

Appendix P

Federally Listed Species and Sensitive Species

1 INTRODUCTION

U.S. Forest Service (USFS) and Bureau of Land Management (BLM) management activities promote the continued conservation of federally listed species and USFS or BLM identified sensitive species and the habitats on which they depend. The tables below display 1) federally listed plant, wildlife, and fish species (USFS and BLM) followed by USFS sensitive species, 2) and BLM sensitive species. Sensitive fish species (BLM and USFS) are combined in the last table. An evaluation of sensitive species is located in Appendix T.

2 FEDERALLY LISTED SPECIES AND THEIR HABITAT

Table P.1: Federally Listed Plant Species and Critical Habitat on the San Juan National Forest and Tres Rios Field Office

Plant Species	Status	Habitat Group
Pagosa skyrocket (<i>Ipomopsis polyantha</i>)	Endangered with designated Critical Habitat	Mancos shale soils in mountain grasslands, mountain shrublands, and ponderosa pine stands
Knowlton's cactus (<i>Pediocactus knowltonii</i>)	Endangered	Rolling, gravelly hillsides in pinyon-juniper woodlands
Mesa Verde cactus (<i>Sclerocactus mesae-verde</i>)	Threatened	Sparsely vegetated badlands of the Fruitland and Mancos Shale formations
Schmoll's milkvetch (<i>Astragalus schmolliae</i>)	Candidate	Dense pinyon-juniper woodlands

Notes to Table P.1

There is one known population of *Pagosa skyrocket* on the TRFO. There are no known populations on the SJNF, but there is suitable habitat on the SJNF. The USFWS has designated four Critical Habitat Units for *Pagosa skyrocket*; two are occupied, and two are unoccupied. One of the occupied Critical Habitat Units is on TRFO land. The two unoccupied Critical Habitat Units occur on SJNF lands.

There are no known populations of *Knowlton's cactus* on the SJPL but there is suitable habitat on both SJNF and TRFO lands in Archuleta and La Plata Counties, Colorado.

There are no known populations of *Mesa Verde cactus* or *Schmoll's milkvetch* on the SJNF or TRFO, but there is suitable habitat for these species on the TRFO.

Table P.2: Federally Listed Terrestrial Wildlife Species on the San Juan National Forest and Tres Rios Field Office

Terrestrial Wildlife Species	Status	Habitat Group
Canada lynx (<i>Lynx Canadensis</i>)	Threatened	High-elevation conifer
Uncompahgre fritillary butterfly (<i>Boloria acrocynema</i>)	Endangered	Alpine
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	Endangered	Riparian
Mexican spotted owl (<i>Strix occidentalis lucida</i>)	Threatened	Douglas-fir, ponderosa pine
Gunnison sage-grouse (<i>Centrocercus minimus</i>)	Proposed Endangered with Proposed Critical Habitat	Sagebrush shrublands
North American wolverine (<i>Gulo gulo</i>)	Proposed Threatened	Alpine, and subalpine forests

Notes to Table P.2

In March 2000, the **Canada lynx** was listed as a federally threatened species under the ESA. In March 2009, the USFWS revised the critical habitat designated for lynx to include approximately 39,000 square miles encompassing five critical habitat units in Maine, Minnesota, Montana, Wyoming, Idaho, and Washington.

The planning area represents the southern edge of the historic range of the Canada lynx. Individual lynx, or population groups, have been extremely rare or absent within the planning area and across Colorado since the early 1900s. In 1999, the CPW initiated a lynx recovery program intended to augment any existing populations in the southern Rocky Mountains with transplants from Canada and Alaska. The augmentation program resulted in 218 lynx being transplanted into the San Juan Mountains between 1999 and 2006. Habitat on USFS and BLM lands within the planning area have contributed to the reintroduction effort and are considered part of a core area that is important to recovery of lynx in Colorado. From February 1999 to February 2005, 144 of the reintroduced lynx were detected in the planning area and 126 kittens were born in Colorado as of June 2009.

In the southern Rocky Mountains, high-elevation spruce-fir forests make up the primary habitat for lynx and its primary prey species, the snowshoe hare. There are approximately 777,000 acres of lynx habitat on NFS lands and approximately 15,000 acres of lynx habitat on BLM lands in the planning area.

Currently, there is no federal recovery plan published for this species. NFS lands are managed under the guiding requirements of the SRLA and LCAS (Ruediger et al. 2000, revised in 2006 [USFS and USFWS 2006]). On BLM lands, Canada lynx habitat is managed according to the Canada Lynx Conservation Agreement, which was signed by the USFS, BLM, and USFWS in the spring of 2000 (USFS and USFWS 2000). Under that agreement, the land management agencies agreed to consider the recommendations contained in the LCAS in order to help guide planning activities and ESA Section 7 consultation. These guiding documents include habitat definitions, recommended analysis methods, and conservation measures, goals, objectives, standards, and guidelines intended to help provide a consistent approach to conserve Canada lynx in the conterminous United States.

The **Mexican spotted owl** is one of three subspecies of spotted owl in North America. In March 1993, the Mexican subspecies was listed as a federally threatened species under the ESA. The proposed rule to designate critical habitat for the Mexican spotted owl was completed by the USFWS in February 2001. That proposal included 4.6 million acres across Colorado, Utah, Arizona, and New Mexico. The 2001 proposal was considered inadequate by the courts in October 2003, and a new final rule to designate critical habitat was published in August 2004. The 2004 rule included 8.6 million acres across federal lands in Colorado, Utah, Arizona, and New Mexico. Approximately 322,326 acres (approximately 3.7%) of this land occurs in Colorado. The planning area was not included in the 2001 or the 2004 critical habitat designations.

There have been numerous Mexican spotted owl surveys conducted across the SJNF and TRFO since the late 1980s. To date, protocol surveys have detected only three Mexican spotted owls on NFS lands (two juvenile females and one juvenile male). These detections occurred during separate years in the southeastern portion of the planning area. These detections may represent individuals that occasionally disperse and/or move to and from more suitable habitat to the south. There have been no Mexican spotted owl detections on BLM lands in the planning area. Nesting has been documented in Mesa Verde National Park, but no owls have been located outside the park on adjacent BLM-administered or NFS lands. The occurrence of Mexican spotted owl within the planning area appears to be irregular and uncommon, and similar to other locations in Colorado where apparently suitable habitat remains unoccupied.

Mexican spotted owl habitat was mapped across the planning area in 1992. A total of 67,324 acres of habitat in 31 locations were mapped along the southern boundary of the planning area. These areas represent approximately 2% of the total acreage in the planning area. Habitat for Mexican spotted owl would be re-evaluated as the current Mexican Spotted Owl Recovery Plan (USFWS 1995) is updated and available (USFWS 2012c).

Mexican spotted owl habitat in the planning area occurs mostly in steep, narrow, rocky canyons that are rarely subject to management activities; therefore, habitat has been minimally affected by management actions. Habitat present across most areas has been influenced by insects, disease, and wildfire. These disturbance processes have reduced habitat quality over the last 20 years. Management activities (mechanical fuels reduction, prescribed fire, forest restoration projects) have been completed in some locations to help restore habitat conditions and reduce the risk of catastrophic wildfire. Management of Mexican spotted owl habitat across the planning area has been consistent with the current recovery plan, and would continue as that recovery plan is updated. Continued inventory and monitoring of suitable habitat and maintenance of occupied habitat would be the primary conservation measures that the SJNF and TRFO would use in order to aid in the recovery of the species.

The ***Southwestern willow flycatcher*** is one of four or five recognized subspecies of the willow flycatcher (Sedgwick 2001). In March 1995, the southwestern willow flycatcher was listed as a federally endangered species under the ESA. The proposed rule to designate critical habitat for the southwestern willow flycatcher was completed in October 2004. The proposal included 1,556 floodplain miles in California, Arizona, Nevada, Utah, Colorado, and New Mexico as critical habitat within the 100-year floodplain or flood-prone areas. The proposal also identified the essential stream and lake edge habitats thought to be essential for conserving the species (USFWS 2004). There is no designated critical habitat for the southwestern willow flycatcher in the planning area.

The current survey information indicates that southwestern willow flycatchers are localized and uncommon on the SJNF. There are no confirmed breeding populations of southwestern willow flycatcher in the planning area. Increasing trends in overall riparian habitat conditions suggest that ample unoccupied habitat is available if the subspecies eventually begins nesting within the planning area.

In summary, the current information suggests that the planning area does not measurably contribute to the recovery or overall viability of the southwestern willow flycatcher. The possibility of future individual breeding pairs, however, cannot be discounted as the recovery of the subspecies expands. Continued monitoring of suitable and occupied habitats would continue to utilize the USFWS protocol. Management of southwestern willow flycatcher habitat across the planning area has been consistent with the current Southwestern Willow Flycatcher Recovery Plan (USFWS 2002) and would continue as the recovery plan is updated. Continued inventory and monitoring of suitable habitat and maintenance of occupied habitats would occur in order to aid in the recovery of the species.

The ***Uncompahgre fritillary butterfly*** was discovered in 1978 and described as a new species in 1980. In 1991, it was listed as a federally endangered species. The Uncompahgre fritillary butterfly has the smallest range of any North American butterfly and is restricted to alpine, snow willow habitats within a small geographical area in the San Juan Mountains and southern Sawatch Range in southwest Colorado. Suitable habitat in the planning area occurs on both BLM-administered and NFS lands.

Suitable habitat for the Uncompahgre fritillary butterfly is restricted to topographic features that rarely occur in the planning area. Suitable habitat consists of snow willow above 13,000 feet on north, northeast, and east aspects. Snow willow serves as the host plant for the eggs and larvae of the Uncompahgre fritillary butterfly. Most of the snow willow patches in the planning area do not support the vegetative characteristics of occupied sites found on neighboring forests (may be related to soil and moisture factors).

Since 1983, the number of known Uncompahgre fritillary butterfly colonies across the species range has increased (as more extensive surveys have been initiated). Currently, the species is known, or suspected, to occur at 12 sites, all of which contain various numbers of population clusters. After at least 9 years of intensive inventory, all probable locations for finding additional Uncompahgre fritillary butterfly colonies are nearly exhausted. There are no additional priority sites to survey within the planning area that may possibly support the species (although one additional site on SJNF land is considered a possibility, if snow willow characteristics are adequate).

The Uncompahgre fritillary butterfly was not known to occur in the planning area until 2004, when a small habitat patch associated with an existing colony was discovered on SJNF lands. There are no threats

identified for this colony (due to its remoteness), and habitat has remained stable. Current monitoring shows the population is persistent, and the entire colony currently remains one of the most extensive of the known populations (Ellingson 2003).

Currently, there are enough known colonies of sufficient size to down-list the Uncompahgre fritillary butterfly. However, the down-listing criteria calls for 10 stable colonies for a period of 10 years, and not enough colonies have been known for the time specified. There is also a need for more long-term monitoring in order to determine population changes over time. Due to their seclusion, there are few, if any, immediate risks or management issues associated with the colonies. Continued monitoring and confidentiality of colony locations are the primary conservation measures pursued for the species.

The **Gunnison sage-grouse** is proposed for listing as endangered under the ESA, and critical habitat has been proposed in the planning area.

Gunnison sage-grouse currently occupy a small fraction of their historical range and have been extirpated from much of their presumed historical distribution due to habitat conversion (Gunnison Sage-grouse Rangewide Steering Committee 2005). Although their distribution was probably always somewhat fragmented, the amount of fragmentation has greatly increased due to habitat loss. As of 2004, the total population of this species was estimated at approximately 3,200 breeding birds in seven populations (75% of which occurred in the Gunnison Basin). In 2011 CPW estimated Gunnison sage-grouse populations to be 4,155 breeding birds. The Gunnison sage-grouse remains a species of conservation interest in this planning process because two small populations (Dove Creek and San Miguel) occur on lands administered by the TRFO and because of continued habitat and population viability concerns. The Dove Creek and San Miguel populations are not thought to contribute to the overall viability of Gunnison sage-grouse range wide. Dove Creek supports 1.4% of the total Gunnison sage-grouse population and San Miguel supports 2.2% of the total population.

There are many threats and challenges associated with the management and continued persistence of Gunnison sage-grouse. The primary threat, however, is the permanent loss, and the associated fragmentation, of sagebrush (Gunnison Sage-grouse Rangewide Steering Committee 2005). These threats are amplified by land ownership patterns, especially where the risk of urban expansion and/or habitat conversion is high. Currently, the majority of the occupied habitat occurs on private land; therefore, the amount of conservation benefit provided by lands administered by the TRFO would be minimal for these subpopulations. In the Dove Creek area (41,284 acres), for example, private lands make up roughly 79% of the proposed occupied critical habitat, while BLM lands account for approximately 21%. The amount of TRFO-administered lands is even smaller for the Miramonte subpopulation, which covers approximately 6,782 acres of proposed occupied critical habitat (where BLM lands make up approximately 41% of the proposed occupied critical habitat). In the Dry Creek area proposed occupied critical habitat is approximately 61,823 acres; however, most (approximately 57%) of the occupied habitat occurs on BLM lands; therefore, the TRFO may have more of a management influence on the Dry Creek subpopulation. There is at least one known lek on BLM lands in the Dry Creek Basin. It is possible that leks in the basin exist that have not been identified. Lek sites do occur on adjacent private and state lands, and the habitats on BLM lands are important in providing nesting and brood-rearing habitat in conjunction with those lek sites.

In 2005, the Gunnison Sage-grouse Rangewide Conservation Plan (Gunnison Sage-grouse Rangewide Steering Committee 2005) was completed in order to supplement information in the local conservation plans and provide a range-wide perspective regarding the conservation of Gunnison sage-grouse. Conservation efforts for the Gunnison sage-grouse within the planning area would continue through the opportunities identified in these plans and through local partnerships, as opportunities arise.

On February 4, 2013, the USFWS published a proposed rule to list the distinct population segment (DPS) of the **North American wolverine** occurring in the 48 contiguous United States as a threatened species under the ESA (USFWS 2013b). The proposed rule did not propose any critical habitat for the species. The primary reason for the proposed listing was threats to habitat from global climate change. There are numerous historical records of wolverines from the Colorado Rocky Mountains. However, the species is believed to have been extirpated from the southern Rocky Mountains including Colorado, New Mexico,

and Wyoming by the early 1900s. In May 2009 a radio-collared male wolverine was tracked from the Yellowstone ecosystem south into north-central Colorado, becoming the first confirmed wolverine occurrences in Colorado since 1919 (Inman et al. 2009).

Climate change has been projected to have the potential to reduce suitable wolverine habitat by 31% in the contiguous United States by the year 2045, and by 63% by 2099 (USFWS 2013b). Deep snow that persists into the month of May is essential for wolverine reproduction. Reproduction is the life-history parameter likely to be most sensitive to climate changes, but year-round wolverine habitat, not just denning habitat, is likely to be reduced due to the effects of climate change. Human activities, including dispersed recreation activities, infrastructure, and the presence of transportation corridors, occur in occupied wolverine habitat. The alpine and subalpine habitats preferred by wolverine, however, typically receive less human use than lower-elevation habitats. Land management activities such as timber harvest, prescribed fire, and silviculture can modify wolverine habitat, but this wide-ranging generalist species does not appear to be greatly affected by changes in vegetation. For these reasons, the USFWS (2013b) determined that “human activities and developments do not pose a current threat to wolverines in the contiguous United States” and forest management activities “would not significantly affect the conservation of the DPS.”

The SJNF and TRFO are thought to provide a large amount of apparently suitable wolverine habitat, mostly in alpine and subalpine areas. Although the San Juan Mountains are at the southernmost extent of the known historic wolverine range (Aubry et al. 2007; USFWS 2013), the large area within the San Juan Mountains that is at relatively high elevation appears to provide an abundance of alpine habitats with late season snowfields that are central to wolverine ecology.

Table P.3: Federally Listed Aquatic Species on the San Juan National Forest and Tres Rios Field Office

Fish Species	Status	Habitat Group
Colorado pikeminnow (<i>Ptchocheilus lucius</i>)	Endangered	Aquatic
Razorback sucker (<i>Xyrauchen texanus</i>)	Endangered	Aquatic
Humpback chub (<i>Gila cypha</i>)	Endangered	Aquatic
Bonytail chub (<i>Gila elegans</i>)	Endangered	Aquatic
Greenback cutthroat trout (<i>Oncorhynchus clarkia stomias</i>)	Threatened	Aquatic

Notes to Table P.3

Public land management activities that affect water depletions are implemented in compliance with the Section 7 Agreement and Recovery Implementation Program Action Plan (RIPRAP) (USFWS 1993) and San Juan Basin Recovery Implementation Program (USFWS 2003) for the four endangered fish species found in the Upper Colorado and San Juan river systems (Colorado pikeminnow, razorback sucker, humpback chub, and bonytail chub).

3 FOREST SERVICE SENSITIVE SPECIES

Table P.4: U.S. Forest Service Rocky Mountain Region (R2) Sensitive Wildlife Species and their Habitat Associations on the San Juan National Forest

Sensitive Species	Habitat Association or Vegetation Type
Mammals (9)	
American marten <i>Martes americana</i>	Subalpine spruce-fir forests, alpine tundra, montane forests
Fringed myotis <i>Myotis thysanodes pahasapensis</i>	Pinyon-juniper and other coniferous woodlands

Sensitive Species	Habitat Association or Vegetation Type
Gunnison's prairie dog <i>Cynomys gunnisoni</i>	Grasslands and semidesert and montane shrublands
Hoary bat <i>Lasiurus cinereus</i>	Associated with trees. In Colorado, it is mainly found in ponderosa pine, piñon/juniper, and riparian forest.
New Mexico meadow jumping mouse <i>Zapus hudsonius luteus</i>	Mesic grass/forb/sedge riparian habitat
River otter <i>Lontra canadensis</i>	Stream and river riparian
Rocky Mountain bighorn sheep <i>Ovis canadensis canadensis</i>	Steep, high mountain terrain dominated by grass, low shrubs, rock cover and areas near open escape
Spotted bat <i>Euderma maculatum</i>	Pinyon-juniper, shrub desert, possibly riparian
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	Abandoned mines and caves
Birds (18)	
American bald eagle <i>Haliaeetus americanus</i>	Forested stands around aquatic settings
American bittern <i>Botaurus lentiginosus</i>	Marsh, swamp, or bog with cattails, rushes, grasses, and sedges
American peregrine falcon <i>Falco peregrinus anatum</i>	Breeds on cliffs, often in association with riparian areas; regular breeder SJNF administrative unit
Black swift <i>Cypseloides niger</i>	Vertical rock faces near waterfalls or in dripping caves
Boreal owl <i>Aegolius funereus</i>	Mature spruce-fir forests with high canopy closure
Brewer's sparrow <i>Spizella breweri</i>	Primarily sagebrush but also in mixed shrublands (rabbitbrush, greasewood, etc.)
Ferruginous hawk <i>Buteo regalis</i>	Grasslands and semi-desert shrub; not known to breed but a regular winter resident on SJNF administrative unit
Flammulated owl <i>Otus flammeolus</i>	Open ponderosa pine forests; dry montane conifer or aspen forests, often with dense saplings
Lewis' woodpecker <i>Melanerpes lewis</i>	Open ponderosa pine forest, riparian, and pinyon-juniper woodlands
Loggerhead shrike <i>Lanius ludovicianus</i>	Lowland riparian, pinyon-juniper woodlands, semi-desert shrublands
Northern goshawk <i>Accipiter gentiles</i>	Ponderosa pine, aspen, mixed-conifer, and spruce-fir forests
Northern harrier <i>Circus cyaneus</i>	Grasslands, agricultural lands, mountain sagebrush, and marshes; requires abundant cover (same as for short-eared owl)
Olive-sided flycatcher <i>Contopus cooperi</i>	Snags and conifers, often on steep slopes, open stands, and natural openings
Purple martin <i>Progne subis</i>	Mature aspen stands near streams, springs, or ponds
Short-eared owl <i>Asio flammeus</i>	Open habitats including grasslands, marsh edges, shrub-steppe, and agricultural lands; requires taller grass cover than northern harrier
Western burrowing owl <i>Athene cunicularia</i>	Prairie dog colonies with vacant burrows; grasslands, shrublands, deserts
Western yellow-billed cuckoo <i>Coccyzus americanus</i>	Riparian; gallery cottonwoods with dense understory
White-tailed ptarmigan <i>Lagopus leucurus</i>	Alpine tundra, especially with rock fields and willow carrs

Sensitive Species	Habitat Association or Vegetation Type
Insects (1)	
Great Basin silverspot butterfly (<i>Nokomis fritillary butterfly</i>) <i>Speyeria nokomis nokomis</i>	Riparian; mostly tied to springs
Amphibians (2)	
Boreal toad <i>Bufo boreas boreas</i>	Damp conditions; marshes, wet meadows, streams, ponds, lakes
Northern leopard frog <i>Rana pipiens</i>	Water's edge; wet meadows, banks of marshes and ponds

Table P.5: U.S. Forest Service Rocky Mountain Region (R2) Sensitive Plant Species and their Habitat Associations on the San Juan National Forest

Sensitive Plant Species	Habitat Association or Veg Type
Stonecrop gilia <i>Aliciella sedifolia</i>	Alpine (dry, rocky gravelly talus of tuffaceous sandstone)
Missouri milkvetch <i>Astragalus missouriensis</i> var. <i>humistratus</i>	Pinyon-juniper woodlands, ponderosa pine forests, Gambel oak shrublands (underlain by Mancos shale)
Aztec milkvetch <i>Astragalus proximus</i>	Ponderosa pine, pinyon-juniper, mountain shrubland
Lesser panicled sedge <i>Carex diandra</i>	Riparian/wetland (fens)
Lesser yellow lady's slipper orchid <i>Cypripedium parviflorum</i>	Aspen, ponderosa pine (restricted to calcareous derived soils in montane aspen and ponderosa pine forest)
Smith's draba <i>Draba smithii</i>	Mixed Conifer (montane seeps, rock cracks and crevices in shaded protected sites)
English sundew <i>Drosera anglica</i>	Riparian/wetland (fens)
Stream orchid <i>Epipactis gigantea</i>	Riparian/wetland (seeps on sandstone cliffs and hillsides)
whitebristle cottongrass <i>Eriophorum altaicum</i> var. <i>neogaeum</i>	Riparian/wetland (fens)
Chamisso's cottongrass <i>Eriophorum chamissonis</i>	Riparian/wetland (fens)
Slender cottongrass <i>Eriophorum gracile</i>	Riparian/wetland (fens, wet meadows)
Lone Mesa snakeweed <i>Gutierrezia elegans</i>	Pinyon-juniper, semi-desert shrubland, sagebrush (barren Mancos shale outcrops)
Frosty bladderpod <i>Lesquerella pruinosa</i>	Mountain grasslands and mountain shrublands (soils derived from Mancos shale)
Colorado tansyaster <i>Machaeranthera coloradoensis</i>	Alpine, spruce-fir (gravelly areas on slopes and in parks, on soils of sedimentary or volcanic origin)
Kotzebue's grass-of-Parnassus <i>Parnassia kotzebuei</i>	Sub-alpine and Alpine (wet areas along streamlets and in moss mats)
Cushion bladderpod <i>Physaria pulvinata</i>	Pinyon-juniper, semi-desert shrubland, sagebrush (barren shale outcrops)
West silver bladderpod <i>Physaria scrotiformis</i>	Alpine (barren exposure of Leadville limestone)
Arizona willow <i>Salix arizonica</i>	Riparian/wetland (high elevation wet meadows, streamsides, and cienegas)

Sensitive Plant Species	Habitat Association or Veg Type
Sageleaf willow <i>Salix candida</i>	Riparian/wetland (fens)
Autumn willow <i>Salix serrisima</i>	Riparian/wetland (fens and possibly streambanks)
Sphagnum moss <i>Sphagnum angustifolium</i>	Riparian/wetland (fens)
Baltic bog moss <i>Sphagnum balticum</i>	Riparian/wetland (fens)
Largeflower triteleia <i>Triteleia grandiflora</i>	Ponderosa pine
Lesser bladderwort <i>Utricularia minor</i>	Aquatic (submerged in shallow water, inundated mudflats, or areas with emergent vegetation)

4 BLM SENSITIVE SPECIES

Table P.6: Bureau of Land Management Sensitive Wildlife Species and their Habitat Associations on the Tres Rios Field Office

Sensitive Species	Habitat Association or Vegetation Type
Birds	
American bald eagle <i>Haliaeetus americanus</i>	Forested stands around aquatic settings
American bittern <i>Botaurus lentiginosus</i>	Marsh, swamp, or bog with cattails, rushes, grasses, and sedges
American peregrine falcon <i>Falco peregrinus anatum</i>	Breeds on cliffs, often in association with riparian areas; regular breeder TRFO administrative unit
Black swift <i>Cypseloides niger</i>	Vertical rock faces near waterfalls or in dripping caves
Brewer's sparrow <i>Spizella breweri</i>	Primarily sagebrush but also in mixed shrublands (rabbitbrush, greasewood, etc.)
Columbian sharp-tailed grouse <i>Pediocetes phasianellus columbianus</i>	Oak/serviceberry shrublands, often interspersed with sagebrush; aspen forests; irrigated pasture; recently reintroduced near Dolores, not expected for other units
Ferruginous hawk <i>Buteo regalis</i>	Grasslands and semi-desert shrub; not known to breed but a regular winter resident on TRFO administrative unit
Gunnison Sage-grouse <i>Centrocercus minimus</i>	Sagebrush grasslands
Northern goshawk <i>Accipiter gentiles</i>	Ponderosa pine, aspen, mixed-conifer, and spruce-fir forests
Western burrowing owl <i>Athene cunicularia</i>	Prairie dog colonies with vacant burrows; grasslands, shrublands, deserts
Western yellow-billed cuckoo <i>Coccyzus americanus</i>	Riparian; gallery cottonwoods with dense understory
White-faced ibis <i>Plegadis chihi</i>	Fresh water marshes, pond edges, irrigated land.
Insects	
Great Basin silverspot butterfly (Nokomis fritillary butterfly) <i>Speyeria Nokomis nokomis</i>	Riparian; mostly tied to springs
Mammals	
Allen's big-eared bat	

Sensitive Species	Habitat Association or Vegetation Type
Big free-tailed bat	
Desert bighorn sheep <i>Ovis Canadensis nelsoni</i>	Rocky canyons, grass, low shrub, open habitat with adjacent steep rocky areas for escape and safety
Fringed myotis <i>Myotis thysanodes pahasapensis</i>	Pinyon-juniper and other coniferous woodlands
Gunnison's prairie dog <i>Cynomys gunnisoni</i>	Grasslands and semidesert and montane shrublands
New Mexico meadow jumping mouse <i>Zapus hudsonius luteus</i>	Mesic grass/forb/sedge riparian habitat
North American wolverine <i>Gulo gulo</i>	Rare; boreal spruce-fir forest and tundra
Spotted bat <i>Euderma maculatum</i>	Pinyon-juniper, shrub desert, possibly riparian
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	Abandoned mines and caves
Amphibians	
Boreal toad <i>Bufo boreas boreas</i>	Damp conditions; marshes, wet meadows, streams, ponds, lakes
Canyon treefrog	
Northern leopard frog <i>Rana pipiens</i>	Water's edge; wet meadows, banks of marshes and ponds
Reptiles	
Desert spiny lizard	
Longnose leopard lizard	

Table P.7: Bureau of Land Management Sensitive Plant Species and their Habitat Associations on the Tres Rios Field Office

Sensitive Plant Species	Habitat Association or Veg Type
<i>Amsonia jonesii</i> (Jones' bluestar)	Pinyon-juniper woodlands and desert shrub in runoff-fed draws on sandstone
<i>Astragalus naturitensis</i> (Naturita milkvetch)	Pinyon-juniper woodlands (grows in the cracks of sandstone bedrock, associated with biological soil crusts)
<i>Astragalus schmolliae</i> * (Schmoll's milkvetch)	Mature pinyon-juniper woodlands on mesa tops in the Mesa Verde area
<i>Cryptogramma stelleri</i>	Riparian/wetlands (cliff crevices and seeps in calcareous soils)
<i>Erigeron kachinensis</i> (Kachina daisy)	Riparian/wetland (saline soils in alcoves and seeps in desert canyon walls)
<i>Eriogonum clavellatum</i> (Comb Wash buckwheat)	Semi-desert shrublands with shadscale saltbrush, on shale soils
<i>Gutierrezia elegans</i> (Lone Mesa snakeweed)	Pinyon-juniper, semi-desert shrubland, sagebrush (barren Mancos shale outcrops)
<i>Lesquerella pruinosa</i> (frosty bladderpod)	Mountain grasslands and mountain shrublands (soils derived from Mancos shale)
<i>Lygodesmia doloresensis</i> (Dolores river skeleton plant)	Pinyon-juniper, semi-desert shrublands with shadscale, and sagebrush communities on reddish, purple, sandy alluvium and colluvium of the Cutler Formation between the canyon walls and the Dolores river
<i>Mimulus eastwoodiae</i> (Eastwood's monkeyflower)	Riparian/wetland (shallow caves and seeps on canyon walls, hanging gardens)

Sensitive Plant Species	Habitat Association or Veg Type
<i>Pediomelum aromaticum</i> (aromatic Indian breadroot)	Semi-desert shrublands and sagebrush shrublands
<i>Physaria pulvinata</i> (cushion bladderpod)	Pinyon-juniper, semi-desert shrubland, sagebrush (barren shale outcrops)

Table P.8: Bureau of Land Management and U.S. Forest Service Sensitive Fish Species and Their Habitat Associations on the San Juan National Forest and Tres Rios Field Office

Sensitive Species	Habitat Association or Vegetation Type
Fish	
Roundtail chub (<i>Gila robusta</i>)	Tributaries of the Colorado and San Juan Rivers
Bluehead sucker (<i>Catostomus disobolus</i>)	Tributaries of the Colorado and San Juan Rivers
Flannelmouth sucker (<i>Catostomus latipinnis</i>)	Tributaries of the Colorado and San Juan Rivers
Colorado River Cutthroat Trout (<i>Oncorhynchus clarki pleuriticus</i>)	Tributaries of the Colorado and San Juan Rivers

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