

# UPPER MOKELUMNE RIVER WATERSHED AUTHORITY

## PRE-ADVERTISEMENT for Forest Projects Plan - Phase 1 Fuel Reduction Project

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### A. SCOPE OF PROJECT

The Upper Mokelumne River Watershed Authority (UMRWA or Authority) intends to issue a Request for Proposals (RFP) by mid-June for the Forest Projects Plan (FPP) Phase 1 Fuel Reduction Project. A portion of the project area is currently under snow and UMRWA is still in the process of field verification of units and treatments. **Therefore, the acres and units identified for treatment herein may change between now and issuance of the RFP.**

The term of the contract to be subsequently awarded shall begin on the date the contract is executed by the Authority (expected by July 28, 2023) and terminates on October 31, 2025. Portions of the project area must be completed by the end of the 2024 as described under B. Specific Requirements below.

Interested contractors are encouraged to email the Project Manager their contact information to ensure proper electronic transmittal of the RFP when it is issued.

This project lies entirely within Eldorado National Forest Lands, on the Amador Ranger District, and parallels Highway 88. The Authority is implementing this project under a Supplemental Project Agreement pursuant to Master Stewardship Agreement #16-SA-11052000-065 between the Authority and the Forest Service, and a grant from Cal-Fire.

The project consists of natural forested stands, plantations, and aspen stands. In all areas, live and dead brush, dead trees, and live coniferous trees generally less than 10" diameter breast height (DBH) would be treated in order to reduce fuel loading which is leading to increased wildfire severity, intensity, and frequency.

OPTIONAL AREAS: Applies to Items 2 and 3. UMRWA may consider award of all or part of the Optional Areas based upon available funding.

Specifications for treatments are described below. A project map is provided separately.

**B. SPECIFIC REQUIREMENTS**

<b>Item Number</b>	<b>Description</b>	<b>Unit of Measure</b>	<b>Estimated Quantity<sup>1</sup></b>
1	Mastication and Hand Treatment	Acres	2331
2	Mastication and Hand Treatment Optional Areas	Acres	269
3	Hand Treatment Only Optional Areas <sup>2</sup>	Acres	191
<b>Total Project</b>		<b>Acres</b>	<b>2791</b>

<sup>1</sup>Refer to detailed unit list below; total acres are rounded.

<sup>2</sup>Optional Item 3 may change to mastication pending completion of Archeological surveys.

**All Items: Mastication and Hand Treatment**

- a. Unit boundaries are identified virtually or as flagged on the ground with blue flagging.
- b. Contractor shall be required to navigate virtual boundary using GPS.
- c. Contractor shall be required to utilize a georeferencing software such as Avenza Maps or Esri FieldMaps to conduct all treatments. GPS units shall be capable of downloading unit location data from provided Geographic Information Systems, either in shapefile (.shp) or keyhole markup language (.kml).
- d. Contractor shall be required to have a GPS enabled device on each piece of equipment capable of 30 ft (9.1 meter) accuracy).

**Mastication Specifications**

- a. In natural forested stands masticate all live and dead brush, and live coniferous trees less than 10 inches diameter at breast height (dbh). In areas where trees are sparse thin trees 3-10 inches DBH to a spacing of 25 feet between stems. Non-merchantable trees and lodgepole pine up to 14 inches dbh shall also be masticated. Additional trees up to 14" dbh may be masticated if such removal is necessary to facilitate machinery movement within the stand.
- b. In aspen stands shown on the Project Map, masticate all live and dead brush, and live coniferous trees less than 12 inches dbh. Trees up to 14 inches dbh may be masticated if such removal is necessary to facilitate machinery movement within the stand or to remove lodgepole pines.
- c. In plantations masticate all live and dead brush and live coniferous trees up to 10 inches dbh to a 25 x 25 foot spacing. Trees up to 14 inches dbh may be masticated when necessary to facilitate machinery movement within the stand. Trees are to be retained within the spacing described above in the following priority: 1) sugar pine (free of white pine blister rust), 2) Douglas fir, 3) incense cedar, 4) ponderosa pine, 5) white fir. Retained trees shall be free of damage and defect. If all trees inside the spacing have defect or damage, retain the healthiest tree with highest species priority. Damage includes but is not limited to broken tops, broken

branches, trunk scars and previous mechanical damage. Defect includes but is not limited to forked tops, crooks, conks, cankers, mistletoe and blister rust.

- d. Masticate all dead coniferous trees up to 15 inches dbh. In addition, all dead trees (snags) and unstable live trees tall enough to reach travelled roadways shall be felled to abate hazard. Such material shall be masticated unless otherwise agreed to be left in place.
- e. Existing surface fuels shall be masticated, mulched or crushed to a depth of less than 10”.
- f. Within all units all leave trees shall be pruned to 12 feet above ground level, while retaining a minimum of 50% of the canopy. Machine pruning may be permitted in mastication units provided the boles of leave trees are not damaged (e.g., retain approximately 6-inch stob).
- g. All masticated brush and coniferous trees shall be cut below the lowest live branch and have a stump height no higher than 8 inches above ground level on the uphill side or obstacles (i.e. large rocks, down logs).
- h. Debris resulting from the operation shall lie flat on the ground and not exceed 10 inches in depth. No masticated or cut material shall lean against or be suspended by a leave tree.
- i. No individual piece of slash or vegetative debris shall be greater than 3 feet in length.
- j. Protection of the residual trees shall be the highest priority in all operations.
- k. Soil displacement shall be minimized by working the masticating equipment in as straight a line as possible, up and down slopes, given the known limitations of residual trees and terrain.
- l. Hardwoods (black oak, aspen, willow, dogwood) and whitebark pine shall not be masticated, shredded, or damaged.
- m. To the extent practicable do not masticate existing down logs greater than 10 feet long and 16 inches diameter at the small end.
- n. Equipment shall be kept free of debris accumulations that may result in fire starts.
- o. The masticated/shredded material shall be evenly distributed over the treated areas so as to not leave large accumulations of slash. Concentrations of brush, slash, and small dead trees may need repeated treatment in order to satisfy desired work standards.
- p. Vegetative debris shall not be pushed into leave trees and left unshredded.
- q. Soils in the operating area must be dry enough to prevent rutting by a single pass of the equipment.
- r. Equipment shall not operate on slopes exceeding 40%.
- s. Mastication adjacent to Highway 88 must be conducted in a safe manner that does not result in debris into the highway right-of-way.

### **Hand Thinning Plus Lop and Scatter or Chipping Specifications**

- a. In treatment units where mastication is unsuited or prohibited (too rocky, streamcourse buffers, too steep, wildlife exclusion areas, etc.), hand thinning shall be required in accordance with specifications herein.
- b. All brush and live conifer trees over 1 foot in height and up to 10 inches dbh shall be felled, lopped and scattered or chipped. Non-merchantable trees and lodgepole pine up to 14 inches dbh shall also be felled, lopped and scattered or chipped. In aspen stands shown on the Project Map where slopes exceed 40%, hand cut all live and dead brush, and live coniferous trees less than 12 inches dbh.
- c. Within wildlife areas designated on the Project Map (CA-5) hand cutting of conifer trees shall be limited to conifer trees less than 6 inches dbh.

- d. Hand cut all dead coniferous trees up to 15 inches dbh. In addition, all dead trees (snags) tall enough to reach travelled roadways shall be felled to abate hazard.
- e. All trees shall be cut below the lowest live limbs, except when prevented by natural obstacles. All live limbs below the cutting point shall be removed. Trees shall be completely severed from the stump.
- f. Lop and Scatter or chip all vegetative material associated with cut trees to a maximum slash depth of 10 inches.
- g. Piece length shall be less than or equal to 8 feet and scattered at least 4 feet away from residual trees.
- h. Cut trees shall be felled away from unit boundaries, roads, telephone lines, established trails, stock driveways, fence lines, established land corners and streams. Any trees falling on such areas shall be removed, or left standing if damage to improvement would result.
- i. All stump heights shall be no higher than 8 inches above ground level on the uphill side.
- j. Within all units, all leave trees shall be pruned to 12 feet above ground level, while retaining a minimum of 50% of the canopy. Pruning shall be done using pole saws or hand tools.

### **Equipment Requirements**

- a. Contractor shall provide machinery that is suitable for the job and minimizes soil disturbance.
- b. All equipment and power tools shall comply with Fire Precautions and Control (Exhibit C).

### **Resource Protection Measures**

- a. Tracks or wheels of equipment shall not operate within 50 feet of perennial or intermittent streams, within 50 feet of wet areas, meadows, or fens, nor within 15 feet of ephemeral streams; unless a larger exclusion area is flagged on the ground and/or noted in the legend of the Project Area Map. An articulating masticating head may operate within exclusion areas. Equipment shall not cross meadows, wet stream channels, or other non-work areas. Riparian vegetation shall not be shredded, cut or damaged.
- b. Unless otherwise agreed, no operations shall be permitted within areas identified as CA-1 or CA-2 on the Project Map and/or flagged with pink plus green, pink and black, or orange "Noxious Weed" flagging and/or behind "Area Controlled" signs.
- c. Should any Threatened, Endangered or Eldorado National Forest Sensitive species be detected during any phase of the project, the UMRWA Project Inspector shall be notified, and adjustments to the project will be evaluated and may be made accordingly.
- d. When working above 7,000 feet, areas with potential habitat for whitebark pine shall be assessed for stand-health and delineated for avoidance by UMRWA. Hand-thinning or mastication shall not occur delineated stands of whitebark pine.
- e. Lava cap plant communities shall be protected from motorized equipment and vehicles. All project related equipment and vehicles shall remain on existing road corridors within lava caps; including no parking off road, heavy equipment travel, etc.
- f. Storage of fuel or other toxic materials and maintenance of equipment shall not occur within Riparian Conservation Areas defined as 300 feet on each side of perennial streams and from the edge of special aquatic features (lakes, wet meadows, bogs, fens, wetlands, vernal pools, and springs), and 150 feet from each side intermittent and ephemeral streams. For streams, the RCA is measured from the bank full edge of the stream.
- g. Refer to Exhibit C Specifications for Operations for additional Protection Measures.

**Limited Operating Periods and Schedule for Completion**

- a. Work undertaken during the 2023 field season shall only occur in areas where archeological survey and botanical surveys for Forest Service Sensitive Species and invasive plants have been completed. The survey work will be ongoing during the 2023 field season through approximately the end of August. The UMRWA Operations Manager or his designee shall assist the Contractor in coordinating its plan of operations with the botanical survey progression.
- b. A minimum of **60%** of project acres shall be completed by **November 30, 2024** unless otherwise agreed.
- c. Limited operating periods (LOPs) apply to the operations within all project areas as designated on the Project Map, unless waived by the Forest Service. CA-3: No Operations between March 1 and August 15, inclusive. CA-4: No Operations between February 15 and September 15, inclusive.

**Road and Trail Use Applicable to All Items**

- a. All roads leading into each project area and trails within units are to be kept open and cleared of any debris that may occur as a result of the work. When accessing treatment units by means of State Route Highway 88, Contractor shall park their vehicles and/or equipment entirely off of the roadway in areas of low vegetative growth, bare mineral soil or rock, or in designated pullouts. Contractor shall exercise extreme caution and awareness of surroundings when entering or leaving the highway. Contractor shall access units in a manner that protects the safety of themselves and their employees, as well as, the general public.
- b. Road signs indicating warning of work in progress are required at the beginning of any road and/or OHV trail while the operator is working in the vicinity and material from operator’s work might cause a hazard to the general public using these trails/roads.

**Project units are listed in the table below and included on the Project Map. Units were identified using Geographical Information System data from various sources. Note that units may change as additional field verification is completed.**

<b>Item 1: Mandatory Units</b>	<b>Mastication Acres (units may include unmapped areas requiring hand treatment)</b>	<b>CA-5 Acres Hand Treatment &lt;6"</b>
P1PP_Unit_1	119	
P1PP_Unit_2	18	
P1PP_Unit_23	94	
P1PP_Unit_24	13	
P1PP_Unit_25	100	
P1PP_Unit_26	61	
P1PP_Unit_27	14	
P1PP_Unit_3	56	
P1PP_Unit_37	23	
P1PP_Unit_38	41	
P1PP_Unit_39	15	
P1PP_Unit_4	95	
P1PP_Unit_40	30	

<b>Item 1: Mandatory Units</b>	<b>Mastication Acres (units may include unmapped areas requiring hand treatment)</b>	<b>CA-5 Acres Hand Treatment &lt;6"</b>	
P1PP_Unit_41	119		
P1PP_Unit_42	130		
P1PP_Unit_43	61		
P1PP_Unit_44	108		
P1PP_Unit_45	53		
P1PP_Unit_46	31		
P1PP_Unit_48	109		
P1PP_Unit_49	65		
P1PP_Unit_5	74		
P1PP_Unit_52	87		
P1PP_Unit_53	58		
P1PP_Unit_54	71		
P1PP_Unit_54_CA-5		12	
P1PP_Unit_55	57		
P1PP_Unit_55_CA-5		6	
P1PP_Unit_56	106		
P1PP_Unit_57	26		
P1PP_Unit_58	91		
P1PP_Unit_59	64		
P1PP_Unit_59_CA-5		15	
P1PP_Unit_63	98		
P1PP_Unit_65	74		
P1PP_Unit_66	36		
P1PP_Unit_67	17		
P1PP_Unit_70	31		
P1PP_Unit_71	31		
P1PP_Unit_72	21		
<b>Total:</b>	<b>2297</b>	<b>33</b>	<b>2331</b>

<b>Item 2: Optional Acres</b>	<b>Aspen Restoration Acres</b>	<b>Mastication Acres (units may include unmapped areas requiring hand treatment)</b>	<b>CA-5 Acres Hand Treatment &lt;6"</b>
P1PP_Unit_22		72	
P1PP_Unit_22_CA-5			3
P1PP_Unit_47		64	
P1PP_Unit_47_CA-5			12
P1PP_Unit_6		77	
P1PP_Unit_6_CA-5			3
P1PP_Unit_73	1		
P1PP_Unit_74	0		

<b>Item 2: Optional Acres</b>	<b>Aspen Restoration Acres</b>	<b>Mastication Acres</b> (units may include unmapped areas requiring hand treatment)	<b>CA-5 Acres Hand Treatment &lt;6"</b>	
P1PP_Unit_76	3			
P1PP_Unit_77	2			
P1PP_Unit_78	1			
P1PP_Unit_8		31		
<b>Total:</b>	<b>6</b>	<b>245</b>	<b>18</b>	<b>269</b>

<b>Item 3: Optional Areas</b>	<b>Hand Treatment Only</b>
P1PP_Unit_50	39
P1PP_Unit_51	46
P1PP_Unit_68	47
P1PP_Unit_7	59
<b>Total:</b>	<b>191</b>

Note that Item 3 Optional Areas may change to Mastication pending Archeological survey

C. ANTICIPATED CALENDAR OF EVENTS

For process flexibility and uncertain field conditions that may restrict site access, all CALENDAR dates are subject to change.

<b>EVENT</b>	<b>DATE/LOCATION</b>
<b>RFP to be Issued</b>	June 12, 2023
<b>Pre-Proposal Meeting</b>	June 23, 2023, 1:00 p.m., LOCATION TBD.
<b>Response/Proposal Due</b>	July 12, 2023, by 12:00 p.m. PDT
<b>Anticipated Contract Award</b>	July 28, 2023
<b>Pre-work Conference</b>	No less than 7 days prior to operations starting
<b>Contract Termination Date</b>	October 31, 2025