

**BUREAU OF LAND MANAGEMENT
ELKO FIELD OFFICE
BURNED AREA EMERGENCY REHABILITATION PLAN AND ACCOMPLISHMENT REPORT**

PART F - SPECIFICATIONS

SPECIFICATION TITLE:	RESEED CRITICAL WILDLIFE WINTER RANGE & SAGE GROUSE HABITAT (AERIAL OR BROADCAST)	AGENCY:	BLM Elko F.O.
PART E LINE ITEM:	N-3a Ecological Stabilization - Planting/Seeding (BLM 98-148 III. E)	FISCAL YEAR(S) (list each year):	2001-2003

I. WORK TO BE DONE

Number and Describe Each Task:	
A. General Description:	Aerially seed crucial big game winter range and sage grouse habitat to reestablish shrub species important for cover, nesting, and forage.
B. Location (Suitable) Sites:	Wildlife aerial seeding will be done in designated areas for the six priority fires mentioned in the BAER plan 18-Mile, 21-Mile, Adobe, Camp Creek, Chokecherry, Cold Springs, South Cricket, Three Mile, and West Basin. See Map Index, Treatment Section.
C. Design/Construction Specifications:	Aerial seeding application will be completed with Office of Aircraft (OAS) carded helicopter and pilot. The wildlife seed mixes were selected by BLM, BAER, NDOW, and other local representatives, and were based on policy, regulations, and mandates. Seed mixtures should be tested for purity and germination rates. Before accepting delivery of seed shipment the contractor must provide written evidence (seed label and letter) to the resource advisor that the seed conforms to the purity and germination requirements in the specification. Test methods specified in <i>Rules for Testing Seeds, Proceedings of the Association of Official Seed Analyst</i> will be accepted for determining the germination rate. Seed designated without a purity or germination rate shall be labeled to include month and year collected, and the name and address of the seed supplier. Low sagebrush and some forage kochia will be collected by hand during the fall by Nevada Division of Forestry honor camp crews due to the lack of commercial availability of low sagebrush and the low commercial availability of forage kochia.
D. Purpose of Treatment Specifications:	Reestablish shrub species in critical big game winter ranges and sage grouse habitat to provide nesting, cover, and forage. By seeding these species, native shrubs can be reestablished and out compete exotic annual plant species that are prone to frequent fires.

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
Project Inspector GS-11 @ \$20.05/hr X 10 hrs/day X 43 days/year X 1 Year	\$8,622.00
Air Support Personnel (Helitak seasonals or AD hires) @ \$ 1,000/day X 43 days X 1 Year	\$43,000.00
TOTAL PERSONNEL SERVICE COST	\$51,622.00
EQUIPMENT PURCHASE, LEASE AND /OR RENT (Item @ Cost/Hour X # of Hours X # Fiscal Years = Cost/Item): Note: Purchase require written justification that demonstrates cost benefits over leasing or renting.	COST/ITEM
Helicopter Seed Bucket Rental: 2 buckets @ \$500/day per bucket X 43 days X 1 Year	\$21,500.00
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	\$21,500.00

MATERIALS AND SUPPLIES: (Item @ Cost/Each X Quantity X # Fiscal Years = Cost/Item):	COST/ITEM
Aerial Seed Mix Average Seed Costs @ \$5.75 (avg price)/ lb X 327,947 lbs (bulk) X 1 year	\$1,884,312.00
Bitterbrush Seed Costs @ \$ \$10.94/lb X 8,113 lbs (bulk) X 1 Year	\$88,756.00
TOTAL MATERIALS AND SUPPLY COST	\$1,973,068.00
▶ TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	COST/ITEM
Seed transport vehicle @ \$.50/mile x 200 miles per day x 43 days x 1 Year	\$4,300.00
Support Vehicle @ \$1.00/mile X 200 miles/day X 43 days X 1Year	\$8,600.00
Per Diem for pilot and mechanic @ \$168/day X 43 days X 1 Year	\$7,224.00
Fuel truck mileage @ \$1.00/mile X 200/mile X 43 days X 1 Year	\$8,600.00
TOTAL TRAVEL COST	\$28,724.00
▶ CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	COST/ITEM
Seed mixing costs @ \$0.10/lb X 327,947 lbs. X 1 Year	\$32,795.00
Seed fertilizer coating @ \$.20/lb X 327,947 lbs. X 1 Year	\$ 65,589.00
Contracted Aerial Application @ \$7.25/acre X 49,056 acres X 1 Year	\$355,656.00
4% Contract administration and oversight to agency (.04% X \$355,656.00 (total contract))	\$14,226.00
Broadcast application of low sagebrush @ \$13.50 /acre x 100 Acres x 1 Year	\$1,350.00
4% Contract administration and oversight to agency (.04% X \$1,350.00 (total contract))	\$54.00
Dribbler application of bitterbrush seed with dozer @ \$ 13.50/acre X 2,434 Acres X 1 year	\$ 32,859.00
4% Contract administration and oversight to agency (.04% X \$32,859.00 (total contract))	\$ 1,314.00
Low sagebrush hand collection by NDF honor camp crews @ \$350/day X 12 days X 1 Year	\$4,200.00
4% Contract administration and oversight to agency (.04% X \$4,200.00 (total contract))	\$168.00
Forage kochia hand collection by NDF honor camp crews @ \$350/day X 12 days X 1 Year	\$4,200.00
4% Contract administration and oversight to agency (.04% X \$1,750.00 (total contract))	\$168.00
TOTAL CONTRACT COST	\$512,579.00

SPECIFICATION COST SUMMARY

FISCAL YEAR	UNIT	UNIT COST	# OF UNITS	COST	FUNDING SOURCE	METHOD
FY 1	acres aerial	\$ 50.13	49,156	\$2,464,371 .00	EFR	C
FY 1	acres dribble	\$ 50.63	2,434	\$123,229.00	EFR	C
FY 2						
FY 3						
TOTAL:	acres		51,590	\$2,587,600.00	EFR	C

FUNDING SOURCES:

F = Fire Suppression Account
EFR = Emergency Fire 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, C
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, T
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 Map Index, Treatment sections.

IV. TOTAL COST BY FIRE

FIRE NAME	UNITS TREATED	TREATMENT METHOD	COST
18-Mile	261 Acres	Aerial	\$13,717.00
21-Mile	159 Acres	Aerial	\$9,281.00
Adobe	1,767 Acres	Aerial	\$65,883.00
Camp Creek	4,173 Acres	Aerial	\$156,138.00
Camp Creek	2,434 Acres	Dribble w/ Light Dozer	\$123,229.00
Chokecherry	19,637 Acres	Aerial	\$1,135,678.00
Cold Springs	2,888 Acres	Aerial	\$110,923.00
South Cricket	7,396 Acres	Aerial	\$284,438.00
Three Mile	2,274 Acres	Aerial	\$86,479.00
West Basin	10,601 Acres	Aerial	\$601,834.00
TOTAL COST	51,590 Acres		\$2,587,600.00

**COST ESTIMATE FOR SEED
2000 ELKO 21 FIRE COMPLEX**

Notes:

Estimates derived from either the actual 1999 cost to the Elko Field Office or the 8/11/99 seed list from Boise Seed Cache; prices were increased 20%. The exceptions are forage kochia and Basin big sagebrush which was based on the estimated cost at the 2000 seed buy. Where species were not listed, the next closest species was used (i.e., Mountain big sagebrush was not listed so used the price and germination for Basin big sagebrush.)

N-3a (BLM 98-148 III. E)

Reseed Critical Wildlife Winter Range (Aerial or Drill)

Aerial Seed Mixes							
Wildlife Seed Mix	Rate/ac lbs.	Min % PLS	Cost/lb. PLS	Cost/lb. Bulk	Acres	Bulk lbs.	Total Cost
18-Mile							
Immigrant Forage Kochia	1.0	75%	32.54		261	348	\$ 8,493
Western Yarrow	0.1	95%	7.19			27	\$ 188
Rice Hulls (seed dispersal)	3.0	n/a		0.46		783	\$ 360
Total						1,158	\$ 9,041
21-Mile							
Immigrant Forage Kochia	1.0	75%	32.54		159	212	\$ 5,174
Western Yarrow	0.1	95%	7.19			17	\$ 114
Rice Hulls (seed dispersal)	3.0	n/a		0.46		477	\$ 219
Total						706	\$ 5,507
Adobe							
Basin Big Sagebrush	0.25	12%		12.00	1,767	3,681	\$ 44,172
Western Yarrow	0.1	95%	7.19			186	\$ 1,270
Rice Hulls (seed dispersal)	2.7	n/a		0.46		4,771	\$ 2,195
Total						8,638	\$ 47,637
Camp Creek							
50% Area Wildlife Seed Mix					2,518		
Basin Big Sagebrush	0.25	12%		12.00		5,246	\$ 62,952
Rice Hulls (seed dispersal)	2.7	n/a		0.46		6,799	\$ 3,128
						12,045	\$ 66,080
33% Area Wildlife Seed Mix					1,655		
Basin Big Sagebrush	0.25	12%		12.00		3,448	\$ 41,376
Rice Hulls (seed dispersal)	2.7	n/a		0.46		4,469	\$ 2,056
						7,917	\$ 43,432
Total					4,173	19,962	\$ 109,512

Aerial Seed Mixes							
Wildlife Seed Mix	Rate/ac lbs.	Min % PLS	Cost/lb. PLS	Cost/lb. Bulk	Acres	Bulk lbs.	Total Cost
Chokecherry							
Low Elevation Wildlife Mix					19,587		
Critana Thickspike Wheatgrass	2.5	80%	7.55			61,209	\$ 369,705
Basin Big Sagebrush	0.25	12%		12.00		40,806	\$ 489,672
Western Yarrow	0.1	95%	7.19			2,062	\$ 14,083
Rice Hulls (seed dispersal)	2.7	n/a		0.46		52,885	\$ 24,327
Total						156,962	\$ 897,787
Cold Springs							
Basin Big Sagebrush	0.25	12%		12.00	2,888	6,017	\$ 72,204
Western Yarrow	0.1	95%	7.19			304	\$ 2,076
Rice Hulls (seed dispersal)	2.7	n/a		0.46		7,798	\$ 3,587
Total						14,119	\$ 77,867
South Cricket							
50% Area Wildlife Seed Mix					2,830		
Basin Big Sagebrush	0.25	12%		12.00		5,896	\$ 70,752
Western Yarrow	0.1	95%	7.19			298	\$ 2,035
Rice Hulls (seed dispersal)	2.7	n/a		0.46		7,641	\$ 3,515
						13,835	\$ 76,302
25% Area Wildlife Seed Mix					4,566		
Basin Big Sagebrush	0.25	12%		12.00		9,512	\$ 114,150
Western Yarrow	0.1	95%	7.19			481	\$ 3,283
Rice Hulls (seed dispersal)	2.7	n/a		0.46		12,328	\$ 5,671
						22,321	\$ 123,104
Total					7,396	22,321	\$ 199,406
Three Mile							
Basin Big Sagebrush	0.25	12%		12.00	2,274	4,738	\$ 56,856
Western Yarrow	0.1	95%	7.17			239	\$ 1,630
Rice Hulls (seed dispersal)	2.7	n/a		0.46		6,140	\$ 2,824
Total						11,117	\$ 61,310
West Basin							
Low Elevation Wildlife Mix					7,525		
Critana Thickspike Wheatgrass	2.5	80%	7.55			23,516	\$ 142,034
Basin Big Sagebrush	0.25	12%		12.00		15,677	\$ 188,124
Western Yarrow	0.1	95%	7.19			792	\$ 5,410
Rice Hulls (seed dispersal)	2.7	n/a		0.46		20,318	\$ 9,346
						60,303	\$ 344,914
High Elevation Wildlife Seed Mix					3,026		
Mountain Big Sagebrush	0.25	12%		15.12		6,304	\$ 95,316
Secar Snake River Wheatgrass	1.0	80%	10.66			3,782	\$ 32,257
Rice Hulls (seed dispersal)	2.7	n/a		0.46		8,170	\$ 3,758
						18,256	\$ 131,331
Total					10,551	78,559	\$ 476,245

Broadcast Low Sagebrush with specialized browse seeding/broadcast equipment							
Species	Rate/ac lbs.	Min % PLS	Cost/lb. PLS	Cost/lb. Bulk	Acres	Bulk lbs.	Total Cost
Chokecherry							
Gray Low Sagebrush	0.25	12%		14.00	50	150	\$ 2,100
Rice Hulls (Seed dispersal)	2.7	N/a		0.46		135	\$ 62
Total						285	\$ 2,162
West Basin							
Gray Low Sagebrush	0.25	12%		14.00	50	150	\$ 2,100
Rice Hulls (Seed dispersal)	2.7	N/a		0.46		135	\$ 62
Total						285	\$ 2,162

Broadcast Bitterbrush seed using Hansen-style Seed Dribblers mounted on a tractor/dozer							
Species	Rate/ac lbs.	Min % PLS	Cost/lb. PLS	Cost/lb. Bulk	Acres	Bulk lbs.	Total Cost
Camp Creek							
Antelope Bitterbrush	3.0	90%		10.94	2,434	8,113	\$ 88,756