximately 60 square feet basal area.
    - Removal of dead, standing and downed trees of any size, up to number of trees required to remain for wildlife habitat needs.
    - Removal of ladder fuels by pruning lower limbs on remaining trees and cutting brush species
    - Chipping slash.
    - Hand-piling slash.
    - Burning of slash piles.
    - Prescribed understory burning is included as part of initial treatments. All improvements that could be affected during prescribed fire treatments will be mitigated by hand lines, fire suppression staff presence, or foam and water.
    - Prescribed understory maintenance burning 3-10 years after initial treatments.
  - Within the 200 feet of private property and developed recreation sites (excluding designated Wilderness areas), variation from above treatments include:
    - Where slopes are greater than 40 percent, thinning will be limited to areas where footing for personnel is secure, trees will not roll into private property or structures and will not destabilize slopes. Basal area in these sites will likely remain higher than 60 square feet per acre.
    - Prescribed understory initial and maintenance burns will not be done on slopes greater than 40 percent.

These treatments will reduce crown density, which provides space between tree crowns. In addition, treatments will reduce the quantity and arrangement of surface and ladder fuels, smaller branches and limbs and brush species. This will reduce fire intensities in treated areas, increase control capabilities, and lessen the risk to firefighters during wildfire events. These types of vegetative treatments followed with prescribed burning will produce a mosaic effect on the landscape.

- Chaparral:
  - Treatments will be within 200 feet of private property boundaries and developed recreation sites, and additional sites where slopes are less than 40%, but not within designated Wilderness. Treatments include:
    - Mechanical hand cutting of chaparral to a height of one foot from ground level. Edges of clearing will be feathered or varied to prevent linear appearance.
    - Chipping.
    - Piling of slash.
    - Burning of piles.
    - Prescribed broadcast burning in areas where ground litter is conducive for carrying fire.
    - Mechanical hand cutting, piling and pile burning of re-growth to maintain clearing will be done on a 3-10 year rotation.
    - Mechanical crushing.

These treatments will provide a fuel break between private property and continuous chaparral fields. This provides a buffer to reduce fire intensities in treated areas, increase control capabilities, and lessen the risk to firefighters during wildfire events

- Juniper woodlands:
  - Treatments will be within 200 feet of private property boundaries, developed recreation sites, and additional sites where slopes are less than 40%, but not within designated Wilderness. Treatments include:
    - Mechanical thinning of stands, including dead, standing trees, to 40 square feet basal area to remove ladder fuels.
    - Removal of dead, standing trees of any size, up to number of trees required to remain for wildlife habitat needs.
    - Cutting of brush species within this vegetation type.
    - Chipping.
    - Hand-piling.
    - Burning of piles.
    - Maintenance activities on a 3-10 year cycle, includes cutting of returning brush and small trees and broadcast burning.
    - Lop and scatter in limited situations.
  - Within 200 feet of private property and developed recreation sites (excluding designated Wilderness areas), variation from above treatments include:
    - Where slopes are greater than 40 percent, thinning will be limited to areas where footing for personnel is secure and will not destabilize slopes.
    - Retention of cypress trees over other species when possible during thinning activities.

The treatments in juniper woodlands will reduce crown densities and the quantity and arrangement of surface and ladder fuels. This will reduce fire intensities, increase control capabilities, and lessen risks to firefighters in the event of wildfires.

This alternative meets requirements under federal laws and executive orders pertaining to project-specific planning and environmental analysis on federal lands. In addition to these laws and orders, the Oak Creek Fuel Reduction project was analyzed under Healthy Forest Restoration Act (HFRA) authorities. A discussion and analysis of how the project meets requirements set forth under the HFRA can be found in the EA. Also, to use certain alternative development options under HFRA, a Community Wildfire Protection Plan (CWPP) must be in place. A CWPP for Flagstaff and surrounding communities was developed in October 2004 and this project is consistent with this plan as stated in the Public Involvement and Background Sections above.

## **Other Alternatives Considered**

In addition to Alternative 2, the selected alternative, I considered four other alternatives that were not analyzed in detail. No other alternatives were analyzed in detail as issues were not raised during the public process to change the Proposed Action except through the addition of required mitigation measures. (See discussion on EA pages 15-16). A comparison of Alternative 2 and the No Action alternative can be found in the EA on Table 2-2, page 23. Alternatives that were not considered in detail are:

Alternative A: Proposed fuel reduction treatments throughout the entire area of Oak Creek Canyon WUI project area. It was determined that treatment in designated Wilderness would not conform to Wilderness values, as well as the steep and rocky terrain limit the ability to treat these areas. Treatments in over 40 percent slopes and narrow side canyons could result in unstable slopes and potential degradation of water quality in Oak Creek and were therefore not considered in detail.

Alternative B: Aerial ignition of chaparral slopes was considered; however, there was concern with the potential for rocks being dislodged during this activity and in weather events and could pose a threat to property, including Highway 89A and life below burned areas and therefore was not considered in detail.

Alternative C: Treatment in juniper woodlands was considered throughout this vegetation type. This vegetation type has a lower fire hazard and is located on more sensitive soils, subject to erosion. Treatments over the entire vegetation type in the canyon would destabilize soils and not result in a reduction of large scale fires. Therefore this alternative was not considered in detail.

Alternative D: Treatments within most of the riparian areas and all of the Research Natural Areas were considered, but it was determined that treatments in these areas would result in unacceptable impacts to these resources.

## **Public Involvement**

As described in the background, the need for this action arose in 2000 with the National Fire Plan and Cohesive Strategy, including the identification of WUI areas. A letter was sent to the public in 2001 asking for comments and again in August 2005 when the proposal was provided to the public, including all landowners in Oak Creek Canyon, and other agencies for comment. The agency held a public meeting in September 2005 to answer questions and collect public comments related to the proposal. Using the comments from the public, other agencies, the Sedona Fire District and resource specialists on the interdisciplinary team, several issues regarding the effects of the proposed action were raised. These issues are found on pages 10-11 of the EA. Comments from the public have been supportive of treatments. The project is also

consistent with the goals in the CWPP which was developed through a public process. No comments were received during the objection period in September 2007.

### **Finding of No Significant Impact**

After considering the environmental effects described in the EA, I have determined that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). An environmental impact statement will not be prepared.

This project is a site-specific action that by itself does not have international, national, region-wide, or statewide importance. The following discussion is organized around the Ten Significance Criteria described in the National Environmental Policy Act (NEPA) regulations (40 CFR 1508.27).

My finding of no significant environmental effects is not biased by the beneficial effects of the action. As described in the EA in Chapter 3 and Appendix A – Mitigation Measures for the Oak Creek Fuel Reduction (HFRA) Project, impacts from this project are both beneficial and adverse. The adverse effects of thinning, broadcast maintenance burning, piling and pile burning, and brush removal are minor in nature and will not impair land productivity. These effects are short-term noise, smoke, visual, recreation experience and human disturbance and habitat changes to wildlife. Loss of habitat for wildlife species is likely but the benefits that will reduce the potential for large wildfire impacts outweigh these effects. Treatment areas are relatively small within the designated WUI area, only 653 acres of approximately 8,000 acres. Treatments include mitigation measures that protect water quality and soil stability as well as minimize impacts to wildlife.

There will be no significant effects on public health and safety, because standard Forest Service requirements will be used for all activities. Treatments will provide opportunities for better public and firefighter safety when large fires occur outside of treatment areas. There are no known adverse impacts to public safety.

1. There will be no adverse effects on unique characteristics of the geography, such as cultural resources and wetlands. Ecologically critical areas such as park lands, and prime farmlands, wild and scenic rivers etc. do not exist in the project area. Oak Creek riparian areas will be treated minimally and wetland areas associated with the creek will not be impacted by treatment activities. Recreation sites and Oak Creek and its tributaries occur within the project area but known mitigation measures and Best Management Practices address and mitigate these resources.

Surveys indicate the presence of cultural resources in the project area that include: 34 historic sites, six prehistoric sites, and one prehistoric site with a historic component within the 8,500 acres planning area; of these 25 will require some level of protection and monitoring during implementation of treatments. In addition, seven undocumented historic linear sites (six trails and one road) are also known within or adjacent to the project area. All sites will either be avoided or mitigation measures implemented to reduce the risk from wildfire while protecting site integrity. The project will increase protection of sites from wildfire and associated suppression activities through these mitigations (see EA page 25).

2. The effects on the quality of the human environment are not likely to be highly controversial because there is no known scientific controversy over the impacts of the project. The effects of

the project are limited to the Oak Creek Fuel Reduction (HFRA) project area and concerns from the public were not expressed. Therefore the effects are not likely to be controversial.

3. We have considerable experience with the types of activities to be implemented. The effects analysis shows the effects are not uncertain, and do not involve unique or unknown risk. The actions described in this decision are not new. The Forest Service has a long history of implementing these activities on this and other areas of the Coconino National Forest. These actions have been applied elsewhere on similar soil and vegetation types. The effects are not uncertain, unique or unknown.

4. The action is not likely to establish a precedent for future actions with significant effects, nor does this represent a decision in principle about a future consideration. A decision to implement this decision does not establish any future precedent for other actions within or outside of the project area. Future actions will be evaluated through the NEPA process and will stand on their own as to the environmental effects and project feasibility. This finding is demonstrated through the analysis in EA Chapter 3.

5. The cumulative impacts are not significant. These actions are not related to other actions that, when combined, will have significant impacts. Cumulative effects are documented in Chapter 3 of the EA per resource area. There is no impact to the overall watershed or changes to forest vegetation that would be cumulative to impacts from other activities. Effects to air quality are monitored and controlled through ADEQ regulations. There are no adverse effects to cultural resources and therefore no cumulative effect. Effects to wildlife habitat are described in detail in Chapter 3 of the EA and are generally minor and do not cause significant effects when considered with other activities in the general area.

6. The action will have no significant adverse effect on districts, sites, highways, or structures. The EA identifies actions to reduce the threat to these sites from treatment actions. The action will also not cause loss or destruction of significant scientific, cultural, or historical resources, and will increased protection from the threats of wildfire. An Archaeological Clearance Report signed by the State Historic Preservation Office September 23, 2005 and concurred with by the Coconino National Forest Supervisor on October 3, 2005 is located in Project Record and specifies monitoring and mitigation requirements for known sites.

7. Formal consultation with US Fish & Wildlife Service (USFWS) has been completed for this project (Region 3 Wildland Urban Interface Programmatic Biological Opinion, see Project Record). Consultation has been completed for listed species within the project area. Managers will comply with mandatory minimization measures in order to mitigate adverse affects to listed species and their habitat, as described in the Biological Opinion. Therefore, no significant effects to threatened or endangered species of plants or animals or habitat critical for the management of these species, are anticipated. A summary of effects is located in *Chapter 3* of the EA. The consultation with US Fish and Wildlife Service acknowledges existing conditions and provides for reduced fire hazard to threatened communities in the wildland urban interface and restored health to a fire adapted ecosystem.

8. The action will not violate Federal, State, and local laws or requirements for the protection of the environment. Applicable laws and regulations were considered in the EA (see EA page 11-12). The action is consistent with the Coconino National Forest Land and Resource Management Plan (See EA page 7-9).

I find that implementing Alternative 2 does not constitute a major Federal action that would significantly affect the quality of the human environment in either context or intensity. I have made this determination after considering both positive and negative effects, as well as direct, indirect, and cumulative effects of this action and reasonably foreseeable future actions.

I have found that the context of the environmental impacts of this decision is limited to the local area and is not significant. I have also determined that the severity of these impacts is not significant.

### **Findings Required by Other Laws and Regulations**

My decision to implement Alternative 2, with defined mitigation measures in Appendix A of the EA, is consistent with the intent of the forest plan's long term goals and objectives. The project was designed in conformance with land and resource management plan standards and incorporates appropriate land and resource management plan guidelines for Management Area 14, Oak Creek Canyon and Area-wide Standards and Guidelines (EA page 8). The Oak Creek Fuel Reduction (HFRA) project meets the requirements of an authorized hazardous fuel reduction project, as defined by the HFRA (Section 101(2), for National Forest Service lands analyzed in an EA.

### **Implementation Date**

The Oak Creek Fuel Reduction project was analyzed under the Healthy Forest Restoration Act (HFRA) authority and thus is not subject to appeal (36 CFR 215.12 and 218.3). Implementation may occur immediately following publication of a legal notice in the Sedona Red Rock News announcing the decision.

HFRA Section 105(a) of the HFRA replaces the USDA Forest Service's administrative appeals process with an objection process. A 30-day objection process for the Oak Creek Fuel Reduction project was initiated in September 2007 with the issuance of a legal notice of the EA in the newspaper of record on September 12, 2007, and closed on October 15, 2007. No objections were received during the objection period.

### **Contact**

For additional information concerning this decision, contact Heather Provencio, District Ranger, Red Rock Ranger District, PO Box 20429, Sedona, AZ 86341, (928) 282-4119 or Scott Spleiss, Verde Ranger District, (928) 567-4121.

/s/ Heather C. Provencio  
HEATHER C. PROVENCIO  
District Ranger  
Red Rock Ranger District

November 7, 2007  
DATE

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