## UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE Spanish Fork RD

REPLY TO: 2520 Watershed Protection and Management

August 9, 1976

SUBJECT: Rehabilitation - Brimhall Fire

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TO: Forest Supervisor

On Sunday, August 8, we visited the Brimhall Fire to prepare a Rehabilitation Needs Report on the burned area. The total fire area is approximately 175 acres, including about 29 acres on private lands. The following summarizes our recommendations on this burned area:

- 1. Much of the area inside the burn is either lightly burned or has the capability to resprout. Unless prolonged precipitation occurs this fall, this sprouting will not take place until next spring. Exdept for the alluvial bottoms, these areas should not need any treatment.
- 2. Those areas which burned with severe intensity or are located on steeper, precarious slopes above the main stream should receive treatment. The treatment we propose is broadcast seeding, with the attached mixture mostly to be performed with helicopter. We estimate 41 acres of these steeper, burned out slopes should be reseeded. About 2.5 acres of additional burned area are amenable to treatment by drilling. This work can be financed with 092 funds available on the Forest. Estimated cost is \$800.
- 3. The most critical watershed problems on the burn are associated with the fireline and other areas disturbed with tractor control efforts. We recommend drilling the entire fireline, consisting of 1.62 miles, or about 2.3 acres. In addition, an estimated 2 acres of Cat disturbed fire areas are needed. A small track-type tractor and the baby rangeland drill located at Vernon should be used to do this work. This work should be accomplished using FFF funds. Additional water bars should be added to the fireline along the portion which follows the steep ridge on the east edge of the burn.
- 4. There are about 5 acres of alluvial bottom which were severely burned. The bluegrass willow and cottonwood on these areas are expected to resprout, but esthetic improvement may be slow. We recommend seeding 10 pounds per acre mix of Kentucky bluegrass, alsikeclover (trifolium hybridum) and orchardgrass as soon as possible. This should be seeded on foot, using a cyclone seeder. Observations may show a desirability to plant some willow cuttings next spring.

5. The fences which were cut to gain access to the burn should be repaired utilizing FFF funding.

Paul Winkelaar's report covering his findings on the main soils included in the burned area is enclosed.

PAUL H. SKABELUND

Forester

W. FRANK SAVAGE

Range Conservationist

PAUL WINKELAAR

Soil Scientist

Enclosure

cc: D-3

## BRIMHALL FIRE REVEGETATION August 8, 1976

Alfalfa (Ladak)		•		
Clover (Sweet)	<u>Species</u>	<u> </u>	<u>lbs/acre</u>	
Broadcast - 41 acres - Chopper and Hand Drill - 7 acres  Riverbottom  Poa - Poa Pratensis	Alfalfa (Ladak)			
Poa - Poa Pratensis	Broadcast - 41	acres - Chonner and Hand	22 lbs/acre	
Poa - Poa Pratensis			11	
Poa - Poa Pratensis				
Clover - Alsike Trefalium hybridum	Riverbottom			
Broadcast (Hand) - 5 acres  Purchase  50 lbs Alfalfa 50 lbs Clover (Yellow Sweet) 100 lbs Brome (Northern) 100 lbs Intermediate Wheat 100 lbs Crested Wheat 100 lbs Pubescent Wheat			· ·	
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100 lbs Brome (Northern) 100 lbs Intermediate Wheat 100 lbs Crested Wheat 100 lbs Pubescent Wheat	Broadcast (Hand) -			
100 lbs Intermediate Wheat 100 lbs Crested Wheat 100 lbs Pubescent Wheat	Broadcast (Hand) - <u>Purchase</u> 50	5 acres 1bs Alfalfa		
100 lbs Crested Wheat 100 lbs Pubescent Wheat	Broadcast (Hand) - <u>Purchase</u> 50 50	5 acres  1bs Alfalfa 1bs Clover (Yellow Sweet)		
100 1bs Pubescent Wheat	Broadcast (Hand) - <u>Purchase</u> 50 50 100	5 acres  1bs Alfalfa 1bs Clover (Yellow Sweet) 1bs Brome (Northern)		
100 lbs Kentucky Rlue	Broadcast (Hand) - <u>Purchase</u> 50  50  100  100	5 acres  1bs Alfalfa 1bs Clover (Yellow Sweet) 1bs Brome (Northern) 1bs Intermediate Wheat		
100 100 Reflectory Ditte	Broadcast (Hand) - <u>Purchase</u> 50  50  100  100  100	1bs Alfalfa 1bs Clover (Yellow Sweet) 1bs Brome (Northern) 1bs Intermediate Wheat 1bs Crested Wheat		
10 lbs Clover (Alsike)	Broadcast (Hand) - <u>Purchase</u> 50 50 100 100 100 100	1bs Alfalfa 1bs Clover (Yellow Sweet) 1bs Brome (Northern) 1bs Intermediate Wheat 1bs Crested Wheat		

610 lbs Total

BRIMNALL FIRE

Burned area = 175 A. ne rund PRIVATE Broad cast Seed sideslopes a 41 A. Riverbottown a 5 A. DarllSecel Fire line . 1.62 miles or CG Riscobollo Broad cast Seed

## UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE

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REPLY TO:

2520 Watershed Protection and Management 2550 Soil Survey Interpretation and Management August 11, 1976

SUBJECT:

Rehabilitation - Brimhall Fire

WAS STORY RESIDENCE

TO: Forest Supervisor

On August 8, a field trip was made with the Rehabilitation Team to the Brimhall fire site.

The fire occurred mostly on the west aspect of a series of lower, rounded foothills that have generally 10 to 30 percent slopes. A portion of the area consisted of steeper (30 to 60 percent) side slopes along the dropoff adjacent to the creek, and along the few steeply incised draws found in the unit.

The vegetation consisted mainly of sage, western wheat grass, forbs, and islands of gamble oak.

The major soil in the area is a deep, well-drained, fine-textured soil derived from a conglomerate with some influence of limestone. It was impossible on the upper part of the unit to determine the presence of a calcic layer underneath the clayey subsoil. It was present on the eroded steep dropoffs where the reddish-colored subsoil is exposed. The soil has a thin laminated dark brown, 1 to 2-inch gravelly loam layer that grades into a subangular, dark brown, gravelly clay loam, B<sub>I</sub> horizon. This is underlaid by a reddish brown, strongly subangular, structured clay which, although still moist, was very hard. The approximate classification of the soil is a typic argixeralls; fine, montmorrillonitic, mesic soil.

This soil is dry in the summer, but receives and stores enough water in winter to provide available moisture for spring and early summer. The major soil has sufficient organic matter in its upper parts to support germination and early growth. This could become critical for the eroded dropoffs and steep canyon walls where the reddishbrown, clay subsoil is exposed and the topsoil eroded off long ago.

These soils are in group C of the SCS hydrologic subgroups.

A small area in the creek bottom burned off. The soils in these alluvial bottoms are generally coarse textured, gravelly, and cobbly outwash soils that belong in the hydrologic subgroup A.

It is recommended that only the intensely burned areas be reseeded. For the foothills, the seed mix would contain crested wheat grass.

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Pubescent wheat grass, intermediate wheat grass, smooth brome, yellow sweet clover, alfalfa, and Kentucky blue grass. For the alluvial bottoms, a seedmix of alsike clover and Kentucky blue is recommended.

The major soil on the foothills is moderately erosive. The greatest damage occurred along the fireline where mechanical equipment has disturbed both soil and vegetation.

Rehabilitation of these soils should be done this fall and should prove quite successful on these fine-textured, dark-colored soils.

Soil Scientist