BURNED AREA EMERGENCY STABILIZATION PLAN

MURPHY FIRE COMPLEX - WILDHORSE ZONE

OPERATIONS RESOURCE ASSESSMENT

I. OBJECTIVES

- Document fire and suppression impacts.
- Prescribe measures to mitigate fire suppression damage impacts and coordinate with personnel to implement repairs.
- Communicate with the Incident Management Team (IMT) and federal agencies to insure acceptable stabilization and repair techniques are implemented.
- Protect cultural and natural resources during fire suppression repair efforts.
- Identify and propose mitigation for public safety hazards found within the burned area.
- Provide logistical support for BAER Team members.

II. ISSUES

- **Human Health & Safety-** Public safety hazards within the burned area as a result of the fire and suppression impacts, and measures to mitigate those hazards.
- **Soil/Watershed Stabilization-** Impacts to critical natural resources from fire suppression efforts.
- **T&E Habitat Stabilization/Recovery-** Impacts to threatened, endangered, and sensitive species affected by suppression damage, including dozer line construction.
- **Cultural Heritage Resources-** Important cultural and natural resources affected by fire suppression efforts.
- **Invasive Plants-** Soil disturbance from suppression impacts, and the threat of invasive nonnative species expanding into these areas.

III. OBSERVATIONS

A. Background – The Murphy Fire Complex started on July 16, 2007 and burned approximately 595,699 acres. Due to the large acreage associated with this fire, it was divided into two zones: the Castleford Zone on the north, California Incident Management Team 1 Hawkins, and the Wildhorse Zone on the south, California Incident Management Team 2 Molumby. The zone boundaries were changed when the incident transitioned to Type III teams from the East Fork of the Jarbidge River, to the existing state fire response boundaries. Land ownership within the two fire zones includes the following: The Castleford Zone included 436,157 acres of BLM, 61 acres of FS, 1 acre of Military, 421 acres of Nevada State Land, 25,958 acres of Utah State land, and 37,937 of private. The Wildhorse Zone included 245 acres of BLM, 91,124 acres of FS, 2,137 acres of Nevada State Land, and 1,657 acres of private land. The total for the Castleford Zone was 500,535 acres, and the total for the Wildhorse Zone was 95,164 acres, for a grand total of 595,699 acres. After arriving on scene, the Twin Falls BLM requested that they write their

own plan covering the Castleford Zone, with only technical assistance from the National BAER Team, therefore I will focus on the Wildhorse Zone for the remainder of this assessment. The Murphy Fire Complex started on July 16, 2007 and grew rapidly over the next few days. On Thursday, July 26th the California Inter-Agency Team 2 (Molumby) assumed command of the Wildhorse Zone of the Murphy Fire Complex at which time the fire was 17% contained. By the end of the first operational period on Thursday July 26th, and after considerable rainfall and work by resource on the fire line, containment was estimated at 70%. The next two days, Friday the 27th and Saturday the 28th, brought a warmer and dryer weather pattern into the area, and resources were able to increase the containment percentage while still handling some active open fire line. By the end of the operational period on Saturday the 28th the Wildhorse Zone was 90% contained. The entire Murphy Fire Complex was contained on August 2nd at 2000. Suppression tactics included, but were not limited to, dozer line, hand line, heavy air tankers, helicopter bucket drops, and backfires. The Operations Specialist assessed suppression related damage and assisted BAER Team members with reconnaissance flights and ground surveys. Surveys were conducted in conjunction with other BAER disciplines and agency resource advisors to identify areas needing emergency stabilization and rehabilitation. Field assessments identified approximately 73.5 miles of dozer line on the entire Murphy Complex, of which 30.6 miles were constructed on the Wildhorse Zone. The Operations Specialist coordinated with the IMT and helped get dozer line identified and repaired. The Operations Specialist also identified numerous miles of preexisting secondary roads which have been impacted by suppression activities. The Operations Specialist also coordinated BAER team logistics for the Murphy Fire Complex assignment. Suppression resources on the Wildhorse Zone at its peak totaled approximately 800 persons. Elevations within the Wildhorse Zone range from 4,900 to 9,500 feet. The fire was primarily wind driven during the day and burned with low intensity at night. Overall, the area burned within the Wildhorse Zone experienced low to moderate fire intensity with some small patches of high fire intensity. Most of the fire in the upper elevations includes a mosaic pattern of burned area interspersed with patches of unburned, while some of the lower elevations burned cleaner due to fine fuel loading including cheat grass.

The National Interagency BAER Team was ordered on July 28, 2007 and the Team arrived in Elko and negotiated acceptance of responsibility for preparation of the BAER Plan for the Murphy Fire Complex on July 30, 2007. An agency in-briefing occurred on July 30th at the Elko FS Mountain City Ranger District office. The emphasis on safety practiced throughout the fire suppression effort continued through the BAER Teams efforts. BAER Team members can encounter hazard trees, rough terrain, hazardous driving conditions, and numerous other environmental hazards and sudden weather events such as lighting. A Risk Assessment/Job Hazard Analysis was completed for the BAER Team assignment for the Murphy Fire Complex. The Operations Specialist presented the Risk Assessment/JHA to the BAER Team when we arrived and all team members signed it acknowledging the risks associated with this assignment. The risk assessment/JHA can be found in Appendix V. Safety briefings were also conducted at each nightly team meeting, and a safety corner was established in the BAER Den with a new safety message posted daily. The Baer Team closeout was done on Friday August 10, 2007 at the BLM Elko Field Office.

B. Reconnaissance Methodology and Results – The Operations Specialist, working with the IMT Resource Advisors, assessed fire suppression impacts that may have adversely affected cultural and natural resources. Operations staff conducted aerial reconnaissance and ground surveys of suppression impacts as well as assessed the degree of resource impacts. Fifteen BAER Team members took helicopter and fixed wing recon flights during the Team's aerial reconnaissance phase of the Fire to gather information. The Operations Specialist scheduled these flights through the Air Operations Director on the IMT and the Elko Dispatch Center. The Helitack Manager at the helibase conducted safety briefings for the Team members prior to each flight. Information was gathered from field reconnaissance and shared with local resource advisors, and was then formulated into treatments in conjunction with other BAER Team disciplines. All known or suspected locations of dozer line related damage were documented and put in a GIS data base.

Potential hazards to the public were identified as a result of the fire, and then a specification written to address these hazards.

The type III IMT for both the Wildhorse and Castleford Zones stated that as of 8/4/07all dozer line repair had been completed.

- **C. Findings** Repair of fire suppression impacts is necessary to protect human safety and property, to inhibit the invasion of noxious weeds, to minimize fragmentation of ecological areas, to prevent unauthorized use of off-highway vehicles, to reduce erosion and sedimentation in waterways, and to return secondary roads to pre-incident conditions.
 - Human Health & Safety- Some roads were damaged as a result of suppression actions. The USFS will have their roads crew fix their portion under the suppression account. Five informational public safety signs were damaged as a result of the Murphy Fire Complex and need to be replaced. These signs contained safety directions for the public in remote areas. Also, there will be 25 hazard warning signs developed for immediate installation on roads entering the burned area for the protection of life and property. These signs are necessary to inform the public of immediate danger posed by flash floods, falling rocks, and washouts.
 - Soil/Watershed Stabilization- There was 30.6 miles of dozer line constructed on the Wildhorse Zone of which 30.1 miles were constructed on USFS lands and .5 miles were constructed on private lands. As of 8/4/07 the type III IMT team stated that all dozer line had been repaired.
 - 3. **T&E Habitat Stabilization/Recovery-** The BAER Team wildlife biologist did not have any concerns with the water or retardant used in the fire since there was no documented retardant drops in any perennial waters. Also there were no issues associated with water depletion as a result of fire suppression tactics.
 - 4. **Cultural Heritage Resources-**There was no known damage to any previously documented cultural heritage sites as a result of suppression. There are two graves located near a main road within the fire area that came close to being impacted from grading during the suppression action. The team archeologist will work with the FS to make sure that future road grading in this area does not affect these sites.
 - 5. **Invasive Plants-** Suppression damage has the potential to promote invasive non-native weed species in disturbed areas. These observed disturbed areas need to be monitored for weed invasion and treated if necessary. Also some of these areas will be seeded in an effort to out compete weed species.

IV. RECOMMENDATIONS

A. **Emergency Stabilization – Fire Suppression Damage Repair-** As of 8/4/07 the Type III IMT stated that all Dozer line damage repair had been completed. The fire damaged bridge on Meadow Creek just south of Hicks Summit was taken out and a low water crossing was installed to allow suppression forces to continue to access the fire. There are still some cut fences that will need to be repaired.

B. Emergency Stabilization

- 1. **Human Health & Safety-** Safety Signs: Five informational public safety signs were damaged as a result of the Murphy Fire Complex, Wildhorse Zone and need to be replaced. These signs contained safety directions for the public in remote areas. Also, there will be 25 Hazard Warning signs developed for immediate installation on roads entering the burned area for the protection of life and property. These signs are necessary to inform the public of immediate danger posed by flash floods, falling rocks, and washouts. The FS will identify specific locations for each sign based on local knowledge and assessed needs.
- 2. Soil/Watershed Stabilization- No Spec

- 3. T&E Habitat Stabilization/Recovery-No Spec
- 4. Cultural Heritage Resources-No Spec
- 5. Invasive Plants-No Spec

C. Rehabilitation - None

D. Management Recommendations – Non-Specification Related

- Ensure suppression repair specifications are clearly understood by those assigned to treatment work, and that the work is completed before the suppression account is closed.
- Provide for safety of personnel assigned to implementation of the Emergency Stabilization Plan.
- Map and repair any additional fire suppression damage found within the fire area.

V. CONSULTATIONS

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