

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

**PART F - SPECIFICATIONS**

<b>SPECIFICATION TITLE:</b>	<b>BALE BOMBING</b>	<b>AGENCY:</b>	BLM Elko F.O.
<b>PART E LINE ITEM:</b>	<b># 11 W-1, Straw Mulching (Aerial Application)</b>	<b>FISCAL YEAR(S) (list each year):</b>	2002-2004

**I. WORK TO BE DONE**

<b>Number and Describe Each Task:</b>
<p>ground cover was consumed by the fire and expected overland runoff would threaten high values at risk. Straw mulch stabilizes ashes on site, preventing loss of topsoil, improving infiltration rates and replacing organic litter consumed by the fire.</p> <p>table) Sites: Alluvial fans in Beaver Creek drainage in the Coyote fire.</p>
<b>C. Design/Construction Specifications:</b>
<p><b>1. Site selection:</b> Suitable sites are generally well-drained soils on gentle slopes that are protected from the wind.</p> <p><b>2. Type of Straw:</b> Suitable straw includes barley, wheat, pasture grasses, rice, bean and prairie grasses. Straw must be certified free of noxious plants. Preferable size of straw bales is 70 pounds or less.</p> <p><b>3. Application:</b> Straw bale(s) are placed in a cargo net. The strings/twine from the bale(s) are cut and removed. The bale(s) are dropped from a helicopter flying at approximately 35 miles/hr (30 knots). Upon impact bale(s) explode. One bale will mulch an area approximately 1,743 ft<sup>2</sup>. Rate of application is a minimum of 2 tons/acre. This is approximately 25 bales/acre, spread 2 inches deep, if evenly distributed.</p> <p>tr) overland runoff due to bare soil, hydrophobic soils and/or compacted soils and prevent erosion. Mulch will stabilize ashes on site to retain nutrients. Straw mulch also reduces raindrop impact, maintains a favorable moisture regime for sprouting seeds, protects soils from frost heaving and provides a growing medium for biological activity in the soil.</p>
<p><b>E. Treatment Effectiveness Monitoring Proposed:</b> See Monitoring and Evaluation of Watershed Protection Seeding specification.</p>

**II. LABOR, MATERIALS AND OTHER COST:**

<b>&lt; PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):</b>	<b>COST/ITEM</b>
<b>Do not include contract personnel costs here (see contractor services below).</b>	
Project Inspector GS-11 @ \$25.00/hr X 10 hrs/day X 2 days X 1 year	\$500
Survey, flag and design mulch area @ \$25.00/hr X 10 hrs/day X 2 days X 1 year	\$500
Air support personnel (Helitak seasonal or AD hires) @ \$1,000/day X 1 day X 1 year	\$1,000
<b>TOTAL PERSONNEL SERVICE COST</b>	<b>\$2,000</b>
<b>EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item):</b>	<b>COST/ITEM</b>
<b>Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.</b>	
Helicopter (with cargo net) rental: 1 aircraft @ \$500/day X 1 day X 1 year	\$500
Vehicle cost @ \$33.00/day X 2 days X 1 vehicle X 1 year	\$66
Vehicle cost @ \$.17/mile X 250 miles/day X 1 day X 1 year	\$43
Vehicle fuel cost @ \$40.00/day X 1 vehicle X 1 year	\$40
<b>TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST</b>	<b>\$649</b>

<b>MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</b>	<b>COST/ITEM</b>
	\$2,975
TOTAL MATERIALS AND SUPPLY COST	<b>\$2,975</b>
<b>TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</b>	<b>COST/ITEM</b>
Per Diem for pilot and mechanic @ \$168/day X 1 day X 1 year	\$168
Fuel truck milage @ \$1.00/mile X 250 miles X 1 day X 1 year	\$250
TOTAL TRAVEL COST	<b>\$418</b>
<b>CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):</b>	<b>COST/ITEM</b>
Straw mulch application by helicopter @ \$7.25/acre X 17 acres X 1 day X 1 year	\$123
4% contract administration and oversight to agency	\$5
TOTAL CONTRACT COST	<b>\$128</b>

**SPECIFICATION COST SUMMARY**

FISCAL YEAR	UNIT	UNITS COST	# OF UNITS	COST	FUNDING SOURCE	METHOD
FY 1	acres	\$338.35	17	\$5,752.00	ESR	C, P
FY 2						
FY 3						
<b>TOTAL</b>	<b>acres</b>	<b>\$338.35</b>	<b>17</b>	<b>\$5,752.00</b>	<b>ESR</b>	<b>C, P</b>

**FUNDING SOURCE**

F - Suppression Operations  
EFR - Emergency Fire Rehabilitation  
EWP - Emergency Watershed Protection  
OPIO - 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.	
Documented cost figures from similar project work obtained from local agency sources.	
Estimate supported by cost guides from independent sources or other federal agencies	C
Estimates based upon government wage rates and material cost.	M, P
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:
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**IV. TOTAL COST BY FIRE:**

<b>FIRE NAME</b>	<b>UNITS TREATED</b>	<b>COST</b>
Coyote	17acres	\$5,752.00
<b>TOTAL COST</b>	<b>17 acres</b>	<b>\$5,752.00</b>