

Additional Biological Information

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PLANT SPECIES KNOWN TO EXIST AT NWSTF BOARDMAN

WILDLIFE SPECIES THAT PRESENTLY OCCUR, POTENTIALLY OCCUR, OR HAVE OCCURRED IN THE PAST AT NWSTF BOARDMAN

DRAFT - REVEGETATION PLAN FOR AREAS DISTURBED BY CONSTRUCTION AND OPERATION OF WEAPONS TRAINING RANGES AND  
OTHER FACILITIES ON NAVAL WEAPONS SYSTEMS TRAINING FACILITY BOARDMAN

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Plant species known to occur at NWSTF Boardman. <sup>1</sup>

Common Name	Scientific Name
<b>Vascular Plants</b>	
<u>Family Asteraceae (Aster)</u>	
Annual agoseris	<i>Agoseris heterophylla</i>
Annual bursage	<i>Ambrosia acanthicarpa</i>
Diffuse knapweed	<i>Centaurea diffusa</i>
Big sagebrush	<i>Artemisia tridentata</i>
Bull thistle	<i>Cirsium vulgare</i>
Canadian thistle	<i>Cirsium arvense</i>
Carey's balsamroot	<i>Balsamorhiza careyana</i>
Chicory	<i>Chichorium intybus</i>
Cluster tarweed	<i>Madia glomerata</i>
Common cocklebur	<i>Xanthium strumarium</i>
Common dandelion	<i>Taraxacum officinale</i>
Common rabbitleaf	<i>Lagophylla ramosissima</i>
Common spikeweed	<i>Hemizonia pungens</i> var. <i>septentrionalis</i>
Columbia cut-leaf	<i>Hymenopappus filifolius</i> var. <i>filifolius</i>
Columbia coreopsis	<i>Coreopsis atkinsoniana</i>
False-yarrow	<i>Chaenactis douglasii</i> var. <i>achilleaeifolia</i>
Gold stars	<i>Crocidium multicaule</i>
Gray rabbitbrush	<i>Chrysothamnus nauseosus</i>
Green rabbitbrush	<i>Chrysothamnus viscidiflorus</i>
Hairy golden-aster	<i>Chrysopsis villosa</i>
Hawkweed	<i>Hieracium</i> sp.
Hoary aster	<i>Machaeranthera canascens</i>
Horseweed	<i>Conyza canadensis</i>
Hounds-tongue	<i>Hieracium cynoglossoides</i>
Long-leaf hawksbeard	<i>Crepis acuminata</i>
Long-leaved aster	<i>Aster chilensis</i>
Low pussy-toes	<i>Antennaria dimorpha</i>
Nodding beggar-ticks	<i>Bidens cernua</i>
Northern wyethia	<i>Wyethia amplexicaulis</i>
Northwest balsamroot	<i>Balsamorhiza deltoidea</i>
Pineapple weed	<i>Matricaria matricarioides</i>
Prickly lettuce	<i>Lactuca serriola</i>
Scotch thistle	<i>Onopordum acanthium</i>
Shaggy daisy	<i>Erigeron pumilis</i>
Skeleton weed	<i>Stephanomeria paniculata</i>
Slender hawksbeard	<i>Crepis atrabarba</i>
Snakeweed	<i>Gutierrezia sarothrae</i>
Tall pussy-toes	<i>Antennaria anaphaloides</i>
Thread-leaf fleabane	<i>Erigeron filifolius</i>
White tidy tips	<i>Layia glandulosa</i>
Yarrow	<i>Achillea millefolium</i>
Yellow desert daisy	<i>Erigeron linearis</i>
Yellow salsify	<i>Tragopogon dubius</i>
<u>Family Boraginaceae (Borage)</u>	
Common cryptantha	<i>Cryptantha intermedia</i>
Slender popcorn flower	<i>Plagiobothrys tenellus</i>
Fiddleneck tarweed	<i>Amsinckia lycopsoides</i>
<u>Family Brassicaceae (Mustard)</u>	
Clasping peppergrass	<i>Lepidium perfoliatum</i>
Flixweed	<i>Descurainia sophia</i>
Jim-hill mustard	<i>Sysimbrium altissimum</i>

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Common Name	Scientific Name
Prairie rocket	<i>Erysimum asperum</i>
Shepard's purse	<i>Capsella bursa-pastoris</i>
Whitlow-grass	<i>Draba verna</i>
Tall peppergrass	<i>Lepidium virginicum</i>
Tansy mustard	<i>Descurainia pinnata</i>
Tumble mustard	<i>Sisymbrium altissimum</i>
<u>Family Cactaceae (Cactus)</u>	
Prickly pear cactus	<i>Opuntia polyacantha</i>
<u>Family Capparidaceae (Caper)</u>	
Yellow bee plant	<i>Cleome lutea</i>
<u>Family Carophyllaceae (Pink)</u>	
Jagged chickweed	<i>Holosteum umbellatum</i>
Bouncing bett	<i>Saponaria officinalis</i>
<u>Family Chenopodiaceae (Goosefoot)</u>	
Black greasewood	<i>Sarcobatus vermiculatus</i>
Russian thistle	<i>Salsola kali</i>
<u>Family Cupressaceae (Cypress)</u>	
Western juniper	<i>Juniperus occidentalis</i>
<u>Family Dipsacaceae (Teasel)</u>	
Teasel	<i>Dipsacus sylvestris</i>
<u>Family Euphorbiaceae (Spurge)</u>	
Rattlesnake weed	<i>Euphorbia serpyllifolia</i>
<u>Family Fabaceae (Pea)</u>	
Alfalfa	<i>Medicago sativa</i>
Black locust	<i>Robinia pseudo-acacia</i>
Columbia milk-vetch	<i>Astragalus succumbens</i>
Stalked-pod milk-vetch	<i>Astragalus sclerocarpus</i>
Hairy vetch	<i>Vicia villosa</i>
Lance-leaf scurf-pea	<i>Psoralea lanceolata</i>
Laurance's milk-vetch	<i>Astragalus collinus</i> var. <i>laurentii</i>
Licorice	<i>Glycyrrhiza leipdota</i>
Long-leaf locoweed	<i>Astragalus reventus</i> var. <i>reventus</i>
Lupine	<i>Lupinus</i> spp.
Pauper milk-vetch	<i>Astragalus misellus</i>
Shoestring psoralea	<i>Psoralea lanceolata</i>
Speckle-pod milk-vetch	<i>Astragalus lentiginosus</i>
Thread-stalk milk-vetch	<i>Astragalus filipes</i>
Tweedy's milk-vetch	<i>Astragalus tweedyi</i>
White clover	<i>Trifolium repens</i>
White sweet-clover	<i>Melilotus alba</i>
Pursh's milk-vetch	<i>Astragalus purshii</i>
Wyeth's lupine	<i>Lupinus wyethii</i>
Yellow deer-vetch	<i>Lotus corniculatus</i>
Yellow sweet-clover	<i>Melilotus officinalis</i>
<u>Family Gentianaceae (Gentian)</u>	
White-stemmed swertia	<i>Swertia albicaulis</i>
<u>Family Geraniaceae (Geranium)</u>	
Redstem filaree/storksbill	<i>Erodium cicutarium</i>
<u>Family Hydrophyllaceae (Waterleaf)</u>	
Silver-leafed phacelia	<i>Phacelia hastata</i>
Thread-leaf phacelia	<i>Phacelia linearis</i>
<u>Family Lamiaceae (Mint)</u>	
Horehound	<i>Marrubium vulgare</i>
<u>Family Liliaceae (Lily)</u>	

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Common Name	Scientific Name
Douglas' brodiaea	<i>Brodiaea douglasii</i>
Sagebrush mariposa	<i>Calochortus macrocarpus</i>
Panicled death-camas	<i>Zigadenus venenosus</i>
Yellow bells	<i>Fritillaria pudica</i>
<u>Family Linaceae (Flax)</u>	
Wild flax	<i>Linum perenne</i>
<u>Family Malvaceae (Mallow)</u>	
Orange globe mallow	<i>Sphaeralcea munroana</i>
<u>Family Nyctaginaceae (Four-o'clock)</u>	
White-sand verbena	<i>Abronia mellifera</i>
<u>Family Onagraceae (Evening Primrose)</u>	
Common evening primrose	<i>Oenothera strigosa</i>
Pale evening primrose	<i>Oenothera pallida</i>
Parched fireweed	<i>Epilobium paniculatum</i>
<u>Family Plantaginaceae (Plantain)</u>	
English plantain	<i>Plantago lanceolata</i>
Hairy plantain	<i>Plantago patagonica</i>
<u>Family Poaceae (Grass)</u>	
Barren fescue	<i>Festuca bromoides</i>
Bluebunch wheatgrass	<i>Agropyron spicatum</i>
Bottlebrush squirrel tail	<i>Sitanion hystrix</i>
Bulbous bluegrass	<i>Poa bulbosa</i>
Crested wheatgrass	<i>Agropyron cristatum</i>
Cheatgrass	<i>Bromus tectorum</i>
Thickspike wheatgrass	<i>Agropyron dasytachyum</i>
Dune wild rye	<i>Elymus mollis</i>
Foxtail barley	<i>Hordeum murinum</i>
Giant wild rye	<i>Elymus flavescens</i>
Idaho fescue	<i>Festuca idahoensis</i>
Indian ricegrass	<i>Oryzopsis hymenoides</i>
Junegrass	<i>Koeleria cristata</i>
Nevada bluegrass	<i>Poa nevadensis</i>
Nuttall's fescue	<i>Festuca microstachys</i>
Orchard grass	<i>Dactylis glomerata</i>
Saltgrass	<i>Distichlis stricta</i>
Sandberg's bluegrass	<i>Poa sandbergii</i>
Six-weeks fescue	<i>Festuca octoflora</i>
Thurber needle grass	<i>Stipa thurberiana</i>
Western needle-and-thread grass	<i>Stipa comata</i>
Wheat	<i>Triticum aestivum</i>
Yellow wild rye	<i>Elymus cinereus</i>
<u>Family Polemoniaceae (Phlox)</u>	
Desert phlox	<i>Phlox austromontana</i>
Long-leaf phlox	<i>Phlox longifolia</i>
Microsteris	<i>Microsteris gracilis</i>
Small-flowered gilia	<i>Gilia minutiflora</i>
<u>Family Polygonaceae (Buckwheat)</u>	
Broom buckwheat	<i>Eriogonum vimineum</i>
Desert buckwheat	<i>Eriogonum compositum</i>
Snow buckwheat	<i>Eriogonum niveum</i>
Veiny dock	<i>Rumex venosus</i>
Wyeth eriogonum	<i>Eriogonum heracleoides</i>
<u>Family Portulacaceae (Purslane)</u>	
Common purslane	<i>Portulaca oleracea</i>

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Common Name	Scientific Name
<u>Family Ranunculaceae (Buttercup)</u>	
Hornseed buttercup	<i>Ranunculus testiculatus</i>
Upland larkspur	<i>Delphinium nuttallianum</i>
Water buttercup	<i>Ranunculus aquatilis</i>
<u>Family Rosaceae (Rose)</u>	
Antelope bitterbrush	<i>Purshia tridentata</i>
<u>Family Santalaceae (Sandalwood)</u>	
Bastard toad-flax	<i>Comandra umbellata</i>
<u>Family Saxifragaceae (Saxifrage)</u>	
Bulbet prairie star	<i>Lithophragma bulbifera</i>
<u>Family Scrophulariaceae (Figwort)</u>	
Common mullein	<i>Verbascum thapsus</i>
Sand dune penstemon	<i>Penstemon acuminatus</i>
<u>Family Solanaceae (Potato or Nightshade)</u>	
Cut-leaf nightshade	<i>Solanum triflorum</i>
Potato	<i>Solanum tuberosum</i>
<u>Family Umbelliferae (Parsley)</u>	
Bicolor biscuit root	<i>Lomatium leptocarpum</i>
Cous biscuit root	<i>Lomatium cous</i>
Biscuit root	<i>Lomatium macrocarpum</i>
Turpentine cymopterus	<i>Cymopterus terebinthinus</i>
Nine-leaved desert-parsley	<i>Lomatium triternatum</i>
<u>Family Verbenaceae (Verbena)</u>	
Bracted verbena	<i>Verbena bracteata</i>
<u>Non-vascular Plants</u>	
(no common names)	
<u>Mosses</u>	
	<i>Aloina pilifera</i>
	<i>Bryum</i> sp.
	<i>Ceratodon purpureus</i>
	<i>Didymodon australasii</i>
	<i>Didymodon brachyphyllus</i>
	<i>Encalypta</i> cf. <i>rhaptoarpa</i>
	<i>Funaria hygrometrica</i>
	<i>Grimmia montana</i>
	<i>Phascum cuspidatum</i>
	<i>Pseudocrossidium revolutum</i>
	<i>Pterygoneurum ovatum</i>
	<i>Tortula brevipes</i>
	<i>Tortula princeps</i>
	<i>Tortula ruralis</i>
<u>Lichens</u>	
	<i>Acarospora schleicheri</i>
	<i>Cladonia coniocraea</i>
	<i>Cladonia fimbriata</i>
	<i>Cladonia pyxidata</i>
	<i>Collema tenax</i>
	<i>Dermatocarpon hepaticum</i>
	<i>Diploschistes scruposus</i>
	<i>Lecanora muralis</i>
	<i>Leptogium californicum</i>
	<i>Leptogium lichenoides</i>
	<i>Nostoc</i>



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Common Name	Scientific Name
<u>Liverworts</u>	<i>Polychidium albociliatum</i> <i>Psora luridella</i> <i>Cephaloziella divaricata</i>

<sup>1</sup> Sources: McClelland and Bedell (1987), Quade (1994).

Wildlife species mentioned in text, that presently occur, potentially occur, or have occurred in the past at NWSTF Boardman.

Species	Scientific Name
<b>Amphibians</b>	
Great Basin spadefoot toad	<i>Scaphiopus intermontanus</i>
<b>Reptiles</b>	
Common garter snake <sup>1</sup>	<i>Thamnophis sirtalis</i>
Gopher snake	<i>Pituophis melanoleucus</i>
Night snake <sup>1</sup>	<i>Hypsiglena torquata</i>
Northern sagebrush lizard	<i>Scleroporos graciosus</i>
Racer	<i>Coluber constrictor</i>
Rubber boa <sup>1</sup>	<i>Charina bottae</i>
Short-horned lizard	<i>Phrynosoma douglassi</i>
Side-blotched lizard	<i>Uta stansburiana</i>
Striped whipsnake <sup>1</sup>	<i>Masticophis taeniatus</i>
Western fence lizard	<i>Scleroporos occidentalis</i>
Western rattlesnake	<i>Crotalus viridis</i>
Western skink <sup>1</sup>	<i>Eumeces skiltonianus</i>
Western terrestrial garter snake <sup>1</sup>	<i>Thamnophis elegans</i>
<b>Birds</b>	
American crow	<i>Corvus brachyrhynchos</i>
American goldfinch	<i>Carduelis tristis</i>
American kestrel	<i>Falco sparverius</i>
American robin	<i>Turdus migratorius</i>
Bald eagle <sup>1</sup>	<i>Haliaeetus leucocephalus</i>
Barn owl	<i>Tyto alba</i>
Barn swallow	<i>Hirundo rustica</i>
Black-billed magpie	<i>Pica pica</i>
Black-crowned night heron	<i>Nycticorax nycticorax</i>
Black-throated sparrow	<i>Amphispiza bilineata</i>
Blue-winged teal	<i>Anas discors</i>
Brown-headed cowbird	<i>Molothrus ater</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</i>
Brewer's sparrow	<i>Spizella breweri</i>
Bullock's oriole	<i>Icterus bullockii</i>
Burrowing owl	<i>Athene cunicularia</i>
California gull	<i>Larus californicus</i>
California quail	<i>Callipepla californica</i>
Caspian tern	<i>Sterna caspia</i>
Chipping sparrow	<i>Spizella passerina</i>
Chukar	<i>Alectoris chukar</i>
Cliff swallow	<i>Hirundo pyrrhonota</i>
Common nighthawk	<i>Chordeiles minor</i>
Common poorwill	<i>Phalaenoptilus nuttallii</i>
Common raven	<i>Corvus corax</i>
Cooper's hawk	<i>Accipiter cooperii</i>
Dark-eyed junco	<i>Junco hyemalis</i>
Eastern kingbird	<i>Tyrannus tyrannus</i>
European starling	<i>Sturnus vulgaris</i>
Ferruginous hawk	<i>Buteo regalis</i>
Fox sparrow	<i>Passerella iliaca</i>
Golden-crowned kinglet	<i>Regulus satrapa</i>
Golden eagle	<i>Aquila chrysaetos</i>

Wildlife species mentioned in text, that presently occur, potentially occur, or have occurred in the past at NWSTF Boardman.

Species	Scientific Name
Grasshopper sparrow	<i>Ammodramus savannarum</i>
Gray flycatcher	<i>Empidonax wrightii</i>
Gray partridge	<i>Perdix perdix</i>
Horned lark	<i>Eremophila alpestris</i>
House sparrow	<i>Passer domesticus</i>
Killdeer	<i>Charadrius vociferus</i>
Lark sparrow	<i>Chondestes grammacus</i>
Lewis's woodpecker	<i>Melanerpes lewis</i>
Loggerhead shrike	<i>Lanius ludovicianus</i>
Long-billed curlew	<i>Numenius americanus</i>
Long-eared owl	<i>Asio otus</i>
Macgillivray's warbler	<i>Oporornis tolmiei</i>
Mallard	<i>Anas platyrhynchos</i>
Merlin	<i>Falco columbarius</i>
Mountain bluebird	<i>Sialia currucoides</i>
Mourning dove	<i>Zenaida macroura</i>
Northern flicker	<i>Colaptes auratus</i>
Northern harrier	<i>Circus cyaneus</i>
Northern pintail	<i>Anas acuta</i>
Northern rough-legged hawk	<i>Buteo lagopus</i>
Northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>
Orange-crowned warbler	<i>Vermivora celata</i>
Peregrine falcon <sup>1</sup>	<i>Falco peregrinus</i>
Prairie falcon	<i>Falco mexicanus</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Ring-billed gull	<i>Larus delawarensis</i>
Ring-necked pheasant	<i>Phasianus colchicus</i>
Rock wren	<i>Salpinctes obsoletus</i>
Sage grouse <sup>2</sup>	<i>Centrocercus urophasianus</i>
Sage sparrow	<i>Amphispiza belli</i>
Sage thrasher	<i>Oreoscoptes montanus</i>
Savannah sparrow	<i>Passerculus sandwichensis</i>
Say's phoebe	<i>Sayornis saya</i>
Sharp-shinned hawk	<i>Accipiter striatus</i>
Sharp-tailed grouse <sup>2</sup>	<i>Tympanuchus phasianellus columbianus</i>
Short-eared owl	<i>Asio flammeus</i>
Snowy owl	<i>Nyctea scandiaca</i>
Spotted sandpiper	<i>Actitis macularia</i>
Spotted towhee	<i>Pipilo maculatus</i>
Swainson's hawk	<i>Buteo swainsoni</i>
Townsend's solitaire	<i>Myadestes townsendi</i>
Turkey vulture	<i>Cathartes aura</i>
Upland sandpiper	<i>Bartramia longicauda</i>
Vesper sparrow	<i>Pooecetes gramineus</i>
Violet-green swallow	<i>Tachycineta thalassina</i>
Western kingbird	<i>Tyrannus verticalis</i>
Western meadowlark	<i>Sturnella neglecta</i>
Western sandpiper	<i>Calidris mauri</i>
Western tanager	<i>Piranga rubra</i>

Wildlife species mentioned in text, that presently occur, potentially occur, or have occurred in the past at NWSTF Boardman.

Species	Scientific Name
White-crowned sparrow	<i>Zonotrichia leucophrys</i>
Wilson's warbler	<i>Wilsonia pusilla</i>
Yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>
<b>Mammals</b>	
Badger	<i>Taxidea taxus</i>
Belding's ground squirrel <sup>1</sup>	<i>Spermophilus beldingi</i>
Big brown bat <sup>1</sup>	<i>Eptesicus fuscus</i>
Bison <sup>2</sup>	<i>Bison bison</i>
Black-tailed jackrabbit	<i>Lepus californicus</i>
Bobcat <sup>1</sup>	<i>Lynx rufus</i>
Bushy-tailed wood rat <sup>1</sup>	<i>Neotoma cinerea</i>
Columbian ground squirrel <sup>1</sup>	<i>Spermophilus columbianus</i>
Coyote	<i>Canis latrans</i>
Deer mouse	<i>Peromyscus maniculatus</i>
Elk	<i>Cervus elaphus</i>
Golden-mantled ground squirrel <sup>1</sup>	<i>Spermophilus lateralis</i>
Great Basin pocket mouse	<i>Perognathus parvus</i>
House mouse	<i>Mus musculus</i>
Little brown myotis <sup>1</sup>	<i>Myotis lucifugus</i>
Long-tailed weasel	<i>Mustela frenata</i>
Merriam's shrew <sup>1</sup>	<i>Sorex merriami</i>
Montane vole	<i>Microtus montanus</i>
Mountain lion <sup>1</sup>	<i>Felis concolor</i>
Mule deer	<i>Odocoileus hemionus</i>
Northern grasshopper mouse	<i>Onychomys leucogaster</i>
Northern pocket gopher	<i>Thomomys talpoides</i>
Norway rat <sup>1</sup>	<i>Rattus norvegicus</i>
Nuttall's cottontail	<i>Sylvilagus nuttallii</i>
Ord's kangaroo rat	<i>Dipodomys ordii</i>
Little pocket mouse <sup>1</sup>	<i>Perognathus longimembris</i>
Porcupine	<i>Erethizon dorsatum</i>
Pronghorn <sup>2</sup>	<i>Antilocarpa americana</i>
Pygmy rabbit <sup>1</sup>	<i>Brachylagus idahoensis</i>
Raccoon <sup>1</sup>	<i>Procyon lotor</i>
Red fox	<i>Vulpes vulpes</i>
Sagebrush vole	<i>Lemmiscus curtatus</i>
Silver-haired bat <sup>1</sup>	<i>Lasionycteris noctivagrans</i>
Townsend's ground squirrel <sup>1</sup>	<i>Spermophilus townsendii</i>
Vagrant shrew	<i>Sorex vagrans</i>
Washington ground squirrel	<i>Spermophilus washingtoni</i>
Western harvest mouse	<i>Reithrodontomys megalotis</i>
White-tailed jackrabbit	<i>Lepus townsendii</i>
Wolf <sup>2</sup>	<i>Canis lupus</i>

<sup>1</sup> Species that hypothetically could occur at NWSTF Boardman, but it unlikely in most cases.

<sup>2</sup> Species with historical ranges overlapping NWSTF Boardman.

## DRAFT - Revegetation Plan for Areas Disturbed by Construction and Operation of Weapons Training Ranges and Other Facilities on Naval Weapons Systems Training Facility Boardman

Prepared by Jeff Mach, Oregon Military Department  
August 2011

**Species.** Revegetation of disturbed areas on NWSTF Boardman would consist of three actions:

1. Cryptogammic crust (aka biological soil crust) would be collected from facility sites prior to construction and stored. Collected crust material would be screened to produce a homogenous material that would be applied to disturbed areas after completion of construction, either dry or in slurry, to inoculate the soil.
2. A mixture of the following grass would be broadcast onto disturbed sites, at a rate of 12.71 pounds pure live seed per acre:

Species	Native? (y/n)	Noxious? (y/n)	Wildlife value (cover/forage)	Mature height (cm)	Life cycle	# Pure Live Seeds per square meter (PLS/m <sup>2</sup> )	Seeding rate in grams/hectare (g/ha)	Seeding rate in pounds PLS per acre (lbs/ac)
bluebunch wheatgrass, <i>Pseudoroegneria spicata</i> (= <i>Agropyron spicatum</i> )	Y	N	C/F	30-60	Perennial	100	4,097	3.61
Sandberg bluegrass, <i>Poa secunda</i> (= <i>Poa Sandbergii</i> )	Y	N	C/F	30-60	Perennial	100	715	0.63
<i>Festuca idahoensis</i> (Idaho fescue)	Y	N	C/F	60+	Perennial	125	1,703	1.50
needle and thread grass, <i>Hesperostipa comata</i> (= <i>Stipa comate</i> )	Y	N	C	60+	Perennial	25	1,668	1.47
bottlebrush squirrel-tail grass, <i>Elymus elymoides</i> (= <i>Sitanion hystrix</i> )	Y	N	C/F	30-60	Perennial	50	1,589	1.40
Indian ricegrass, <i>Achnatherum hymenoides</i> (= <i>Oryzopsis hymenoides</i> )	Y	N	C/F	30-60	Perennial	100	4,654	4.10
TOTALS						500 PLS/m <sup>2</sup> coverage	14,426 g PLS/ha	12.71 lbs PLS /ac

3. Basin big sagebrush (*Artemisia tridentata* ssp *tridentata*) seed would be broadcast on selected focus areas, typically upwind and outside of weapons training range areas which have a higher potential to burn, at a rate of 1.6 pound per acre (lb/ac).

**Site Preparation and Application:** Preparation of areas for cryptogam inoculation and grass seeding will consist of finish soil grading. No site preparation is planned for basin big sagebrush seeding focus areas. Cryptogam inoculation would be accomplished by direct application of cryptogam material either in a dry form or in a slurry. Grass seed would be applied using a hydroseeder. The grass seed would be applied with SOIL-GUARD™ or cellulose mulch with tackifier. Fertilizer would not be used with this seed mixture. Basin big sagebrush seed would be hand broadcast onto firm, but not compacted, ground and pressed, rolled or dragged to improve seed-to-soil contact, with the goal of leaving the seed at a depth of about 1/16 inch. Fertilizer would not be applied to basin big sagebrush seeding areas.

**Schedule:** Cryptogam inoculation and grass seeding would be conducted between October 1 and January 31. Cryptogam inoculation would be conducted before grass seeding. Sagebrush seeding would be conducted between November 1 and December 31.

**Revegetation Success Criteria:** Cryptogam inoculation will be considered successful upon completion of the action. Grass revegetation would be considered successful if seeding results in a stand of grass providing a uniform coverage of at least 80% density of a representative bunchgrass stand area within two to three years of seeding. If an acceptable stand of grass is not achieved, then the area would be re-seeded between October 1 and January 31. Sagebrush revegetation would be considered successful if one seedling per square meter is established over a 10 square meter area in each seeding focus area after one year. Seeding will be repeated if needed to meet the success criteria.