

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

ELKO 13 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; 13 fires totaling 64,693 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

On June 18, lightning ignited the Hogan Fire in the Elko Field Office area. Over the next five week period, lightning ignited 45 fires within the Elko Field Office Area including the Kelly Creek Fire which grew to 37,717 acres. Factors contributing to the rapid growth of many of these fires included strong erratic winds, low humidity, extremely dry fuels, and limited access limited resource personnel to control the fires..

The following data briefly summarizes the 13 fires located within the Elko Field Office Area that the Elko BAER team was asked to assess.

Administrative Unit	Fire Name	Ignition Date	Control Date	Acres Burned
NV-EKD	Alazon	07/27/00	07/27/00	200
NV-EKD	Basin	06/23/00	07/07/00	3,668
NV-EKD	Beowawe	07/17/00	07/23/00	13,948
NV-EKD	Big Springs	07/17/00	07/20/00	1,620
NV-EKD	Hogan	06/18/00	06/22/00	1,870
NV-EKD	Kelly Creek	06/30/00	07/05/00	37,717

NV-EKD	Linka	07/10/00	07/12/00	3,397
NV-EKD	Marys	06/23/00	06/24/00	58
NV-EKD	Morris	07/19/00	07/21/00	79
NV-EKD	Omni	06/24/00	06/26/00	440
NV-EKD	Railroad Pass	06/25/00	06/27/00	827
NV-EKD	Rodriguez	07/20/00	07/22/00	269
NV-EKD	Squaw Valley	07/20/00	07/21/00	600
Totals Acres				64,693

Incident commanders contained the above fires utilizing various suppression techniques including building 88 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 downcutting, 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, Kemmerer, Wyoming, and Rock Springs, 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.

Aerial seeding of all perimeter lines 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 line 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 13 miles of fence line. Additionally nearly 25 head of livestock and 6 wildhorses were lost.

Assessments document 54 miles of County and BLM roads damaged by the suppression effort. Funding is requested to rehabilitate damaged roads back to their pre-fire condition and purchase nine replacement signs to insure public safety is not compromised. Intermittent spot rocking (gravel) is proposed for roads severely impacted.

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 rebuilding and grading projects 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 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 drainage and surface requirements 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-1b BLM 98-148 III. M Grass Reseeding**

General Description: Seeding is to be completed via helicopter or rangeland drill. 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.

- d. W-17 BLM 98-148 III. BB Debris Rack and Road/Culvert Protection**

Four (4) each, corrugated metal pipes (cmp) to be installed where the dozer line crosses creek crossings in the Beowawe fire. (See attached map index). These culverts were damaged or proposed as a result of the fire suppression effort.

- **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**

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- **REFERENCES**

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

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