

CHAPTER 17 – WILDLIFE

17.1 RESOURCE OVERVIEW

The BLM Monticello Field Office (FO) planning area is within the Colorado Plateau ecoregion. Great landscape diversity is found within the Monticello FO planning area with lands associated with the Colorado River, San Juan River, and the Abajo Mountains. These land features have produced a unique combination of landforms and vegetation types and provide important habitat for wildlife and fish species.

17.1.1 Special Status Species Habitat

The diversity of habitat in the Monticello FO planning area is reflected in the diversity of animal life that occurs within its borders. The Monticello Field Office, Utah Division of Wildlife Resources (UDWR), or the U.S. Fish and Wildlife Service (USFWS), have identified the following federally protected threatened, endangered, candidate, or nonessential, experimental population species, and sensitive species that could potentially occur within the Monticello FO planning area.

17.1.1.1 Threatened and Endangered Species

Black-footed Ferret (*Mustela nigripes*)

The black-footed ferret is listed as an endangered species. It is considered the rarest mammal in North America but was once common throughout the Great Plains. All native populations have been extirpated. Successful captive breeding programs and reintroduction efforts are returning small populations to their native ranges. Prairie dog burrows provide potential retreats for ferrets and have been shown to be directly lined to fluctuations in the prairie dog population. Their diet consists of 90% prairie dogs and with recent declines in prairie-dog numbers, reintroduced populations are at risk. Within the Monticello FO planning area, no known populations occur, but historical native ranges exist and reintroductions are being examined by state (UDWR) and federal agencies.

Bald Eagle (*Haliaeetus leucocephalus*)

The bald eagle is listed as a threatened species. Utah's wintering bald eagle population is typically found near rivers, lakes, and marshes where unfrozen, open waters offer the opportunity to prey on fish and waterfowl (Stalmaster 1987). The eagles begin to arrive in November and migrate north by March. Utah also hosts a small population of desert bald eagles that can be found in desert valleys, far from any water. These eagles feed primarily on carrion. Within the Monticello FO planning area, bald eagles are typically found wintering and roosting around Recapture Reservoir and along the San Juan and Colorado Rivers. There are no known bald eagles that nest within the Monticello FO planning area.

Mexican Spotted Owl (*Strix occidentalis*)

The Mexican spotted owl (MSO) is listed as a threatened species. MSO habitat includes high canopy closure, high stand density, multi-layered canopies of uneven-age stands, steep slopes, and canyons with rocky cliffs. Within the Colorado Plateau, owls are known to nest in steep-walled canyon complexes and rocky canyon habitat within desert scrub vegetation. MSOs lay eggs in late March and April with an incubation period of approximately 30 days and most eggs hatch by the end of May. Most owlets fledge in June and are fully independent by early October. The MSO exists in small isolated subpopulations and is threatened by habitat loss and disturbance from recreation, overgrazing, road development, catastrophic

fire, timber harvest, and mineral development (USFWS 1995). The Monticello FO planning area contains two MSO protected activity centers. Protected activity centers are areas (at least 600 acres in size) around a known nest or roost site in which minimal management is permitted. Owls may be in other areas within the field office boundaries or near the borders. There is also USFWS designated critical habitat for this species (see Figure 17-5). The USFWS designates critical habitat for threatened or endangered species to protect occupied habitat and to protect suitable but unoccupied habitat to allow for expansion of populations and recovery of the species.

Southwestern Willow Flycatcher (*Empidonax traillii extimus*)

The Southwestern willow flycatcher (SWF) is listed as an endangered species. SWF utilizes and breeds in patchy to dense riparian habitats along streams and wetlands near or adjacent to surface water or saturated soils. These dense patches are often interspersed with small openings, open water, and/or shorter/sparser vegetation, creating a mosaic habitat pattern. Historically, nests were constructed in native willow species but currently the SWF will utilize both native and exotic species, such as tamarisk and Russian olive that provide desired habitat requirements (USFWS 2002a). SWFs begin laying eggs as early as May but typically in mid-June. Young typically fledge the nest between June and mid-August (Sogge et al 1997). Population declines are attributed to numerous, complex, and interrelated factors such as habitat loss and modification, invasion of exotic plants into breeding habitat, brood parasitism by cowbirds, vulnerability of small population numbers, and winter and migration stress. SWF have been documented migrating along the San Juan River, potentially migrating in Comb Wash, and migrating and nesting within the Cross Canyon area. There is also potentially suitable habitat in larger riparian areas throughout the Monticello FO planning area (see riparian map, Figure 12-1).

Gunnison Sage-grouse (*Centrocercus minimus*)

The Gunnison sage-grouse is listed as a candidate species. Sage-grouse require large expanses of sagebrush (*Artemisia* spp.) communities below 9800 feet, with a diversity of grasses and forbs and healthy riparian ecosystems. The presence of each habitat type in healthy condition in close proximity to winter, lek, nesting, and brood-rearing habitat is essential. Population declines within the MFO are attributed to habitat loss and fragmentation from increased roads, powerlines, sagebrush conversions to farmlands, and reduction in riparian areas. Other issues decreasing habitat quality are livestock grazing, drought, land treatments, and herbicides. The northeast side of the Monticello FO planning area contains populations and habitat for this species (see Figure 17-4).

Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*)

The Yellow-billed cuckoo is listed as a candidate species that has been listed due to loss of riparian habitat from agricultural use, water use, road development and urban development. The yellow-billed cuckoo is a neotropical migrant that utilizes riparian valleys throughout the state. Yellow-billed cuckoos have been documented only during migration along the San Juan River. There is also potentially suitable habitat in the larger riparian areas throughout the Monticello FO planning area (see riparian map, Figure 12-1).

California Condor (*Gymnogyps californianus*)

The California condor, a nonessential, experimental population on the federal list, has been sighted statewide since they were recently released in northern Arizona in the later 1990s. California condors prefer mountainous country at low and moderate elevations, especially rocky and brushy areas near cliffs. Colonies roost in snags, tall open-branched trees, or cliffs, often near important foraging grounds. Condors eat carrion, usually feeding on large items such as dead sheep, cattle, and deer.

Bonytail (*Gila elegans*)

The bonytail is listed as an endangered species and has drastically declined in numbers since the 1960's. The reasons for the decline included flow depletion, dams, mining impacts and resulting siltation, and the introduction of exotic fish. It is a large cyprinid fish and little is known about its biological and diet requirements. Historically it was once widespread throughout the Colorado River Basin. Today it is thought to be found in large river reaches of the Colorado and Green Rivers (USFWS 2002b). Recruitment in the natural environment is apparently nonexistent or extremely low. Bonytails seem to prefer big-river or mainstems with eddies and pools rather than swift current. The Monticello FO planning area contains both populations and designated critical habitat for this species (see Figure 17-6).

Colorado Pikeminnow (*Ptychocheilus lucius*)

The Colorado pikeminnow is listed as an endangered species and is the largest cyprinid fish in North America. Natural populations of the Colorado pikeminnow are restricted to the upper Colorado River Basin in Wyoming, Colorado, Utah, and New Mexico (USFWS 2002c). The main stem of the Colorado River from Palisade, Colorado to Lake Powell has known population within this region. A small reproducing population exists in the San Juan River. According to the Colorado pikeminnow recovery goals (USFWS 2002c) these fish can be found in the San Juan River from Shiprock, New Mexico to the inflow of Lake Powell. Flow regulations, migration barriers, habitat loss/alteration, and introduced non-native fish have all been identified as causes for population decline. The Colorado pikeminnow is adapted to seasonally variable flow, high silt loads, and turbulence. The Monticello FO planning area contains both populations and designated critical habitat for this species (see Figure 17-6).

Razorback Sucker (*Xyrauchen texanus*)

The razorback sucker is listed as an endangered species and is a large catostomid fish endemic to the Colorado River basin. The Green River has the only known spawning areas for the razorback sucker (USFWS 2002d). Populations have been identified in the Colorado River from Rifle Colorado to Lee's Ferry Arizona and also in the San Juan River from Shiprock, New Mexico to the inflow of Lake Powell because populations are being re-established through stocking. The natural population of these fish are mostly aged adults with little or no recruitment. These fish prefer low-gradient, flat-water reaches of rivers. The Monticello FO planning area contains both populations and USFWS designated Critical Habitat for this species (See Figure 17-6).

Humpback Chub (*Gila cypha*)

The humpback chub is listed as an endangered species and is a big-river cyprinid. Populations of humpback chub have been identified in the Upper Colorado River Basin with the highest concentrations found in the Black Rocks and Westwater Canyon reaches of the Colorado River near the Colorado/Utah state line (USFWS 2002e). The presence of juvenile populations suggests spawning may occur in the Upper Colorado River at Black Rock, Westwater Canyon, Cataract Canyon, and Desolation/Gray Canyon. Flow alterations have been identified as a significant cause of decline. The habitat types in which the humpback chub is found include waters with fast currents, deep pools and boulder habitat; as well as the relatively quiet mouth of the Little Colorado River (USFWS 1990c). The Monticello FO planning area contains both populations and USFWS designated Critical Habitat for this species (See Figure 17-6).

There are no listed threatened, endangered, or candidate amphibian or reptilian species with the Monticello FO planning area. There are no known threatened or endangered mollusks within the Monticello FO planning area.

17.1.1.2 Sensitive Species

The BLM maintains a list of sensitive species that may occur on managed lands. The BLM Utah State Director’s Sensitive Species List includes those that are federally listed species, those identified by BLM, and those listed as state sensitive by the State of Utah. In 2002, the USFWS developed a list of Birds of Conservation Concern (BCC) that identifies migratory and non-migratory avian species that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973. Partners in Flight (PIF) Priority Species are those species recognized by Utah Partners in Flight as birds most in need of conservation and are described in further detail in the Utah Partners in Flight Avian Conservation Strategy (Parrish et. al. 2002). The following tables list the species that potentially, or are known to occur within the Monticello FO planning area and are either on the BLM Utah State Director’s Sensitive Species List, the UDWR’s State Sensitive Species List, the USFWS’s Birds of Conservation Concern, or the UDWR’s Partners in Flight Priority Species.

Table 17.1. Special Status Mammalian Species Potentially Occurring in the Monticello FO Planning Area

Scientific Name Common Name	Habitat	Status/List	Area of Potential and/or Known Occurrence
<i>Idionycteris phyllotis</i> Allen’s big-eared bat	Rocky and riparian areas in woodland and scrubland regions, roosts in caves or rock crevices.	BLM and Utah	Throughout southern Utah.
<i>Nyctinomops macrotis</i> Big free-tailed bat	Rocky and woodland habitats, roosts in caves, mines, old buildings, and rock crevices.	BLM and Utah	Throughout southern Utah.
<i>Myotis thysanodes</i> Fringed myotis	Desert and woodland areas, roosts in caves, mines, and buildings.	BLM and Utah	Throughout southern Utah.
<i>Cynomys gunnisoni</i> Gunnison’s prairie-dog	Grasslands, semidesert and montane shrublands.	BLM and Utah	Extreme southeastern Utah.
<i>Vulpes macrotis</i> Kit fox	Desert, semi-arid landscapes.	BLM and Utah	West desert and south of the Cisco Desert.
<i>Microtus mogollonensis</i> Mogollon vole	Dry meadows.	BLM and Utah	Southern part of San Juan County.
<i>Perognathus flavus</i> Silky pocket mouse	Semidesert arid grasslands with rocky or loamy soils	BLM and Utah	Extreme southeast corner of San Juan County.
<i>Euderma maculatum</i> Spotted bat	Found in a variety of habitats, ranging from deserts to forested mountains; roost and hibernate in caves and rock crevices.	BLM and Utah	Throughout Utah.
<i>Corynorhinus townsendii</i> Townsend’s big-eared bat	Occur in many types of habitat, but is often found near forested areas; roosts and hibernates in caves, mines, and buildings.	BLM and Utah	Throughout Utah.

Table 17.2. Special Status Avian Species Potentially Occurring in the Monticello FO Planning Area

Scientific Name Common Name	Habitat	Status	Area of Potential and/or Known Occurrence
<i>Haliaeetus leucocephalus</i> Bald eagle	Roosts and nests in tall trees near bodies of water.	Federally Threatened, BLM and Utah	Throughout Utah.
<i>Empidonax traillii extimus</i> Southwestern willow flycatcher	Low scrub, thickets, or groves of small trees, often near watercourses.	Federally Endangered, BLM, and Utah	Throughout southern Utah.
<i>Strix occidentalis lucida</i> (Mexican) spotted owl	Steep rocky canyons.	Federally Threatened, BLM, and Utah	Southern and eastern parts of Utah.
<i>Coccyzus americanus occidentalis</i> (Western) yellow-billed cuckoo	Riparian habitats.	Federal Candidate, BLM, Utah, and PIF	Throughout Utah.
<i>Centrocercus minimus</i> Gunnison Sage-grouse	Sagebrush and sagebrush/grassland habitats.	Federal Candidate, BLM, Utah, and PIF	Southeastern Utah.
<i>Buteo regalis</i> Ferruginous hawk	Flat and rolling terrain in grassland or shrub steppe; nests on elevated cliffs, buttes, or creek banks.	BLM, Utah, BCC, and PIF	Throughout Utah.
<i>Pelecanus erythrorhynchos</i> American white pelican	Along lakes, ponds, creeks, and rivers.	BLM, Utah, and PIF	Throughout Utah.
<i>Dolichonyx oryzivorus</i> Bobolink	Riparian or wetland areas.	BLM, Utah, and PIF	Throughout Utah.
<i>Athene cunicularia</i> Burrowing owl	Open grassland and prairies.	BLM and Utah	Throughout Utah.
<i>Melanerpes lewis</i> Lewis's woodpecker	Burned-over Douglas-fir, mixed conifer, pinyon-juniper, riparian, and oak woodlands, but is also found in the fringes of pine and juniper stands, and deciduous forests, especially riparian cottonwoods.	BLM, Utah, and PIF	High and mid-elevation mountain ranges of Utah.
<i>Accipiter gentilis</i> Northern goshawk	Mature mountain forest and riparian zone habitats.	BLM and Utah	High and mid-elevation mountain ranges of Utah.
<i>Peregrinus falconus</i> Peregrine falcon	Steep, rocky canyons near riparian or wetland areas.	BLM and BCC	Throughout Utah.

Table 17.2. Special Status Avian Species Potentially Occurring in the Monticello FO Planning Area

Scientific Name Common Name	Habitat	Status	Area of Potential and/or Known Occurrence
<i>Aquila chrysaetos</i> Golden eagle	Mountains, grasslands, and desert habitats.	BCC	Throughout Utah
<i>Buteo swainsonii</i> Swainson's hawk	Plains and grasslands.	BCC	Throughout Utah
<i>Falco mexicanus</i> Prairie falcon	Plains and wooded areas.	BCC	Throughout Utah
<i>Asio flammeus</i> Short-eared owl	Grasslands, shrublands, and other open habitats.	BLM and Utah	Throughout Utah.
<i>Picoides tridactylus</i> Three-toed woodpecker	Engelmann spruce, sub-alpine fir, Douglas fir, grand fir, ponderosa pine, tamarack, aspen, and lodgepole pine forests.	BLM, Utah, and PIF	High and mid-elevation mountain ranges of Utah.
<i>Spizella breweri</i> Brewer's sparrow	Sage and desert scrub.	PIF and BCC	Throughout Utah
<i>Dendroica nigrescens</i> Black-throated gray warbler	Dry western deciduous or coniferous scrub.	PIF and BCC	Throughout Utah
<i>Selasphorus platycercus</i> Broad-tailed hummingbird	Mountains of Rocky Mountain region and lowland riparian	PIF and BCC	Throughout Utah
<i>Vireo vicinior</i> Gray vireo	Pinyon and/or juniper woodland	PIF and BCC	Throughout Utah
<i>Lanius ludovicianus</i> Loggerhead shrike	Sage and desert scrub	BCC	Throughout Utah
<i>Gymnorhinus cyanocephalus</i> Pinyon jay	Sage and desert scrub and pinyon and/or juniper woodlands	BCC	Throughout Utah
<i>Amphispiza belli nevadensis</i> Sage sparrow	Shrub steppe habitat	PIC and BCC	Throughout Utah
<i>Vermivora virginiae</i> Virginia's warbler	Mountain shrub and pinyon-juniper habitat	PIC and BCC	Throughout Utah

Table 17.3. Special Status Amphibian and Reptilian Species Potentially Occurring in the Monticello FO Planning Area

Scientific Name Common Name	Habitat	Status	Area of Potential and/or Known Occurrence
<i>Bufo microscaphus</i> Arizona toad	Lowland riparian habitat.	BLM and Utah	Currently not found in San Juan County. Found in Southern portion of Utah.
<i>Sauromalus ater</i> Common chuckwalla	Predominantly found near cliffs, boulders, or rocky slopes, where they use rocks as basking sites and rock crevices for shelter.	BLM and Utah	Along the Colorado River in Southern Utah.
<i>Xantusia vigilis</i> Desert night lizard	Extremely secretive, spending much of its time hiding under Joshua tree limbs and similar cover.	BLM and Utah	Throughout Southeastern Utah.
<i>Opheodrys vernalis</i> Smooth greensnake	Meadows and stream margins	BLM and Utah	Abajo mountains

Table 17.4. Special Status Fish Species Potentially Occurring in the Monticello FO Planning Area

Scientific Name Common Name	Habitat	Status	Area of Potential and/or Known Occurrence
<i>Gila elegans</i> Bonytail	Eddies, pools, and backwaters near swift current in large rivers.	Federally Endangered, BLM, and Utah	Mainstem of the Colorado and Green Rivers.
<i>Ptychocheilus lucius</i> Colorado pikeminnow	Adults can be found in habitats ranging from deep turbid rapids to flooded lowlands. Young prefer slow-moving backwaters.	Federally Endangered, BLM, and Utah	Mainstem of the Colorado, Green, and San Juan Rivers.
<i>Gila cypha</i> Humpback chub	Large rivers and deep canyons.	Federally Endangered, BLM, and Utah	Mainstem of the Colorado and Green Rivers
<i>Xyrauchen texanus</i> Razorback sucker	Slow backwater habitats and impoundments.	Federally Endangered, BLM and Utah	Within the Green, Colorado, and San Juan River systems.
<i>Catostomus discobolus</i> Bluehead sucker	Fast flowing water in high gradient reaches of mountain rivers.	BLM and Utah	Tributaries of the Colorado and Green rivers.
<i>Gila robusta</i> Roundtail chub	Large rivers, and is most often found in murky pools near strong currents.	BLM and Utah	Mainstem and tributaries of the Colorado and Green rivers.

Table 17.4. Special Status Fish Species Potentially Occurring in the Monticello FO Planning Area

Scientific Name Common Name	Habitat	Status	Area of Potential and/or Known Occurrence
<i>Catostomus latipinnis</i> Flannelmouth sucker	Large rivers, where they are often found in deep pools of slow-flowing, low gradient reaches.	BLM and Utah	Mainstem and tributaries of the Colorado and Green rivers.

Table 17.5. Special Status Mollusk Species Potentially Occurring in the Monticello FO Planning Area

Scientific Name Common Name	Habitat	Status	Area of Potential and/or Known Occurrence
<i>Oreohelix Yavapai</i> Yavapai mountainsnail	Aspens and in rocky habitat.	BLM and Utah	Abajo and Navajo Mountains

17.1.2 Big Game Species Habitat

Mule Deer (*Odocoileus hemionus*)

Mule deer occupy most ecosystems in Utah but likely attain their greatest densities in shrublands on areas characterized by rough, broken terrain and abundant browse and cover. Mule deer summer range habitat types include spruce/fir, aspen, alpine meadows, and large grassy parks located at higher elevations. Winter range habitat primarily consists of shrub-covered, south-facing slopes. Winter range habitat primarily consists of shrub-covered, south-facing slopes. Winter diets of mule deer consist of approximately 75% browse from a variety of trees and shrubs and 15% forbs. Winter range is often considered a limiting factor for mule deer.

Rocky Mountain Elk (*Cervus elaphus nelsoni*)

The Rocky mountain elk occupy most ecosystems in Utah but likely attain their greatest densities in grasslands, aspen and montane coniferous forest. Production or calving areas are used from mid-May through June and typically occupy higher elevation sites than winter range. Calving grounds are usually characterized by aspen, montane coniferous forest, grassland/meadow, and mountain brush habitats, and are generally in locations where cover, forage, and water are in close proximity (Fitzgerald et al. 1994; Seidel 1977; Kufeld 1973.). Within the Monticello FO planning area, typical elk winter range occurs between 5,500 and 7,500 feet elevation and comprises mountain shrub and sagebrush habitats.

Pronghorn Antelope (*Antilocapra americana*)

Pronghorn antelope can be found and are generally associated with open plains where they feed mainly on browse and forbs. Pronghorn prefer to occupy areas with large tracts of flat to rolling open terrain where they rely on keen eyesight and swift movement to avoid predators. Within the Monticello FO planning area, pronghorn are typically found in the Dry Valley area and rely on this habitat year-round.

Desert Bighorn Sheep (*Ovis canadensis nelsoni*)

Desert bighorn sheep are uniquely adapted to inhabit some of the most remote and rugged areas. They prefer open habitat types with adjacent steep rocky areas for escape and safety. Habitat is characterized by rugged terrain including canyons, gulches, talus cliffs, steep slopes, mountaintops and river benches (Shakleton et al. 1999). Desert bighorn sheep typically forage on shrubs more than grasses and use forbs less than shrubs and grasses. Desert bighorns are found in southern Utah and typically do not migrate.

Other Big Game Species

Within the Monticello FO planning area, there are UDWR management areas for black bear (*Ursus americanus*) and mountain lion (*Felis concolor*). These represent areas where populations of these species are sufficient to support hunting. In the Intermountain West, black bears are typically associated with forested or brushy mountain environments and wooded riparian corridors and seldom use open habitats (Zeveloff and Collett 1988). Black bears tend to be nocturnal and are considered omnivorous. Preferred foods include berries, honey, fish, rodents, birds and bird eggs, insects, and nuts. Black bears obtain most of their meat from carrion. From November to April, bears enter a period of winter dormancy. Winter dens are located in caves, under rocks, or beneath the roots of large trees. The mountain lion or cougar inhabits most ecosystems in Utah. However, it is most common in the rough, broken terrain of foothills and canyons, often in association with montane forests, shrublands, and pinyon-juniper woodlands (Fitzgerald et al. 1994). Lions feed primarily on large mammals, especially deer, but also eat coyotes, porcupines, beavers, mice, rabbits, birds, and even grasshoppers.

17.1.3 Avian Species Habitat

Raptors

The Monticello FO planning area includes considerable habitat of value to raptors. Raptors found in this area include eagles, falcons, hawks, harriers, and owls. Special habitat needs for raptors include nest sites, foraging areas, and roosting or resting sites. There are many red-tailed hawks and Cooper's hawk nesting areas as well as a few peregrine and golden eagle nest sites found within the Monticello FO planning area. Raptors forage on small mammals or small birds. The most utilized raptor nesting habitats in the Monticello FO planning area are generally found along riparian areas and/or cliff faces.

Waterfowl

Waterfowl in the Monticello FO planning area is generally associated with the Colorado and San Juan River drainages. Some waterfowl can also be found in other riparian areas, such as ponds, reservoirs, and perennial streams. Some individuals or species breed, winter, or remain yearlong in the state, while larger numbers pass through the area during the spring and fall migration. Many species feed on insects and small fish or amphibians in addition to, or instead of, plant foods in these aquatic areas. In addition, some species feed frequently on upland grasses and forbs in grassy fields and meadows where such vegetation is succulent and sufficiently open to enable rapid flight and avoid harboring predators. Within the Monticello FO planning area, the most important areas for waterfowl are the Colorado and San Juan Rivers, as well as Recapture Reservoir and a couple of permanent ponds such as ones in Cross Canyon and Nancy Patterson Canyon.

Upland Game Birds

There are several species of upland game birds within the Monticello FO planning area (Mitchell 2004; UDWR 2002a; UDWR 2000). Some of the species include Gunnison Sage-grouse, chukar (*Alectoris chukar*), mourning dove (*Zenaida macroura*), and wild turkey (*Meleagris gallopavo*): both Merriams and Rio Grandes, and Gambel's quail (*Callipepla gambelii*). Chukars prefer open, rocky, barren lands and eat

grass shoots, seeds, grain, and insects. Turkeys utilize open woodland or forest clearings, as well as riparian areas and eat acorns, fruit, and seeds. Mourning doves are found in a variety of habitats, but mostly in farmlands and eat grains, small seeds, acorns, and fruit. Gambel’s quail are found in drier habitats and feed on seeds, grain, and insects. Gunnison Sage-grouse are discussed under the sensitive species section of the document.

Neotropical Migratory Birds

There are a wide variety of songbirds and neo-tropical migrants, which spend at least part of the year within the Monticello FO planning area (Parrish et. al. 2002). These species utilize a wide variety of habitats found within the planning area. The Monticello Field Office (MFO) maintains information regarding neotropical migratory birds by conducting annual breeding bird surveys in June of each year with the U.S. Geological Survey and partnering with the Utah Division of Wildlife Resources using mist netting and point count surveys.

17.1.4 Fish and Amphibian Species Habitat

The Monticello FO planning area provides habitat for fish and amphibian species because of the variety of riparian habitats found within the resource planning area, which include rivers, streams, ponds, springs, and marsh areas. Aquatic species in the Monticello FO planning area include several TES species such as bonytail, Colorado pikeminnow, razorback sucker, roundtail chub, bluehead sucker, and flannelmouth sucker. Table 17.6 illustrates the current UDWR inventories of fisheries within the Monticello FO.

Table 17.6. Inventory of Fisheries within Monticello FO Planning Area

FO Area	Species Present
Colorado River	Colorado pikeminnow, razorback sucker, bonytail, humpback chub, flannelmouth sucker, bluehead sucker, channel catfish (<i>Ictalurus punctatus</i>), roundtail chub, speckled dace (<i>Rhinichthys osculus</i>), Plains killifish (<i>Fundulus zebrinus</i>), fathead minnow (<i>Pimephales promelas</i>), red shiner (<i>Cyprinella lutrensis</i>), sand shiner (<i>Notropis ludibundus</i>), smallmouth bass (<i>Micropterus dolomieu</i>), largemouth bass (<i>Micropterus salmoides</i>), carp (<i>Cyprinus carpio</i>), black bullhead (<i>Ameiurus melas</i>), walleye (<i>Stizostedion vitreum</i>)
San Juan River	Colorado pikeminnow, razorback sucker, flannelmouth sucker, bluehead sucker, channel catfish, roundtail chub, speckled dace, fathead minnow, red shiner, sand shiner, smallmouth bass, largemouth bass, carp, black bullhead, yellow bullhead (<i>Ameiurus natalis</i>), walleye, northern pike (<i>Esox lucius</i>)
Arch Creek	Flannelmouth sucker, bluehead sucker, speckled dace
Montezuma Creek	flannelmouth sucker, bluehead sucker, channel catfish, roundtail chub, speckled dace, carp, <i>fathead minnow, red shiner, sand shiner</i>

*Where *fathead minnow, red shiner, sand shiner* are added in italics, these are not necessarily documented. However, they are prolific in the mainstream Green and Colorado rivers. Thus, it is likely that they are in at least the lower extremities of these smaller tributaries.

Amphibians rely on water during a portion of their life cycle and are typically found near water sources. The aquatic habitat in the Monticello FO planning area is generally associated with the Colorado and San Juan River drainages and perennial water sources. The BLM in partnership with U.S. Geological Survey have started conducting amphibian surveys since 2003 on two riparian areas within the Monticello FO

planning area. These include Indian Creek and Arch Canyon. These studies are to determine species and abundance that are within these canyons. To date, the species found in Arch Canyon include: Woodhouse's toad (*Bufo woodhousii*), Red-spotted toad (*Bufo punctatus*), and Northern leopard frog (*Rana pipiens*). In Indian Creek, species found were *Bufo* species of tadpoles and a few red-spotted toads.

17.1.5 Other Wildlife Habitat

The Monticello FO planning area contains a high diversity of small mammals because of the variety of habitats within the boundaries. Other wildlife species that are found within the field office area includes small mammals (cottontails, jackrabbits, squirrels, ground squirrels, mice, voles, and shrews), bats, reptiles, and invertebrate (insects). Bats roost in tree and rock crevices and caves. They rely on insects for food and are typically found near water sources feeding on insects (Oliver 2000). Reptiles have become adapted to living and reproducing entirely on land. They include turtles, lizards, and snakes. The Monticello FO planning area contains a high diversity of reptile because of the variety of habitats found within the resource management area. Most turtles are aquatic, although a few live entirely on land. Lizards are found in grasslands and shrub deserts, boulders, cliffs, trees, and loose sand. Snakes can be aquatic, while some live in trees, and some live in burrows. The Monticello FO planning area contains a high diversity of invertebrates, because of the variety of habitats found within the resource management area. The resource management area contains various riparian, talus slope, marsh, pinyon-juniper, shrub-steppe, and ridge-top habitats.

17.2 SPECIFIC MANDATES AND AUTHORITY

It must be noted that while the MFO manages the habitat, it is UDWR that manages the animals themselves. There are several federal and state laws, executive orders, regulations, cooperative agreements, and informational bulletins that direct the management of wildlife within the Monticello FO planning area. They are:

Federal Laws

- The Migratory Bird Treaty Act of 1929, as amended, established federal responsibility to protect international migratory birds and authorizes the Secretary of the Interior, through the USFWS, to regulate hunting of migratory birds. The North American Waterfowl Management Plan, signed in 1986 between Canada and U.S., further sets population goals and how to achieve them.
- The Bald Eagle Protection Act of 1940, as amended, establishes penalties for taking, possessing, selling, purchasing, or bartering bald and golden eagles. It also provides for cancellation of the lease, license, or other federal land use authorization for anyone convicted of violating the act or any of its implementing regulations or permits.
- Colorado River Storage Act of 1956 authorizes the Bureau of Reclamation to research and monitor activities of endangered fish associated with the Colorado River. The act also authorizes the purchase of land and water rights to protect these endangered fish.
- The Fish and Wildlife Coordination Act of 1958 mandates equal consideration of wildlife conservation with other features of water resource development programs and requires that damage to fish and wildlife resources be prevented, as well as that these resources be developed and improved.
- The Endangered Species Act of 1973, as amended, requires the BLM to ensure that proposed actions do not jeopardize the continued existence of a threatened or endangered species and do not cause its critical habitat to be modified or destroyed.

- The Fish and Wildlife Improvement Act of 1978 authorizes the Secretary of the Interior to permit the taking of golden eagle nests that interfere with resource development or recovery operations.
- The North American Wetlands Conservation Act of 1989 is the first act to make federal funds available annually for wetland restoration in the United States, Canada, and Mexico. The act is intended to generate as much as \$30 million a year toward the North American Waterfowl Management Plan.
- Other federal laws that may occasionally affect wildlife habitat management actions in the planning area are the Fish and Wildlife Act, and the Soils and Water Resources Conservation Act.

Executive Orders

- EO 11514 (March 1970)– directed the protection and enhancement of environmental quality.
- EO 11643 (February 1972)– dealt with animal damage control.
- EO 11870 (July 1975)– dealt with animal damage control.
- EO 11917 (May 1976)– dealt with animal damage control.
- EO 11987 (May 1977)– directs executive agencies to restrict the introduction of exotic species into natural ecosystems (revoked by EO 13112).
- EO 11989 (May 1977)– recognizes wildlife and their habitat as one of the values to be protected through closure of certain areas to OHV use or through the limitation of OHV use in those areas.
- EO 12962 (June 1995)– directs Federal agencies to improve the quality, function, sustainable productivity, and distribution of U.S. aquatic resources for increases recreational fishing opportunities.
- EO 13112 (February 1999)– establishes an Invasive Species Council to coordinate and develop control measures for non-native invasive species.
- EO 13186 (January 2001)– establishes the responsibilities of Federal agencies to protect migratory birds.

Regulations

- 43 CFR 24– Recognizes the necessity of maintaining fish and wildlife resources for their scenic, scientific, recreational, and economic importance, as well as the need for state and federal governments to work in harmony to develop and utilize these resources.
- 43 CFR 4100– Includes improvement of fish and wildlife habitat as a basic part of range betterment; provides BLM grazing and trespass regulations; requires the reservation of sufficient habitat for wildlife; and recognizes wildlife habitat as one of the values that can be protected by closing certain areas to livestock use.

BLM Manuals

- 1737– Explains BLM policy on fencing to avoid or minimize impacts to wildlife.
- 1740– Explains BLM policy and provides guidance on land treatments.
- 1741– Contains information on introduction, transplant, augmentation, and reestablishment of fish, wildlife, and plants.
- 1785– Guides coordination between BLM and state and local governments.
- 4412– Requires development of watering facilities to serve multiple purposes (e.g., big game, small game, waterfowl, and fish).

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

- 6500– Provides policy, guidance, and operating procedures for the BLM’s wildlife habitat management program.
- 6600– Guides determination of crucial habitat areas; explains integrated habitat inventory and classification system; provides methodology and requirements for wildlife inventories; guides management and development of wetlands and riparian habitats; provides methodology for aquatic inventories and water analyses.
- 6820– Establishes BLM policy and guidance for introduction of exotic wildlife species, transplanting native wildlife species, and re-establishing formerly indigenous species.
- 6840– Guides the use of BLM’s authority to further the purpose of the Endangered Species Act and similar state laws. Special status species management is outlined, and guidance is provided.

Instruction Memoranda and Information Bulletins

IM or IB Number	Subject
IM-UT-89-375	Range and Wildlife Project Maintenance
IM-UT-90-60	Hauling Water and Feed to Wildlife and Wild Horses
IM-UT-90-260	Assistance to UDWR – Bighorn Sheep Information
IM-UT-90-306	Utah Wildlife Initiative – Flatwater Fishing
IM-WO-88-28 (10/87)	Revised Fish, Wildlife, and Special Status Plant Monitoring Policy
IM-WO-88-368 (4/88, 5/88)	Fish, Wildlife, and Special Status Plant Monitoring Assessment Ch 88-236 Procedures
IB-UT-79-155	Managing Riparian Zones for Fish and Wildlife
IB-UT-79-179	Memorandum of Understanding between BLM and UDWR Concerning Wildlife Management on Public Lands
IM-No. 2003-209	National Sage-grouse Habitat Conservation Strategy Development

Cooperative Agreements or Memoranda of Understanding

- BLM Agreement No. UT-91 (12/27/76). Sikes Act program plan agreement for the State of Utah between BLM, U.S. Department of Agriculture, Forest Service, and UDWR (IM UT-76-443).
- A Memorandum of Understanding (MOU) between UDWR and Utah BLM (6/22/79), pursuant to Cooperative Agreement between the Governor of Utah and BLM Utah State Director (Agreement No. UT0141 of 9/19/78), is a supplement to that 1978 agreement for the purpose of furthering State-BLM cooperation in fish and wildlife management (also known as UDWR Agreement No. 80-5135 and BLM IM UT-179 of 8/10/79).
- MOU between Ducks Unlimited and BLM to provide a foundation for cooperative implementation of the Bureau’s strategy plan for waterfowl in the Bureau’s Fish and Wildlife 2000 Plan. The MOU will also assist in achieving the goals of the North American Waterfowl Management Plan. (February 20, 1990, Information Bulletin #90-137.)

- MOU between USFWS and BLM signed in 1987 outlines the purposes for animal damage control and the program's intent. The Animal Damage Control program is conducted pursuant to the Animal Damage Control Act of March 2, 1931 (7 USC 426-426b), and Chapter 23 of Title 4 Utah Code Annotated 1953, titled The Agricultural and Wildlife Damage Prevention Act.
- MOU between the BLM and the following organizations provide a framework for cooperative management activities necessary to maintain and enhance the productivity of each organization.
 - Rocky Mountain Elk Foundation – February 18, 1988
 - National Wild Turkey Federation – February 25, 1988
 - Quail Unlimited – June 11, 1988 (Information Bulletin 88-299)
 - Foundation for North American Wild Sheep – October 19, 1988
 - Mule Deer Foundation – March 25, 1989 (Information Bulletin 89-212)
 - National Rifle Association – May 25, 1990
 - One-shot Antelope Hunt Foundation provides funding for water projects to aid wildlife.
 - Partnership between Trout Unlimited, UDWR, USFS, and BLM is designed to improve aquatic and riparian habitat through funding for habitat improvement, dated April 12, 1989.

17.3 CURRENT MANAGEMENT PRACTICES

All of the habitat types and areas within the Monticello FO planning area are managed to maintain or improve ecological condition of the rangelands, and to achieve the objectives described in the Utah Riparian Management Policy and the Utah Standards for Rangeland Health (one objective is to maintain desired species "at a level appropriate for the site and species involved"). This is relevant for all wildlife species.

17.3.1 Special Status Species Habitat

According to the current RMP and The Endangered Species Act of 1973, as amended, no management action would be permitted on public lands that would jeopardize the continued existence of plant or animal species that are listed or officially proposed for listing, or are candidates for listing as threatened or endangered. BLM would cooperate with USFWS in writing and implementing recovery plans for threatened or endangered species located within the Monticello FO planning area. BLM would consult USFWS under Section 7 of the Endangered Species Act before approving or implementing any action that may affect a protected species, as outlined in the Endangered Species Consultation Handbook (1998a). Sensitive species listed by the State (UDWR 2003) would be managed in similar fashion, except that no Section 7 consultation is required. The MFO would also conduct surveys to determine the extent or existence of threatened, endangered, or sensitive species.

Since the RMP, other species have been added to the Threatened or Endangered Species List and these include the razorback sucker, Mexican spotted owl, Southwestern willow flycatcher, and California condor. Two species have also been added to the Candidate Species List and these include the Gunnison sage-grouse and the yellow-billed cuckoo. In November of 2003, the BLM purchased a conservation easement for Gunnison Sage-grouse on 320 acres of private land northeast of Monticello. This land is and will be managed in perpetuity to ensure the habitat continues to be available for sage-grouse and is not converted to farmland or managed in a way that is not beneficial to sage-grouse.

The USFWS has also designated critical habitat for the Mexican spotted owl within the Monticello FO planning area, which requires the BLM not to directly or indirectly alter the value of critical habitat for

both the survival and recovery of MSO. The USFWS and the MSO Recovery Plan recognize two habitat models, the Willey and Spotskey (1997) MSO Habitat Model and the Willey and Spotskey (2000) MSO Habitat Model as tools to identify and protect potential MSO habitat.

The peregrine falcon has been de-listed, but still requires surveys to ensure the continued increase in populations.

According to BLM Manual 6840, all non-listed special status species are to be managed in a manner, "...that actions authorized, funded, or carried out by the BLM do not contribute to the need for the species to become listed." The UDWR has also modified and updated (2003) the State Sensitive Species List and the BLM is planning on adopting this list in addition to adding species, such as the peregrine falcon.

17.3.2 Big Game Species Habitat

Mule Deer

The middle and higher elevations of the Monticello FO planning area sustain a large mule deer population. In the current RMP, wildlife habitats, including mule deer areas are managed to provide forage, cover, water, and space to support these species. Special conditions were developed in the RMP to protect 197,550 acres of crucial deer winter habitat areas (See Figure 17-1). Certain surface uses during periods of critical winter use (December 15 to April 30) would be closed. No oil and gas leasing activities, geophysical work or ORV use may take place. Mining activating during this period would require an approved plan of operations. Land treatments would be considered on a case-by-case basis in certain sagebrush parks within crucial deer winter range areas (9,800 acres) as these areas provide a concentrated food source for wintering deer.

There is one UDWR wildlife management unit for mule deer located within the MFO boundaries. This wildlife management unit contains the San Juan Herd, which is separated into two sub-units (Abajo Mountains and Elk Ridge). Since the current RMP was signed, UDWR has provided BLM with new habitat use area maps that show areas crucial for winter, fawning, and transitional ranges. There has also been a significant decline in mule deer populations throughout the state of Utah. This has been attributed to the recent drought and loss of winter habitat. Within the Monticello FO planning area, there has been a loss/die-off of sagebrush habitat due to drought and insect infestations. These include crucial wintering areas, such as Beef Basin and Harts Draw. There are plans throughout the state with several agencies to restore sagebrush habitats using different treatment techniques.

Rocky Mountain Elk

The middle and higher elevations of the Monticello FO planning area provide habitat for the local elk populations. When the current RMP was signed, there was little to no elk using BLM lands. For this reason, there were no plans to manage habitat for elk. Since then, elk numbers have increased within San Juan County and have reached the population objectives that UDWR set. UDWR has provided BLM with habitat use area maps that show areas crucial for winter, calving, and transitional ranges. Analysis and decisions need to be made to establish habitat management objectives for elk. Currently, elk are being considered during site-specific analysis to ensure projects do not negatively impact elk or their habitat. According to UDWR, the following table shows the amount of BLM acreage that supports elk within the MFO area.

Table 17.7. Rocky Mountain Elk Habitat Managed by the BLM in the Monticello FO Planning Area

	Spring/Fall	Summer	Winter	Winter/Spring
Total elk habitat managed by BLM (acres)	4,602	57	192,403	92,437

Pronghorn Antelope

Wildlife habitats, including pronghorn antelope areas are managed to provide forage, cover, water, and space to support these species. BLM also maintains wildlife water developments that were constructed for pronghorn antelope, which includes three guzzlers. Special conditions were developed in the RMP to protect 12,960 acres of crucial antelope habitat (see Figure 17-2). Use within the crucial antelope habitat may be closed to certain surface uses during the fawning season (May 15 to June 15). During this period, no oil and gas leasing activity, geophysical work or ORV use may take place. Mining activities during these periods would require an approved plan of operations.

The UDWR Hatch Point herd is the only pronghorn herd within the Monticello FO planning area and this herd also extends into the Moab Field Office planning area. Since the RMP was written, the antelope herd has expanded and also inhabit the east side of Highway 191. The habitat that the antelope utilize within the Monticello FO area is in poor condition due to drought and livestock grazing. There is insufficient cover available for fawns to hide in because they are born shortly after livestock is removed from the area and there typically hasn't been sufficient time for vegetation to grow and provide cover. These areas are also lacking forbs and shrubs which are the primary forage for antelope.

Desert Bighorn Sheep

Wildlife habitats, including bighorn sheep areas are managed to provide forage, cover, water, and space to support these species. BLM also maintains wildlife water developments that were constructed for bighorn sheep, which includes 11 guzzlers and 20 springs. Special conditions were developed in the RMP to protect the 329,750 acres of crucial habitat for bighorn sheep (see Figure 17-3). Crucial bighorn sheep habitat may be closed to certain surface uses during the lambing season (April 1 to July 15) and the rutting (mating) season (October 15 to December 31). During these periods, no oil and gas leasing activities, geophysical work, or ORV use may take place. Mining activities during these periods require an approved plan of operations. Any future proposal for a change in kind of livestock from cattle to sheep in crucial desert bighorn sheep habitat would be denied in order to prevent competition for forage and the transmission of disease from domestic to wild sheep.

There are also five mesa tops (totaling 56,740 acres) within the crucial bighorn sheep habitat that have been identified as areas of potential conflict between bighorn and activities that cause surface disturbance resulting in removal of critical forage species (see Figure 17-3). Onsite mitigation would be required for projects that disturb or remove forage and browse species used by bighorn sheep. In addition to standard reclamation practices, revegetation of disturbed areas must be successfully initiated within 5 years after project completion. Livestock grazing, including land treatments and range improvement projects, would not be allowed.

There are currently three UDWR herds units for desert bighorn sheep within Monticello FO planning area. These include the San Juan (Lockhart), the North San Juan, and the South San Juan herds. Since the RMP was written, there is new data on bighorn sheep within the Lockhart Basin area and no provisions or designations of crucial bighorn sheep habitat were made in the Lockhart Basin area. The Moab Field

Office of the BLM manages a small part of the habitat for the Lockhart herd. There is also evidence of the Lockhart herd going up the Redd Sheep Trail to Hatch Point. Bighorn sheep habitat is generally in good condition, although the recent drought has caused forage and water depletions. There has also been a large increase in the amount of ORV use in bighorn sheep areas, which can cause stress to the animals and the increased use of roads could cause habitat fragmentations. The UDWR has developed a statewide management plan for bighorn sheep that was effective from September 15, 1999 to January 1, 2005. Until a new plan is written, the UDWR in cooperation with the BLM, will continue to follow the direction and guidance spelled out in this plan.

Other Big Game Species

The Monticello FO planning area has healthy bear and cougar populations. The BLM works with the UDWR to manage habitat for these species and implement management plans.

17.3.3 Avian Species Habitat

There are currently several known nesting raptors within the field office area. Specific raptor species that nest in the Monticello FO planning area include golden eagle, prairie and peregrine falcon, redtail hawk, American kestrel, Coopers and sharpshinned hawk, great horned and burrowing owls. Bald eagles also use this area during the winter months (Colt 2003-2004). During nesting times, the BLM avoids permitting projects near nest sites and establish management areas around raptor nests to protect nesting from human land use disturbances. The USFWS developed raptor guidelines (1999a) titled "Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances." The BLM uses these guidelines to help mitigate any impacts to raptor species.

The United States has ratified international conventions regarding the protection of migratory birds. The Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711) implements the protective measures of these conventions. The MBTA prohibits "taking," which is the killing, possession, or transport of any migratory bird or their eggs, parts, or nests except as authorized by a valid permit. Responsibilities of Federal Agencies to Protect Migratory Birds, was issued in January 2001 and emphasizes that federal actions are subject to the MBTA. It directs Federal agencies to evaluate the effects of agency actions in NEPA documents. All bird species likely to be found within the Monticello FO planning area are protected under the MBTA, with the exception of house sparrow, European starling, and rock dove.

17.3.4 Fish and Amphibian Species Habitat

All floodplains and riparian/aquatic areas are managed in accordance with Executive Orders 11988 and 11990, the Endangered Species Act, the BLM Riparian Area Management Policy, and the Utah guidelines for implementing BLM riparian area management policy. See the riparian chapter for further management discussions and evaluation of riparian habitat within the MFO area.

17.3.5 Other Wildlife Habitat

BLM manages its lands to provide habitat for wildlife species. The Standards for Rangeland Health and Riparian Area Management Policy are used to ensure that wildlife habitat is available and functioning.

17.4 RESOURCE DEMAND AND ANALYSIS FORECAST

17.4.1 Species Status Species Habitat

Habitat for threatened and endangered species is increasing in demand. There has been two four more species added to the list and only the Peregrine falcon has been removed from the list since the current RMP was written. There are also two Candidate species added to the list that could potentially move up on the list as either threatened or endangered during the life of the new plan. This increase in the number of threatened and endangered species that rely on habitat within the Monticello FO planning area will increase the demand for special management in different habitat types. The designation of critical habitat for MSO has affected the types of activities that can occur in these designated areas. There are also plans to modify the critical habitat for southwestern willow flycatchers and this may affect the Monticello FO planning area in the future. There are also recovery plans associated with threatened or endangered species that need to be implemented as they are completed and updated.

17.4.2 Big Game Species Habitat

Mule Deer

Table 17.8 Current Population and Objectives for Mule Deer

Herd Unit	Current Population	Population Objective	% of Objective
San Juan, Abajo Mt.	6800	13500	50
San Juan, Elk Ridge	2350	7000	34

The present trend of these herds is down. UDWR and the BLM are considering habitat manipulation projects to increase health of winter range areas. Other things may be proposed in the future to help increase these herd numbers.

Rocky Mountain Elk

Table 17.9 Current Population and Objectives for Rocky Mountain Elk

Herd Unit	Current Population	Population Objective	% of Objective
San Juan	900-1000	1300	69-77

With the current drought, UDWR increased the amount of cow permits within this unit to decrease the herd size. When habitat conditions improve, UDWR plan to decrease the amount of cow tags and increase the herd to its objective.

Pronghorn Antelope

Table 17.10 Current Population and Objective of Pronghorn Antelope

Herd Unit	Current Population	Population Objective	% of Objective
San Juan, Hatch Point	130-150	300	43-50

The trend is down from recent years. UDWR will be managing this herd to increase numbers by proposing supplemental transplants.

Desert Bighorn Sheep

Table 17.11 Current Population and Objective of Desert Bighorn Sheep

Herd Unit	Current Population	Population Objective	% of Objective
San Juan, South	120	300	40
San Juan, North	50	100	50
San Juan, Lockhart	90	200	45

These numbers are down from past stable numbers and UDWR is managing these herds to increase all of these herds and would like to expand the South San Juan Herd into areas along the San Juan River on the BLM side west of Bluff to Lake Powell. These may be accomplished with supplemental transplants.

Other Big Game Species

Both bear and mountain lions are managed according to UDWR's current predator management plan (UDWR 2002b). During times when deer or bighorn sheep numbers are down, predators are managed or hunted more intensively. Currently, with the downward trend of deer and bighorn sheep, predators are being hunted to decrease their populations. When deer and sheep numbers increase, predator populations would be allowed to increase accordingly.

17.4.3 Avian Species Habitat

Most of the bird species (especially neo-tropical and sage-grouse) are decreasing in numbers throughout their ranges. This can be seen with the type of species listed on the threatened and endangered species list for San Juan County. According to Parrish et al. (2002), riparian habitats are used as either breeding or wintering habitat by Utah's birds almost twice as much as any other habitat type. Within Utah, 66 – 75% of all bird species use riparian habitats during some portion of their life cycle. Shrublands, forest, and additional habitat groups (e.g. water, rock, playa, agriculture, urban, and cliff) all are about equal and second to riparian when considering their importance to bird species. To prevent further population declines for bird species, the protection of these habitat types, especially riparian, and others are crucial.

17.4.4 Fish and Amphibian Species Habitat

All of these species rely on water systems and riparian habitats for all of their life cycles. In the West, riparian habitat covers less than 1% of the land. It is imperative to protect water sources and riparian habitat for these species to survive and increase in numbers.

17.4.5 Other Wildlife Habitat

There has been an overall decrease in bat numbers, some small mammals, reptiles, and invertebrates throughout Utah and the West. With the increase in recreation and urbanization, it is important to ensure there are continued availability and/or increase of habitat for these wildlife species.

17.5 CONSISTENCY WITH NON-BUREAU PLANS

17.5.1. United States Fish and Wildlife Service (USFWS)

The USFWS has approved recovery plans for the bald eagle (1983), peregrine falcon (1984), black-footed ferret (1988), bonytail (1990a), Colorado pikeminnow (1990b), humpback chub (1990c), Mexican spotted owl (1995), razorback sucker (1998b), and Southwestern willow flycatcher (2002). The Recovery Implementation Plan for the Endangered Fish Species in the upper Colorado River Basin was also updated in 1999 (1999b). The recovery plans identify a strategy that, when implemented, will lead to recovery of the species. BLM management plans must conform to the management strategy, goals, and objectives of the various recovery plans.

17.5.2. School and Institutional Trust Lands (SITLA)

SITLA has prepared a plan for the management of the state lands within Utah. The Lands Division is constitutionally charged to manage the school trust lands for the maximum return to the trust. Lands are scheduled to be disposed of through sales or exchanges or developed under long-term leases. Habitat loss for special status wildlife species is addressed, but general wildlife habitat loss, including riparian habitat, is not. This loss of general wildlife habitat is in direct conflict with most BLM wildlife plans.

17.5.3. United States Forest Service (USFS)

The Manti-La Sal Forest Management Goals are as follows:

1. Maintain or improve habitat carrying capacity for elk or deer.
2. Maintain or improve wildlife habitat diversity.
3. Maintain or improve fisheries habitat.
4. Protect, maintain, and/or improve habitat for threatened or endangered and sensitive plants and animals.
5. Provide habitat for viable populations of the existing vertebrate and invertebrate species found on the forest.
6. Cooperate with the State in keeping wildlife populations within the habitat capacity.

These goals are generally consistent with the Monticello AMS.

17.5.4. Utah Division of Wildlife Resources (UDWR)

UDWR is in charge of the herds while BLM is in charge of some of the land on which they reside. The Monticello AMS is generally consistent with the UDWR herd goals given the amount of land allocated for wildlife. There is constant coordination and cooperation necessary to ensure wildlife populations within habitat capacity.

17.5.5. San Juan County Plan

The San Juan Policy on Wildlife: in the past, San Juan County residents have enjoyed many benefits associated with an abundant and diverse wildlife population. The County recognizes the Utah Division of Wildlife Resources' efforts to manage wildlife and fisheries resources for the public benefit and formally supports those efforts that complement other County interests. In the past few years, there seems to be a

downward trend in the number of hunters who frequent the area. Some think this trend is satisfactory; others whose businesses are more directly affected by low numbers are concerned.

It is San Juan County's position that all wildlife decisions affecting the Southeast Region should have local input. Decisions rendered by the agency should reflect a balance with other local priorities. Of particular interest is that forage allocations be balanced between competing uses based on fair and equitable assumptions. Perhaps the greatest concern is that there needs to be a clear understanding of how much forage is available for livestock and wildlife, and in fact how much forage goes to each.

The County encourages state wildlife management agencies to provide adequate notice to local residents and governments before decisions are made and/or programs implemented. The County will work to improve communications between the regional wildlife advisory councils and county residents. When requested by the Governor, the county will also submit formal comments regarding proposed UDWR property acquisitions.

San Juan County will oppose any attempts to designate threatened or endangered plant habitat or animal species without local input to the planning and decision making process.

17.5.6. Indian Reservations

BLM received the Division of Natural Resources Navajo Nation Division of Wildlife Endangered Species List, updated September 1, 2000.

BLM coordinates on projects that overlap or border Navajo Nation Lands to insure BLM actions do not negatively impact Navajo Nation endangered species.

17.5.7. National Park Service

The Canyonlands Natural Resources Management Plan contains the following objectives:

- Maintain a viable population of desert bighorn sheep, which can also serve as a seed source for reintroduction to other National Park areas and public lands.
- Protect and perpetuate the peregrine falcon and its habitat.
- Protect the bald eagle wintering habitat and possibly establish a nesting pair of bald eagles.
- Protect and perpetuate the natural or restored populations of endangered fishes in the river system (Colorado River squawfish and humpback chub).

17.6 ISSUES OR CONCERNS

17.6.1. Special Status Species Habitat

Since the RMP was written, the Razorback sucker, California condor, Mexican Spotted Owl, Southwestern Willow Flycatcher, Yellow-billed cuckoo, and Gunnison Sage-grouse has been put on the threatened and endangered species list. There is also designated critical habitat for the Mexican Spotted Owl now within the Monticello FO planning area. With these new species listed and the number of state listed species, the associated habitat types need to be managed so that permitted actions and decisions do not negatively impact the species and their habitat.

1. Oil and gas and mineral leasing with associated extraction may impact special status species.
2. Increase in recreation, especially in riparian areas and canyons, is impacting special status species.
3. Livestock grazing and/or season of use may be impacting special status species in some areas, especially riparian areas. Avoid spring use and reduce utilization on riparian habitat.
4. There is an increased interest in wind energy in the area, which is a resources use that may impact special status species.
5. The amount of roads and increase interest in OHV access impact special status species throughout the area and especially in riparian habitat.
6. Some water sources may be exceeding water quality standards.

17.6.2 Big Game Species Habitat

1. There is competition for forage between grazing ungulates, which includes bighorn sheep, mule deer, elk, and livestock. This competition increases during times of drought and during certain seasons in habitats/allotments where livestock use and wildlife use overlap.
2. Fragmentation of habitats related to fencing, recreation, road densities, and increased travel on and off roads causing disruption or displacement of wildlife.
3. There is a large increase of people collecting antler sheds from deer and elk with the use of ORVs off of existing roads and trails, which causes resource damage and disruption to wildlife.
4. At the time the current RMP was written, there was very little elk use within the Monticello FO planning area. Since then, elk numbers have increased and expanded into areas managed by the BLM.
5. Since the RMP was written, there is new information on the range for desert bighorn sheep and pronghorn antelope has expanded their range within the Monticello FO planning area. With this new information and expansion, there is little protection provided for these new habitat use areas. This is particularly prevalent within the Lockhart Basin bighorn sheep herd and the Hatch Point pronghorn antelope herd.
6. With the current drought, insect infestations, recreation use, and livestock grazing levels and/or seasons, the condition of the crucial winter mule deer habitat (sagebrush-steppe) and crucial antelope habitat is decreasing in quality and quantity.
7. Bighorn sheep and antelope populations are decreasing to levels where supplementation from other herds may be necessary to ensure the continued existence of a viable population. DWR is also trying to expand and increase turkey populations with the help of transplants.
8. West Nile Virus, Chronic Wasting Disease, and Hanta Virus have been documented within or in areas bordering the Monticello FO planning area. These diseases could affect populations of birds, ungulates, as well as humans.
9. Fences are being built within the field offices that are not wildlife compatible.

17.6.3 Avian Species Habitat

1. Livestock concentration and use of riparian and aquatic habitat affect wildlife species that rely on these habitat types during their life cycles.
2. Increased recreation, primarily camping and ORVs, in San Juan County has impacts to riparian and aquatic habitat that is essential for avian species.
3. There is currently no discussion or protection for raptors in the RMP.

4. There is an increase interest in wind energy, which is a resource use that would affect avian species, especially raptors.
5. Oil and gas and mineral leasing and associated extractions could affect avian species.

17.6.4 Fish and Amphibian Species Habitat

1. Livestock concentration and use of riparian and aquatic habitat affect wildlife species that rely of these habitat types during their life cycles.
2. Increased recreation, primarily camping and ORVs, in San Juan County has impacts to riparian and aquatic habitat that is essential for wildlife.
3. Some water sources may be exceeding water quality standards

17.6.5 Other Wildlife Habitat

1. Closure of mines and recreation in caves may be impacting bat populations.
2. Increase recreation, especially ORV use and proposals for new trails may impact small mammals, reptiles, and invertebrates because of the fragmentation and loss of habitat.

17.7 MANAGEMENT OPPORTUNITIES AND LIMITATIONS

17.7.1 Special Status Species Habitat

There needs to be considerations and management decisions made within the RMP to protect the habitat types that these animals need to exist and increase. Restrictions, seasonal closures, and management opportunities may need to be made and identified to ensure the protection of these habitat types.

1. Review and possibly modify the oil and gas categories and stipulations for all mineral extractions.
2. Identifying potential conservation easements, land exchanges, and partnerships could all be also be used to protect habitat and wildlife.
3. Provide recreation activities and camping in other areas other than riparian areas or canyons that provide habitat for sensitive species.
4. Develop seasonal closures for conflicting uses in areas that are important for sensitive species during sensitive portion of their life cycles.
5. Modify livestock grazing systems in areas where grazing is found to have negative impact to sensitive species.
6. Use best data available and develop stipulations for potential wind energy development.
7. Prevent ORV use in riparian areas or use season closures in areas that are essential to sensitive species during a sensitive portion of their life cycle.
8. Protect riparian habitat.
9. Ensure that water quality standards are adhered to and prevent or stipulate activities that negatively impact water quality.

17.7.2 Big Game Species Habitat

1. Re-evaluate livestock grazing seasons of use and utilization levels to reduce competition with wildlife species. Consider allocation of forage for wildlife ungulates.
2. Consider seasonal closures of roads that disrupt wildlife during crucial times of the year (breeding, lambing, fawning, and calving). Re-evaluate areas that are designated as open for off-

road travel to ensure they are not in areas important to wildlife. Expand seasonal restrictions to off-road travel in the bighorn sheep areas to incorporate the current use areas.

3. Avoid the constructions of new roads and fences to prevent fragmentation and loss of habitat to big game species.
4. Close areas to off-road travel and implement seasonal restrictions where there is a lot of antler collection and important big game use areas (primarily deer and elk winter range).
5. In crucial habitat for big-game species, the BLM needs to review and possibly modify the oil and gas categories and stipulations.
6. Determine areas that are used by elk within the Monticello FO planning area and decide how to manage for elk habitat and multiple use and determine if special use areas need to be designated to protect crucial habitat for elk.
7. Expand currently designated crucial bighorn sheep and antelope habitat that provide seasonal restrictions to ensure protection of the expanded habitat use areas.
8. Determine crucial wildlife areas that are in need of improvement or restoration work and evaluate current management in these areas to determine if changes need to be made to ensure restoration of these ranges.
9. Allow UDWR to transplant bighorn sheep and antelope when necessary into the Monticello FO planning area.
10. Cooperate with other agencies to help control West Nile Virus, Chronic Wasting Disease, and Hanta Virus within the Monticello FO planning area. Allow for provisions that may be needed to control these diseases and any future diseases.
11. Require that all fences that are maintained or constructed within the field office boundary be built to accommodate wildlife population.

17.7.3 Avian Species Habitat

1. Determine appropriate management necessary to protect raptor habitat to ensure BLM is providing the necessary protection as mandated for raptor species. In 1999, the USFWS prepared raptor protection guidelines titled "Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances." These guidelines could be used adopted and used in conjunction with regulatory authorities to protect and manage raptors and their habitat.
2. Modify livestock grazing systems in areas where grazing is found to have negative impacts to avian species.
3. Develop seasonal closures for conflicting uses in areas that are important for avian species during sensitive portion of their life cycles.
4. Use best data available and develop stipulations for potential wind energy development.
5. Protect riparian habitat.
6. Allow for turkey transplants to supplement and expand current range and population.

17.7.4 Fish and Amphibian Species Habitat

1. Mitigate and/or change livestock season of use and utilization levels within riparian areas when livestock is determined to be negatively impacting wildlife species that rely of these habitat types during their life cycle. Avoid spring grazing and reduce utilization on riparian habitat.
2. Limit the amount of recreation and camping that occurs within the riparian and aquatic areas. Consider permanent or seasonal ORV closures in areas that cross or drive within these habitat types.

3. Ensure that water quality standards are adhered to and prevent or stipulate activities that negatively impact water quality.

17.7.5 Other Wildlife Habitat

1. Ensure that the closure of mines is only done after a bat survey is completed and use bat gates or appropriate measures to prevent negative impacts to bats.
2. Prevent recreational use of caves with bats by putting up bat gates to allow for bat movement, while preventing access for people.
3. Avoid the constructions of new roads to prevent fragmentation and loss of habitat for wildlife.

17.8 REFERENCES

- Colt, Chris. personal communication, 2003-2004. With T. Sharp, SWCA Inc. Environmental Consultants. Biologist, Utah Division of Wildlife Resources, Price, Utah.
- Enderson, J.H., G.R. Craig, and W.A. Burnham. 1988. Pp. 83-86. *In* T.J. Cade, J.H. Enderson, C.G. Thelander, and C.M. White (eds.), *Peregrine Falcon Populations: Their Management and Recovery*. The Peregrine Fund, Inc., Boise, Idaho.
- Fitzgerald, J.P., C. A. Meaney, and D. M. Armstrong. 1994. *Mammals of Colorado*. Denver Museum of Natural History and University Press of Colorado, Niwot.
- Kufeld, R. C. 1973. Foods eaten by the Rocky Mountain elk. *Journal of Range Management* 26:106-113.
- Mitchell, Dean. personal communication, 2004. With T. Sharp, SWCA Inc. Environmental Consultants. Biologist, Upland Game Program Coordinator, Utah Division of Wildlife Resources, Salt Lake City, Utah.
- Oliver, G.V. 2000. *Bats of Utah, A Literature Review*. Utah Division of Wildlife Resources. Publication Number 00-14. 140 pp.
- Parrish, J. R., S. P. Howe, R.E. Norvell. 2002. *Utah Partners in Flight Avian Conservation Strategy Version 2.0*. Utah Partners in Flight Program, Utah Division of Wildlife Resources, 1594 west North Temple, Salt Lake City, UT 84116, UDWR Publication Number 02-27. i-xiv + 302 pp.
- Romin, L.A., and J.A. Muck. 1999. *Utah field office guidelines for raptor protection proximal to disturbances from land use activities*. Unpublished Final Report, Utah Field Office, U.S. Fish and Wildlife Service, Salt Lake City.
- Seidel, J. W. 1977. Elk calving behavior in west central Colorado. Pp. 38-40 *in* Proc. Western States Elk Workshop, Colorado Division of Wildlife, Denver, Colorado.
- Shackleton, D.M., C.C. Shank, and B.M. Wikeem. 1999. Rocky Mountain and California bighorn. Pages 78-138 *in* Mountain sheep of North America. Valdez, R. and P.R. Krausman. 1999. The University of Arizona Press Tuscon, Arizona.

- Sogge, M.K., R.M. Marshall, S.J. Sferra, and T.J. Tibbitts. 1997. A Southwestern Willow Flycatcher natural history summary and survey protocol. Tech. Rep. NPS/NAUCPRS/NRTR-97/12, U.S. Geological Survey Biological Resources Division, Colorado Plateau Field Station, Northern Arizona University, Flagstaff.
- Stalmaster, M.V. 1987. The Bald Eagle. Universe Books, New York, New York.
- UDWR 1999. Utah Bighorn Sheep Statewide Management Plan. Unpublished Document, Utah Division of Wildlife Resources, Salt Lake City, Utah.
- UDWR. 2000. Utah upland game annual report – 1999. Publication 00-27. Utah Division of Wildlife Resources, Salt Lake City, Utah.
- UDWR. 2001. Utah big game annual report – 2001. Publication 01-30. Utah Division of Wildlife Resources, Salt Lake City, Utah.
- UDWR. 2002a. Utah Division of Wildlife Resources Upland Game Information. Located at <http://www.wildlife.utah.gov/uplandgame>. Accessed 9/30/02.
- UDWR 2002b. San Juan Predator Management Plan for Management Unit 14. Unpublished Document, Utah Division of Wildlife Resources, Salt Lake City, Utah.
- UDWR 2003. Utah Sensitive Species List. Unpublished Document, Utah Division of Wildlife Resources, Salt Lake City, Utah.
- U.S. Fish and Wildlife Service. 1983. Northern States Bald Eagle Recovery Plan. U.S. Fish and Wildlife Service, Denver, Colorado. 116 pp.
- U.S. Fish and Wildlife Service. 1988. Black-footed Ferret Recovery Plan. U.S. Fish and Wildlife Service, Denver, Colorado. 154 pp.
- U.S. Fish and Wildlife Service. 1990a. Bonytail Recovery Plan. U.S. Fish and Wildlife Service, Denver, Colorado. 35 pp.
- U.S. Fish and Wildlife Service. 1990b. Colorado Squawfish Recovery Plan. U.S. Fish and Wildlife Service, Denver, Colorado. 56 pp.
- U.S. Fish and Wildlife Service. 1990c. Humpback Chub Recovery Plan. U.S. Fish and Wildlife Service, Denver, Colorado. 43 pp.
- U.S. Fish and Wildlife Service. 1984. American Peregrine Falcon Recovery Plan (Rocky Mountain/Southwest population). U.S. Fish and Wildlife Service, Denver, Colorado. 105 pp.
- U.S. Fish and Wildlife Service. 1995. Recovery plan for the Mexican spotted owl: Vol.I. Albuquerque, New Mexico. 172 pp.

- U.S. Fish and Wildlife Service. 1998a. Endangered Species Consultation Handbook. U.S. Fish and Wildlife Service and National Marine Fisheries Service. Final. March 1998.
- U.S. Fish and Wildlife Service. 1998b. Razorback sucker (*Xyrauchen texanus*) Recovery Plan. Denver, Colorado. 81 pp.
- U.S. Fish and Wildlife Service. 1999a. Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances. U.S. Fish and Wildlife Service, Utah Field Office, Salt Lake City, Utah.
- U.S. Fish and Wildlife Service. 1999b. Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin. U.S. Fish and Wildlife Service, Mountain-Prairie Region (6), Denver, Colorado.
- U.S. Fish and Wildlife Service. 2002a. Southwestern Willow Flycatcher Recovery Plan. Albuquerque, New Mexico. I-ix + 210 pp., Appendices A-O
- U.S. Fish and Wildlife Service. 2002b. Bonytail (*Gila elegans*) Recovery Goals: amendment and supplement to the Bonytail Recovery Plan. U.S. Fish and Wildlife Service, Mountain-Prairie Region (6), Denver, Colorado.
- U.S. Fish and Wildlife Service. 2002c. Colorado pikeminnow (*Ptychocheilus lucius*) Recovery Goals: amendment and supplement to the Colorado Squawfish Recovery Plan. U.S. Fish and Wildlife Service, Mountain-Prairie Region (6), Denver, Colorado.
- U.S. Fish and Wildlife Service. 2002d. Razorback Sucker (*Xyrauchen texanus*) Recovery Goals: amendment and supplement to the Razorback Sucker Recovery Plan. U.S. Fish and Wildlife Service, Mountain-Prairie Region (6), Denver, Colorado.
- U.S. Fish and Wildlife Service. 2002e. Humpback Chub (*Gila cypha*) Recovery Goals: amendment and supplement to the Humpback Chub Recovery Plan. U.S. Fish and Wildlife Service, Mountain-Prairie Region (6), Denver, Colorado.
- Willey, D. and D. Spotskey. 1997. Unpublished GIS Model for Mexican Spotted Owl Breeding Habitat. Final Report. Arizona Heritage Program. Phoenix, AZ.
- Willey, D. and D. Spotskey. 2000. Field Test of a Habitat Model for Mexican Spotted Owl Breeding Habitat. Final Report. Arizona Heritage Program. Phoenix, AZ.
- Zeveloff, S., and F. Collett. 1988. Mammals of the Intermountain West. University of Utah Press, Salt Lake City, Utah. Pp. 288-290.