



## DRILL SEEDING OF LOWER ELEVATION AREAS ON THE WATERFALL FIRE

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### DRILL SEEDING

Carson City, private landowners and the Nevada Division of Forestry are partnering in the "drilling" of seed and mulch on the Waterfall fire this fall. Seedling establishment is the most critical phase of revegetation. Drilling of the seed allow us to achieve the best results.

A seed drill saves seed by ensuring good seed-to-soil contact which promotes rapid germination and results in more uniform and optimum stands, reduces winter injury, and improves seeding establishment over broadcast seeding and aerial seeding. The areas that were too steep to drill were aerial seeded in September.

Drill seeding is limited to slopes of 3:1 or flatter and areas that are not extremely rocky. The "rangeland drill" is often the most effective machine for reclamation drill seeding if the soil is rocky or contains other large debris. The furrows are covered with drag chains or pipe drags. The disks can be equipped with different-size depth bands to control furrow depth. Multiple seed boxes can be used for metering different-size seeds, planting at differing depths. There will also be rice straw mulch crimped into the soil over the seed. Mulching of the soil surface protects the soil from erosion until the plants become established.

### PLANT SPECIES IN THE DRILL SEED MIX

#### Luna Pubescent Wheatgrass *Elytrigia intermedia*

This cool season bunchgrass is a strongly rhizomatous, long-lived, sod-forming, drought tolerant grass. It has full sun and partial shade tolerance and grows in moderately coarse to medium textured soils and generally prefers pH neutral soils. Fall planting is most successful.

#### Siberian Wheatgrass *Agropyron fragile sibericum*



A cool season bunch grass, this drought tolerant grass grows well in 6-10 inch precip zones. It does well on a variety of soil types and generally neutral pH soils.

#### Fourwing Saltbush *Atriplex canescens*

This medium to tall, drought resistant, deciduous or evergreen shrub is adapted to a wide range of soils from near sea level to 8,500 ft. It has excellent palatability for all classes of livestock and wildlife and provides excellent cover for birds and small mammals.

#### Sulfur Flower *Eriogum umbellatum*

This forb is drought tolerant and can grow in full sunlight to partial shade. From basal leaf clumps, erect stalks yield tiny yellow flowers that form balls or umbel-like clusters. Most common on dry rocky slopes, sagebrush deserts, mountain meadows, and on generally well-drained soils.

#### Protstrate summer cypress *Kochia prostrata*

Also known as Forage Kochia, this is a small to medium evergreen shrub adapted to a wide range of sites and soils, including shallow soils with low fertility. It behaves as a warm or cool season plant depending upon the ecotype in which it is planted. Very palatable and nutritious to wildlife.

**Blue Flax Linum lewisii**



This is another drought tolerant, full sunlight forb. Its blue flowers bloom May to July with fresh flowers borne daily. Occurs from foothills to upper montane, mostly on open rocky soils throughout much of western North America. It is often selected for reclamation projects due to its outstanding vigor, beauty, and ability to withstand drought.

**Ladak Alfalfa Medicago sativa**

This is a medium to tall, moderately long-lived perennial. Widely used for pasture, range and revegetation seed mixtures and is easily established. It is a ‘nitrogen fixer’ and is an important part of this seed mix. It is a very winter hardy variety with good yielding characteristics and drought tolerance.

**Palmer Penstemon Penstemon palmeri**



This drought tolerant forb likes full sunlight. Soft pink flowers bloom May to July along tall stout stems. It prefers open exposed areas such as rocky hillsides, road banks, gravel pits or gravelly washes. Basal leaves are semi-evergreen and are palatable to wildlife during spring and winter. It is a very drought hardy plant recommended for revegetating disturbed sites, especially on limestone soils. This forb was selected for ability to establish in erosion control and revegetation seedings. It is persistent and provides succulent winter forage for wildlife.

**Antelope Bitterbrush Purshia tridentata**

This native evergreen prostrate to upright shrub grows from 2 to 15 ft. tall and occurs on medium to well drained soils. It is found on plains, foothills, mountain slopes and ridges. It is an important winter food for muledeer.

**For Further Information:**

**The Nevada Division of Forestry  
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