

# Request for Proposals Mesa Antero Estates Landscape Restoration Project – Phase I San Isabel National Forest, CO

**Background and Statement of Work:** In collaboration with the Colorado State Forest Service, the National Forest Foundation (NFF or Project Administrator) is seeking a contractor(s) to conduct service work, including forest thinning and mastication operations, across 110 acres of private land in Chaffee County, Colorado, to reduce dense forest fuels that have accumulated due to a century of fire suppression and human development in fire-dependent ecosystems. The Colorado State Forest Service (CSFS or Implementation Lead) identified and developed this project and will operate as the primary point of contact for the selected contractor during implementation. The Mesa Antero Estates Landscape Restoration Project – Phase I (Project) will improve wildlife habitat and reduce the risk of severe wildfire through targeted treatments on private land in Chaffee County. Contractor will also reduce forest densities by creating a mosaic of small openings and leaving un-thinned forested areas adjacent for wildlife cover.

As noted below, this Request for Proposals (RFP) includes 110 acres of required private-land treatments for the Phase I portion of the Project. The NFF and CSFS will be releasing additional RFPs later this year to implement similar service work in subsequent phases of this Project to treat a cumulative total of roughly 300 acres of private land in Chaffee County.

#### **Information Requested**

If interested in submitting a bid for this project, please provide a proposal for the above statement of work by providing:

- technical approach, including slash management
- work experience (with at least three references)
- cost
- capacity for this project (including anticipated project completion date)
- experience in similar projects

Specific requirements are detailed below.

#### I. PROJECT OVERVIEW AND REQUIREMENTS

#### **General Specifications**

- (a) <u>Description of Work</u> This Request for Proposals is for restoration services related to mechanical treatments (thinning and mastication), including the following project areas:
  - 1. Mesa Antero Estates Private Acres (110 acres)

The Contractor shall identify what 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) <u>Project Location</u> The Project units are located in Chaffee County, CO, northwest of Salida, CO. The treatment units and boundaries will be delineated on the ground with paint or flagging; project shapefiles are available on request. Specific project locations will be shared to those who RSVP to the contractor tour.
- (c) <u>Work Schedule</u> Project implementation for the required private acres will begin as early as October 1, 2024, pending the awarding of a contract and must be completed no later than July 31, 2025. Preference will be given to bids that can complete project implementation by December 15, 2024.

#### **Other Project Requirements and Specifications**

- (a) <u>Utilities</u> 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. If needed, the NFF and CSFS can assist the Contractor in identifying potential camping locations near the project area on BLM or other public land. Permits or authorization may be required for public lands camping.
- (b) <u>Specifications</u> Project work shall be accomplished in accordance with the following:
  - APPENDIX A Scope of Work

#### **Insurance Requirements**

Upon selection of the winning bid, the Contractor agrees that it has and shall maintain the following insurance coverage indicated below. The effective date of all coverage shall precede the start of any work.

- a. State minimum workers' compensation insurance coverage for its employees, if any.
- b. 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 a certificate of insurance evidencing such coverages, prior to the initiation of the Scope of Services.
- c. If the Scope of Services includes professional services as identified herein, Contractor shall also provide professional errors and omissions liability insurance. Professional services for purposes of this section include, but are not limited to performing architecture, engineering, landscape architecture, land surveying or planning, preparation and signing or stamping of drawings, maps, surveys or construction specifications, or design and development of computer software, programs or websites by the Contractor or by subcontractors on behalf of the

Contractor, for which professional liability insurance would typically be required. The minimum coverage limits required are \$1,000,000 for each claim and \$1,000,000 annual aggregate.

#### **Prohibited Telecommunications Services and Equipment**

The Contractor is responsible for compliance with the prohibition on certain telecommunications and video surveillance services or equipment identified in 2 CFR 200.216.

#### **Payment/Performance Security**

Contractor shall post cash, a letter of credit, bond, or other financial security that is easily convertible into cash in a form acceptable to the NFF, in its sole determination, to assure completion of the work required under any subsequent agreement and payment of all amounts lawfully due to all persons supplying or furnishing to the Contractor or Contractor's subcontractors with labor, laborers, materials, rental machinery, tools or equipment used or to perform the work. Contractor may incorporate required associated costs into mobilization costs or other approved expenses.

- a. Work that is classified as construction in accordance with the Miller Act or Little Miller Act or if required per conditions of the funding source, payment and performance bonding will be required in the full amount of any Agreement. For the purposes of this Request for Proposal, construction is defined as "any contract greater than \$100,000 for the construction, alteration, or repair of any public building or public work where the federal government is the owner", or
- b. If Contractor is not self-performing at least 85% of the total contract value or if the cost of materials is in excess of the larger of \$100,000 or 50% of the contract total, payment and performance bonding will be required in the full amount of the agreement, or
- c. If the value of the agreement is in excess of \$250,000, Contractor will be required to post financial security in a form acceptable to the NFF in the amount of 5% of the total agreement value up to \$250,000 in total financial security.

**American Made Products.** The work associated with this RFP is subject to Build America, Buy America Act. P.L. 117-58, Secs 70911-70917, and as such, domestic content procurement preference requires all iron and steel, manufactured products and construction materials used within the scope of this Agreement, be produced in the United States.

### Federal Exclusion Verification

The selected Contractor will be required to affirm that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

#### **Federal Flowdown Provisions**

Flowdown Requirements: Any Agreement associated with this RFP may be subject to flowdown requirements under associated federal or state funding agreements, which are included and made part of by this reference.

### II. REQUIRED COMPONENTS

#### **Technical Proposal**

Please provide a detailed technical approach to the work.

#### **Contractor Qualifications**

- I. <u>Past Experience</u> Please provide a brief explanation of previous work experience with land management agencies.
- II. <u>References</u> Please provide three professional references that can speak to past performance.

#### **Pricing Schedule**

Contractor shall price work according to the schedule below. Prevailing wages are required per conditions of funding sources. If Contractor intends to use more than one treatment type (e.g. mechanical thinning, mastication, hand thinning, etc.) and the unit cost for each treatment type is different, please indicate that in the table below, making sure that the sum of the combination of treatment types equals the full treatment goal of this project – 110 acres.

	Task/Item	Units	Quantity	Unit Cost	Extended Cost
(a)	Mesa Antero Estates – Private Acres	Acres	110		
(b)					
(c)					
(d)					
		1		Total Bid	

### III. SUBMISSION, EVALUATION, AND CONTACTS

#### **Contractor Selection Process**

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

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 by May 3, 2024 and will prepare a separate contract document.

#### **Evaluation Factors and Relative Importance**

The following criteria will be used in the evaluation of submitted proposals, ordered from highest weighting (level 3) to lowest weighting (level 1).

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

### Point of Contact

Please submit any questions about the project in writing to the Point of Contact.

Matt Nykiel National Forest Foundation, Central Colorado Project Coordinator mnykiel@nationalforests.org

Responses will be shared with known interested parties by email or otherwise posted at <u>https://www.nationalforests.org/rfp</u>.

#### Pre-Bid Questions and Pre-Bid Contractor Tour

Please direct questions to the NFF point of contact listed above. The NFF will host a pre-bid contractor tour on Friday, April 19, 2024, to visit the project site in person with project foresters and the NFF. During the tour, we will also preview subsequent phases of the Project, which are in active development. If the tour results in any changes to the RFP or specifications, the NFF will share those changes in writing with all contractors who have expressed interest in attending the tour. Please RSVP to Matt Nykiel at mnykiel@nationalforests.org or 720.880.0045 if you are interested in attending the pre-bid contractor tour, or if you are unable to attend the tour but still wish to receive any updates to the RFP or specifications. **Please RSVP by COB, April 17, 2024.** Details for the pre-bid contractor tour will be shared with those who RSVP.

#### **Bid Submission**

Submit bids via email to mnykiel@nationalforests.org by April 26, 2024.

### **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: Scope of Work Mesa Antero Estates Landscape Restoration Project - Phase 1

## **Project Description**

The project in Mesa Antero Estates (henceforth referred to as MAE) will deliver 110 acres of forest health improvement and fire mitigation to the community in Phase 1 of a three-part project. Treatment will be conducted as a traditional timber harvest, mastication, and handwork project through the removal of large diameter marked trees, small diameter unmarked trees, woody debris, shrubs, and slash mitigation. The work to be completed for this project will reduce hazardous fuel loading within the treatment units, address forest health concerns (i.e. spruce budworm impacts, overstocked stands), and improve wildlife habitat by opening the canopy to allow for increased growth of grasses and forbs. The MAE units are located in Colorado, west of US Highway 285 between Salida to the south and Nathrop to the north, on Coyote Valley Road and Kiowa Road. The forest composition within the treatment units is variable but consists largely of dry mixed conifer and piñon/juniper stands, with one small aspen unit. Within the dry mixed conifer stands, the Douglas-fir trees have been heavily impacted by western spruce budworm and the Douglas-fir beetle. The ponderosa pine has sustained a moderate to heavy dwarf mistletoe infection. The stand will benefit from thinning to increase canopy separation. The piñon/juniper stand is overly dense and has an abundance of ladder fuels throughout. A reduction of the stand density will increase the safety of the individual properties, as well as the community, thereby reducing the potential for severe wildfire.

The prescriptions will vary depending on the unit being worked on, which will be outlined in detail in the <u>Unit</u> <u>Descriptions</u> and <u>Prescription for Treatment</u> sections below. A general description of the work is as follows: The mixed conifer units included in the project will undergo a timber harvest in addition to handwork and mastication. Within these units the mastication will include removal of non-merchantable trees and shrubs and potential slash mitigation resulting from harvest operations. The treatment on the piñon/juniper stands will include mastication, shrub removal and slash mitigation. The aspen stand treatment will include a timber harvest and mastication. Handwork may be added where necessary.

# **Project Administration**

CSFS Forester Kellie Solis will serve as the primary Project Administrator. Additional project administration will be conducted by other CSFS Salida FO staff. Contact information is listed below:

Kellie Solis 7980 W. HWY 50 Salida, CO. 81201 719-839-5748 cell kellie.solis@colostate.edu

The Project Administrator reserves the right to suspend operations at any time and to require specific onthe-spot work on a case-by-case basis that may override the prescription listed below. For example, **the Project Administrator may require the removal of specific trees that fall outside of the "Prescription for Treatment Units" listed below.** 



The **CONTRACTOR** shall notify the Project Administrator when they are within **two days** of completion of each unit. The Project Administrator will notify the **CONTRACTOR** of a date and time for a final inspection. Payment to the **CONTRACTOR** will be processed upon successful completion of the project after the final inspection. The operator must be present at the time of final inspection.

## **Project Locations**

The MAE properties are located off US Highway 285 on Coyote Valley Road and Kiowa Road. To reach the treatment area, head north on Highway 285 from Poncha Springs for about nine miles. Turn left onto County Road 260 and drive for one mile. Turn left onto Coyote Valley Road, which is a dirt road. The first property is about a mile down the road on the left, and two others are on this road. Take a left turn onto a narrow, switchback-filled, dirt Kiowa Road to reach the other four properties in the treatment area.

# **Existing Conditions**

The forest conditions included in the treatment units are variable. There are three different forest types that will be included in this treatment:

- 1. Dry mixed conifer stands consisting of Douglas-fir and ponderosa pine with marginal aspen components. Many of the Douglas-fir throughout the area have been heavily impacted by western spruce budworm throughout its age classes. Additionally, there are pockets of Douglas-fir beetle activity impacting the larger Douglas-firs, especially on the properties to the south. The ponderosa pines are impacted by dwarf mistletoe in some areas, while in others, they are healthy. The forest will benefit from an overall thinning to reduce basal area and a removal of understory vegetation serving as ladder fuels.
- 2. Piñon-juniper stands with the occasional ponderosa pine and Douglas-fir. The piñon-juniper components will benefit from thinning to reduce canopy cover and to remove understory vegetation that is serving as ladder fuels, especially around the juniper. There are sporadic, healthy individual ponderosa pine and Douglas-fir, as well as larger pockets of both that can be found in drainages within the stands.
- 3. A small aspen stand with large quantities of downed woody debris and snags. The debris will need to be largely masticated or removed from the stand. There is a large component of rose and willow in the understory, making it difficult to walk through the stand. Heavy equipment will create a disturbance that will benefit aspen regeneration.

# **Unit Descriptions**

Phase 1 of the MAE project includes **19 Management Units (110 acres)** with varying prescriptions. The treatment is being completed on seven different landowners' properties. See the table below for the breakdown by landowner of acreage, forest type and prescriptions. There are nine mixed conifer stands (**46.7 machine acres and 18 handwork acres**), and one aspen stand (**1.7 machine acres**) that are marked in orange flagging. The nine piñon-juniper stands (**43.6 machine acres**) are marked in pink flagging. Trees marked with **red** paint are to be retained as wildlife or legacy trees.

Management Units **1** (Mowry), **4**, **6**, **7** (Hellebush), **11** (Stites), and **15** (Shin) are all located on Kiowa Road. These units consist of **46.7 acres of mixed conifer**, which includes Douglas-fir and ponderosa pine with a piñon-juniper understory. The slopes are consistently <30% and are expected to be completed as mastication and/or timber harvest units. Handwork may be supplemented as necessary.



Management Units **5** (Hellebush) and **14** (Shin) are located on Kiowa Road, while Management Unit **12** (Steenberge) is located on Coyote Valley Road. The units are all **mixed conifer with 18 acres** in total, but with steep and undulating slopes averaging >30%. These acres are listed as handwork but may be completed as mastication and/or timber harvest if possible while maintaining a clean look (i.e. no ruts 4" depth for 10' or longer will be created). The overstory is comprised of Douglas-fir and ponderosa pine, while the understory consists of piñon-juniper.

Management Units **2** (Mowry), **3**, **8**, **9** (Hellebush), **10** (Stites), and **16**, **17** (Shin) are located on Kiowa Road, while Management Units **18** (Sanchez) and **19** (Bright) are on Coyote Valley Road. The units are **43.7 acres of piñon-juniper** with mild to moderate slopes <30%. The overstory is comprised of piñon pine and juniper, with scattered ponderosa pine and Douglas-fir throughout. Mastication is expected for these stands.

Management Unit **13** (Steenberge) is a small **aspen stand** that is a total of **1.7 acres** that is mostly flat with marginal slopes of <30% along the bottom of MU-12. The stand is expected to be completed as a mastication and/or timber harvest unit due to the large quantity of downed woody material and a thorny understory vegetation cover. The presence of heavy machinery will also allow for prolific aspen regeneration.

MU	Landowner	Acres	Total Rx	Forest Type	Treatment (Rx)
	(LO)	per MU	Acres by LO		
1	Mowry	24.0	27.4	Ponderosa/Douglas-Fir	Timber Harvest/Mastication
2	IVIOWI y	3.4	27.4	Piñon/Juniper	Mastication
3		1.7		Piñon/Juniper	Mastication
4		5.9		Ponderosa/Douglas-Fir	Timber Harvest/Mastication
5		4.4		Ponderosa/Douglas-Fir	Handwork
6	Hellebush	4.3	21.7	Ponderosa/Douglas-Fir	Timber Harvest/Mastication
7		0.6		Ponderosa/Douglas-Fir	Timber Harvest/Mastication
8		2.3		Piñon/Juniper	Mastication
9		2.5		Piñon/Juniper	Mastication
10	Stites	6.3	13.7	Piñon/Juniper	Mastication
11	Silles	7.4	15.7	Ponderosa/Douglas-Fir	Timber Harvest/Mastication
12	Steenberge	9.0	10.7	Ponderosa/Douglas-Fir	Handwork
13	Steenberge	1.7	10.7	Aspen	Timber Harvest/Mastication
14		4.6		Ponderosa/Douglas-Fir	Handwork
15	Shin	4.5	15.2	Ponderosa/Douglas-Fir	Timber Harvest/Mastication
16	31111	1.3	13.2	Piñon/Juniper	Mastication
17		4.8		Piñon/Juniper	Mastication
18	Sanchez	4.4	4.4	Piñon/Juniper	Mastication
19	Bright	17.0	17.0	Piñon/Juniper	Mastication

If needed, the **CONTRACTOR** will work with the Project Administrator to modify buffers around houses.

### **Prescription for Treatment Units**

The following prescriptions have been grouped together first by forest type and second by the relevant treatment units:



### Ponderosa/Douglas-Fir:

<u>**Timber Harvest/Mastication Units 1, 4, 6, 7, 11, and 15 (46.7 acres)</u></u>: These management units will undergo a timber harvest in addition to mastication. Within the units, mastication will include removal of non-merchantable trees and shrubs, as well as slash mitigation resulting from harvest operations. All merchantable trees will be cut and removed off site. Trees \geq 8" DBH have been marked with a <b>blue** slash for removal, while trees <8" DBH have largely not been marked.</u>

<u>Handwork Units 5, 12, and 14 (18 acres</u>): Handwork due to steepness of terrain and landowner objectives within ponderosa/Douglas-fir stands will remove all encroaching piñon pine and juniper to reduce ladders fuels to diminish potential fire behavior and torching of mature trees. Mastication may be supplemented if possible while maintaining a clean look (i.e. no ruts 4" depth for 10' or longer will be created). Trees  $\geq$ 8" DBH have been marked with a **blue** slash for removal, while trees <8" DBH have largely not been marked.

- Trees ≥8" DBH:
  - Harvest all trees ≥8" DBH that are marked with **blue** painted slashes to a 6" top.
  - Beetle infested trees may be added during the operation by the Project Administrator as necessary to achieve treatment goals.
  - $\circ\,$  Remove all piñon pine and juniper that are within 20' of the driplines of ponderosa/Douglas-fir.
    - If piñon pine and juniper are the overstory species in an area of the stand, thin trees to have a spacing of 30' between canopies of individuals and 40' around groups of 3-6 trees.
    - Do not remove trees that are marked with **red** paint.
    - \*If unsure with the transition between forest types, please ask the Project Administrator.
- Trees 5-8" DBH (most have NOT been marked in **blue** paint for removal):
  - Retain individuals or groups of 3-8 trees of good health.
  - Masticate Douglas-fir and ponderosa pine 5-8" DBH that are marked with **blue** painted slashes, display signs of poor health or that densely populate an area. Examples of trees to remove include:
    - <30% live crown (i.e. western spruce budworm defoliation)</p>
    - Suppressed trees that are growing abnormally to receive sunlight.
    - Trees growing underneath the dripline of larger retained trees.
    - Standing dead trees.
    - >20% of the live crown has evidence of dwarf mistletoe.
- Seedlings and Saplings <5" DBH:
  - Remove seedlings and saplings with a spacing of 8-12' between those retained. Seedlings and saplings selected for removal should exhibit:
    - Dead, forked, or broken tops.
    - Live crown ratio is <30%.
    - Any visible presence of dwarf mistletoe (i.e. shoots or witches' brooms).
    - Suppression by larger diameter classes.
    - Underneath the dripline of larger trees.
- Slash/Dead Trees:
  - Leave resulting masticated material on site.



- Chip depth throughout each individual unit must average ≤4" or ≤40% of the treatment area.
- Chip size must not exceed 5" in diameter and 24" in length.
- Masticate downed trees and standing dead trees to a 6" stump except:
  - Retain downed trees that are ≥12" DBH.
    - Rotting stems or trees where the bark has/is sloughing off may be left.
    - Tops, branches, woody debris, etc., attached to retained downed logs must be cut so the logs are ≤6" height from the ground to aid in decomposition.
  - Preserve obvious wildlife trees ≥12" DBH at a rate of 1-3 per acre. Characteristics include:
    - Presence of nests.
    - Presence of holes/cavities.
    - Presence of broken tops.

### Piñon/Juniper:

<u>Mastication Units 2, 3, 8, 9, 10, 16 and 17 (22.3 acres)</u>: Mastication within piñon-juniper stands will increase canopy separation between retained trees and tree clumps to both reduce potential fire behavior and improve wildlife habitat. The resulting treatment will include clumps of trees left untreated displaying good health, and areas with increased crown spacing between single retained trees. No trees were marked for removal in any of the piñon-juniper units.

- Retain legacy piñon and juniper ≥ 14" DBH.
- Select healthy trees displaying good form and full crowns to be retained. Keep a diversity of size/age class throughout treatment area. Characteristics for leave trees include:
  - <u>Free of disease damage</u>: Trees shall not have diseases such as dwarf mistletoe, western gall rust, or piñon blister rust, etc.
  - <u>Free of insect damage</u>: Trees shall not have damage resulting from infestations of piñon ips beetle, piñon needle scale, or other insects affecting piñon pines.
  - <u>Dominant or co-dominant trees</u>: Trees have well developed crowns that either form or extend above the general level of the forest stand canopy and receive full sunlight from the top and partly from the sides.
  - <u>Stem quality</u>: The bole or stem of the tree shall be relatively straight. Trees shall have a single live terminal leader (no dead or broken tops).
- Individuals/Groups
  - Groups of trees will make up about 30% of the treatment area and individual trees will make up the remaining 70%.
  - $\circ$   $\;$  Remove piñon and juniper to create 30' of crown spacing between retained single trees.
  - Clumps of 3-6 trees growing well together and displaying good health shall be retained, with at least 40' of spacing surrounding.
- Retain all ponderosa pine and Douglas-fir ≥14" DBH that are healthy.
  - Remove trees beneath the drip line and within 20' of the canopy.
  - Examples of ponderosa pine and Douglas-fir to remove include:
    - <30% live crown (i.e. western spruce budworm defoliation).
    - Suppressed trees that are growing abnormally to receive sunlight.
    - Standing dead.
    - >20% of the live crown has evidence of dwarf mistletoe.



- Stump height will be  $\leq 6^{\prime\prime}$  on uphill side unless disallowed by terrain.
- Slash/Dead Trees
  - The resulting masticated material will be left on site.
    - Chip depth will be  $\leq 4^{\prime\prime}$  over 40% of the project area.
    - Chip size must not exceed 5" in diameter and 24" in length.
  - Dead standing snags ≥12" DBH will be retained at a rate of 1-3 per acre. Retain those with:
    - Presence of nests.
    - Presence of holes/cavities.
    - Presence of broken tops.
  - Downed logs ≥12" DBH shall be retained at a rate of 1-3 per acre.
    - Rotting stems or trees where the bark has/is sloughing off may be left.
    - Tops, branches, woody debris, etc., attached to retained downed logs must be cut so the logs are ≤6" height from the ground to aid in decomposition.

<u>Mastication Units 18 and 19 (21.4 acres)</u>: These units are included as a fuelbreak treatment and will therefore focus on the removal of trees <14" DBH. Mastication within piñon-juniper stands will increase canopy separation between retained trees and tree clumps to reduce potential fire behavior. The remaining trees will mainly be larger, more mature piñon pine and juniper with lots of spacing between trees.

- Retain legacy piñon pine and juniper that are ≥18" DBH, including flat topped, old piñon and juniper.
- Focus on selecting for healthy trees that include:
  - No disease damage: Trees shall not have diseases such as dwarf mistletoe, western gall rust, or piñon blister rust, etc.
  - No insect damage: Trees shall not have damage resulting from infestations of piñon ips beetle, piñon needle scale, or other insects affecting piñon pines.
  - Dominant or co-dominant trees: Trees have well developed crowns that either form or extend above the general level of the forest stand canopy, which receive full sunlight from the top and partly from the sides.
- Trees will be singly spaced with no groups of trees.
- Remove trees within 30' of crown spacing between retained single trees.
- Stump height will be ≤6" on uphill side unless disallowed by terrain.
- Slash/Dead Trees
  - The occasional snag (1 per acre) may remain if there are nests, or holes/cavities present.
  - Downed logs should only be retained if the bark is sloughing off, it is decomposing, and it is lying flat on the ground (no limbs holding the log away from the ground).
  - Leave resulting masticated material on site.
    - Masticate old slash piles, including the pile just outside of the northeast corner of MU-19.
    - Chip depth throughout each individual unit must average ≤4" or ≤40% of the treatment area.
    - Chip size must not exceed 5" in diameter and 24" in length.

### Aspen

<u>Timber Harvest/Mastication Unit 13 (1.7 acres)</u>: The aspen stand will undergo a timber harvest in addition to mastication. Within this unit, mastication will include removal of non-merchantable trees and



shrubs and slash mitigation resulting from harvest operations. Handwork may be added if necessary. Dead downed and standing trees will be masticated or removed from the stand, unless marked to be retained with **red** paint. All merchantable trees will be cut and removed off site. Trees  $\geq 8^{"}$  DBH have been marked with a **blue** slash for removal, while trees <8" DBH have largely not been marked.

- Trees ≥8" DBH
  - Harvest all trees  $\geq$ 8" DBH that are marked with **blue** painted slashes to a 6" top.
  - Remove all Douglas-fir, juniper and any other conifers except:
    - Retain ponderosa ≥16" DBH not marked with **blue** paint.
    - Prune the remaining ponderosa 6-8' up the tree or 1/3 of the tree height, whichever is the lesser amount.
    - Leave any wildlife trees with **red** paint.
- Trees, Seedlings, Saplings <8" DBH
  - Cutting aspen is encouraged if necessary to remove conifers.
  - Masticate trees <8" DBH that are marked with **blue** painted slashes, display signs of poor health or that densely populate an area. Examples include:
    - All species other than aspen (i.e. juniper, ponderosa), especially those within 20' of the dripline of retained aspen.
    - <30% live crown.</p>
    - Suppressed trees that are growing abnormally to receive sunlight.
    - Standing dead trees or those with dead tops.
- Slash/Dead Trees
  - Remove dead standing trees and downed woody debris unless marked with **red** paint.
    - Tops, branches, woody debris, etc., attached to retained downed logs must be cut so the logs are ≤6" height from the ground to aid in decomposition.
    - Large, downed logs shall be retained at a rate of 1-3 per acre.
    - Retain live or decadent aspen that have nesting cavities.
  - Leave resulting masticated material on site.
    - Chip depth throughout each individual unit must average ≤4" or ≤40% of the treatment area.
    - Chip size must not exceed 5" in diameter and 24" in length.

### **Equipment Requirement**

The minimum requirement for this project is a large wheeled or tracked masticator with either a vertical or horizontal mulching head. The equipment to be utilized must be able to achieve the prescription outlined above. The equipment and operator must be capable of operating on slopes greater than 20%.

- Skid-steer based mastication equipment will not be sufficient for this project.
- The CSFS publication *Best Management Practices Guide and Mastication Operational Guidelines* will be followed to prevent resource degradation.
  - Copies of these publications will be provided at the time of contract finalization.

### **Contracting and Operational Period**

- Start Date: October 1<sup>st</sup>, 2024
- End Date: April 30<sup>th</sup>, 2025



- Daily Operational Period: Daily hours
  - Due to proximity to residential communities, machinery will not be started prior to 8:00 am.

# **Plan of Operations**

The **CONTRACTOR** will submit a Plan of Operation to the Project Administrator within 30 days of contract execution. The **CONTRACTOR** will not begin any work until the Project Administrator has reviewed and approved the plan. The Plan of Operation is to be considered a dynamic document and will be updated as conditions change.

The Plan of Operation will include the projected start and end date for the project, proposed area to begin work, equipment used and crew member roles.

# **Environmental and Other Concerns**

- <u>Known Hazard</u>: The CSFS is informing the **CONTRACTOR** that the following physical hazards are located within the project area and may not be obvious:
  - Various barbed wire fences in and along borders of treatment units.
- Mastication activity will only be allowed within the boundaries identified on the maps. Cutting outside of the boundary is prohibited, and if it occurs, must be reported to the Project Administrator immediately.
- The undercarriage and tires of all trucks and equipment must be washed offsite before entering the project area to reduce the spread of noxious weeds from other projects. A CSFS representative must be present to inspect the vehicles and machinery before they are brought onto the project site.
- Any soil contaminated by loss of fuel, oil, grease, hydraulic fluid, coolant, or other fluids shall be removed and placed in covered drums or other acceptable containers for proper disposal by the **CONTRACTOR**.
- The **CONTRACTOR** is required to comply with all Endangered Species Act (ESA) and other relevant state and federal species protection laws or regulations.
  - At this time, CSFS personnel have not identified any species, flora or fauna, included in the ESA within the project area.
  - If the **CONTRACTOR** should find evidence of threatened or endangered species, immediately notify the Project Administrator.
  - The Project Administrator can cease the project at any time if there are any issues with the ESA or other laws/regulations.
- Archaeological or Cultural Discoveries
  - If in connection with operations under this contract, the CONTRACTOR, his/her subcontractors, or the employees of any of them, discovers, encounters, or becomes aware of any objects or sites of cultural value on the contract area such as historical or prehistorical ruins, human remains, graves or grave markers, fossils, or artifacts, the CONTRACTOR shall immediately suspend all operations in the vicinity of the cultural value and shall notify the Project Administrator of the findings. Operations may resume at the discovery site upon receipt of written instructions and authorization by the Project Administrator.
- Surface Conditions: Wheeled/tracked motorized equipment shall not be operated when conditions are muddy, or the soil moisture is high enough for the vehicles to leave ruts over



4.0 inches in depth for 10 ft. or longer. When/if such conditions are encountered, the **CONTRACTOR** shall stop work and immediately notify the Project Administrator.

- Neither trash nor litter will be left by the **CONTRACTOR** anywhere on the property, access route, or vicinity. Daily hauling of any trash generated by the **CONTRACTOR** is the **CONTRACTOR'S** responsibility.
- All access roads will always be kept passable. Any significant accumulations of mulch on the access roads and trails will be removed by the **CONTRACTOR** at the end of the project.
- Under no circumstance will new roads/routes/access points be created by the **CONTRACTOR**. All travel will occur on current and existing BLM and or County Roads, or through travel points established by the Project Administrator. If a need for alternative travel route/road/access point arises, it must be mapped and approved by the Project Administrator in writing prior to its creation.
- All gates shall always be left closed.
- Smoking will only be allowed in vehicles. Each vehicle must have a properly serviced Class A, 10-pound fire extinguisher and a minimum of one fire tool per cutting crew member. All vehicles and motorized equipment must utilize effective manufacturer-certified spark arresters and muffler systems.
- Boundary fences needing alterations for operation must be repaired by the **CONTRACTOR** and excessive mastication debris must not be propelled onto the adjoining private land. No woody material may be left on or piled up against boundary fences. Work may need to be completed by hand near property boundaries to meet this standard.
- The **CONTRACTOR** shall maintain a drug and alcohol free work environment on the subject property.
- The **CONTRACTOR** shall abide by Colorado State University's non-discrimination policy (<u>https://oeo.colostate.edu/non-discrimination-statement/</u>).

# **Damage Penalty**

• A Damage Deposit in the amount of <u>\$5,000.00</u> shall be deposited by the **CONTRACTOR** upon signing of this contract. The deposit shall be in the form of cash or certified check. Any damage penalties and charges for damages to trees, soils, improvements, or other elements of the forest stand not repaired or corrected by the **CONTRACTOR** shall be deducted from the Damage Deposit. If at any time during the performance of this agreement the Damage Deposit balance falls below

\$1,000.00, the **CONTRACTOR** shall bring it back to the original full amount through additional payments.

• Any remaining deposit balances will be released to **CONTRACTOR** promptly upon satisfactory completion of this agreement.















