

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

PART F - SPECIFICATIONS

SPECIFICATION TITLE:	RESEED CRITICAL WILDLIFE WINTER RANGE & SAGE GROUSE HABITAT (AERIAL OR BROADCAST) - 2001 August 2001 Fire Complex	AGENCY:	BLM Elko F.O.
PART E LINE ITEM:	#19 V-2 Ecological Stabilization - Planting/Seeding	FISCAL YEAR(S) (list each year):	2002 - 2004

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, grass and forb species important for cover, nesting, and forage.
B.	Location (Suitable) Sites: Wildlife aerial seeding will be completed in designated areas for the _ See Map Index, Treatment Section and Attached Map.
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.
D.	Purpose of Treatment Specifications: Reestablish shrub, grass and forb species in critical big game winter ranges and sage grouse habitat to provide cover, and nesting and foraging areas. By seeding these species, perennial vegetation can be reestablished to help restore range site dynamics and help outcompete 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 @ \$25.00/hr x 10 hrs/day x 70 days x 1 Year	\$17,500.00
Seasonal Wildlife Biologist GS-7 @ \$17.00/hr x 10 hrs/day x 60 days x 1 years	\$10,200.00
GIS Specialist GS-11 @ 25.00/hr x 10 hrs/day x 30 days x 1 year	\$7,500.00
Helicopter Loading crew (inc. premium pay) GS-5 @ \$225 day x 3 people x 70 days x 1 Year	\$47,250.00

Helicopter Manager (inc. premium pay) GS-9 @ \$350 day x 70 days x 1 Year	\$24,500.00
TOTAL PERSONNEL SERVICE COST	\$106,950.00
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 @ \$150/day per bucket X 70 days X 1 Year	\$21,000.00
Helicopter Ag/NAV GPS mapping system @ \$40/hour x 8 hours x 70 days x 1 year	\$22,400.00
Seed mixer @ \$200/day x 70 days x 1 year	\$14,000.00
Vehicle Rental Cost @ \$1000 per month x 3 months x 2 vehicles x 1 year	\$6,000.00
Vehicle Maintenance Cost @ .17 per mile x 250 miles/day x 90 days x 2 vehicle x 1 year	\$7,650.00
Vehicle Fuel Cost @ \$40 per day x 90 days x 2 vehicles x 1 year	\$7,200.00
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	\$78,250.00
MATERIALS AND SUPPLIES: (Item @ Cost/Each X Quantity X # Fiscal Years = Cost/Item):	COST/ITEM
Aerial Seed Mix Seed Costs @ \$14.40 (avg price)/ lb x 164,568 lbs (bulk) x 1 year	\$2,369,779.00
Bitterbrush seed Costs @ \$10.94/lb x 5,150 lbs (bulk) x 1 year	\$56,341.00
TOTAL MATERIALS AND SUPPLY COST	\$2,426,120.00
► TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	COST/ITEM
Seed transport vehicle @ \$.50/mile x 250 miles per day x 70 day x 1 Year	\$8,750.00
Support Vehicle @ \$2.00/mile X 250 miles/day X 70 days X 1Year	\$35,000.00
Per Diem for pilot and mechanic @ \$168/day X 70 day X 1 Year	\$11,760.00
Fuel truck mileage @ \$1.00/mile X 250 miles/day X 70 day X 1 Year	\$17,500.00
TOTAL TRAVEL COST	\$73,010.00
► CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	COST/ITEM
Seed Storage Cost @ 300/wk x 52 weeks x 1 years	\$15,600.00
Seed mixing costs @ \$0.10/lb x 164,568 lbs x 1 year	\$16,457.00
Seed fertilizer coating @ \$ 0.30/lb x 164,568 lbs x 1 year	\$49,370.00
Contracted Aerial Application @ \$7.25/acre X 54,362 acres X 1 Year	\$394,125.00
Dribbler application of bitterbrush seed with dozer @ 21.63/acre x 1000 acres x 1 years	\$21,630.00
7% Contract administration and oversight to agency	\$34,803.00
TOTAL CONTRACT COST	\$531,985.00

SPECIFICATION COST SUMMARY

FISCAL YEAR	UNIT	UNIT COST	# OF UNITS	COST	FUNDING SOURCE	METHOD
FY 1	acres aerial	\$57.51	54,362	\$3,126,350.77	ESR	C / P
FY 1	acres dribble	\$88.17	1,000	\$88,171.00	ESR	C / P

FY 1	acres drill	see Spec. #18 V-1	593	\$1,793.23	ESR	C / P
FY 2						
FY 3						
TOTAL:	acres	\$57.48	55,955	\$3,216,315.00	ESR	C / 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, C
2. Documented cost figures from similar project work obtained from local agency sources.	P / C
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
Bailey	213 acres within 426-acre block	Aerial	\$12,249.60
Buffalo	3,379 acres	Aerial	\$194,325.80
Coyote	1,704 acres	Aerial	\$97,996.79
Dunphy	260 Acres within 655-acres	Aerial	\$14,952.56
Hot Lake	Winter Range: 9,842 acres Sage Grouse: 2,961 acres	Aerial	\$736,298.69
Ranch	Lower Alluvial: 917 acres Winter Range: 3,956 acres Lower Bench: 1501 acres	Aerial	\$366,567.82
Rodeo Creek	144 acres within 640-acre block 637 acres within 1,274-acre blocks 108 acres within 216-acre block	Aerial	\$51,126.26
Sheep	Sage Grouse: 6,691 acres Winter Range: 6,144 acres Lower Bench: 2933 acres	Aerial	\$906,815.40
Stag	Sage Grouse: 11,322 acres	Aerial	\$651,126.59

	..... Sage Grouse: 593 acres .....	..... Drill see spec. #18	\$1,793.23
	..... Bitterbrush: 1,000 acres .....	..... Dribbler	\$88,171.00
	..... Bitterbrush: 1,650 acres .....	..... Aerial	\$94,891.26
TOTAL COST	ACRES		\$3,216,315.00

**COST ESTIMATE FOR SEED
August 2001 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 mountain and basin big sagebrush and four-wing saltbush which was based on the estimated cost at the 2000 seed buy and forage kochia at 10% above 2000 seed buy.

Reseed Critical Wildlife Winter Range (Aerial)

Aerial Seed Mixes							
Wildlife Seed Mix	Rate/ac lbs.	Min % PLS	Cost/lb. PLS	Cost/lb. Bulk	Acres	Bulk lbs. (rounded)	Total Cost
Bailey Fire (X297)							
Basin big sagebrush	0.25 PLS (2.1 bulk lbs/ac)	12%		12.00	213	450	\$ 5,400
..... Western Yarrow	0.15 bulk lb/ac.	95%	7.19	.....		32	..... \$230
Total Bailey Fire (X297)					213 ac.	482 lbs.	\$5,630
Dunphy Fire(X282)							
Wyoming big sagebrush	0.25 PLS (2.1 bulk lb/ac)	12%		15.12	260	550	\$8,316
..... Forage kochia	1.0 PLS (1.3 bulk lbs/ac)	75%		25.30		350	..... \$8,855
..... Delar Small Burnet	1.5 bulk lbs/ac.	80%	3.50	.....		500	..... \$1,750
..... Western Yarrow	0.15 bulk lb/ac.	95%	7.19	.....		40	..... \$288
..... Ladak upland alfalfa	1.5 bulk lbs/ac	88%	1.30	.....		450	..... \$585
..... Secar Snake River wheatgrass	2.5 bulk lbs/ac	80%	10.66	.....		800	..... \$8,528
Total Dunphy Fire(X282)					260 ac.	2,690 lbs	\$28,322.00

Aerial Seed Mixes							
Wildlife Seed Mix	Rate/ac lbs.	Min % PLS	Cost/lb. PLS	Cost/lb. Bulk	Acres	Bulk lbs. (rounded)	Total Cost
Sheep Fire (X275) - Sage Grouse Habitat Emphasis-North Side - Approx. 3,134 acres							
Wyoming big sagebrush	0.20 PLS (1.7 bulk lb/ac)	12%		15.12	3,134	5,350	\$ 80,892
.....
Basin Big Sagebrush	0.05PLS (0.4 bulk lb/ac)	12%		12.00		1,250	\$15,000
.....
Western Yarrow	0.15 bulk lb/ac.	95%	7.19			500	\$ 3,595
.....
Total Sheep Fire (X275) - North Side Sage Grouse Habitat Emphasis					3,134 ac	7,100 lbs	\$99,487.00
Sheep Fire (X275) - Sage Grouse Habitat Emphasis-Interior - Approx. 3,557 acres							
Wyoming big sagebrush	0.05 PLS (0.4 bulk lb/ac)	12%		15.12	3,557	1,400	\$ 21,168
.....
Basin Big Sagebrush	0.20 PLS (1.7 bulk lbs/ac)	12%		12.00		6,050	\$72,600
.....
Western Yarrow	0.15 bulk lb/ac.	95%	7.19			550	\$ 3,955
.....
Total Sheep Fire (X275) - Sage Grouse Habitat Emphasis- Interior					3,557 ac	8,000 lbs	\$97,723.00
Sheep Fire (X275) Crucial Deer Winter Range Emphasis - Approx. 6,144 acres							
Wyoming big sagebrush	0.15 PLS (1.25 bulk lbs/ac)	12%		15.12	6,144	7,700	\$ 116,424
.....
Basin Big Sagebrush	0.10 PLS (0.85 bulk lb/ac)	12%		12.00		5,200	\$62,400
.....
Western Yarrow	0.15 bulk lb/ac.	95%	7.19			900	\$6,471
.....
Forage kochia	1.0 PLS (1.3 bulk lbs/ac)	75%		25.30		8,000	\$202,400
.....
Total Sheep Fire (X275) Crucial Deer Winter Range Emphasis					6,144 ac	21,800 lbs	\$387,695
Sheep Fire (X275) Lower Bench Forage kochia Seeding - Approx. 2933 acres							
Forage kochia	1.0 PLS (1.3 bulk lbs/ac)	75%		25.30	2933	3,812	\$ 96,444
.....
Rice hulls (seed carrier)	2.7 bulk lb/ac			0.46		7,919	\$ 3643
.....
Total Sheep Fire (X275) Lower Bench Forage Kochia Seeding					2933 ac	11,731 lbs	\$ 100,086
Grand Total Sheep Fire Wildlife Seedings (X-275)					13,625 acres	48,631 lbs	\$785,077.00

Aerial Seed Mixes

Wildlife Seed Mix	Rate/ac lbs.	Min % PLS	Cost/lb. PLS	Cost/lb. Bulk	Acres	Bulk lbs. (rounded)	Total Cost
Coyote Fire (X284) - 1,704 acres							
Basin big sagebrush	0.25 PLS (2.1 bulk lbs/ac)	12%		12.00	1,704	3,600	\$ 43,200
..... Western Yarrow	0.15 bulk lb/ac.	95%	7.19	.....		250	..... \$1,798
Total Coyote Fire (X284)					1,704 ac	3,850 lbs	\$44,998.00

Aerial Seed Mixes							
Wildlife Seed Mix	Rate/ac lbs.	Min % PLS	Cost/lb. PLS	Cost/lb. Bulk	Acres	Bulk lbs. (rounded)	Total Cost
Buffalo Fire (X286) - Approx. 3,379 acres							
Wyoming big sagebrush	0.05 PLS (0.4 bulk lb/ac)	12%		15.12	3,379	1,350	\$ 18,144
Basin Big Sagebrush	..... 0.20 PLS (1.7 bulk lbs/ac)	..... 12%	.....	..... 12.00		..... 5,750	..... \$69,000
..... Western Yarrow	0.15 bulk lb/ac.	..... 95%	7.19	.....		500	..... \$ 3,236
Total Buffalo Fire (X286)					3,379 ac	7,600 lbs	\$81,980.00

Aerial Seed Mixes							
Wildlife Seed Mix	Rate/ac lbs.	Min % PLS	Cost/lb. PLS	Cost/lb. Bulk	Acres	Bulk lbs. (rounded)	Total Cost
Hot Lake Fire (X305) - Sage Grouse Habitat Emphasis-- Approx. 2,961 acres							
Wyoming big sagebrush	0.05 PLS (0.4 bulk lb/ac)	12%		15.12	2,961	1,200	\$ 18,144
Basin Big Sagebrush	0.20 PLS (1.7 bulk lbs/ac)	12%		12.00		5,050	\$60,600
Western Yarrow	0.15 bulk lb/ac.	95%	7.19			450	\$ 3,236
Total Hot Lake (X305) - Sage Grouse Habitat Emphasis					2,961 ac	6,700 lbs	\$81,980.00
Hot Lake Fire (X305) - Izenhood Deer Winter Range Emphasis - Approx. 1,103 acres							
Wyoming big sagebrush	0.15 PLS (1.25 bulk lbs/ac)	12%		15.12	1,103	1,400	\$ 21,168
Basin Big Sagebrush	0.10 PLS (0.85 bulk lb/ac)	12%		12.00		950	\$11,400
Western Yarrow	0.15 bulk lb/ac.	95%	7.19			165	\$1,186
Forage kochia	1.0 PLS (1.3 bulk lbs/ac)	75%		25.30		1,450	\$36,685
Total Hot Lake Fire (X305) Izenhood Deer Winter Range Emphasis					1,103 ac	3,965 lbs	\$70,439.00
Hot Lake Fire (X305) - Rock Creek Gorge Deer Winter Range Emphasis - Approx. 8,739 acres							
Wyoming big sagebrush	0.05 PLS (0.4 bulk lbs/ac)	12%		15.12	8,739	3,500	\$52,920
Basin Big Sagebrush	0.20 PLS (1.7 bulk lb/ac)	12%		12.00		14,850	\$178,200
Western Yarrow	0.15 bulk lb/ac.	95%				1,300	\$9,347
Forage kochia	1.0 PLS (1.3 bulk lbs/ac)	75%		25.30		11,350	\$287,155
Total Hot Lake Fire (X305) - Rock Creek Gorge Deer Winter Range Emphasis					8,739 ac	29,700 lbs	\$527,622.00
Grand Total Hot Lake Fire Wildlife Seedings					12,803 acres	40,365 bulk pounds	\$680,041.00

Aerial Seed Mixes							
Wildlife Seed Mix	Rate/ac lbs.	Min % PLS	Cost/lb. PLS	Cost/lb. Bulk	Acres	Bulk lbs. (rounded)	Total Cost

Aerial Seed Mixes							
Wildlife Seed Mix	Rate/ac lbs.	Min % PLS	Cost/lb. PLS	Cost/lb. Bulk	Acres	Bulk lbs. (rounded)	Total Cost
Rodeo Fire (X272) - Sage Grouse Habitat Emphasis - Approx. 144 acres							
Wyoming big sagebrush	0.05 PLS (0.4 bulk lb/ac)	12%		15.12	144	50	\$ 756
.....
Basin Big Sagebrush	0.20 PLS (1.7 bulk lbs/ac)	12%		12.00		250	\$3,000
.....
Western Yarrow	0.15 bulk lb/ac.	95%	7.19			25	\$ 180
.....
Total Rodeo Fire (X272) - Sage Grouse Habitat Emphasis					144 ac	325 lbs	\$3,936.00
Rodeo Fire (X272) Crucial Deer Winter Range Emphasis - Approx. 637 acres							
Wyoming big sagebrush	0.15 PLS (1.25 bulk lbs/ac)	12%		15.12	637	800	\$ 12,096
.....
Basin Big Sagebrush	0.10 PLS (0.85 bulk lb/ac)	12%		12.00		550	\$6,600
.....
Western Yarrow	0.15 bulk lb/ac.	95%	7.19			100	\$719
.....
Forage kochia	1.0 PLS (1.3 bulk lbs/ac)	75%		25.30		825	\$20,873
.....
Total Rodeo Fire (X272) Crucial Deer Winter Range Emphasis					637 ac	2,275 lbs	\$40,288.00
Rodeo Fire (X272) Lower Bench Forage kochia Seeding - Approx. 54 acres							
Forage kochia	1.0 PLS (1.3 bulk lbs/ac)	75%		25.30	54	70	\$1,771
.....
Rice hulls (seed carrier)	2.7 bulk lb/ac			0.46		150	\$69
.....
Total Rodeo Fire (X272) Lower Bench Forage Kochia Seeding					54	220	\$1,840
Grand Total Rodeo Fire (X-272) Wildlife Seedings					889 acres	2,820 lbs	\$46,064.00

Aerial Seed Mixes							
Wildlife Seed Mix	Rate/ac lbs.	Min % PLS	Cost/lb. PLS	Cost/lb. Bulk	Acres	Bulk lbs. (rounded)	Total Cost
Ranch Fire (K857) - Low Elevation Alluvial Areas- Approx. 917 acres							
Wyoming big sagebrush Basin Big Sagebrush Western Yarrow Four-wing saltbush	0.20 PLS (1.7 bulk lb/ac) 0.05PLS (0.4 bulk lb/ac) 0.15 bulk lb/ac. 3.0 bulk lbs/ac	12% 12% 95% 38%	..... ..... 7.19	15.12 12.00 7.04	917	1,600 400 150 2,750	\$ 24,192 \$ 4,800 \$ 1,079 \$ 19,360
Total Ranch Fire (K857) - Low Elevation Alluvial Areas					917 ac	4,900 lbs	\$ 49,431
Ranch Fire (K857) Crucial Deer Winter Range Emphasis - Approx. 3956 acres							
Wyoming big sagebrush Western Yarrow Secar Snake River wheatgrass	0.25 PLS (2.1 bulk lbs/ac) 0.15 bulk lb/ac. 4.0 PLS (5.0 bulk lbs/ac)	12% 95% 80%	..... 7.19	15.12 10.66	3956	8,350 600 19,780	\$ 126,252 \$ 4,314 \$ 210,855
Total Ranch Fire (K857) Crucial Deer Winter Range Emphasis					3956 ac	28,730 lbs	\$ 341,421
Ranch Fire (K857) Lower Bench Forage kochia Seeding - Approx. 1501 acres							
Forage kochia Rice hulls (seed carrier) Western Yarrow	1.0 PLS (1.3 bulk lbs/ac) 2.7 bulk lb/ac 0.15 bulk lb/ac.	75% ..... .....	..... ..... 7.19	25.30 0.46	1501	1950 4050 250	\$ 49,335 \$ 1,863 \$ 1,798
Total Ranch Fire (K857) Lower Bench Forage Kochia Seeding					1501 ac	6250 lbs	\$52,996
Grand Total Ranch Fire (K857) Wildlife Seedings					6,374 acres	39,880 lbs	\$ 443,848

Aerial Seed Mixes							
Wildlife Seed Mix	Rate/ac lbs.	Min % PLS	Cost/lb. PLS	Cost/lb. Bulk	Acres	Bulk lbs. (rounded)	Total Cost
Stag Fire (X246) -							
Wyoming big sagebrush	0.025 PLS (.2 bulk lb/ac)		\$15.12		11,915	2,400	\$ 36,288
..... Basin Big Sagebrush	..... 0.10 PLS (0.9 bulk lbs/ac)	.....	\$15.12	.....		..... 10,700	..... \$ 161,784
..... Antelope Bitterbrush	..... 3.33 bulk lb/ac.	.....	..... 10.94	.....	..... 1,000	..... 3,350	..... \$ 36,349
	1.1 bulk lb/ac.		10.94		1650	1,800	\$ 19,692
Total Stag Fire (X)					14,565		\$254,413.00