

**AUGUST 2001 FIRE COMPLEX
BURNED AREA EMERGENCY STABILIZATION REHABILITATION PLAN**

PART F - SPECIFICATIONS

SPECIFICATION TITLE:	Contour Tree Falling	AGENCY:	BLM, Elko Field Office
PART E LINE ITEM:	# 1 F-1, Contour Tree Falling	FISCAL YEAR(S) (list each year):	2002 - 2004

I. WORK TO BE DONE

Number and Describe Each Task:

- A. General Description:** Contour Falling of Pinyon- Juniper trees on severely burned watershed.
- B. Location/(Suitable) Sites:** Selected portions of Mile Marker 367 fire (X-256), on slopes > 20 % slope.
- C. Design/Construction Specifications:**
 1. Tree size: 6 to 14 inches (diameter at breast height)
 2. Species: Any available Pinyon or Juniper that is fairly straight in form.
 3. Construction process: First, the appropriate tree is fallen parallel to the contour of the slope (perpendicular to the fall line of the slope). Second, the underside of the tree is limbed, starting at the lowest limbs to the limbs at a tree diameter of 3 to 4 inches. This allows for the tree bole to make contact with the ground. Third, if due to uneven slope surface or curved tree bole, then under-cuts of the tree bole will allow it to make better contact with the soil. Forth, Trenching with a pulaski may be necessary to bed the fallen tree with an uphill backfill to seal the log to the soil such that water does not flow beneath. The length of the fallen log should be 10- 20 feet. Use limbs to provide additional ground cover in openings by spreading and/or lop and scatter.
 4. Density- The density of the fallen trees depend on the fall line of the slope. On 30-50 percent slope the spacing is approximately 30-40 feet apart on the fall line of the slope. On slopes less than 30 %, the spacing should be 40-50 feet. On slope greater than 50 %, spacing should be 20-30 feet. If possible, some overlap of the fallen trees in a row by the trees in the uphill row (shingling) is desirable.
 5. Safety- Standing dead trees that are a hazard to the chainsaw operator during the falling process should be avoided, or the hazard tree should be fallen first if it can be done safely. If the tree cannot be fallen safely then avoid the area affected by the hazard tree.
 6. Progress- Typically, it is best to begin at the top of the unit and work down. The tree faller needs to make this determination based on ground and overstory characteristics. Make stump heights no less than about 18 inches, since they act as anchors for securing fallen logs on the uphill side.
 7. Equipment- Chainsaw with proper safety equipment, wedges, single bit ax, pulaskis, extra chains, saw gas and oil.

D. Purpose of Treatment Specifications:

The primary purpose of the practice is to reduce the overland flow of rainfall thereby reducing the amount of runoff and potential of overland flow to initiate surface soil erosion

(rills). Secondary, the contour felled logs on the ground surface trap sediments, and aid in vegetation reestablishment.

E. Treatment Effectiveness Monitoring Proposed: Percent of fallen trees that trap sediment.
Data collected to date indicates Excellent results 29 % (of 35 tests), Good results 37 % , Fair results 14 % , Poor results 20%.

II. LABOR, MATERIALS AND OTHER COST:

▶ PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).	COST/ITEM
GS-11 Supervision of specifications @ \$ 250/ day X 3 days	\$750
20 person Type 1 fire crew with saws @ \$ 2840.20/ 12 hr day X 7 days	\$19,881
TOTAL PERSONNEL SERVICE COST	\$20,631
▶ EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	COST/ITEM
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	
▶ MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):	COST/ITEM
Saw chains, gas, oil, wedges, safety equipment, etc.	\$500
TOTAL MATERIALS AND SUPPLY COST	
▶ TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	COST/ITEM
1 Vehicle @ .20/mile X 142 miles roundtrip X 3 days	\$85
2 Vehicles @ .20/ mile X 994 miles total mileage	\$398
TOTAL TRAVEL COST	\$483
▶ CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	COST/ITEM
TOTAL CONTRACT COST	

SPECIFICATION COST SUMMARY

FISCAL YEAR	UNIT	UNITS COST	# OF UNITS	COST	FUNDING SOURCE	METHOD
FY 1	Acre	\$43.23	500.0	\$21,614	EFR	FC,P
TOTAL						

FUNDING SOURCE

F - Suppression Operations
EFR - Emergency Fire Rehabilitation
EWP - Emergency Watershed Protection
OP/O - Agency Operations/Other

METHODS

P - Agency Personnel Services
C - Contract (long-term)
EFC - Emergency Fire Contract (short-term)
FC - Incident Management Crew Assignment

SOURCE OF COST ESTIMATE

1. Estimate obtained from 2-3 independent contractual sources.	
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2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	P, M
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:

List Relevant Documentation and Cross-Reference Location within ESR Plan Accomplishment Report (for Rehabilitation treatments quote (include page number, approving officials name, and date approved for review and auditing purposes) pertinent passages from approved land management plans: See Forest and Woodland Assessment Treatments on Mile Marker 367 Fire