STEEP SLOPE THINNING ON BILL WILLIAMS MOUNTAIN
REQUEST FOR PROPOSALS

BACKGROUND AND STATEMENT OF WORK
The National Forest Foundation (NFF), and local community partners are working to restore forests, reduce fire risk, and protect watersheds on National Forests in Arizona as part of the Northern Arizona Forest Fund (NAFF) program.

The purpose of this Request for Proposals (RFP) is to invite forestry contractors with experience working with mechanical equipment on steep slopes to provide a proposal for thinning operations on 300 acres of steep, rocky terrain on Bill Williams Mountain (BWM), on the Kaibab National Forest, near the City of William, AZ.

This work will be done under a service contract with the National Forest Foundation. The timber cut on this project is owned by the Kaibab National Forest and may be sold as separate deck sale at a later date.

SITE CONDITION
The approximately 300 acres included in this RFP range in steepness from 25% to 70% slope. The terrain is rocky and uneven throughout the unit. We are considering ground-based steep-slope mechanical thinning and removal (Ponsse equipment), hand-falling with helicopter removal, hand-falling with tethered forwarders, and shovel logging. Please note that per the Bill Williams EIS this work cannot be done using traditional cable logging.

LOCATION
All work will be conducted on the Williams Ranger District of the Kaibab National Forest. See vicinity map at end of document.

FUEL REDUCTION PRESCRIPTION
Thinning specifications for this project have been written by the Kaibab National Forest. These are intended as guidelines for the project as they represent the desired condition, but it is understood that flexibility may be required to allow for safe and efficient operations. For example, some acres may be to rocky or steep in which case those acres can be ruled out if deemed unsafe for operation.
The Kaibab National Forest has written the following prescriptions for this area:

- The objective and desired treatment condition is to thin and remove ponderosa pine, Douglas-fir and white fir trees between 1” - 18” DBH to an average landscape average basal area of 80 ft$^2$ per acre. Remove sound dead and down material to 5-15 tons per acre. All averages will be taken at the mid-scale of 100 acres to account for variability.
- Portions of the cutting unit are designated to maintain a higher density of trees in pre-settlement areas. These areas should have a higher density of leaf trees greater than 18” DBH to maintain a higher basal area. At a minimum, these areas should maintain 60 ft$^2$ basal area per acre and they should average 120 ft$^2$ basal area at the mid-scale. Outside of pre-settlement areas, maintain an average density of 80 ft$^2$ basal area at the mid-scale. *Hardwoods such as aspen and oak will not be cut and will not count toward residual basal area.
- Fall all ponderosa pine, Douglas-fir and white fir trees between 1” - 18” DBH to meet the above objectives and desired condition. Species preference for removal include, in order of preference: White fir, Douglas-fir then ponderosa pine.
- Retain all snags not posing hazards to operations.
- Conduct tree falling treatment on a 90% acceptance.

**DECKING AND SLASH PILING**

- Process all merchantable material at designated landings. Process and sort includes:
  - Material less than 8” in diameter piled at landings
  - Material (logs) 8”- 13” in diameter will be sorted into piles
  - Material (logs) greater than 13” in diameter will be decked
- All activity generated slash and dead and down material are to be piled in the landing.
- Include the cost of operating an Air Curtain Burner onsite for slash removal. Air Curtain Burner Specs: [https://airburners.net/spec_sheets/s-119/s119_specifications_ro.pdf](https://airburners.net/spec_sheets/s-119/s119_specifications_ro.pdf) Air Curtain Burner will be provided by the County, however, operating, and fuel expenses to run the burner will be the contractor’s responsibility.

**ADDITIONAL PROJECT CONSIDERATIONS**

The objective of this project is to remove the material from the area. Slash disposal is preferred at approved landings. However, alternative methods of slash disposal, for example AirCurtain Burner technology or disposal areas, may be considered. The aforementioned methods are not exhaustive and contractors are encouraged to propose alternative methods to meet desired conditions.

As this project is located on National Forest System lands, contractors must also comply with all applicable U.S. Forest Service direction and regulations.

NFF will administer and oversee the implementation of the work. Please be prepared to appoint a supervisor to coordinate and work closely with NFF and Kaibab National Forest representatives.

NFF has a limited budget and operating window to complete this project. Anticipated earliest start date is September 1, 2019. End date of this project is December 31, 2020. There are operating timing restriction from March 1 to August 31 for TES requirements.

LiDAR data and site visits are intended to give contractors as much information about
this project as possible so that you can provide an accurate, competitive proposal. If you have additional questions please contact Spencer Plumb, Arizona Program Manager at splumb@nationalforests.org or via phone at 928-961-2486.

**PROPOSALS**
The proposal should contain all of the following information: 1) Company information, 2) Operation plan describing the equipment used for cutting and removal of biomass, and stacking and/or processing of biomass 3) Proposed map with landing locations, desired skid/flight paths, 4) Project timeline, and 5) Proposal Bid Sheet.

**Note:** Alternative methods or approaches to operations will be considered. The Kaibab National Forest will allow for flexibility in achieving the desired condition as prescribed above. Therefore, contractors are encouraged to propose operating plans that may meet some or all of the specific guidelines to achieve the overall intent of the prescription. It is understood that the complexity of this restoration treatment may warrant creative, non-traditional approaches, so proposals should present and describe those alternate approaches where professional expertise in operations are required.

1) **Company Information:**
   - Company name
   - Name(s) of individual(s) preparing the response,
   - Primary contact: mailing address and physical address, office phone, cell phone of primary contact and email(s)
   - DUNS Number ([https://www.grants.gov/applicants/organization-registration/step-1-obtain-duns-number.html](https://www.grants.gov/applicants/organization-registration/step-1-obtain-duns-number.html)). You must have DUNS number in order to be considered for this contract.
   - List of names of employees (operators, technicians, sawyers etc.) and any subcontractors that may work on this project.
   - Lists of heavy equipment to be used (year, manufacturer, model)

2) **Proposed Operating Plans:** Given the information provided, please provide detailed description of an operating plan to complete this project (300 acres) in a timely, safe, and cost-effective manner. To the extent possible use simple, clear language to illustrate the methods you propose.
   - **Thinning Methods**
   - **Removal Methods**
   - **Slash piling**
   - **Wood Processing**
   - **AirCurtain Burner Operation (optional)**

3) **Proposed Operations Maps** of Landings, Skid/Flight paths (cannot be completed until project maps are released).

4) **Project Timeline:** Estimated start date September 1, 2019. Expected acres per day.

5) **Proposal Bid Sheet:** Please provide a bid using the Schedule of Required Tasks and Optional Items in Appendix A of this document. You may adapt this table as needed but the final should include the Required Total, Optional Total, and Complete Total.
DUE DATE

To submit a proposal, please e-mail all relevant proposal documents to Spencer Plumb at splumb@nationalforests.org by Tuesday, July 30th at 6:00pm Arizona Time.

PROJECT VICINITY MAP

Leaving from Williams, head south on Perkinsville Rd (County Rd 73) for 1.9 miles. Turn right onto E Ski Run Rd. Please note that a locked Forest Service gate prevents vehicle driving up to the project site that is located for 1.5 miles up E. Ski Run Rd. If you wish to visit the project site again please contact Spencer Plumb (928-961-2486) or visit the Williams District Office to checkout a key to open the gate.

Google Directions:
https://goo.gl/maps/xC6CijgR4cM2
Appendix A: Proposal Bid Sheet

Tasks are broken down below into specific bid items that intended to provide flexibility and facilitate invoicing.

### Schedule of Required Tasks and Optional Items

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<thead>
<tr>
<th>TASK</th>
<th>METHODS</th>
<th>UNITS</th>
<th>PRICE</th>
<th>AMOUNT</th>
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<td>Required Tasks : Thinning and Removal</td>
<td>Equipment, Machinery, or Method</td>
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<td>Amount</td>
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<td>Unit #1 – Thinning</td>
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<td>Unit #1 – Cut Trees Removal</td>
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<td>Slash Piling at Landing</td>
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<tr>
<td>Wood Processing</td>
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<td>Additional Required Item 2:</td>
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**SUBTOTAL OF REQUIRED TASKS** $ 

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<th>Optional Items</th>
<th>Equipment, machinery, or method</th>
<th>Acres, NA</th>
<th>$/UNIT</th>
<th>Amount</th>
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<td>Alternative Slash Disposal</td>
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<tr>
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</tbody>
</table>

**SUBTOTAL OF OPTIONAL ITEMS** $ 

**COMPLETE TOTAL OF REQUIRED AND OPTIONAL** $
Bill Williams Steep Slope Restoration

Description
This map displays the first Bill Williams steep slope unit to be thinned in the 2019 RFP by NFF. Data includes pre-settlement patches, Cararact PAC, Caract PAC core area, landings, and temp roads.

Legend
- Temp Road
- Landings
- Cararact PAC
- Cararact PAC Core Areas
- Pre-settlement Patches
- Existing Road