Background and Statement of Work: In collaboration with the Bird Conservancy of the Rockies and the DOI Bureau of Land Management, the National Forest Foundation (NFF) is seeking contractors to conduct service work, including forest thinning and mastication operations, across 425 acres of private land and public land in Chaffee County, Colorado, to reduce dense ponderosa, mixed conifer, and lodgepole fuels. The Bird Conservancy of the Rockies (BCR) identified and developed this project and will operate as the primary point of contact for the selected contractor during implementation. Consistent with trends throughout the West, Chaffee County contains forest ecosystems with drastically altered structure and composition due to a century of fire suppression. The Riverside Upland Restoration Project will improve wildlife habitat and reduce the risk of severe wildfire through targeted treatments on the private and BLM land in Chaffee County. The goals of these activities will be to improve habitat for mule deer, elk, and wild turkey and to reduce the risk of unnaturally severe wildfire and its effects on drinking water, homes, infrastructure, and the residents in Chaffee County. The selected contractor will thin and masticate fuels to reduce competition for moisture and sunlight to increase the availability of browse and forb species utilized by wintering big game and other wildlife species. Contractor will also reduce forest densities by creating a mosaic of small openings and leaving un-thinned forested areas adjacent for wildlife cover. The NFF will be the Project Administrator and BCR will be the Implementation Lead.

This Request for Proposals (RFP) includes 340 acres of required private-land treatments. The NFF is also seeking bids for 85 acres of optional BLM treatments adjacent to the private-land treatments. The NFF cannot enter into a contract for the BLM acres at this time; however, Contractors who choose to provide bids for the full 425 acres will be eligible to enter into contract with the NFF in the future when the BLM project area is ready for implementation.

Information Requested

If interested in this project, please provide a bid for the statement of work by providing approach including slash management, work experience (with at least three references), and cost. Please also include your capacity for this project and efficiency in timber harvest and mastication projects in the past, if any, particularly in Central Colorado.

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 mechanical treatments (thinning and mastication) for the following project areas:

1. Riverside Project Required Acres – Private Acres – Option A (340 acres)
2. Riverside Project Optional Acres – DOI Bureau of Land Management Acres – Option B (85 acres)

*Note that option B is a “request for information” as the NFF is not planning to award a contract for the BLM acres currently. However, contractors who provide a bid will be eligible to enter into contract with the NFF in the future when the BLM project area is ready for implementation.*

All work items will be awarded at the discretion of the NFF, as budgetary obligations allow. *The NFF reserves the right to award all or portions of the total project acreage.*

The Contractor shall supply 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** – The Project units are located in Chaffee County, CO, approximately 10 miles northwest of Buena Vista, 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 include:

1. Riverside Project Required Acres - Private – Option A - Located approximately 10 miles northwest of the Town of Buena Vista, CO, see Appendix A: Project Area Map.
   - Unit 1: 19500 Overlook Drive
   - Unit 2: 19000 Mountain View Drive
   - Unit 3: 18840 Mountain View Drive
   - Unit 4: 18735 Morrison Creek Circle
   - Unit 5: 36750 US Hwy 24 N

2. Riverside Project – DOI Bureau of Land Management Acres – Option B - Located approximately 10 miles northwest of the Town of Buena Vista, CO, see Appendix A: Project Area Map.

(c) **Work Schedule** – Project implementation for Option A (Required private acres) will begin as early as fall 2022 pending the awarding of a contract and must be completed no later than December 1, 2023. Project implementation for Option B (BLM acres) is unknown at this time but the goal is to treat these acres in 2023. The NFF, BCR, and BLM will align implementation of private land and BLM acres to the extent possible to avoid multiple entries.

**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. If needed, the NFF and BCR 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) **Specifications** – Project work shall be accomplished in accordance with the specifications and management requirements listed in the attached appendices, as follows:

- APPENDIX A – Project Area Map
- APPENDIX B – Detailed Information Sheet
- APPENDIX C – Project Treatment Detail Map
- APPENDIX D – Tree Species and Size Inventory
Project work shall be accomplished in accordance with the general specifications explained in more detail in APPENDIX B: Detailed Information Sheet and APPENDIX C: Protect Treatment Detail Map. Payment for work by Project Administrator will be contingent upon inspection by the Implementation Lead.

Pricing Schedule
Contactor shall price work according to the schedule below. Prevailing wages are required per conditions of funding sources. The NFF reserves the right to award all or individual units to potential Contractors.

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Quantity</th>
<th>Total Cost</th>
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<tr>
<td>Riverside Required Acres – Private Acres Option A</td>
<td>Acres</td>
<td>340</td>
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<td></td>
</tr>
<tr>
<td>Riverside – BLM Acres Option B (Bids provided will give contractor eligibility to enter into a contract for these acres in the future)</td>
<td>Acres</td>
<td>85</td>
<td></td>
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</tr>
</tbody>
</table>

Contractor Qualifications and Bid
If interested in this project, please provide a bid for the statement of work by providing:

(a) Approach – Please explain the approach you would use, including slash management (mastication, chip/haul, etc.).

(b) Past experience – Please summarize previous work experience, including your capacity for this project and efficiency in timber harvest and mastication projects in the past, if any, particularly in Central Colorado.

(c) References – Please provide at least three references.

(d) Cost – Please provide a bid for Option A (required acres), and if desired, Option B, using the pricing schedule.

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.

Performance Security
Chosen 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 in the amount of 5% of the amount due to contractor, not to exceed $250,000 dollars, to assure completion of the work.
required under this 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. As work is completed in integrated component parts, inspected, approved and, if applicable, conveyed to NFF, the Performance Security shall be released in a proportional amount, unless a lesser amount of release is necessary to maintain 5% Performance Security.

**Pre-Bid Questions and Pre-Bid Contractor Tour**

Please direct questions to the NFF point of contact listed below. The NFF will host a pre-bid contractor tour on July 13, 2022, to visit each of the areas in person with project foresters and the NFF. 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.

**Bid Submission**

Submit bids via email to mnykiel@nationalforests.org by July 22, 2022

**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 by July 29, 2022 and will prepare a separate contract document.

**Point of Contact**

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

Matt Nykiel  
National Forest Foundation, Central Colorado Projects Coordinator  
720.880.0045  
mnykiel@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, and Envision Forest Health Council/Chaffee Treats 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
Riverside Upland Restoration Project Area Map
APPENDIX B: Detailed Information Sheet  
*Riverside Upland Restoration Project*

1. **Overview**
   a. The Riverside Upland Restoration Project will improve wildlife habitat and reduce the risk of severe wildfire through targeted treatments on the private and BLM land in Chaffee County. The National Forest Foundation (NFF or Project Administrator) is seeking a contractor to conduct service work, including mechanical mastication and hand thinning treatments, in an effort to reduce dense ponderosa, mixed conifer, and lodgepole fuels. The Bird Conservancy of the Rockies (BCR or Implementation Lead) identified and developed this project and will operate as the primary point of contact for the selected contractor during implementation. The goals of these activities will be to improve habitat for mule deer, elk, and wild turkey and to reduce the risk of unnaturally severe wildfire and its effects on drinking water, homes, infrastructure, and the residents in Chaffee County. The selected contractor will thin and masticate fuels to reduce competition for moisture and sunlight in order to increase the availability of browse and forb species utilized by wintering big game and other wildlife species. Contractor will also reduce forest densities by creating a mosaic of small openings and leaving un-thinned forested areas adjacent for wildlife cover.

   b. The entire Riverside Project area, includes approximately 425 acres across 8 parcels of private land and 1 parcel of BLM land (Appendix A: Project Area Map). The NFF is seeking contractor(s) to treat approximately 340 acres of private land (required acres). Please see Appendix C, Project Treatment Detail Map for additional information.

   c. Optional: The NFF is also requesting information regarding potential treatments on adjacent BLM land, including the potential approach, type of equipment that may be feasible to use, and pricing range.

   d. The selected operator will be under contract with the NFF.

2. **Treatment Area Prescriptions**
   a. **General Treatment Specifications**

   1. Cut trees shall be completely severed from the stump to a stump height of 6 inches or less.

   2. All live branches will be severed from the stump.

   3. No trees shall be felled toward or across any improvement such as, but not limited to roads, trails, fences, gates, signs and spring developments.

   4. Vegetation should be removed from the base of individual trees and the periphery of groups of leave trees. The biomass should be cut to the extent where it no longer provides an immediate fire risk as ladder fuels.
5. Section corner monuments, survey markers, and private land boundaries will be protected.

6. The contractor is responsible for the removal of all created slash and debris from roadways and trails.

7. Beetle-infested material must be promptly removed from the property within 1 week. Any beetle-infested trees greater than 6” diameter outside bark hauled off the project site must be disposed of at least 3 miles away from any tree or stand of trees containing pine species (including firewood, saw logs and POL). The project administrator may request a log of forest product deliveries from contractor or subcontractor to ensure infested wood is being transported appropriately.

8. Slash removal methods shall include mastication or chip and haul offsite. Contractor may suggest alternative approaches to slash removal subject to approval by Implementation Lead. Minimize chip and mastication depth and coverage as much as possible, leaving a maximum depth of 3” and/or maximum coverage of 30% of surface area in any given acre. Remove as much product from the area as possible.

9. Some trees that are not beetle infested may be retained by landowners. These trees shall be decked in locations to be determined in coordination with each landowner.

10. Treat species and size inventory data are provided in Appendix D.

3. Forest Material Transportation System

a. Contractor will flag and GPS proposed landings submit the proposals for approval by the Implementation Lead. Use of skid trails and landings will require implementation of Best Management Practices to limit the establishment of noxious weeds, and all forestry operations conducted on the project site must limit disturbance to the greatest extent possible.

b. Areas used for skidding/forwarding and mechanical access and must be returned to pre-project conditions upon completion of project.

c. Skidding with tractors within 100 feet of live streams is not permitted and in no event shall skid roads be located in live or intermittent stream courses. Skid trails shall be located high enough out of draws, swales, and valley bottoms to permit diversion of runoff water to natural undisturbed forest ground cover. Contractor shall inspect and open culverts and drainage structures, construct special cross ditches for road runoff, and take other reasonable measures needed to prevent soil erosion and siltation of streams.

d. Temporary Road surface width shall be limited to truck bunk width plus four (4) feet, except for needed turnouts which shall not exceed two (2) times the bunk width plus four (4) feet. If shovels or cranes with revolving carriage are used to skid or load, Temporary Road surface width equal to track width plus tail swing shall be permitted.
e. Roads, skid trails, landings:
   i. Construction of temporary roads or spurs and improvements to existing roads must be approved by the Implementation Lead and returned to pre-project conditions prior to completion of the project. The Implementation Lead may request post-haul grading, installation of water bars or other features to reduce soil erosion concerns.
   ii. Over the entire length, re-contour where significant side slopes exist as deemed necessary by Implementation Lead.
   iii. De-compact soils where deemed necessary by Implementation Lead.
   iv. Remove any temporary stream crossings, including fill material in the active channel, and ditch relief culverts.
   v. For skid trails, remove lateral berms and scatter slash stumps and/or cull logs as agreed to by the Implementation Lead.
   vi. At landings, decompact soils and scatter slash stumps and/or cull logs as agreed to by the Implementation Lead.
   vii. In the event of snowfall, dozers and skidders shall not be used to plow snow on system roads without written approval of Implementation Lead. Upon approval, dozers and skidders must be equipped with shoes or runners to keep the plow blade a minimum of four (4) inches above the road surface. Snow must not be removed to the road surface. A minimum four (4) inch depth must be left to protect the roadway.
   viii. Complete all erosion control and rehabilitation activities no later than 15 days after completion of skidding on each unit.

4. **Sensitive Areas**
   a. Care should be taken to protect seedling and saplings of all species in cut unit.
   b. Log truck turn-arounds should be located at established landings or within the unit.
   c. Noxious weeds have been identified along the haul route/access to the unit and disturbance to these areas should be avoided. If areas of heavy noxious weeds are traveled through, the Implementation Lead may request equipment cleaning prior to moving to a different treatment unit.
   d. Special care should be taken to reduce dust and noise impacts to the community as well as slow driving speeds.
   e. Any damage to riverbanks by equipment must be returned to original conditions and seeded.

**General Riparian Area Specifications**
5. **Hazardous Materials Specifications**

   a. Use of Hazardous Materials requires that all appropriate State and Federal Regulations be complied with including, but not limited to, Material Safety Data Sheets (MSDS) on hand and use of necessary Personal Protective Clothing (PPE).

   b. On-site disposal of Hazardous Materials or Waste including hydrocarbons is not authorized. On-site disposal will subject the Contractor to at least the cost of reclamation and the appropriate disposal of contaminated soil.

   c. Maintenance and repair operations that require the draining of engines or hydraulic systems may be conducted on site only if the fluids are captured, containerized, and removed from the project site for proper disposal.

   d. The Contractor will be required to report to the Implementation Lead, any spills of any volume of a "hazardous material" and any spill with a volume of 5 gallons or more of hydrocarbons.

6. **Contractor Furnished Property and Services**

   a. The Contractor shall provide all labor, transportation, materials, and equipment necessary to perform the work described herein. The contractor shall be responsible for posting signs warning the public of the work in the area.

   b. No littering is allowed and the contractor shall be responsible for hauling all trash accumulated out of the area.

   c. The Contractor must be aware of the presence of people in the work area and adjust activities to account for their presence. The contractor is responsible for securing his equipment and supplies from possible theft and vandalism.

7. **Fire Stipulations**

   a. Fire Period and Closed Season - Specific fire prevention measures are listed below and shall be effective during the contract period.
b. Required tools and equipment shall be kept in serviceable condition and immediately available for initial attack on fires.

c. Emergency Measures - The Implementation Lead may require emergency measures, including the necessary shutting down of equipment or portions of operations in the project area during periods of fire emergency created by hazardous climatic conditions or when the implementation of Fire Restrictions require.

d. Fire Control - The Contractor shall, independently and in cooperation with the Implementation Lead, take all reasonable action to prevent and suppress fires in the project area. Independent initial action shall be prompt and shall include the use of all personnel and equipment available in the project area.

e. Compliance with State Forest Laws - Listing of specific fire precautionary measures herein is not intended to relieve the Contractor in any way from compliance with the State Fire Laws covering fire prevention and suppression equipment, applicable to operations under this contract, permit or license.

f. Fire Precautions - Specific fire precautionary measures are as follows:

   i. Smoking and Open Fires: The Contractor shall not allow open fires on the project area. Smoking shall be confined to the inside of vehicles at all times.

   ii. Fire Extinguishers and Equipment, on Trucks, Tractors, etc.: All power-driven equipment operated by the Contractor, except portable fire pumps, shall be equipped with one 5-pound dry chemical fire extinguisher having a UL rating of at least 2-A; 10-B:C and one "D" handled or long handled round point shovel. In addition, each motor patrol, truck and passenger-carrying vehicle shall be equipped with a double-bit axe or Pulaski, 3-1/2 pounds or larger. Equipment shall be kept in a serviceable condition and shall be readily available.

   iii. Power Saws: Each gasoline power saw operator shall be equipped with a pressurized chemical fire extinguisher of not less than 8-ounce capacity by weight, and one long handled round point shovel, size "O" or larger. The extinguisher shall be kept in possession of the saw operator at all times. The shovel shall be accessible to the operator within 1 minute.

   iv. Extinguishers: One refill for each type or one extra extinguisher sufficient to replace each size extinguisher required on equipment shall be safely stored in the fire tool box or other agreed upon place on the project area that is protected and readily available.

   v. Spark Arresters and Mufflers (required at all times): Each internal combustion engine shall be equipped with a spark arrester meeting either (1) USDA Standard 5100-1a, or (2) appropriate Society of Automotive Engineers (SAE) recommended practice J335(b) and J350(a) as now or hereafter amended unless it is:

      1. Equipped with a turbine-driven supercharger such as the turbocharger. There shall be no exhaust bypass.
2. A passenger carrying vehicle or light truck, or medium truck up to 40,000 GVW, used on roads and equipped with a factory designed muffler complete with baffles and an exhaust system in good working condition.

3. A heavy-duty truck, such as a dump or log truck, or other vehicle used for commercial hauling, used only on roads and equipped with a factory designed muffler and with a vertical stack exhaust system extending above the cab. Exhaust equipment described in this Subsection, including spark arresters and mufflers, shall be properly installed and constantly maintained in serviceable condition.

g. Additional Fire Precautions - If determined that fire danger indicates a need for fire restrictions the Contractor may continue to operate:

i. Stage I restrictions:
   1. Power saws with approved spark arrester and fire extinguisher
   2. Welding or cutting of metal only with written permit specifically authorizing the activity
   3. Tractor or other mechanized roller crushing, hydro-axing, dozer piling operations with approved spark arrester device properly installed.

ii. Stage II restrictions:

   1. Partial Hoot owl - The following may operate only between the hours of ½ HOUR BEFORE SUNRISE and 2 P.M. local time:
      a. Power saws with approved spark arrester and fire extinguisher
      b. Welding or cutting of metal only with written permit specifically authorizing the activity
      c. Tractor or other mechanized roller crushing, hydro-axing, dozer piling operations with approved spark arrester device properly installed.

   2. At stage II restrictions, the Contractor shall designate a person who shall perform fire security services listed below on the project area and vicinity. The designated person shall be capable of operating the Contractor's communications and firefighting equipment specified in the contract, excluding helicopters, and of directing the activities of the Contractor's personnel on forest fires. In lieu of having the designated person perform the required supervisory duties, the Contractor may provide another person meeting the qualifications stated above to direct the activities of the Contractor's personnel and equipment during all fire fighting activities. Services described shall be for at least 2 HOURS from the time the Contractor's Operations are shut down. For the purposes of this provision, personnel servicing equipment and their vehicles or who are engaged in cutting or welding metal are not considered on fire security.
3. Fire security services shall consist of moving throughout the operation area or areas constantly looking, reporting and taking suppression action on any fires detected. Where possible, the designated person shall observe inaccessible portions of remote operating areas from vantage points within or adjacent to project work.

h. Communications: At all times of operation the Contractor shall maintain communication devices to report a fire to the Landowner, Project Administrator, Implementation Lead, local fire department, the U.S. Forest Service, and the BLM within 15 minutes of detection. FCC Regulations prohibit commercial use of Citizen Band (CB) radios. (CB's are not considered adequate two-way communications.) Such communications shall be operable during periods of operation of power-driven equipment, including the time fire security is required.

i. General Shutdown—all Operations Suspended - Stage II fire restrictions may dictate a need to shut down/suspend all industrial operations.

8. Inspection and Acceptance

a. The Implementation Lead or other designated inspector will make periodic inspection as a basis for payment and recommendations for adjustments in work quality while work is in progress. The Contractor is encouraged to observe inspections while they are being made.

b. Contractor will request payment from the NFF with an invoice. As the basis for payment, inspections for compliance with specifications will be made for work units reported as completed by the Contractor. Once the Implementation Lead (BCR) has completed the inspection and confirmed completion of the units, the NFF will issue payment to the Contractor.

c. Unit will be measured using a handheld GPS unit to determine total acres accomplished.

9. Safety

a. Contractor’s operations shall facilitate the Implementation Lead’s safe and practical inspection of Contractor’s operations and conduct of other official duties on the Contract Area. Contractor has all responsibility for compliance with safety requirements for Contractor's employees.

LOGGING AND MAINTENANCE OPERATIONS SIGNING STANDARDS

All signs must be manufactured & installed as specified in the FHWA "Manual on Uniform Traffic Control Devices" (MUTCD) & FS publication "Standards for Forest Service Signs & Posters" (EM 7100-15).

SIGN STANDARDS

SHAPE & COLOR: Generally, signs for logging and maintenance operations are either
diamond-shaped or rectangular. All signs are **reflective orange background with black legend and border** unless shown otherwise. Handpainted, homemade signs are not legal. Fluorescent paint is not reflectorized.

**SUBSTRATE:** Sign substrate material may be High Density Overlay (HDO) Plywood, Aluminum, Fiberglass Reinforced Plastic, Corrugated Plastic or Roll-up Fabrics.

**SIGN SIZE:** Sign size is a factor of speed and MUTCD & FS standards. Where conditions of speed, volume, or special hazard require greater visibility or emphasis, larger signs should be used. Minimum sizes for the most common signs can be found in Figure 4. Refer to the EM-7100-15 for additional sign sizes.

**LEGEND:** All lettering shall be Series "C" alphabet, conforming to Standard Alphabets for Highway Signs. Letter size is also a function of speed - use letter size and word messages as specified in MUTCD and EM-7100-15.

**SIGN PLACEMENT**

Signs are to be installed in locations as agreed to in the traffic control plan. All signs are to be removed, covered, or folded when operations are not in progress or the sign message is not applicable. Signs should generally be located on the right-hand side of the roadway. When special emphasis is needed, signs may be placed on both the left and right sides of the road. Sign message shall be clearly visible to road users, mounted on posts or portable sign stands.

**LATERAL CLEARANCE**

From the edge of the road - 2 foot minimum, where slope limits to less than 6 feet. 6-12 foot preferred.

**HEIGHT**

Minimum of 7 feet, measured from the bottom of the sign to the near edge of the travelway. The height to the bottom of a supplemental sign mounted below the primary sign will be 6 feet.

Dimensions
PLACEMENT DISTANCE

Signs must be located 100-500 feet prior to the activity, (both ends if a through road) and maintained at that distance. This distance is based on speed. Refer to Figure 2, Table II-1, MUTCD, a portion of which is reproduced here, to determine correct placement distance.

SIGN SUPPORTS

POSTS: Signs are to be mounted on separate posts. Supplemental signs such as Speed Advisory plates are to be mounted on the same post as the primary sign. **Do not mount signs on trees or other signs.** Posts may be wood, metal, carsonite or similar material. Where sign supports cannot be sufficiently offset from the road edge, supports will meet breakaway standards. Single wood posts with less than 24 square inches do not require breakaway design.

TEMPORARY/PORTABLE SUPPORTS: Portable supports may be used for short-term, short-duration, and mobile conditions. MUTCD defines this time period as one work shift, 12 hours or less. All portable supports must meet MUTCD standards, including breakaway. These must be a minimum of 1 foot above the road surface or more if visibility requires it.

SIGN SUPPORTS

The following signs meet the intent of the Safety standard. **This is not a complete listing of signs that may be needed.**

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<thead>
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<th>Posts or 85 percentile speed MPH</th>
<th>Deceleration to listed advisory speed MPH</th>
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**Figure 2: A Portion of MUTCD TABLE II-1**

**Figure 3: Examples of Temporary/Portable Supports**

**SIGNS**

The following signs meet the intent of the Safety standard. **This is not a complete listing of signs that may be needed.**
10. Accident and Injury Notification

a. Contractor shall notify Implementation Lead of any lost time personal injury accident or any accident or vandalism resulting in personal property damage that occurs as a result of or is associated with Contractor's Operations.

b. Contractor shall notify Implementation Lead within 8 hours of any personal injury accident. For vandalism and personal property accidents, Contractor shall notify Implementation Lead at the same time notification is given to the state and local law enforcement authorities.

c. Contractor shall take all reasonable measures after an accident or vandalism event to preserve the scene of the incident and provide information to facilitate an investigation.

11. Sanitation and Servicing
a. Contractor shall take all reasonable precautions to prevent pollution of air, soil, and water by Contractor's operations. Precautions shall include if facilities for employees are established on the Contract Area, they shall be operated in a sanitary manner. The parties shall agree to the cleanup and restoration of a polluted site. Contractor shall maintain all equipment operating on Contract Area in good repair and free of abnormal leakage of lubricants, fuel, coolants, and hydraulic fluid. Contractor shall not service tractors, trucks, or other equipment on Contract Area lands where servicing is likely to result in pollution to soil or water. Contractor shall furnish oil-absorbing mats for use under all stationary equipment or equipment being serviced to prevent leaking or spilled petroleum-based products from contaminating soil and water resources. Contractor shall remove from Contract Area lands all contaminated soil, vegetation, debris, vehicle oil filters (drained of free-flowing oil), batteries, oily rags, and waste oil resulting from use, servicing, repair, or abandonment of equipment.

12. Cleaning Equipment

a. In order to prevent the spread of noxious weeds into the Contract Area, Contractor shall be required to clean all off-road logging and construction equipment prior to entry on to the Contract Area. This cleaning shall remove all soil, plant parts, seeds, vegetative matter, or other debris that could contain or hold seeds. Only logging and construction equipment so cleaned and inspected by the Implementation Lead will be allowed to operate within the Contract Area. All subsequent move-ins of equipment to the Contract Area shall be treated in the same manner as the initial move in. “Off-road equipment” includes all logging and construction machinery, except for log trucks, chip vans, service vehicles, water trucks, pickup trucks, cars, and similar vehicles.

b. Contractor shall employ whatever cleaning methods are necessary to ensure that off-road equipment is free of noxious weeds. Equipment shall be considered free of soil, seed, and other such debris when a visual inspection does not disclose such material. Disassembly of equipment components or specialized inspection tools is not required.

c. As agreed upon, Contractor shall inspect equipment at cleaning location, and provide documentation of inspection to the Implementation Lead.

d. New infestations of noxious weeds, of concern to Forest Service and identified by either Contractor or Implementation Lead, on the Contract Area or on the haul route, shall be promptly reported to the other party. Contractor and Implementation Lead shall agree on treatment methods to reduce or stop the spread of noxious weeds when new infestations are found. A current list of noxious weeds of concern to Forest Service is available at each Forest Service office.

13. Hazardous Substances

a. Contractor shall notify the Project Administrator, Implementation Lead, Landowner, National Response Center, and Chaffee County Office of
Emergency Management of all releases of reportable quantities of hazardous substances on or in the vicinity of the Contract Area that are caused by Contractor’s employees, agents, sub-contractors or their employees or agents, directly or indirectly, as a result of Contractor’s operations.

14. Prevention of Oil Spills

a. If Contractor maintains storage facilities for oil or oil products on Contract Area, Contractor shall take appropriate preventive measures to ensure that any spill of such oil or oil products does not enter any stream or other waters of the United States or any of the individual States.

b. If the total oil or oil products storage exceeds 1,320 gallons or if any single container exceeds a capacity of 660 gallons, Contractor shall prepare a Spill Prevention Control and Countermeasures (SPCC) Plan. Such plan shall meet applicable EPA requirements (40 CFR 112) including certification by a registered professional engineer.
APPENDIX C: Project Treatment Detail Map
Riverside Upland Restoration Project

For all treatment units, see Appendix B for Detailed Information Sheet.

All units:

Treatment Type: Hand thinning or Mechanical Mastication, Whole Tree or Cut-to-Length Logging, Leave Tree Mark

Boundary/Unit Marking Designation:
- Boundaries are designated with ORANGE flagging.
- Boundary trees are to be left uncut.
- Leave trees are marked with BLUE paint.
- Trees marked with a BLUE "G" denote trees to be girdled or topped.
- Trees marked with a BLUE "i" or "I" denote the perimeter of a group (island) of trees to be left. All trees within and along this perimeter are to be left uncut.

TREATMENT AREA: Unit 1 – Joe and Cathy Wise (Chris Dana), 19500 Overlook Drive, Buena Vista, CO

Treatment Goal: Wildlife Habitat Restoration and Fuels Reduction

Acres: 103 treatment acres; 160 total acres

Landownership: Joe and Cathy Wise (Chris Dana)

Protected Improvements:
• Access to Unit 1 is obtained through private land. Special care should be taken to avoid any excessive damage to gates, fences, leave trees, infrastructure or any other improvement on private lands.

**Associated Roads:** US HWY 24; Mountain View Drive; Overlook Drive

**Forest Material Disposal:**
• All material shall be disposed of according to the treatment prescription described in Appendix B, with the exception of landowner-specific requests to keep forest material.

**Acceptance of Work:**
Visual inspection by Project Administrator meets standards listed in the final contract.
TREATMENT AREA: Unit 2 – Ted Palpant, 19000 Mountain View Drive, Buena Vista, CO

Treatment Goal: Wildlife Habitat Restoration and Fuels Reduction

Acres: 27 treatment acres; 60.37 total acres

Landownership: Ted Palpant

Protected Improvements:
- Access to Unit 2 is obtained through private land. Special care should be taken to avoid any excessive damage to gates, fences, leave trees, infrastructure or any other improvement on private lands.

Associated Roads: US HWY 24; Mountain View Drive

Forest Material Disposal:
- All material shall be disposed of according to the treatment prescription described in Appendix B, with the exception of landowner-specific requests to keep forest material.

Acceptance of Work:
Visual inspection by Project Administrator meets standards listed in the final contract.
TREATMENT AREA: Unit 3 – Rick Bieterman, 18840 Mountain View Drive, Buena Vista, CO

Treatment Goal: Wildlife Habitat Restoration and Fuels Reduction

Acres: 33 treatment acres; 73.11 total acres

Landownership: Rick Bieterman

Protected Improvements:
- Access to Unit 3 is obtained through private land. Special care should be taken to avoid any excessive damage to gates, fences, leave trees, infrastructure or any other improvement on private lands.

Protected Improvements: Access to Unit 3 is obtained through private land. Special care should be taken to avoid any excessive damage to utilities, gates, fences, leave trees, infrastructure or any other improvement on private lands.

Associated Roads: US HWY 24; Mountain View Drive

Forest Material Disposal:
- All material shall be disposed of according to the treatment prescription described in Appendix B, with the exception of landowner-specific requests to keep forest material.

Acceptance of Work:
Visual inspection by Project Administrator meets standards listed in the final contract.
TREATMENT AREA: Unit 4 – Ted Osowski, 18735 Morrison Creek Circle, Buena Vista, CO

Treatment Goal: Wildlife Habitat Restoration and Fuels Reduction

Acres: 34 treatment acres; 35.10 total acres

Landownership: Ted Osowski and Dennis D. Pittman

Protected Improvements:
- Access to Unit 4 is obtained through private land. Special care should be taken to avoid any excessive damage to gates, fences, leave trees, infrastructure or any other improvement on private lands.

Associated Roads: US HWY 24; Mountain View Drive, Morrison Creek Drive, Morrison Creek Circle

Forest Material Disposal:
- All material shall be disposed of according to the treatment prescription described in Appendix B, with the exception of landowner-specific requests to keep forest material.

Acceptance of Work:
Visual inspection by Project Administrator meets standards listed in the final contract.
APPENDIX C: Project Treatment Detail Map

Riverside Upland Restoration Project

TREATMENT AREA: Unit 5 – Mike Blitstein, 36570 US Hwy 24 N, Buena Vista, CO

Treatment Goal: Wildlife Habitat Restoration and Fuels Reduction

Acres: 142 treatment acres; 313 total acres

Landownership: Mike Blitstein

Protected Improvements:
- Access to Unit 5 is obtained through private land. Special care should be taken to avoid any excessive damage to gates, fences, leave trees, infrastructure or any other improvement on private lands.

Associated Roads: US HWY 24, Private Roads

Forest Material Disposal:
- All material shall be disposed of according to the treatment prescription described in Appendix B, with the exception of landowner-specific requests to keep forest material.

Acceptance of Work:
Visual inspection by Project Administrator meets standards listed in the final contract.
Ponderosa pine woodlands:

<table>
<thead>
<tr>
<th>Species</th>
<th>Trees/acre</th>
<th>Regeneration/acre</th>
<th>Basal area</th>
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</thead>
<tbody>
<tr>
<td>Ponderosa pine (PP)</td>
<td>119.5</td>
<td>57.9</td>
<td>93.8</td>
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<tr>
<td>Lodgepole pine (LP)</td>
<td>1.84</td>
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<tr>
<td>Douglas fir (DF)</td>
<td>11.8</td>
<td>10.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Aspen (AS)</td>
<td>3.6</td>
<td>0</td>
<td>2.5</td>
</tr>
<tr>
<td>Pinyon pine (PI)</td>
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<td>31.6</td>
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<td><strong>All</strong></td>
<td><strong>136.7</strong></td>
<td><strong>100</strong></td>
<td><strong>106.3</strong></td>
</tr>
</tbody>
</table>

![Histogram of trees per acre by diameter at breast height](image1.png)

![Histogram of basal area by diameter at breast height](image2.png)
Dry mixed conifer:

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<th>Species</th>
<th>Trees/acre</th>
<th>Regeneration/acre</th>
<th>Basal area</th>
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<td>Ponderosa pine (PP)</td>
<td>62.2</td>
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<td>Lodgepole pine (LP)</td>
<td>50.0</td>
<td>16.7</td>
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<td>Douglas fir (DF)</td>
<td>7.1</td>
<td>25</td>
<td>8.6</td>
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<tr>
<td>Aspen (AS)</td>
<td>17.9</td>
<td>25</td>
<td>7.9</td>
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<tr>
<td><strong>All</strong></td>
<td><strong>137.2</strong></td>
<td><strong>108.4</strong></td>
<td><strong>86.5</strong></td>
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</table>
**Lodgepole pine:**

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<th>Trees/acre</th>
<th>Regeneration/acre</th>
<th>Basal area</th>
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<td>2.3</td>
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<td>Lodgepole pine (LP)</td>
<td>344.9</td>
<td>206.7</td>
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<td>Douglas fir (DF)</td>
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<td>0.6</td>
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<tr>
<td>Aspen (AS)</td>
<td>28.4</td>
<td>33.3</td>
<td>6.25</td>
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<tr>
<td><strong>All</strong></td>
<td><strong>375.9</strong></td>
<td><strong>240</strong></td>
<td><strong>105.1</strong></td>
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