

**DEPARTMENT OF THE INTERIOR
ELKO FIELD OFFICE
BURNED AREA EMERGENCY REHABILITATION PLAN AND ACCOMPLISHMENT REPORT**

PART F - SPECIFICATIONS

SPECIFICATION TITLE:	CHECK DAMS, DEBRIS BASINS Install Straw Bale Check Dams	AGENCY:	BLM Elko F.O.
PART E LINE ITEM:	W-12 STRAW BALE CHECK DAMS (BLM 98-148 III BB)	FISCAL YEAR(S) (list each year):	2001 - 2003

I. WORK TO BE DONE

<p>Number and Describe Each Task:</p> <p>A. General Description: Straw bale check dams are used to temporarily trap and store sediments, prevent channel downcutting and reduce runoff in the channel.</p> <p>B. Location (Suitable) Sites: Suitable sites for straw bale check dams are on watersheds less than 160 acres and have primary channels with moderate to heavy sediment loading. Primary channels are ephemeral. Channel gradient should be less than 8%. Straw bale check dams are suitable for placement within Maggie creek fire.</p> <p>C. Design/Construction Specifications: Straw bale check dams are placed in the channel usually in a series of dams. Each dam begins near the junction with a higher order channel and extends upstream. Dams are usually 50 to 100 feet apart. Bales are wrapped in chicken wire and embedded into the channel 3 inches deep. Bales are secured with T-posts driven into the downstream side of the channel. An earth berm must be packed against the dam on the upstream side to prevent underflow. Straw must be free of noxious plants.</p> <p>D. Purpose of Treatment Specifications: Straw bales check dams are used in conjunction with other watershed treatments. They are primarily used within ephemeral channels. The check dams will trap sediments from a flood flow and prevent the suspension of new sediment caused by channel scour.</p>

II. LABOR, MATERIALS AND OTHER COST:

▶ PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item	COST/ITEM
GS-12 @ 28.20/hour x 130 hours x 1 year (District Hydrologist)	\$3,666.00
GS-7 @ \$14.00 /hr x 260 hrs x 1 year (Seasonal work force-Project Supervisor)	\$3,640.00
8-person team @ \$70.00/hr x 260 hrs x 1 year (Seasonal work force)	\$18,200.00
TOTAL PERSONNEL SERVICE COST	\$25,506.00
▶ EQUIPMENT PURCHASE, LEASE AND /OR RENT (Item @ Cost/Hour X # of House X # Fiscal Years = Cost/Item):	COST/ITEM
Fuel and maintenance of quad track vehicle	\$600.00
Gloves and safety equipment	\$300.00
Survey tools: Hand level's @ \$80/each x 3 x 1 year Compass's @ \$65/each x 3 x 1 year 50 ft tapes @ \$25/each x 3 x 1 year Data books @ \$5/each x 3 x 1 year	\$525.00
Miscellaneous tools: tie wire, wire cutters, shovels, hedge sheers, hay hooks	\$500.00
Vehicle Cost @ 1000 per month x 1 months x 2 vehicles x 1 year	\$2,000.00
Vehicle Cost @ .17 per mile x 5000 miles x 2 vehicles x 1 year	\$1,700.00
Vehicle Cost @ \$40 per day x 26 days x 2 vehicles x 1 year	\$2,080.00
Crew Van @\$70.00/day x 26 days x 1 year	\$1,820.00
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	\$9,525.00

► MATERIALS AND SUPPLIES: (Item @ Cost/Each X Quantity X # Fiscal Years = Cost/Item):	COST/ITEM
Straw bale dams @\$5.00/each x 2853 bales x 1 year	\$14,265.00
Chicken wire, (150' by 7', 2" mesh) @ \$65.00/roll x 78 rolls x 1 year	\$5,070.00
T-posts, @ 6.00/each x 3487 x 1 year	\$20,922.00
TOTAL MATERIALS AND SUPPLY COST	\$40,257.00
► TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	COST/ITEM
TOTAL TRAVEL COST	N/A
► CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	COST/ITEM
TOTAL CONTRACT COST	N/A

SPECIFICATION COST SUMMARY

FISCAL YEAR	UNIT	UNIT COST	# OF UNITS	COST	FUNDING SOURCE	METHOD
FY 1	Straw Bales	\$26.39	2853	\$75,288.00	ESR	P
FY 2						
FY 3						
TOTAL:		\$26.39	2853	\$75,288.00	ESR	P

FUNDING SOURCES:

F = Fire Suppression Account
ESR = Emergency Stabilization Rehabilitation
OP = Agency Operating Fund
O = Other

METHODS:

P = Agency Personnel Services
C = Contract (Long-Term)
EFC = Emergency Fire Contract
FC = Crew Labor Assigned to Fire

SOURCE OF COST ESTIMATE

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

P = Personnel Services, **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 BAER Report:

See text of Soil and Watershed Assessment (Appendix I) for narrative on the objectives. See map index, Treatment section for potential treatment sites.

IV. TOTAL COST BY FIRE

FIRE NAME	UNITS TREATED	COST
Maggie Creek	2853	\$75,288.00
TOTAL COST		\$75,288.00

