

## **3.16 VEGETATION**

### **3.16.1 Dominant Vegetation Communities**

The vegetation on lands administered by the BLM within the VPA was mapped in conjunction with the Natural Resources Conservation Service (NRCS). Lands within the VPA under other jurisdictions were not analyzed. Because the soil associations were mapped to a minimum size of 50 acres, the designated vegetation associations only show changes in community types of a minimum of 50 acres as well, making the complex mosaic of natural vegetation not visible at this level of detail. The vegetation associations within the VPA were then classified using vegetation categories defined by the BLM and by GAP analysis (Edwards et al. 1994).

Vegetation across the VPA ranges from desert shrub to boreal forest. The following seven vegetation types are identified in the VPA: plains grassland/herbaceous, desert shrub, sagebrush/perennial grass, pinyon-juniper, mountain shrub, and conifer, which includes aspen/forb. Other minor vegetation/cover types are riparian areas and wetlands, and badland/rock outcrops. Descriptions of the identified vegetation types, including their associated plant species and general locations within the VPA, are provided below. The following associations occur intermixed throughout the VPA.

#### ***3.16.1.1 Plains Grassland/Herbaceous***

This vegetation type is dominated by herbaceous species and includes a few solitary shrubs. The plains grassland/herbaceous type is found in only a small portion of the VPA, but many of the species that compose it are found in the understory of the other associations. Most wildlife species use this area at some time during the year.

#### ***3.16.1.2 Desert Shrub***

Vegetation of the desert shrub type typifies the cold desert environment. It composes approximately 20% of the VPA, mainly in the center of the planning area (e.g., Antelope Flat, Clay Basin, and half of the Myton Bench Area), and is located at the lower elevations from 4,800 to 6,000 feet. This type is characterized by shrubs such as shadscale, winterfat, Mormon tea, Gardner's saltbush, mat saltbush, four-winged saltbush, rabbitbrush, and greasewood (Table 3.16.1). The understory is sparse and may contain Indian ricegrass, galletta, scarlet globemallow, bud sagebrush, spring parsley, and textile onion. Soil salinity is relatively high.

Vegetation treatments or manipulations are not very successful in this type of community, due to the shallow soils and low moisture availability.

<b>TABLE 3.16.1. COMMON PLANTS IN THE DESERT SHRUB COMMUNITY IN THE VPA.</b>	
<b>Scientific Name</b>	<b>Common Name</b>
<b><i>Shrubs</i></b>	
<i>Atriplex canescens</i>	Four-winged saltbush
<i>Atriplex confertifolia</i>	Shadscale
<i>Atriplex corrugata</i>	Mat saltbush
<i>Atriplex gardneri</i>	Gardner's saltbush
<i>Artemisia spinescens</i>	Bud sage
<i>Ceratoides lanata</i>	Winterfat
<i>Chrysothamnus</i> spp.	Rabbitbrush species
<i>Ephedra nevadensis</i>	Mormon tea
<i>Sarcobatus vermiculatus</i>	Greasewood
<b><i>Grasses and Forbs</i></b>	
<i>Agropyron dasystachyum</i> var. <i>dasystachyum</i>	Thickspike wheatgrass
<i>Allium textile</i>	Textile onion
<i>Arenaria</i> spp.	Sandwort
<i>Cymopterus</i> spp.	Spring parsley
<i>Eriogonum</i> spp.	Buckwheat
<i>Descurainia pinnata</i>	Tansy mustard
<i>Hilaria jamesii</i>	Galleta
<i>Phlox</i> spp.	Phlox
<i>Poa sandbergii</i>	Sandberg bluegrass
<i>Poa</i> spp.	Bluegrasses
<i>Sitanion hystrix</i>	Squirreltail
<i>Sphaeralcea</i> spp.	Globemallow
<i>Sporobolus airoides</i>	Alkali sacaton
<i>Stipa hymenoides</i>	Indian ricegrass
Plant names are using Utah Flora 1993.	

### ***3.16.1.3 Sagebrush/Perennial Grass***

The sagebrush association covers approximately 57 percent of the VPA. This association is composed mainly of black sagebrush, basin big sagebrush, Wyoming big sagebrush, and mountain big sagebrush (Table 3.16.2). Other important shrubs are rabbitbrush, Mormon tea, and bitterbrush. Basin big sagebrush and Wyoming big sagebrush dominate the zone between 5,000 and 7,000 feet. Typically, the basin big sagebrush is found in areas of well-drained soils that receive 10-16 inches of annual precipitation, and Wyoming big sagebrush occupies drier, shallow soils that receive 8-12 inches of annual precipitation. Mountain big sagebrush is

dominant in areas over 7,000 feet in elevation that receive 14-20 inches of annual precipitation (Welsh et al. 1987).

The herbaceous understory is typically composed of bluebunch wheatgrass, Idaho fescue, western wheatgrass, Junegrass, Indian ricegrass, and many needlegrasses. Many forbs also occur in this area and are an important resource for sage grouse. Common forb species include balsamroot, mules ears, Indian paintbrush, sego lily, larkspur, phlox, and mustards (Edwards et al. 1994).

The mountain big sagebrush is declining throughout the VPA, as evidenced by the existing, decadent, even-aged stands. The native perennial grassland understory has also been invaded by annual species such as cheatgrass; some invasions cover thousands of acres. Prescribed burning may be used to treat these areas, which would also benefit wildlife habitat and the wildland urban interface. The sagebrush association provides important wildlife habitat in the form of crucial winter range for deer and elk and essential habitat and forage for sage grouse. Domestic livestock grazing occurs in this association, as does recreation.

<b>TABLE 3.16.2. SPECIES COMMONLY ASSOCIATED WITH SAGEBRUSH/ PERENNIAL GRASSLAND COMMUNITIES IN THE VPA.</b>	
<b>Scientific Name</b>	<b>Common Name</b>
<i>Shrubs</i>	
<i>Artemisia nova</i>	Black sagebrush
<i>Artemisia tridentata</i> ssp. <i>tridentata</i>	Basin big sagebrush
<i>Artemisia tridentata</i> ssp. <i>vaseyana</i>	Mountain big sagebrush
<i>Artemisia tridentata</i> ssp. <i>wyomingensis</i>	Wyoming big Sagebrush
<i>Chrysothamnus viscidiflorus</i>	Douglas rabbitbrush
<i>Ceratoides lanata</i>	Winterfat
<i>Ephedra nevadensis</i>	Mormon tea
<i>Purshia tridentata</i>	Antelope bitterbrush
<i>Grasses and Forbs</i>	
<i>Astragalus</i> spp.	Milkvetch
<i>Balsamorhiza</i> spp.	Balsamroot species
<i>Brassica</i> spp.	Mustards species
<i>Calochortus nuttallii</i>	Sego lily
<i>Delphinium</i> spp.	Larkspur species
<i>Erigeron</i> spp.	Fleabane species
<i>Elymus cinereus</i> var. <i>cinereus</i>	Great Basin wildrye
<i>Elymus smithii</i>	Western wheatgrass
<i>Elymus spicatus</i>	Bluebunch wheatgrass
<i>Erysimum asperum</i>	Wallflower
<i>Festuca</i> spp.	Fescue species
<i>Koeleria macrantha</i>	Junegrass

<b>TABLE 3.16.2. SPECIES COMMONLY ASSOCIATED WITH SAGEBRUSH/ PERENNIAL GRASSLAND COMMUNITIES IN THE VPA.</b>	
<b>Scientific Name</b>	<b>Common Name</b>
<i>Lupinus</i> spp.	Lupine species
<i>Phlox</i> spp.	Phlox species
<i>Stipa</i> spp.	Needlegrass species
<i>Stipa hymenoides</i>	Indian ricegrass
<i>Wyethia amplexicaulis</i>	Mules ears
Plant names are using Utah Flora 1993.	

### **3.16.1.4 Pinyon-Juniper**

This association occurs at slightly higher elevations than the sagebrush. Typically, there is a wide transition zone from juniper-sagebrush to juniper, so the boundaries between these associations are indistinct.

In the juniper-dominated areas, the understory's percent cover generally decreases. Therefore, this association has many management challenges. Vegetation manipulation, in the form of chaining and prescribed burns, has been used in the past. (In the 1960s and 1970s, 11,600 acres in the VPA were chained and reseeded successfully, and in the 1980s, chaining occurred in Wood Canyon in the Nine Mile area and in Browns Park.) Through vegetation manipulation, openings that are beneficial to wildlife and ecosystem health can be created. Dense stands of juniper provide high-quality nesting habitat and thermal cover, but little forage value. Many more animal species can use this association if the juniper stands have a varied age class and structure. Common plant species in this association are shown in Table 3.16.3.

<b>TABLE 3.16.3. SPECIES COMMONLY ASSOCIATED WITH PINYON-JUNIPER COMMUNITIES IN THE VPA.</b>	
<b>Scientific Name</b>	<b>Common Name</b>
<b><i>Trees</i></b>	
<i>Pinus edulis</i>	Pinyon pine
<i>Juniperus osteosperma</i>	Juniper
<b><i>Shrubs</i></b>	
<i>Artemisia tridentata</i> ssp. <i>tridentata</i>	Basin big sagebrush
<i>Chrysothamnus</i> spp.	Rabbitbrush species
<i>Ceratoides lanata</i>	Winterfat
<i>Ephedra nevadensis</i>	Mormon tea
<b><i>Grasses and Forbs</i></b>	
<i>Astragalus</i> spp.	Milkvetch species
<i>Erigeron</i> spp.	Fleabane species
<i>Elymus cinereus</i> var. <i>cinereus</i>	Great Basin wildrye
<i>Elymus smithii</i>	Western wheatgrass

<b>TABLE 3.16.3. SPECIES COMMONLY ASSOCIATED WITH PINYON-JUNIPER COMMUNITIES IN THE VPA.</b>	
<b>Scientific Name</b>	<b>Common Name</b>
<i>Erysimum asperum</i>	Wallflower
<i>Festuca</i> spp.	Fescue species
<i>Koeleria macrantha</i>	Junegrass
<i>Lupinus</i> spp.	Lupine species
<i>Phlox</i> spp.	Phlox species
<i>Stipa hymenoides</i>	Indian ricegrass
Plant names are using Utah Flora 1993.	

### **3.16.1.5 Mountain Shrub**

This association is sometimes called browse, because a large proportion of the species in this association are of high forage and cover value for wildlife. Dominant shrub species include serviceberry, gamble oak, mountain mahogany, snowberry, squaw apple, antelope bitterbrush, and sagebrush (Table 3.16.4). The sagebrush may occasionally grow densely in areas, but generally, it is less than 50% of the overall composition in this association. Common herbaceous species include showy goldeneye, whorled buckwheat, hoary aster, sticky geranium, and a variety of native grasses. Mountain shrub occurs in more sheltered microclimates within the VPA than the sagebrush/perennial grass association.

<b>TABLE 3.16.4. SPECIES COMMONLY ASSOCIATED WITH MOUNTAIN SHRUB COMMUNITIES IN THE VPA.</b>	
<b>Scientific Name</b>	<b>Common Name</b>
<b><i>Shrubs</i></b>	
<i>Artemisia tridentata</i>	Sagebrush
<i>Ceanothus</i> spp.	Buckbrush species
<i>Cercocarpus montanus</i>	Mountain mahogany
<i>Amelanchier</i> spp.	Serviceberry species
<i>Purshia tridentata</i>	Antelope bitterbrush
<i>Quercus gambelii</i>	Gamble oak
<i>Ribes cereum</i>	Wax currant
<i>Symphoricarpos oreophilus</i>	Mountain snowberry
<b><i>Grasses and Forbs</i></b>	
<i>Agastache urticifolia</i>	Hyssop
<i>Delphinium</i> spp.	Larkspur species
<i>Elymus glaucus</i>	Blue wildrye
<i>Elymus trachycaulus</i>	Slender wheatgrass
<i>Eriogonum heracleoides</i>	Whorled buckwheat
<i>Eriogonum</i> spp.	Buckwheat species

<b>TABLE 3.16.4. SPECIES COMMONLY ASSOCIATED WITH MOUNTAIN SHRUB COMMUNITIES IN THE VPA.</b>	
<b>Scientific Name</b>	<b>Common Name</b>
<i>Erigeron</i> spp.	Fleabane species
<i>Festuca</i> spp.	Fescue species
<i>Geranium viscosissimum</i>	Sticky geranium
<i>Viguiera multiflora</i>	Showy goldeneye
<i>Mahonia repens</i>	Oregon grape
<i>Machaeranthera canescens</i>	Hoary aster
<i>Lupinus</i> spp.	Lupine species
<i>Phlox</i> spp.	Phlox species
<i>Poa</i> spp.	Bluegrass species
<i>Penstemon</i> spp.	Penstemon species
<i>Senecio</i> spp.	Groundsel species
<i>Stipa</i> spp.	Needlegrass species
<i>Trifolium</i> spp.	Clover species

### **3.16.1.6 Conifer Forest: Conifer/Aspen, Aspen/Forb, and Spruce/Fir**

These three smaller vegetation associations combine to form the conifer forest association. The conifer forest association occurs at the highest elevations, mostly at the outer fringes of the VPA, covering approximately 4% of the total land area within the VPA. Douglas fir, spruce, ponderosa pine, and aspen communities are scattered throughout the higher elevations (7,500–10,500 feet). Because of the elevation, cheatgrass is not a significant threat. Elk, deer, and grouse frequently use this association in the summer. Domestic livestock also use this association for its forage and cover resources. Common species are shown in Table 3.16.5.

<b>TABLE 3.16.5. SPECIES COMMONLY ASSOCIATED WITH CONIFER FOREST COMMUNITY IN THE VPA.</b>	
<b>Scientific Name</b>	<b>Common Name</b>
<b><i>Trees</i></b>	
<i>Pseudotsuga menziesii</i>	Douglas fir
<i>Abies</i> spp.	Fir species
<i>Picea</i> spp.	Spruce species
<i>Pinus ponderosa</i>	Ponderosa pine
<i>Pinus</i> spp.	Pine species
<i>Populus tremuloides</i>	Quaking aspen
<b><i>Shrubs</i></b>	
<i>Ribes</i> spp.	Currant species
<i>Rosa woodsii</i>	Wood rose

<b>TABLE 3.16.5. SPECIES COMMONLY ASSOCIATED WITH CONIFER FOREST COMMUNITY IN THE VPA.</b>	
<b>Scientific Name</b>	<b>Common Name</b>
<i>Salix</i> spp.	Willow species
<i>Sambucus pubens</i>	Elderberry
<i>Symphoricarpos oreophilus</i>	Snowberry
<b><i>Grasses and Forbs</i></b>	
<i>Achillea millefolium</i>	Western yarrow
<i>Aquilegia coerulea</i>	Columbine
<i>Delphinium occidentale</i>	Tall larkspur
<i>Elymus trachycaulus</i>	Slender wheatgrass
<i>Frasera speciosa</i>	Green gentian
<i>Festuca</i> spp.	Fescue species
<i>Geranium</i> spp.	Geranium species
<i>Heracleum lanatum</i>	Cow parsnip
<i>Melica bulbosa</i>	Oniongrass
<i>Lupinus</i> spp.	Lupine species
<i>Mertensia</i> spp.	Bluebell species
<i>Phleum alpinum</i>	Alpine timothy
<i>Stipa</i> spp.	Needlegrass species
Plant names are using Utah Flora 1993.	

### ***3.16.1.7 Riparian Areas and Wetlands***

Approximately 16,000 acres of floodplains are found along the Green and White Rivers and Bitter, Evacuation, Sweetwater, and Willow Creeks in the Book Cliffs portion of the VPA. The Diamond Mountain portion of the VPA contains 15,650 acres of riparian areas as well as perennial and intermittent streams (BLM 1993).

The ecological condition of the wetland and riparian areas in the VPA is considered to be threatened by flow alterations, non-native plant species, and grazing. Whitetop and tall whitetop are firmly established in the Green River watershed and in moist places that receive high pressure from recreation. Tamarisk is also well established along the river corridors, and *Phragmites* stands are increasing in size and distribution.

### ***3.16.1.8 Badland/Rock Outcrops***

The badlands are characterized in the Uinta Basin as Mancos shales, appearing as red and gray banded, eroded mudstones and sandstones and shale layers of the Uinta Formation. Mancos shales are high in selenium, and sometimes they have a sandstone cap layer. The badland or rock outcrop association is scattered throughout the resource area, but it comprises only 3% of the total land area.

Vegetation on the badlands is very sparse; extensive areas of bare ground occur. Vegetation generally grows in areas where water can collect and at the base of slopes. A few annuals are

tolerant of the side slopes in wet years, but such seasons are short. Gardner's saltbush and mat saltbush are the dominant species.

Antelope use these areas for forage and bedding, especially in the winter. Domestic sheep use the shrubs on the base slopes and in transition zones with other vegetation types. Some steeper, vertical slopes and knobs are used by raptors for nest sites. Wildlife use of this community is low in comparison to other communities, but it is relatively important to the wildlife that do use it.

### **3.16.2 Invasive Species and Noxious Weeds**

At least 23,000 acres of noxious and undesirable weeds are a management concern, spreading and becoming a common threat to many areas, within the VPA (BLM 2001). Many large infestations in the area also occur on private and Tribal lands adjacent to or near BLM lands. Of particular management concern are potential and existing populations of invasive species in the oil and gas fields that are receiving increased activity and interest. Human activities, OHV use and vehicles, construction activities, soil disturbance, wildlife movement, and domestic livestock grazing activities can increase the spread and establishment of noxious weeds.

Noxious weeds are identified and recognized by the federal government, the state, and local counties. Within the VPA, the BLM office would control all weeds designated as noxious, as per regulations. For a list of the noxious weeds for the VPA, refer to Table 3.16.6.

The Upper Green River Cooperative Weed Management Area, which includes Daggett County in Utah and Sweetwater County in Wyoming, was formed to manage weeds across lands under various jurisdictions and to pool resources for weed control activities and education. The Uintah County Weed Management Area and the Duchesne County Weed Management Area were organized in 2003 to meet similar objectives. Current collaborative weed management agencies include the NPS, BLM, USFS, UDWR, Ute Tribe, and SITLA. One result of collaborative efforts is the Red Creek Tamarisk Project, which spans all property boundaries; the tamarisk is being controlled both in Wyoming and Utah on the Red Creek watershed.

Russian knapweed, spotted knapweed, Canada thistle, tall whitetop, whitetop, musk thistle, Scotch thistle, and leafy spurge have been singled out as the most invasive species and have become the priority for management and control due to their expanding populations on BLM lands in the VPA. Russian knapweed occurs from Myton to Browns Park with large infestations on private and Tribal lands in the Roosevelt area and the Green River corridor. Also of concern are the increasing populations of Russian knapweed in the oil and gas fields. So far, two populations of spotted knapweed are known: one is located on Diamond Mountain, the other on Blue Mountain. An infestation of diffuse knapweed was located on Blue Mountain, resulting in a special emphasis area for control. One infestation of leafy spurge occurs on BLM lands; however, there are also populations on nearby private land. Canada thistle is a problem in moist areas, especially where livestock use is prevalent. Scotch thistle is coming in as patches scattered throughout the VPA. Whitetop is a problem scattered across the VPA and is increasing in the oil and gas fields. Tall whitetop has major infestations on all land ownerships in all three counties, especially in the Green River corridor.

Henbane and houndstongue are undesirable plants that are targeted by BLM for control on the VPA due to the increased infestations on native rangelands. These species are prevalent in the Argyle Ridge area, and Nine Mile Canyon. In the Book Cliff portion of the VPA they are

prevalent on Seep Ridge and in the Willow Creek watershed. Henbane is a threat in the Browns Park area due to heavy infestations in Wyoming, where it is not controlled.

Russian thistle, halogeton, and cheatgrass are undesirable weed species that occur throughout the Uinta Basin, Clay Basin, and Browns Park. These three plants are already heavily established along the roadsides, and the populations increase with oil field development. Cheatgrass has become so widespread that control efforts are focused on reducing its density through large-scale habitat manipulation programs, and not by individual sprayings. In 1992, a cheatgrass inventory identified 55,700 acres as having greater than 60% cheatgrass cover, and 162,000 acres were identified as having 10-60% cheatgrass cover. The cheatgrass infestation in the VPA has increased and is a major management concern.

Tamarisk has effectively established itself along all the riparian ecosystems, as well as in patches where moisture accumulates in the desert shrub and sagebrush/grass communities. Some control has been gained over the tamarisk infestations via herbicide use in Red Creek and Browns Park. However, some areas of tamarisk are currently protected as critical habitat for the federally endangered southwestern willow flycatcher, which further complicates its management. Tamarisk was listed as a county noxious weed in Uintah County as of 2003.

<b>TABLE 3.16.6. NOXIOUS WEEDS AND UNDESIRED PLANT SPECIES.</b>			
<b>Common Name</b>	<b>Scientific Name</b>	<b>Status</b>	<b>Known Distribution</b>
Bermudagrass	<i>Cynodon dactylon</i>	State Noxious Weed	No populations known at this time
Dyer's woad	<i>Isatis tinctoria</i>	State Noxious Weed	Found on private land in Duchesne and Uintah Counties
Field bindweed (wild morning glory)	<i>Convolvulus arvensis</i>	State Noxious Weed	Occasional. Heavy infestations in farm and city lands
Johnsongrass	<i>Sorghum halepense</i>	State Noxious Weed	No populations known at this time
Knapweed, diffuse	<i>Centaurea diffusa</i>	State Noxious Weed	No populations known at this time
Knapweed, Russian	<i>Centaurea repens</i>	State Noxious Weed	Heavy infestations especially in Pelican Lake area, Green River, Browns Park and adjacent lands to Myton, to Roosevelt. Increasing in the oil and gas fields
Knapweed, spotted	<i>Centaurea maculosa</i>	State Noxious Weed	Small population on Diamond Mountain
Knapweed, squarrose	<i>Centaurea squarrosa</i> or <i>Centaurea virgata</i>	State Noxious Weed	No populations known at this time
Leafy spurge	<i>Euphorbia esula</i>	State Noxious Weed	Small population on ditch area, some on private lands
Medusahead	<i>Taeniatherum caput-medusae</i>	State Noxious Weed	No populations known at this time

<b>TABLE 3.16.6. NOXIOUS WEEDS AND UNDESIREED PLANT SPECIES.</b>			
<b>Common Name</b>	<b>Scientific Name</b>	<b>Status</b>	<b>Known Distribution</b>
Purple loosestrife	<i>Lythrum salicaria</i>	State and Uintah County Noxious Weed	Coming into east Duchesne County. No populations known on BLM lands at this time
Quackgrass	<i>Agropyron repens</i> or <i>Elytrigia repens</i>	State Noxious Weed	Occasional
Tall whitetop (perennial pepperweed)	<i>Lepidium latifolium</i>	State Noxious Weed	Very prevalent along all riparian areas and moist patches
Canada thistle	<i>Cirsium arvense</i>	State Noxious Weed	Scattered
Musk thistle	<i>Carduus nutans</i>	State Noxious Weed	Scattered
Scotch thistle (cotton thistle)	<i>Onopordum acanthium</i>	State Noxious Weed	Scattered
Whitetop (hoary cress)	<i>Cardaria draba</i>	State Noxious Weed	Very prevalent along all riparian areas and moist patches
Yellow starthistle	<i>Centaurea solstitialis</i>	State Noxious Weed	No populations known at this time
Russian olive	<i>Elaeagnus angustifolia</i>	Duchesne and Uintah County Noxious Weed	Scattered
<b><i>Other Undesirable Plant Species</i></b>			
Black henbane	<i>Hyoscyamus niger</i>	Undesired Plant Species	Very prevalent in Book Cliffs, Nine Mile Canyon, and Argyle
Bull thistle	<i>Cirsium vulgare</i>	Undesired Plant Species	Occasional
Buffalobur	<i>Solanum rostratum</i>	Undesired Plant Species	No populations known at this time
Camelthorn	<i>Alhagi camelorum</i>	Undesired Plant Species	No populations known at this time
Common cocklebur	<i>Xanthium strumarium</i>	Undesired Plant Species	No populations known at this time
Common crupina	<i>Crupina vulgaris</i>	Undesired Plant Species	No populations known at this time
Goat's rue	<i>Galega officinalis</i>	Undesired Plant Species	No populations known at this time
Jointed goatgrass	<i>Aegilops cylindrica</i>	Undesired Plant Species	No populations known at this time
Low larkspur	<i>Delphinium nuttallianum</i>	Undesired Plant Species	No populations identified for control. Common native plant
Poison hemlock	<i>Conium maculatum</i>	Undesired Plant Species	No populations known at this time
Poverty weed	<i>Iva axillaris</i>	Undesired Plant Species	No populations known at this time

**TABLE 3.16.6. NOXIOUS WEEDS AND UNDESIRE D PLANT SPECIES.**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Status</b>	<b>Known Distribution</b>
Purple starthistle	<i>Centaurea calcitrapa</i>	Undesired Plant Species	No populations known at this time
Silverleaf nightshade	<i>Solanum elaeagnifolium</i>	Undesired Plant Species	No populations known at this time
St. John's wort	<i>Hypericum perforatum</i>	Undesired Plant Species	No populations known at this time
Velvetleaf	<i>Abutilon theophrasti</i>	Undesired Plant Species	No populations known at this time
Water hemlock	<i>Cicuta douglasii</i>	Undesired Plant Species	No populations identified for control. Common native plant
Wild proso millet	<i>Panicum miliaceum</i>	Undesired Plant Species	No populations known at this time
Yellow nutsedge	<i>Cyperus esculentus</i>	Undesired Plant Species	No populations known at this time
Toadflax, Dalmatian	<i>Linaria dalmatica</i>	Undesired Plant Species	One site in Browns Park
Toadflax, yellow	<i>Linaria vulgaris</i>	Undesired Plant Species	No populations known at this time
Whorled or poison milkweed	<i>Asclepias subverticillata</i>	Undesired Plant Species	Occasional
Halogeton	<i>Halogeton glomerata</i>	Undesired Plant Species	Numerous infestations
Cheatgrass	<i>Bromus tectorum</i>	Undesired Plant Species	Numerous major infestations
Houndstongue	<i>Cynoglossum vulgare</i>	Undesired Plant Species	Very prevalent in Book Cliffs, Nine Mile Canyon, and Argyle

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