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NATIONALFORESTS.ORG

**Scotia Fuels Reduction**  
**Statement of Work and Request for Proposals**  
**Coronado National Forest, Arizona**

**Background and Statement of Work:** The National Forest Foundation (NFF), the Forest Service and local community partners are working together to improve watershed conditions and wildlife habitat on the Coronado National Forest that have been degraded by natural and anthropogenic causes. Restoration is imperative to maintain a healthy watershed and provide appropriate habitat for wildlife. Across this landscape, fuels have accumulated and have the potential to contribute to uncharacteristic fire behavior. The Scotia Canyon Fuels Reduction project is part of a landscape restoration effort, involving a variety of forest restoration treatments within Madrean Encinal Woodland and Pine Oak Woodland on the Sierra Vista Ranger District, located in Cochise County.

The purpose of this Request for Proposal (RFP) is to engage professional forestry contractors to provide bids for hand thinning and piling treatments on a total of 390 acres within Scotia Canyon (see Appendix A).

RFPs should include a price per acre for 375 acres of Madrean Encinal Woodland and 15 acres of Pine Oak Woodland units. Desired Conditions and Project Objectives are presented in Appendix B. Mobilization and direct and indirect labor should be included in your unit price. A Quality Control Plan is to be submitted with quotation. If the price exceeds the available budget, NFF may request work to be done on some but not all of the requested acres.

The NFF will select a contractor and be responsible for administering the contract. All work must meet Forest Service standards, Coronado National Forest project prescriptions and follow all NFF contract agreements. NFF example agreements are available upon request.

**Pre-Bid Site Visit:** A site visit is scheduled Thursday September 24th, 2020. The contractor is encouraged to attend prior to submitting a project bid. During the site visit, prospective contractors, the NFF and the USFS will evaluate the project area, staging areas, and access needs. The conditions described in this RFP will be discussed and clarified as necessary. PLEASE RSVP to [rdavidson@nationalforests.org](mailto:rdavidson@nationalforests.org) by Monday September 21<sup>st</sup>, 2020 to receive confirmation and additional details related to safety and PPE required for the site visit.

**Information Requested**

If interested in this project, please provide a bid for the above statement of work by providing approach, work experience, and cost. Please also include your capacity for this project and efficiency in hand thinning and piling projects in the past, if any.

This is a request for proposals only and quotations furnished are not offers. This request does not commit the National Forest Foundation to pay any costs incurred in the preparation of submission of the quotation or to contract for supplies or services.

## General Specifications

- (a) Description of Work – This Request for Proposals is for restoration services related to hand thinning from below, and piling of slash. Appendix C provides a detailed Implementation Guide. General specifications include the following:
1. Hand thinning from below, piling within Madrean Encinal Woodland on a 20 foot spacing structure (375 acres):
    - i. Retain all Arizona madrone, Chihuahua pine, and Apache pine.
    - ii. Hand thin and pile alligator juniper, Arizona oak, Emory oak, and pinyon pine.
    - iii. All fuel ladders, small trees and shrubs under retained canopy trees, should be cut and piled.
  2. Hand thinning from below within Madrean Pine Oak Woodland to an overall 110 ft<sup>2</sup>/ac BA and pile (15 acres):
    - i. Retain all Arizona madrone and Apache pine.
    - ii. Hand thin and pile alligator juniper, Arizona oak, Emory oak, pinyon pine, and Chihuahua pine.
  3. Project area is adjacent to the Arizona Trail. Piles should not be constructed within 50 feet of trail.
  4. Contractor will avoid operating and removing trees in riparian drainages. Leave a 50 foot buffer from the edge of riparian corridors.
  5. Avoid disturbance to all agave and cactus species.
  6. Retain snags over 12 inches diameter at root collar (DRC) / diameter at breast height (DBH) when possible
  7. Do not treat areas over 20% slope.
  8. Do not cut any Apache pine.

The Contractor shall identify which efforts and materials they can supply in terms of materials, labor, equipment, supplies, supervision, quality control, and incidentals required to complete the work described. The Contractor shall perform all work in a safe and conscientious manner.

- (b) Project Location- Access to the Project Area is by FS System Road 228, Sunnyside. <https://goo.gl/maps/aZSgAohP3mdzAKZk7>
- (c) Work Schedule- The Period of Performance of this contract is from the date of Notice to Proceed (estimated November 2, 2020) through May 31, 2021, subject to the following stipulations:
1. Work may begin immediately, pending a signed project contract and pre-work conference.
  2. Full project completion (390 acres) is required to be complete no later than May 31, 2021.

Cutting and piling may proceed through normal operating season, unless climate or other unforeseen variables make the project inoperable. Should roads become inaccessible due to rain, snow, fallen trees, or Forest fire closure orders, the U.S. Forest Service may direct NFF to suspend operations until road conditions improve or fire order is rescinded.

## Pricing Schedule

Contractor shall price work according to the schedule below. Prevailing wages will be required per conditions of funding sources.

Description	Unit	Unit Cost	Quantity	Total Cost
<b>Hand thinning from below, piling within Madrean Encinal Woodland</b>	1		375 Acres	
<b>Hand thinning from below, piling within Pine Oak</b>	1		15 Acres	

### Other Project Requirements and Specifications

- (a) Utilities –In many locations there will be no or limited sanitation, water, electrical or housing services available. The Contractor shall make its own arrangements for temporary facilities if needed.
- (b) Specifications – Project work shall be accomplished in accordance with the following:
- Current Conditions, Desired Conditions and Project Objectives (Appendix B)
  - Implementation Guide (Appendix C)
  - Equipment and Services (Appendix D)

### Contractor Qualifications

- (a) References – Please provide three references.
- (b) Past Experience – Please provide a brief explanation of previous work experience with land management agencies.

### Insurance Requirements

Upon selection of the winning bid, chosen contractor will be asked to affirm that it has and shall maintain State minimum workers' compensation insurance coverage for its employees, if any. The selected contractor shall also maintain broad form general liability, property damage, and automotive liability insurance in the minimum amount of \$1,000,000 for bodily injury, death, or damage to property of any person and \$2,000,000 for bodily injury, death, or damage to property of more than one person. The Contractor shall name NFF an Additional Named Insured and provide NFF with documentation evidencing such coverages.

### Bid Submission

Submit bids via email to [rdavidson@nationalforests.org](mailto:rdavidson@nationalforests.org) by Friday October 9<sup>th</sup>, 2020.

### Contractor Selection Process

The NFF will use the Evaluation Factors below to review each submitted bid. Based on the outcomes of that selection process, the NFF will notify successful and unsuccessful bidders during the period of October 16<sup>th</sup> - 23<sup>rd</sup>, 2020 and will prepare a separate contract document.

## Point of Contact

For questions about the details of producing the bid, please contact:

Rebecca Davidson  
National Forest Foundation, Director Southern Rockies Field Program  
720-749-9008  
rdavidson@nationalforests.org

## Evaluation Factors and Relative Importance

### Level 3 Criteria

- Price / cost
- Equipment and contractor capability
- Timing of when contractor can begin and/or finish the project
- Past performance, references, and USFS feedback

### Level 2 Criteria

- Technical proposal / proposed approach to project
- Overall strategic benefits to meeting NFF goals and grant needs, requirements, and timelines

### Level 1 Criteria

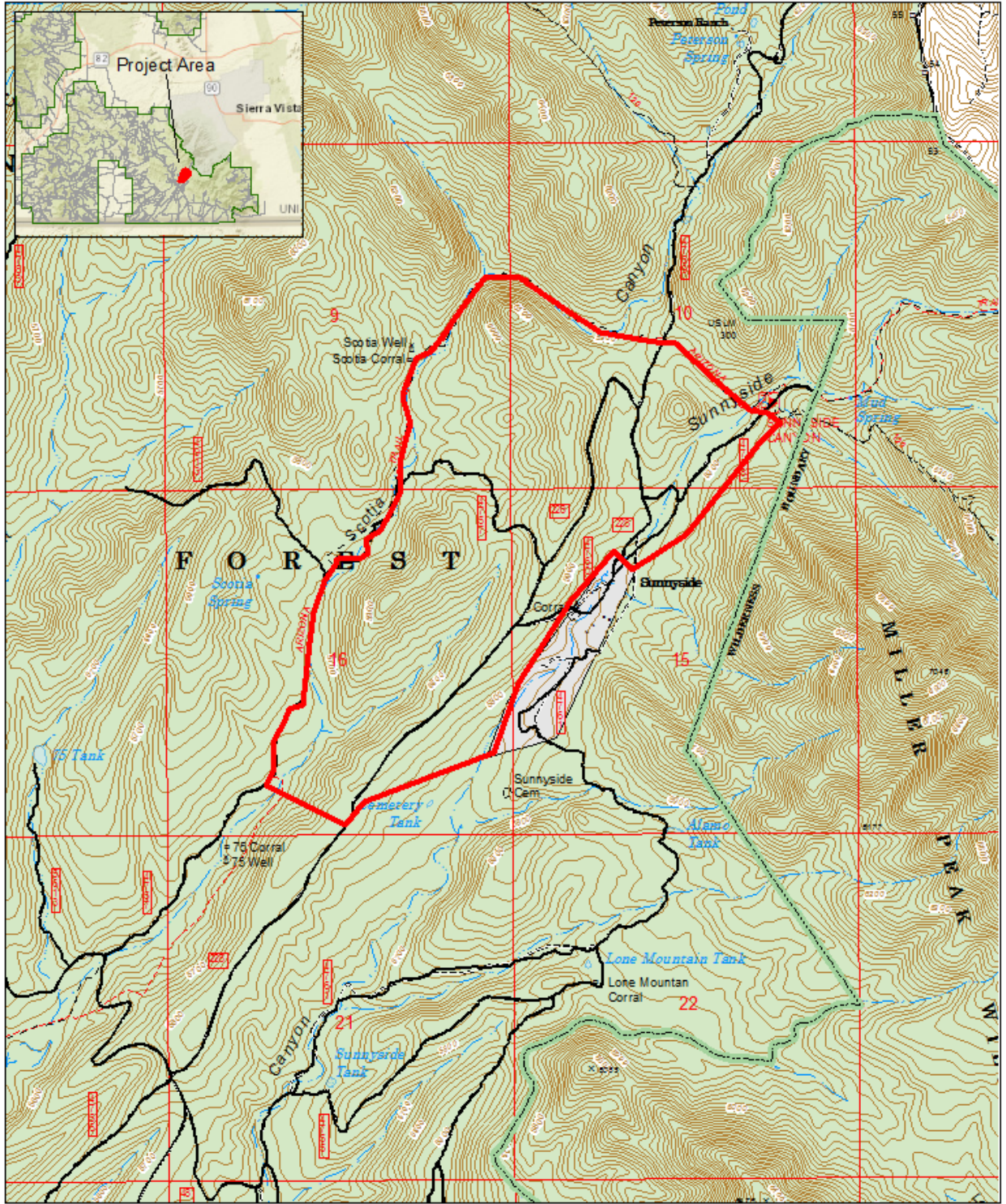
- Benefits to the local community
- Relationship to local community

## Equal Opportunity Provider

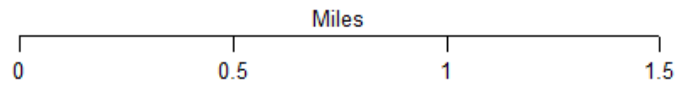
In accordance with Federal law and U.S. Department of Agriculture policy, the National Forest Foundation is prohibited from discriminating on the basis of race, color, national origin, sex, age, religion, political beliefs, or disability.

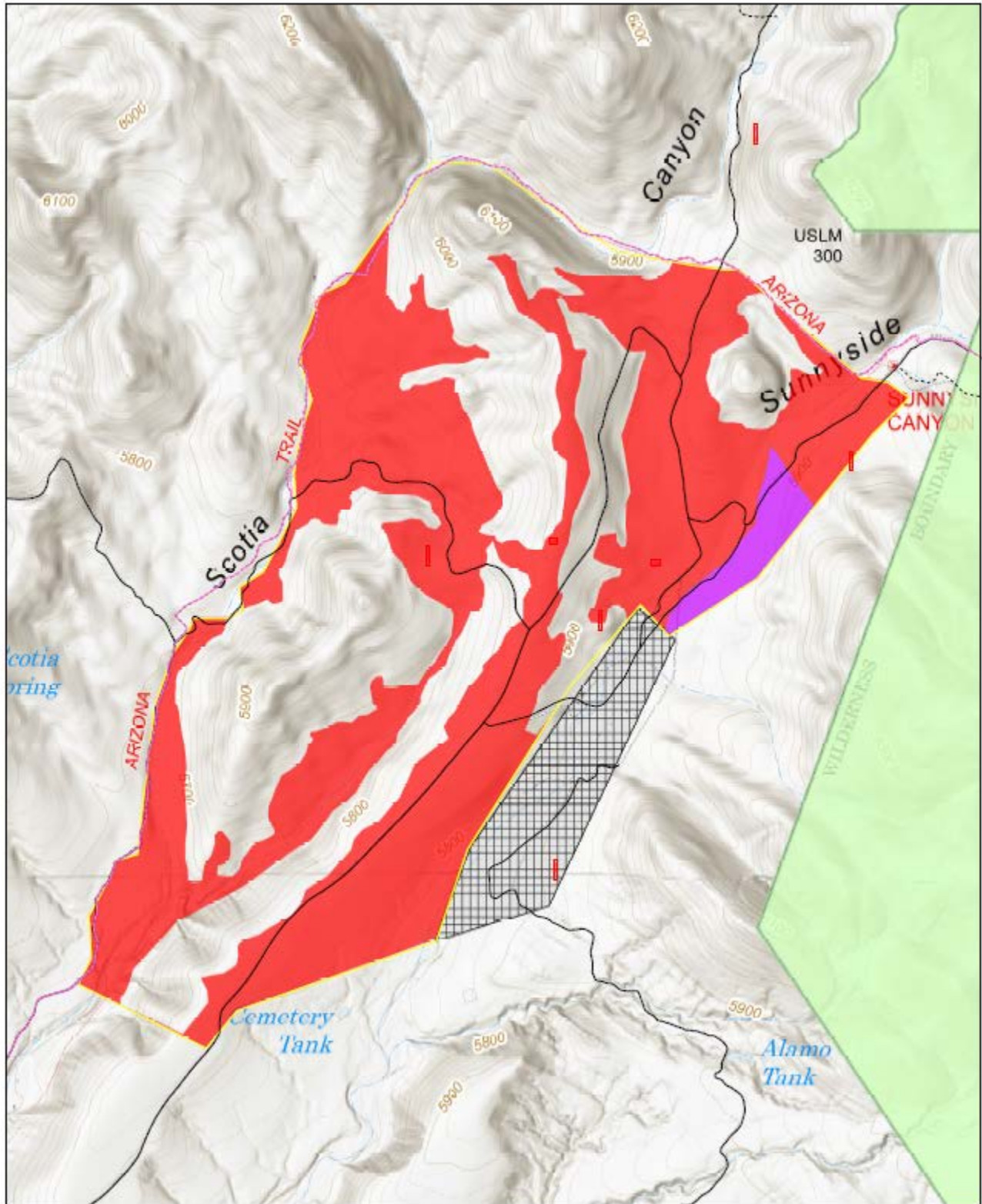
APPENDIX A - Maps

# Scotia Thinning Project



 Project Area





**Coronado National Forest  
Scotia Fuels Reduction Project**



NAD 1983 UTM Zone 12N  
6/9/2020, 1:17:54 PM, Coronado NF GIS

- |                            |               |
|----------------------------|---------------|
| Scotia Project Area        | Arizona Trail |
| Treatment 1 - Oak Woodland | Trail         |
| Treatment 2 - Pine Oak     | Road          |
| Private                    | Wilderness    |



## APPENDIX B - Existing Conditions

The project area is adjacent to the Arizona trail to the east and north, and private property to the southeast. It is within a grazing allotment and is a popular area for various types of outdoor recreation. Access to the project area is by FS system road 228, Sunnyside.

Madrean encinal woodlands – Canopy is dominated by alligator juniper (*Juniperus deppeana* – JUDE2), Arizona oak (*Quercus arizonica* – QUAR), Emory oak (*Quercus emoryi* – QUEM), and border pinyon (*Pinus discolor* – PIDI3). Common understory shrubs include manzanita (*Arctostaphylos pringlei* – ARPR) and netleaf hackberry (*Celtis laevigata* var. *reticulata* – CELAR).

The Madrean encinal woodland canopy is about 40-50% closed throughout most of the stands with grasses, shrubs, and succulents in the understory. Alligator juniper is the most dominant species in the stands as measured by trees per acre and basal area per acre, both in the overstory and regeneration layers.

Madrean pine oak woodlands – Canopy is dominated by alligator juniper (*Juniperus deppeana* – JUDE2), Arizona oak (*Quercus arizonica* – QUAR), Emory oak (*Quercus emoryi* – QUEM), Chihuahua pine (*Pinus leiophylla* – PILE), Apache pine (*Pinus engelmannii* – PIEN2) and border pinyon (*Pinus discolor* – PIDI3). Common understory shrubs include manzanita (*Arctostaphylos pringlei* – ARPR).

The Madrean pine oak woodland canopy is about 60% closed throughout most of the stands with grasses and shrubs in the understory. A pine beetle infestation in the past 3-4 years, likely exacerbated by drought which has since subsided, has left some Chihuahua pine dead standing or dead and down. Evidence suggests there is no longer a pine beetle infestation in the stand.

### Long-Term Desired Conditions and Prescribed Treatment Objectives

#### **Desired Condition (spatial patterns, species composition, stand structure)**

The desired condition in the Madrean encinal woodland stands is uneven aged with canopy cover ranging from 5-50% with an average of around 25%. South facing slopes should have between 5-25% canopy cover, while north facing slopes and drainages should range from 25-50% canopy cover. The area should be composed of single large trees or small groups of trees that are widely spaced between large expanses of grasses and shrubs. Species composition should remain largely unchanged, with oaks and juniper dominating the overstory.

The desired condition in the Madrean pine oak woodland stands is uneven aged with canopy cover around 50% for 70% of the area, the remaining 30% of the area should be more open, with 10% canopy cover and a grass understory. Pine should dominate but the stand should include large oaks and junipers.

#### **Short-Term Objectives (expected post-treatment outcome)**

For Madrean encinal woodland stands:

- Reduce the likelihood for high severity or stand replacing wildfires
- Reintroduce low severity fire as a natural disturbance to promote and maintain the desired conditions in the Forest Plan
- Maintain species diversity and improve forest health
- Maintain and protect the natural landscape surrounding the Arizona Trail

For Madrean pine oak woodland stands:

- Reduce the likelihood for high severity or stand replacing wildfires
- Maintain, promote, and protect recovery habitat for Mexican Spotted Owl
  - >110 ft<sup>2</sup>/ac BA
  - Promote and retain large trees, snags, large logs, and hardwoods
  - Spatial heterogeneity
- Maintain species diversity
- Improve forest health and resilience to drought
- Maintain and protect the natural landscape surrounding the Arizona Trail



## APPENDIX C - Implementation Guide

### Madrean Encinal Woodland Acres: 375

#### Silvicultural Treatment:

Thin and pile from below on a 20 foot spacing

#### Implementation Instructions (in order of priority)

- Do not cut any trees over 16" DRC.
- Retain all Arizona madrone, Chihuahua pine, and Apache pine.
- Hand thin and pile alligator juniper, Arizona oak, Emory oak, and pinyon pine leaving the highest quality tree or small clusters of trees approximately every 20'. Spacing should vary within the range of 15'-25', larger spacing on south facing slopes, lower spacing on north facing slopes
  - Characteristics of a high quality tree
    - Large
    - Healthy, spreading crown
    - No evidence of insect damage or disease
  - When no single large tree occurs within 20' choose a tightly clustered group of 2-4 trees with similar high quality tree traits
- Cut list priority – spacing and quality are more important, leave an even mix of species when possible.
  - Juniper (highest priority to cut)
  - Arizona and Emory oaks
  - Pinyon pine (lowest priority to cut)
- 1 out of 10 small trees, less than 5" DRC, should be retained in openings.
- All fuel ladders, small trees and shrubs under retained canopy trees, should be cut and piled.
- Piles should be placed in openings to minimize tree scorch when burning operations occur.

### Madrean Pine Oak Woodland Acres: 15

#### Silvicultural Treatment:

Thin from below to an overall 110 ft<sup>2</sup>/ac BA and pile

#### Implementation Instructions (in order of priority)

- Do not cut any trees over 16" DRC.
- Retain all Arizona madrone and Apache pine.
- Hand thin and pile alligator juniper, Arizona oak, Emory oak, pinyon pine, and Chihuahua pine.
  - Cut 8 out of 10 trees and shrubs less than 12" DBH/DRC
    - Leave trees under 12" should be of high quality and should not be suppressed under canopy trees.
    - Spatial heterogeneity should be encouraged
  - About 110 ft<sup>2</sup>/ac BA should remain on average
- Cut list priority
  - Juniper (highest priority to cut)
  - Arizona and Emory oaks
  - Pinyon pine (lowest priority to cut)
  - Chihuahua pine (lowest priority to cut)
- Piles should be placed in openings to minimize tree scorch when burning operations occur.

## **APPENDIX D - Equipment and Services**

For this project activity, there will be no Government-furnished property or material. A contractor will be responsible for the following:

The Contractor shall provide dependable, safe equipment and protective gear that meets all applicable state and federal laws and regulations relating to motor vehicles and equipment. The Government reserves the right to conduct inspections at any time.

### Powersaws

Any fueling or refueling of a powersaw shall only be done in an area which has first been cleared or is free of all material capable of carrying fire; powersaw shall be moved at least 10 feet from place of fueling before starting.

### Spark Arrestors

The NFF/third-party contractor shall not operate any internal combustion engine on any timber, brush or grass covered land, including trails or roads without a spark arrestor maintained in effective working order and meeting the guidelines set forth in the National Wildfire Coordinating Group Publication NFES 1363 and 2363.

### Personal Protective Equipment

Personal protective equipment for eyes, face, head, and extremities shall be provided, used, and maintained in a sanitary and reliable condition. The Contractor shall provide to each employee who operates a chain saw, chain saw chaps and assure the chaps are worn during saw operations. These chaps must be approved by Underwriters Laboratory or meet Forest Service specification 6170-47. The chaps shall cover the full length of the thigh to the top of the boot on each leg.

Work may be suspended or modified when the Coronado National Forest personnel identifies conditions that represent an unacceptably high fire risk, such as very dry fuels, high winds, increased incidence of wildfires, erratic fire behavior, or Red Flag conditions.

### Hazardous Materials

Compliance with all applicable State and Federal regulations pertaining to the handling and disposal of hazardous materials. Disposal of hazardous materials is not permitted on site or on federal land. Failure to meet this condition can result in the NFF/third-party contractor being liable for the cost of reclamation, including clean up and disposal of contaminated soil.

Minor, incidental leaks from fittings, seals or ruptured hoses will not subject the NFF/third-party contractor to remedial requirements; however, continued leaks will require repair to eliminate/minimize the impact of hazardous materials. Maintenance and repairs that require the draining of lubricants or other fluids may be conducted on site only if the fluids are captured, containerized, and removed from public lands for proper disposal.

### Personnel

NFF will provide a representative onsite to ensure safety and quality performance.