

**BUREAU OF LAND MANAGEMENT
ELKO FIELD OFFICE
BURNED AREA EMERGENCY REHABILITATION TEAM**

ELKO 21 FIRE COMPLEX

OPERATIONS ASSESSMENT

I. ISSUES

- Identify, inventory, and map fire suppression impacts.
- Initiate discussions with private land owners, state officials, and federal agencies to insure acceptable rehabilitation techniques are implemented.
- Develop short term rehabilitation treatments for fire lines, staging areas, and safety zones; 21 fires totaling 220,497 acres
- Direct personnel and equipment involved in restoration efforts.
- Document all private and public facilities damaged by fire.
- Conduct an assessment of roads used by suppression crews that need maintenance as a result of action taken during the fire.
- Conduct an assessment of all private and public property affected by fire.

II. OBSERVATIONS

A. Background

The complex of wildfires began on July 25, 2000, when lightning ignited the South Cricket fire in the Elko BLM Field Office area. Over the next few weeks lightning ignited 20 new fires, including the, South Cricket fire listed above at 66,487 acres, the West Basin fire at 55,197 acres, the Camp Creeks fires at 31,194 acres, and the Choke Cherry fire at 31,051, where some of the larger fires. This plan will address a total 21 fires. Factors contributing to the rapid growth of the many fires included strong and erratic winds, low humidity, extremely dry fuels, limited access and limited resource personnel to control the fires. The complex of fires encompassed approximately 220,497 acres of federal, state and private lands within four counties within the BLM Elko Field Office area.

The following data briefly summarizes the 21 fires located within the Elko Field Office Area that the Elko BAER team was asked to assess.

Administrative Unit	Fire Name & Number	Ignition Date	Control Date	Acres Burned
NV-EKD	Adobe X049	08/01/2000	08/05/2000	6,860
NV-EKD	O'Neil Complex Camp Creek X056	08/03/2000	08/16/2000	31,194
NV-EKD	Charlie X048	07/31/2000	08/07/2000	3,021
NV-EKD	Choke Cherry X092	08/10/2000	08/15/2000	31,051
NV-EKD	Cold Springs X067	08/01/2000	09/06/2000	8,393
NV-EKD	Gamble X053	08/01/2000	08/06/2000	22
NV-EKD	Mahogany X071	08/03/2000	08/25/2000	214
NV-EKD	Mule X078	08/06/2000	08/07/2000	69
NV-EKD	PattyJack X074	08/03/2000	08/06/2000	35
NV-EKD	Rabbit X075	08/01/2000	09/06/2000	5,837
NV-EKD	Sheep Pen X062	08/01/2000	08/04/2000	2,496
NV-EKD	South Cricket X039	07/25/2000	08/07/2000	66,487
NV-EKD	Stag X073	08/03/2000	08/05/2000	Acres in Camp Crk.
NV-EKD	Sun Creek X070	08/01/2000	09/06/2000	Acres in Camp Crk.
NV-EKD	Three Mile X068	08/02/2000	08/05/2000	3,379
NV-EKD	Vega X065	08/01/2000	08/05/2000	2,697
NV-EKD	West Basin X097	08/17/2000	08/31/2000	55,197
NV-EKD	Wildcat X069	08/01/2000	09/06/2000	Acres in Camp Crk.

NV-EKD	Wimpy Complex - X052	08/01/2000	08/06/2000	2,870
NV-EKD	18 Mile X050	08/01/2000	08/02/2000	336
NV-EKD	21 Mile X055	08/01/2000	08/02/2000	306
Totals Acres				220,497

Incident commanders contained the above fires utilizing various suppression techniques including building 64 miles of dozer lines. Due to the varied terrain, lines were constructed across terrain features including slopes in excess of 40%. Dozer impacts varied according to topography with light one blade surface scrapes along valley floors and ridge tops. Some dozer use resulted in moderately deep down cutting, but for the most part, these actions were isolated occurrences.

Rehabilitation treatments were implemented on all suppression related impacts that occurred on the major Elko Field Office Fires. Treatments were directed in a cooperative effort by resource advisors from the Elko, Nevada, and Kemmerer, Wyoming, Field Office staff. Corrective action to prevent soil erosion and help begin the restoration process needs to be completed with the use of heavy equipment and crews to re-contour hand and dozer suppression lines. In addition, safety zones and staging areas need to be treated.

At specific locations where the resource advisor felt heavy equipment would cause further resource degradation the sites were treated by crews or left alone. To date over 20% of all suppression lines assessed for rehabilitation have received treatments. The remaining 80% is scheduled to be completed by the Elko Field Office.

Primary goal is to drill seed the dozer lines as establishment of vegetation occurs quicker and would limit the erosive effects of rain on disturbed sites. However aerial seeding of all perimeter lines is the alternate option that has been prescribed to provide a timely means of applying seed on disturbed soils prior to erosive rains. The use of a helicopter and seed hopper will facilitate a uniform application with all lines treated without regard to private or public ownership.

Resource advisors also surveyed fire areas for damaged public and private property. Structures destroyed included one primary residence ranch building, several dozen power poles, range improvements, and over 150 miles of fence line.

Assessments document 69.25 miles of BLM roads damaged by the suppression effort, with an additional 1.0 mile of county road already repaired by Elko County. Funding is requested to rehabilitate damaged roads back to their pre-fire condition. Intermittent rocking (gravel) is proposed for portions of roads that were severely impacted. This damage rehabilitation also includes work which has already been done, or we propose to be done, by Elko County; consisting of: road segments which were graveled (Camp Creek and Cold Springs fires); repairs made to the Cottonwood Creek bridge (Camp Creek Fire); and recommended replacement of 3 damaged cattleguards (Chokecherry and West Basin fires).

B. Reconnaissance Methodology and Results

Resource advisors from BLM Field Offices served as rehabilitation specialists for each fire. Field surveys of fire damages and suppression related impacts were identified by a thorough ground and aerial reconnaissance. Considerable effort was made to access even the most remote areas of each fire to assess damages. Resource advisors assigned to fires were also directed to contact as many land owners and permittees as possible to insure their first hand accounts of damages and rehabilitation needs were included in reports.

III. Recommendations

- **Management (Specification Related)**

- Continue to rehabilitate remaining fire lines and other sites directly or indirectly impacted by fire suppression activities.
- Designate a lead person from the Elko Field Office to coordinate and plan the aerial seeding of suppression lines. Past experience has revealed that the magnitude of this operation will present formidable challenges if not properly preplanned between operational, air, and logistical personnel.
- Within the next 60 days prioritize road graveling and grading projects in order to maximize brief work periods following rain events this coming fall.

a. R-2 BLM 98-148 III. M Natural Resource Restoration

General Description: Dozer line rehabilitation will generally be rehabilitated with dozers on slopes up to 40%. Hand crews will be used on slopes greater than 40%. Hand crews will also work behind dozers and complete rehabilitation at locations determined to be impracticable for dozer rehabilitation by dozer operators.

b. S-6 BLM 98-148 III. M Facility Replacement

Rehabilitation of preexisting roads is necessary to provide safe and adequate travelways and to avoid erosion gullies and ponding on road surfaces due to blockage of drainage diversions by berms. The intent is not to improve the roads beyond the pre-existing condition but to reestablish roadway surfaces and drainage for public safety. Road regrading should occur after sufficient moisture is available to reconstruct roads to pre-fire condition. Many of these roads provide primary access to private property, permittee allotments, recreational users, and the public at large

c. W-1 BLM 98-148 III. M Grass Reseeding

General Description: Seeding is to be completed via rangeland drill or helicopter . The District staff and equipment, primarily transport vehicles, will be used to move seed to and load seed from strategic staging points in close proximity to each fire. The need for seeding, seed selection and application rates were determined in consultation with local area resource management staff. Seeding will serve as an immediate, temporary ground cover to decrease surface erosion and help prevent invasion of exotic plants.

Management (Non-Specification Related)

- Insure rehabilitation specifications are clearly understood by new personnel assigned to treatment work, particularly heavy equipment operators performing line rehab.
- Many range and watershed treatments are enormous operational projects. Most projects would be best implemented with many resources over a short duration in contrast to limited resources over a long duration.
- Guarantee safety of personnel assigned to operational assignments in the fire area during periods of precipitation over the burn.

CONSULTATIONS

Janice Stadelman, Minerals Recl & Comp Specialist, BLM Elko Field Office
Donna Nyrehn, Rangeland Mngt Specialist, BLM Elko Field Office
Leticia Lister, Rangeland Mngt Specialist, BLM Elko Field Office
Tom Warren, Rangeland Mngt Specialist, BLM Elko Field Office
Doug Furtado, Rangeland Mngt Specialist, BLM Elko Field Office
Norman Rockwell, PE, PLS, Civil Engineer, BLM Elko Field Office

- **REFERENCES**

USDI, 1995. BAER Field Team Leader Reference Book
BLM 98-148 III.M. BLM Emergency Fire Rehabilitation Handbook

Rick Driggs, Civil Engineer Technician, BLM Elko Field Office 775-753-0211
Norman Rockwell, PE, PLS, Civil Engineer, BLM Elko Field Office 775-753-0321