

NRCS New Mexico State Wildlife Plan 2014-2017

In conjunction with national NRCS priorities, each state is directed to further define priority species and habitats using locally led processes. In New Mexico, this locally led process was exemplified by the collaborate effort used to develop the “Comprehensive Wildlife Conservation Strategy for New Mexico (NMDGF, 2006)”. The Strategy was a culmination of two years of efforts on the part of resource professionals, conservation organizations, commodity interests, private individuals, tribal interests, municipal governments, and others to construct a better wildlife conservation overview for New Mexico. Those efforts have presented strategies that address local and state-level conservation needs and which promote wildlife conservation at landscape scales. New Mexico NRCS has incorporated this Strategy into the development of New Mexico’s state-level priorities. As the Strategy is updated, the NRCS state wildlife plan will be revised to reflect those updates.

This plan will be used for NRCS conservation programs where wildlife is either the primary emphasis of the program, such as the Wildlife Habitat Incentives Program (WHIP) or where “State/Local Wildlife Priorities” are addressed or referenced through other programs.

I. STATE WILDLIFE PRIORITIES

a. Protect, restore or enhance Key Rare or Declining Habitats.

In order to focus conservation actions on those most essential to conserving New Mexico's biodiversity, NRCS adopted the ‘key rare or declining habitats’ from the Comprehensive Wildlife Conservation Strategy. These key habitats are known to support plant and wildlife species which are considered at-risk. In most cases, the loss or degradation of these habitats is a major contributing factor to the decline of those species.

Key Rare or Declining Habitats of New Mexico	
Chihuahuan Semi-Desert Grassland	Rocky Mountain Montane Mixed Conifer Forest and Woodland
Intermountain Basins Big Sagebrush Shrubland	Juniper Savanna, Piñon-Juniper Woodland/Shrubland
Madrean Encinal & Madrean Pine-Oak/Conifer-Oak Forest	Riparian Habitat and Streams
Western Great Plains Sandhill Sagebrush Shrubland	Wetlands: Marsh/Ciénega/Spring/Seep/Depression
Western Great Plains Shortgrass Prairie	Playas and Xeric Riparian
Rocky Mountain Alpine-Montane Wet Meadow	

Habitat descriptions are provided in [Appendix 2](#). A GIS spatial data of these habitats is located in the NRCS’s F:/geodata/land_use_land_cover/SWReGap. This data may also be download at: <http://fws-case-12.nmsu.edu/cwcs/sortspatialdata.php>.

b. Protect, restore or enhance habitat for at-risk species: Species of Greatest Conservation Need.

The Comprehensive Wildlife Conservation Strategy for New Mexico identified 452 species that were found to be of greatest conservation need; species that are indicative of the diversity and overall health of the state’s wildlife resources. They include: declining, endemic and vulnerable species (which may, or may not, be federal, state or Tribal protected species); keystone species that contribute to ecosystem function in a unique and significant manner; wide ranging species; and species with recreational (hunted or fished), economic, or charismatic appeal. The Strategy removed species considered common, extinct, nonnative, and those that were introduced for recreation or whose natural history requirements were covered by other species.

These species are known to occur within one or more of the Key Rare and Declining Habitats. [Appendix 2](#) provides a partial listing of species per habitat type; the species selected include those which NRCS has the ability to beneficially affect with conservation efforts.

II. LOCAL WILDLIFE PRIORITIES

Local fish and wildlife priorities are identified in the “conservation needs assessment” completed through the annual Local Work Group Meetings. Meetings generally occur on a county-level from August to October of each year. A meeting schedule and annually completed conservation needs assessments are posted on the [NM NRCS website](#) under the Programs header.

The NRCS programs staff and the NRCS state biologist will review the conservation needs assessments annually and incorporate any identified wildlife-related items into the local ranking questions. Refer to [Appendix 4](#) for a listing of local priorities.

III PARTNERSHIPS

Partners are essential to the success of NRCS conservation programs and in the conservation of our nation's biodiversity. NRCS strives to build and maintain partnerships at all levels; from international agreements to national/regional partnership initiatives. However, special emphasis is placed upon local partnership with the acknowledgement that effective conservation cannot be achieved unless the people who live and rely on those lands are an integral part of the conservation process.

New Mexico's wildlife partners represent a wide array of special interests which help to bring diversity and new ideas to our program. Provided below are partnerships that have essential roles in the implementation of the NRCS conservation programs.

Conservation Districts

Conservation Districts and Tribal Conservation District responsibilities may include: assisting with program outreach activities, accepting applications to forward to NRCS, providing technical assistance, administrative support for contracts, and working with NRCS on issues. (M_440_517_517.5)

Tribal Conservation Advisory Council

Their role is to provide recommendations concerning the implementation of the program and to establish program direction on applicable tribal land. (M_440_517_517.7)

Local Working Groups

Are a subset of the State Technical Committee, their role is to facilitate locally led conservation and to provide advice to NRCS on implementation of conservation programs. (M_440_517_517.8)

State Technical Committee

Their role is to provide recommendations concerning the implementation of the program and to establish program direction within the State. Specifically, in regards to the Wildlife State Plan, the state priorities, and the ranking criteria. (M_440_517_517.6)

A wildlife subcommittee has formed to specifically provide wildlife-related recommendations. Refer to [Appendix 3](#) for a listing of committee members.

Other Agencies and Tribes

Other Federal, State, local agencies, and Tribes responsibilities may include:

- serving as a member of the State Technical Committee, local working group, or both,
- provide input and recommendations to NRCS for developing program guidelines,
- assist with outreach activities, and
- providing technical assistance

IV. Performance Measurement and Accountability

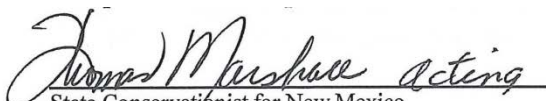
Performance Measurement. NRCS uses the Performance Results System (PRS) to report 'performance measures' which show how planned and applied conservation activities link to wildlife priorities. This reporting system is available to the public online at: <https://prs.sc.egov.usda.gov/prsdataentry/>.

Accountability. The NRCS employs periodic national program reviews, annual state program reviews, and annual conservation planning quality assurance reviews to ensure programs and conservation technical assistance are achieving their intended purpose.

Additional Reporting. When requested, specific program and implementation information will be collected at the field level and submitted to the state office. These special requests are often the result of congressional reviews, Endangered Species Act reporting requirements, FOIA requests, or national program reviews. Field level requests will only be made when the information cannot be obtained by querying PRS or other data sources.

Approval

This plan was developed with recommendations provided by the New Mexico State Technical Committee.


State Conservationist for New Mexico
Natural Resources Conservation Service


Date

References

- NMDGF. 2006. [Comprehensive Wildlife Conservation Strategy for New Mexico](#). New Mexico Department of Game and Fish. Santa Fe, New Mexico. 526 pp + appendices.
- USGS, NBII. Southwest Regional Gap Analysis Project (SWReGAP). National Biological Information Infrastructure (NBII), GAP Analysis Program. Online: <http://swregap.nmsu.edu/>.
- USDA, NRCS. [Field Office Technical Guide \(FOTG\)](#), New Mexico. USDA Natural Resources Conservation Service.
- USDA, NRCS. [Performance Results System \(PRS\)](#). USDA Natural Resources Conservation Service. Fort Collins, Colorado.

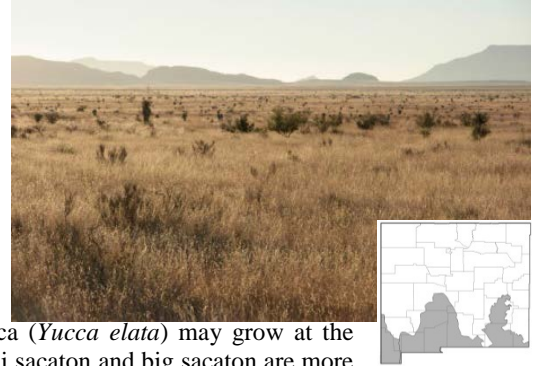
Key Rare or Declining Habitats in New Mexico

Overview: In order to focus conservation actions on those most essential to conserving New Mexico's biodiversity, NRCS adopted the 'key rare or declining habitats' from the Comprehensive Wildlife Conservation Strategy. These key habitats are known to support plant and wildlife species which are considered at-risk. In most cases, the loss or degradation of these habitats is a major contributing factor to the decline of those species.

Chihuahuan Semi-Desert Grassland

[TNC Ecoregions](#) : Apache Highlands and Chihuahuan Desert

Found on gently sloping bajadas, on mesas, and steeper piedmont and foothill slopes in the Chihuahuan Desert. This intermingled and naturally fragmented habitat type contains a highly varied flora. Vegetation is typically characterized by diverse perennial grasses. Common grass species include black grama (*Bouteloua eriopoda*), hairy grama (*B. hirsuta*), Rothrock's grama (*B. rothrockii*), sideoats grama (*B. curtipendula*), blue grama, plains lovegrass (*Eragrostis intermedia*), bush muhly (*Muhlenbergia porteri*), curlyleaf muhly (*Muhlenbergia setifolia*), James' galleta (*Pleuraphis jamesii*), tobosagrass (*Pleuraphis mutica*), and alkali sacaton (*Sporobolus airoides*). Succulents include agave, dasylirion, and yucca. Vegetation in the depressions is typically dominated by tobosa swales or other mesic graminoids such as western wheatgrass (*Pascopyrum smithii*), vine mesquite (*Panicum obtusum*), alkali sacaton, or big sacaton (*Sporobolus wrightii*). With tobosa swales, sand-adapted species such as soap tree yucca (*Yucca elata*) may grow at the swale's edge in the deep sandy alluvium that is deposited there from upland slopes. Alkali sacaton and big sacaton are more common in alkaline soils. Includes the following landscape habitat types:



- Chihuahuan-Sonoran Desert Bottomland and Swale Grassland: [SWReGAP Codes: S109](#)
- Chihuahuan Piedmont Semi-Desert Grassland: [SWReGAP Codes: S077](#)

Associated At-Risk Wildlife Species^{1]}

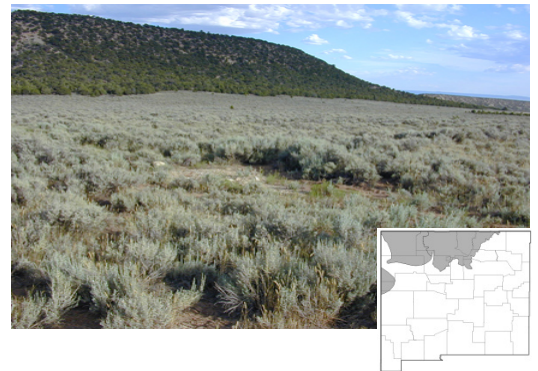
Baird's Sparrow	Desert Massasauga	Mexican Gray Wolf	Northern Pygmy Mouse
Bendire's Thrasher	Ferruginous Hawk	Mexican Long-Nosed Bat	Ornate Box Turtle
Black-Tailed Prairie Dog	Grasshopper Sparrow	Montezuma Quail	Sage Thrasher
Botteri's Sparrow	Gray Vireo	Mourning Dove	Scaled Quail
Bunch Grass Lizard (Slevin's)	Great Plains Narrowmouth Toad	Mule Deer	Swift Fox
Burrowing Owl	Lesser Long-Nosed Bat	Northern Aplomado Falcon	White-Sided Jack Rabbit
Desert Bighorn Sheep	Loggerhead Shrike	Northern Harrier	Yellow-Nosed Cotton Rat

^{1]} Species of Greatest Conservation Concern (*aka* SWP at-Risk Species), which have the potential for targeted NRCS conservation efforts.

Intermountain Basins Big Sagebrush Shrubland

[TNC Ecoregions](#) : Colorado Plateau and Southern Rocky Mountains

Occurs in northern New Mexico in both the Colorado Plateau and the Southern Rocky Mountains ecoregions. These shrublands are dominated by basin big sagebrush (*Artemisia tridentate tridentate*) and/or Wyoming big sagebrush (*A. t. wyomingensis*), while scattered Juniper, greasewood (*Sarcobatus vermiculatus*) and saltbrush (*Atriplex* spp.) may also be present. Rubber rabbitbrush (*Ericameria nauseosa*), yellow rabbitbrush (*Chrysothamnus viscidiflorus*), antelope bitterbrush (*Purshia tridentate*), or mountain snowberry (*Symphoricarpos oreophilus*) may codominate disturbed stands. Perennial herbaceous components typically contribute less than 25% vegetative cover. Common graminoid species include Indian ricegrass (*Achnatherum hymenoides*), blue grama, streambank wheatgrass (*Elymus lanceolatus*), Idaho fescue (*Festuca idahoensis*), needle and thread (*Hesperostipa comata*), basin wildrye (*Leymus cinereus*), James' galleta, western wheatgrass, Sandberg bluegrass (*Poa secunda*), or bluebunch wheatgrass (*Pseudoroegneria spicata*). [SWReGAP Codes: S054](#).



Associated At-Risk Wildlife Species^{1]}

Arizona Myotis Bat	Golden Eagle	Mourning Dove	Sage Thrasher
Bendire's Thrasher	Gunnison's Prairie Dog	Mule Deer	Scaled Quail
Black Bear	Loggerhead Shrike	Sage Sparrow	White-Tailed Jack Rabbit

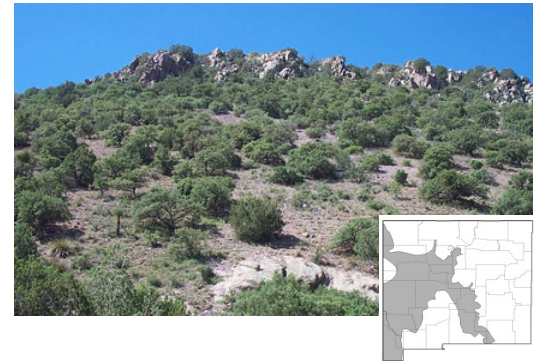
^{1]} Species of Greatest Conservation Concern (*aka* SWP at-Risk Species), which have the potential for targeted NRCS conservation efforts.

Madrean Encinal & Madrean Pine-Oak Conifer-Oak Forest and Woodland

TNC Ecoregions: Apache Highlands and AZ-NM Mountains Ecoregion

Madrean Encinal woodlands occur on foothills, canyons, bajadas and plateaus between 4,000 ft and 4,986 ft, and are dominated by Madrean evergreen oak species. Emory oak (*Quercus emoryi*) is the most common tree species, and is found in associations with varying intermixtures of Mexican blue oak (*Q. oblongifolia*), gray oak (*Q. grisea*) silverleaf oak (*Q. hypoleucoides*), and Arizona white oak (*Q. arizonica*). Arizona cypress (*Cupressus arizonica*), piñon, and juniper trees may be present, but do not codominate. In southern NM, the three-needled Mexican piñon (*Pinus cembroides*), alligator juniper (*Juniperus deppeana*), and red berry juniper (*J. erythrocarpa*) are often found. Common grass species include sideoats grama, blue grama, hairy grama, and purple grama (*Bouteloua radicata*), plains lovegrass and Mexican lovegrass (*Eragrostis mexicana*), muhly's bullgrass (*Muhlenbergia emersleyi*), and longtongue (*M. longiligula*).

SWReGAP Codes: S051.



Madrean Pine-Oak/Conifer-Oak Forest and Woodland occurs on mountains and plateaus in southern New Mexico; composed of Madrean pines Arizona (*Pinus arizonica*), Apache (*Pinus engelmannii*), Chihuahuan (*Pinus leiophylla*), or southwestern white (*Pinus strobiformis*) pines and evergreen oaks (Arizona white, Emory, and gray oaks) intermingled with patchy shrublands on most mid-elevation slopes (4,920-7,545 ft). Other tree species include Arizona cypress, alligator juniper, Mexican piñon, border piñon (*Pinus discolor*), and ponderosa pine (with Madrean pines or oaks). Subcanopy may include typical encinal and chaparral species such as Agave spp., Arizona madrone (*Arbutus arizonica*), Pringle manzanita (*Arctostaphylos pringlei*), pointleaf manzanita, Wright's silktassel, beargrass (*Nolina spp.*), and Sonoran scrub oak. May also be characterized by patches dominated by Douglas fir, Coahuila fir (*Abies coahuilensis*), or white fir (*Abies concolor*), and Madrean oaks such as silverleaf oak and netleaf oak (*Quercus rugosa*). Some stands have moderate cover of perennial graminoids such as bullgrass, longtongue muhly, screwleaf muhly (*Muhlenbergia virescens*), and Texas bluestem. **SWReGAP Codes:** S035, S111.

Associated At-Risk Wildlife Species¹¹

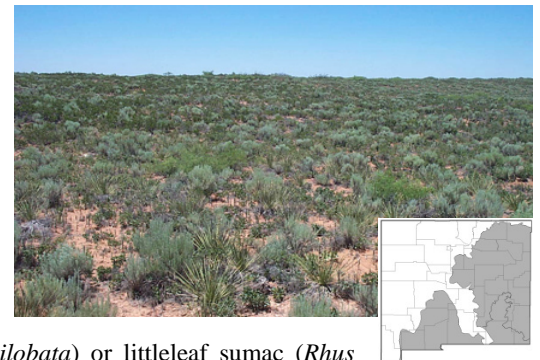
Arizona Shrew	Gray Vireo	Mexican Long-Tongued Bat	Red-faced Warbler
Band-tailed Pigeon	Greater Pewee	Mexican Spotted Owl	Scaled Quail
Black Bear	Jaguar	Montezuma Quail	Sonoran Mountain Kingsnake
Black-Throated Gray Warbler	Juniper Titmouse	Mourning Dove	Whiskered Screech-Owl
Blue Grouse	Lesser Long-Nosed Bat	Mule Deer	White-Nosed Coati
Coues' White-Tailed Deer	Loggerhead Shrike	Northern Goshawk	Williamson's Sapsucker
Desert Bighorn Sheep	Lucifer Hummingbird	Olive-Sided Flycatcher	Yellow-Eyed Junco
Golden Eagle	Madrean Alligator Lizard	Ornate Box Turtle	Yellow-Nosed Cotton Rat
Gould's Wild Turkey	Mexican Gray Wolf	Painted Redstart	
Grace's Warbler	Mexican Long-Nosed Bat	Piñon Jay	

¹¹ Species of Greatest Conservation Concern (*aka* SWP at-Risk Species), which have the potential for targeted NRCS conservation efforts.

Western Great Plains Sandhill Sagebrush Shrubland

TNC Ecoregions: Chihuahuan Desert and Southern Shortgrass Prairie

A mosaic of hummock and coppice dunes dominated by sand sage (*Artemisia filifolia*) and/or shinnery oak (*Quercus havardii*) with a mixed grass and tallgrass composition. Found in the Chihuahuan Desert and the Southern Shortgrass Prairie Ecoregions. In the Chihuahuan Desert, sites dominated by sand sage and purple pea (*Dalea scoparia*) are largely found in central New Mexico adjacent to the middle Rio Grande corridor. Grasses in these sites consist of Indian ricegrass (*Oryzopsis hymenoides*), little bluestem (*Andropogon scoparium*), and sand dropseed (*Sporobolus cryptandrus*). Shallow soil sites are typically dominated by buffalograss (*Buchloe dactyloides*), blue grama (*Bouteloua gracilis*) and threeleaf sumac (*Rhus trilobata*) or littleleaf sumac (*Rhus microphylla*). In the Southern Shortgrass Prairie, grasses consist largely of little bluestem (*Schizachyrium nees*), sand bluestem (*Andropogon hallii*), sand dropseed, and needle and threadgrass (*Stipa comata*). Shallow soil sites are dominated by buffalograss (*Buchloe dactyloides*), blue grama (*Bouteloua gracilis*) and threeleaf sumac (*Rhus trilobata*) or littleleaf sumac (*Rhus microphylla*). This habitat is often associated with dune systems and ancient floodplains. **SWReGAP Codes:** S048.



Associated At-Risk Wildlife Species¹¹

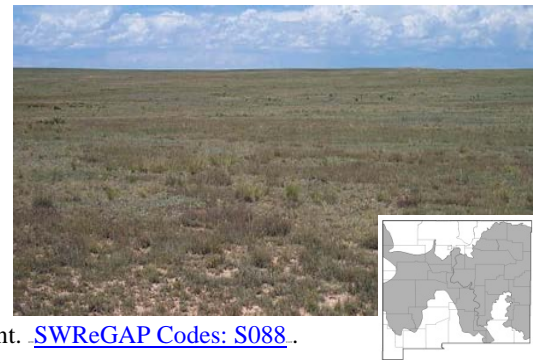
Black-Tailed Prairie Dog	Ferruginous Hawk	Mourning Dove	Sand Dune Lizard
Burrowing Owl	Lesser Prairie-Chicken	Mule Deer	Swift Fox
Desert Massasauga	Loggerhead Shrike	Ornate Box Turtle	

¹¹ Species of Greatest Conservation Concern (*aka* SWP at-Risk Species), which have the potential for targeted NRCS conservation efforts.

Western Great Plains Shortgrass Prairie

[TNC Ecoregions](#) : AZ-NM Mountains and Southern Shortgrass Prairie

Found primarily in the eastern third of New Mexico and occurs primarily on flat to rolling uplands. This habitat forms a matrix system with blue grama dominating. Associated graminoids may include purple threeawn (*Aristida purpurea*), sideoats grama, hairy grama, buffalograss, needle and thread, prairie Junegrass (*Koeleria macrantha*), western wheatgrass, James' galleta, alkali sacaton and sand dropseed. Although mid-height grass species may be present especially on more mesic land positions and soils, they are secondary in importance to the sod-forming short grasses. Sandy soils have higher cover of needle and thread, spike dropseed (*Sporobolus cryptandrus*), and soap tree yucca. Scattered shrub and dwarf-dwarf species such as sand sagebrush, prairie sagewort (*Artemisia frigida*), big sagebrush (*Artemisia tridentata*), fourwing saltbrush (*Atriplex canescens*), spreading buckwheat (*Eriogonum effusum*), broom snakeweed (*Gutierrezia sarothrae*), wolfberry (*Lycium palida*), may also be present. [SWReGAP Codes: S088](#).



Associated At-Risk Wildlife Species^{1]}

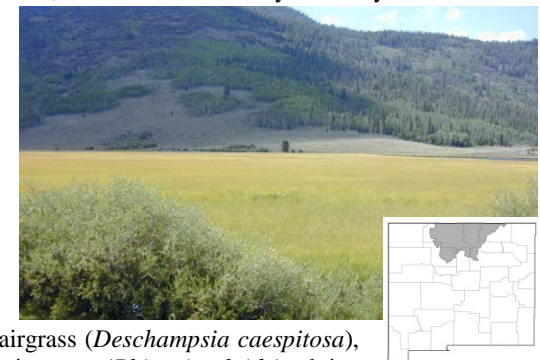
Baird's Sparrow	Ferruginous Hawk	Mountain Plover	Scaled Quail
Black-Tailed Prairie Dog	Grasshopper Sparrow	Mourning Dove	Sprague's Pipit
Burrowing Owl	Lesser Prairie-Chicken	Mule Deer	Swift Fox
Desert Massasauga	Loggerhead Shrike	Ornate Box Turtle	

^{1]} Species of Greatest Conservation Concern (*aka* SWP at-Risk Species), which have the potential for targeted NRCS conservation efforts.

Rocky Mountain Alpine-Montane Wet Meadow

[TNC Ecoregions](#) : Southern Rocky Mountains

High-elevation communities found throughout the Rocky Mountains and Intermountain regions, dominated by herbaceous species on sites with very low-velocity surface and subsurface flows. They range in elevation from 3,280-11,800 ft. Soils of this system may be mineral or organic and display hydric soil characteristics. These habitat types can occur as large meadows in montane or subalpine valleys, as narrow strips bordering ponds, lakes, and streams, and along toe slope seeps and are typically found on flat areas or gentle slopes, but may also occur on sub-irrigated sites with slopes up to 10%. Wet meadows are tightly associated with snowmelt and typically not subjected to high disturbance events such as flooding. In alpine regions, sites typically are small depressions located below late melting snow patches or on snow beds. This habitat often occurs as a mixture of several plant associations, often dominated by graminoids, including slimstem reedgrass (*Calamagrostis stricta*), white marsh marigold (*Caltha leptosepala*), heartleaf bittercress (*Cardamine cordifolia*), sheep sedge (*Carex illota*), smallwing sedge (*Carex microptera*), black alpine sedge (*Carex nigricans*), mountain sedge (*Carex scopulorum*), Northwest Territory sedge (*Carex utriculata*), native sedge (*Carex vernacular*), tufted hairgrass (*Deschampsia caespitosa*), fewflower spikerush (*Eleocharis quinqueflora*), Drummond's rush (*Juncus drummondii*), icegrass (*Phippisia algida*), alpine yellowcress (*Rorippa alpine*), arrowleaf ragwort (*Senecio triangularis*), Parry's clover (*Trifolium parryi*), and American globeflower (*Trollius laxus*). Often alpine dwarf-shrublands, especially those dominated by willow (*Salix*), are immediately adjacent to the wet meadows. [SWReGAP Codes: S102](#).



Associated At-Risk Wildlife Species^{1]}

Black Bear	Mule Deer	Rocky Mountain Bighorn Sheep	White-Tailed Ptarmigan
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^{1]} Species of Greatest Conservation Concern (*aka* SWP at-Risk Species), which have the potential for targeted NRCS conservation efforts.

Rocky Mountain Montane Mixed Conifer and Woodlands

[TNC Ecoregions](#) : AZ-NM Mountains and Southern Rocky Mountains

A highly variable habitat of mixed-conifers within the montane zone of the Rocky Mountains, occurring on all aspects at elevations ranging from 3,900-10,800 ft. Douglas fir and white fir are most common canopy dominants, but Engelmann spruce (*Picea engelmannii*), or blue spruce may be present, with ponderosa pine being present to codominant. Douglas fir forests occupy drier sites, and white fir-dominated forests occupy cooler sites, such as upper slopes at higher elevations, canyon sideslopes, ridgetops, and north- and east-facing slopes which burn somewhat infrequently. Blue spruce is most often found in small pockets of cool, moist areas (frost pocket). This system also includes mixed conifer/aspen stands. As many as seven conifers can be found growing in the same occurrence, and there are a number of cold-deciduous shrub and graminoid species



common, including a few maple (*Acer* spp.) and blueberry (*Vaccinium*) species, gray alder (*Alnus incana*), kinnikinnick (*Arctostaphylos uva-ursi*), water birch (*Betula occidentalis*), redosier dogwood (*Cornus sericea*), Arizona fescue (*Festuca arizonica*), fivepetal cliffbush (*Jamesia Americana*), creeping barberry (*Mahonia repens*), Oregon boxleaf, (*Paxistima myrsinites*), Kuntze mallow ninebark (*Physocarpus malvaceus*), New Mexico locust (*Robinia neomexicana*), mountain snowberry, and Gambel oak (*Quercus gambelii*). Herbaceous species include fringed brome (*Bromus ciliatus*), Geyer's sedge (*Carex geyeri*), Ross' (*Carex rossii*), dryspike sedge (*Carex siccata*), screwleaf muhly, bluebunch wheatgrass, sprucefir fleabane (*Erigeron eximius*), Virginia strawberry (*Fragaria virginiana*), smallflowered woodrush (*Luzula parviflora*), sweetcicely (*Osmorhiza berteroi*), bittercress ragwort (*Packera cardamine*), western meadow-rue (*Thalictrum occidentale*), and Fendler's meadow-rue (*Thalictrum fendleri*). [SWReGAP Codes: S032, S034](#).

Associated At-Risk Wildlife Species^{1]}

Abert's Squirrel	Grace's Warbler	Northern Goshawk	Williamson's Sapsucker
Band-tailed Pigeon	Jemez Mountain Salamander	Olive-Sided Flycatcher	
Black Bear	Mexican Spotted Owl	Red-faced Warbler	
Blue Grouse	Mule Deer	Snowshoe Hare	

^{1]} Species of Greatest Conservation Concern (*aka* SWP at-Risk Species), which have the potential for targeted NRCS conservation efforts.

Juniper Savanna, Piñon-Juniper Woodland/Shrubland

[TNC Ecoregions](#): statewide

Occurs above desert or grassland vegetation and below pine forest; from approximately 4,650-7,130 feet with extremes between 3,255 and 7,700 ft. The natural piñon-juniper ecosystem is highly variable across the western landscape; varying in species composition, density, canopy structure, understory characteristics and disturbance regimes. There are three fundamentally different kinds of piñon-juniper ecosystems; often described as piñon-juniper woodland, juniper savanna or piñon-juniper shrubland.



Piñon-Juniper Woodland: a late successional plant community with a multi-age stand of piñon and or juniper trees that includes seedlings, young trees, mature trees (>150 years old) and often some very old trees (>300 years old). Where the mature tree community occupies >25% canopy cover, or physical evidence suggests that the site once supported mature trees at >25% canopy; or, where the mature tree community has, or once had, >15% canopy cover with a tree height greater than 12 feet. Sparse shrubs may be present, and perennial herbaceous cover is generally low to moderate and often discontinuous. The potential for production of continuous fine fuels (including litter) is >600 lbs/acre. Topography and soils limit the frequency and intensity of natural fires; where topography is rugged and soils are very shallow to shallow, rocky, and often associated with exposed bedrock. Most precipitation is received in a bi-modal pattern or as winter precipitation (generally not an aridic or ustic aridic moisture regime). Upper elevation canopy cover may be greater than 60% (due to cooler, moister conditions and shallower soils); this is often referred to as 'closed woodland'. Lower elevation canopy cover may be 15-25% (due to warmer, drier conditions and deeper soils) and often referred to as an 'open woodland'.

Piñon-Juniper Shrubland: often occurs on the lower elevations of piñon-juniper woodlands; where it is drier and warmer, and where soils are deeper and less rocky. Often on foothill and lower montane settings. Piñon-juniper shrublands may also occur as patches intermixed in woodland or savanna landscapes. Mature piñon and/or juniper have an average tree height of 10 feet or less with a sparse herbaceous cover. It is common in areas where most of the annual precipitation comes in the winter but is not restricted to this precipitation regime.

Juniper Savanna: is considered a transitional zone between piñon-juniper woodland/shrubland and grassland. However, the boundary between woodland/shrubland and grassland may be abrupt and without a savanna. This aridic (warm, dry) savanna is characterized as a grassland with sparse, scattered juniper trees (<130 trees/ac.). It may also have scattered shrubs or succulents, and individual old juniper trees (>150 years old) may be present. The trees are generally low-growing (<16ft tall). The understory is generally >25% canopy cover and capable of producing continuous fine fuels under normal precipitation. Savannas occur on deep, fine-textured soils on lower elevation mountain slopes, gentle broad valley bottoms and on gently rolling hills; it may also occur on rockier sites and plateaus where soils are deep and plant productivity is high. Juniper savanna is found at xeric sites (than woodlands) and precipitation generally is received in the summer.

Note: It can be especially challenging to differentiate between a Juniper Savanna and a juniper invaded grassland (both communities are similar in appearance). However, a juniper invaded grassland generally has deeper, more productive soils to support a more robust plant community, and it should show indications of the suppressed or remnant plant communities. Conversely, the site would lack large-diameter piñon or juniper trees, snags, stumps or downed wood; which would indicate a naturally a piñon-juniper community.

Associated At-Risk Wildlife Species^{1]}

Ferruginous Hawk	Loggerhead Shrike	Common Nighthawk	Juniper Titmouse
Gray Flycatcher	Western Bluebird	Ladder-backed Woodpecker	Lark Sparrow
Gray Vireo	Mountain Bluebird	Say's Phoebe	
Bendire's Thrasher	Virginia's Warbler	Ash-throated Flycatcher	
Black-throated Gray Warbler	Scott's Oriole	Cassin's Kingbird	
Montezuma Quail	Scaled Quail	Pinyon Jay	

^{1]} Species of Greatest Conservation Concern (*aka* SWP at-Risk Species), which have the potential for targeted NRCS conservation efforts.

Riparian Habitat and Streams

[TNC Ecoregions](#): statewide

Rocky Mountain Subalpine-Montane Riparian Shrubland & Woodland: The primary riparian matrix of the upper Rio Grande watershed; from approximately 8,000-11,000 ft. The dominant shrubs include gray alder, dwarf birch, water birch, redosier dogwood, and willow species (*Salix spp.*). [SWReGAP Codes: S091](#). Or, contains a mosaic of one or two communities dominated by white and subalpine fir, Englemann and blue spruce, or aspen. [SWReGAP Codes: S092](#).



Rocky Mountain Lower Montane Riparian Woodland and Shrubland: Scattered throughout upper watersheds from approximately 3,000-9,000 ft. Occurs as a mosaic of multiple communities that are tree-dominated with a diverse shrub component. Includes boxelder, cottonwood, balsam poplar, Douglas fir, blue spruce, or Rocky Mountain juniper. Dominant shrubs include Rocky Mountain maple, gray alder, birch, dogwood, and willow species. [SWReGAP Codes: S093](#).

North American Warm Desert Lower Montane Riparian Woodland and Shrubland: Consists of mid-low elevation (3,600-5,900 ft) along perennial and seasonally intermittent streams throughout canyons and valleys of southern New Mexico. Includes gray alder, river hawthorn, stretchberry, cottonwood, wild plum, skunkbush sumac, and willow species. [SWReGAP Codes: S094](#).

Western Great Plains Riparian Woodland and Shrubland: Found throughout eastern New Mexico, and as far west as the Rio Grande. Dominant species can include cottonwood, willow, silver sagebrush, western wheatgrass, spike dropseed, and little bluestem. [SWReGAP Codes: S095](#).

North American Warm Desert Riparian Woodland and Shrubland: Low elevation (< 3,900 ft) along medium to large perennial streams throughout New Mexico. It occurs along the main stems and tributaries of lower Gila River, lower San Francisco River, the lower Zuni River, and probably the lower reaches of streams draining the east slopes of the Sierra Blanca, Sacramento Mountains, and Guadalupe Mountains. [SWReGAP Codes: S097](#).

North American Warm Desert Riparian Mesquite Bosque: Low-elevation (< 3,600 ft) riparian corridors along intermittent streams in southern New Mexico. Includes honey mesquite with seep willow, arrow-weed, and coyote willow. [SWReGAP Codes: S098](#).

[Associated At-Risk Wildlife Species](#)^[1]

<i>Streams</i>			
American Beaver	Colorado Pikeminnow	Mountain Tree Frog	Plains Leopard Frog
Canadian Speckled Chub	Common Black-Hawk	Narrowhead Garter Snake	Rio Grande Leopard Frog
Central Stoneroller	Desert Sucker	NM Meadow Jumping Mouse	Western Chorus Frog
Chiricahua Leopard Frog	Gila Chub	Northern Leopard Frog	Headwater Catfish
<i>Riparian</i>			
Abert's Towhee	Hooded Oriole	NM Meadow Jumping Mouse	Western Red Bat
Arizona Shrew	Lewis's Woodpecker	Northern Leopard Frog	Western Yellow Bat
Bell's Vireo	Lucy's Warbler	Painted Bunting	White-Nosed Coati
Black Bear	Madrean Alligator Lizard	Plains Leopard Frog	White-Tailed Ptarmigan
Common Black-Hawk	Mountain Skink	Red-faced Warbler	Yellow Warbler
Common Ground-Dove	Mourning Dove	Red-Headed Woodpecker	Yellow-Billed Cuckoo
Elf Owl	Mule Deer	Rio Grande Leopard Frog	
Gila Woodpecker	Narrowhead Garter Snake	Southwestern Willow Flycatcher	

^[1] Species of Greatest Conservation Concern (*aka* SWP at-Risk Species), which have the potential for targeted NRCS conservation efforts.

Wetlands: Marsh/Cienega/Spring/Seep/Depressions

[TNC Ecoregions](#): statewide

North American Arid West Emergent Marsh/Cienega/Springs: Occurs throughout the arid and semi-arid regions in depressions, as fringe around a lake, and along streams and rivers (i.e. sloughs, backwater wetlands). Includes species of sedges (*Scirpus spp.*) and/or cattail (*Typha spp.*), rush (*Juncus spp.*), pondweed (*Potamogeton spp.*), and reed (*Phalaris spp.*) [SWReGAP Codes: S100](#).



Western Great Plains Saline Depression: Shallow lakes and depressions with strongly saline soils often resulting in brackish waters. Salt encrustations can occur on the surface and vegetation is salt tolerant; such as inland saltgrass (*Distichlis spicata*), alkali sacaton (*Sporobolus airoides*). During wet years, less tolerant species can occur as precipitation dilutes the salt concentration. [SWReGAP Codes: S108](#).

Chihuahuan Semi-Desert Depressions and Swales: Occurs in relatively small depressions or swales and along drainages throughout the Chihuahuan Desert, as well as limited areas of the southern Great Plains on broad mesas, plains and valley bottoms that receive runoff from adjacent areas. Soils are neutral to slightly or moderately saline/alkaline. During rainfall events, ponding is common. Vegetation is typically

dominated by *Sporobolus* spp. *Pleuraphis mutica* (tobosa swales), or other mesic graminoids such as *Pascopyrum smithii* or *Panicum obtusum*. [SWReGAP Codes: S109](#).

Associated At-Risk Wildlife Species^{1]}

American Bittern	Mountain Tree Frog	Plains Leopard Frog	Wilson's Phalarope
Arizona Shrew	NM Meadow Jumping Mouse	Rio Grande Leopard Frog	Long-Billed Curlew
Chiricahua Leopard Frog	Northern Harrier	Sandhill Crane	
Great Plains Narrowmouth Toad	Northern Leopard Frog	Snowy Plover	
Least Shrew	Northern Pintail	Western Chorus Frog	

^{1]} Species of Greatest Conservation Concern (*aka* SWP at-Risk Species), which have the potential for targeted NRCS conservation efforts.

Playas and Xeric Riparian

[TNC Ecoregions](#): statewide

Inter-Mountain Basins Playa: Ephemeral natural catchment (playa) which is barren and sparsely vegetated with intermittent flooding followed by evaporation, leaving behind a saline residue. Additional names may include: salt basins, salterns, alkali flats, tinajas, vernal pools, and karst. Characterized by species such as iodinebush (*Allenrolfea occidentalis*), greasewood, spiny hopsage (*Grayia spinosa*), lemmon's alkali grass (*Puccinellia lemmonii*), basin wildrye, inland saltgrass, and saltbrush. Often having sparse shrubs around the margins. [SWReGAP Codes: S015](#).



North American Warm Desert Playa: Ephemeral natural catchment (playa) which is barren and sparsely vegetated with intermittent flooding followed by evaporation, leaving behind a saline residue. Larger playas have vegetation rings which are formed in response to salinity. Plants include iodinebush, inland saltgrass, common spike rush (*Eleocharis palustris*), ricegrass (*Oryzopsis* spp.), dropseed, and saltgrass. [SWReGAP Codes: S022](#).

Inter-Mountain Basins Greasewood Wash: Restricted to intermittently flooded streambeds and banks which is barren and sparsely vegetated. Soils are generally less alkaline than those found in the playa system. Shrubs include greasewood, rubber rabbitbrush, Apache plume (*Fallugia paradoxa*), and/or silver sagebrush. Saltgrass (*Distichlis spicata*) meadows can occur where water remains for the longest periods. [SWReGAP Codes: S014](#).

North American Warm Desert Wash: Restricted to intermittently flooded washes or arroyos that dissect bajadas, mesas, and plains of the warm deserts. Plants includes catclaw acacia (*Acacia greggii*), cut-leaf brickellia (*Brickellia laciniata*), desert broom (*Baccharis sarothroides*), desert willow (*Chilopsis linearis*), Apache plume, burro brush (*Hymenoclea monogyra* and *H. salsola*), mesquite, littleleaf sumac (*Rhus microphylla*), and greasewood. [SWReGAP Codes: S020](#). Data provided by NMDGF, 2006.

Inter-Mountain Basins Greasewood Flat: Occurs near drainages on stream terraces and flats or may form rings around more sparsely vegetated playas and can be open to moderately dense shrublands. Sites typically have saline soils, a shallow water table and flood intermittently, but remain dry for most growing seasons. The water table remains high enough to maintain vegetation, despite salt accumulations. Dominated or codominated by greasewood, fourwing saltbush (*Atriplex canescens*), shadescale saltbush (*Atriplex confertifolia*), or winterfat (*Krascheninnikovia lanata*). [SWReGAP Codes: S096](#).

Associated At-Risk Wildlife Species^{1]}

Chiricahua Leopard Frog	Plains Leopard Frog	White-Faced Ibis	Varied Bunting
Great Plains Narrowmouth Toad	Sandhill Crane	Western Chorus Frog	
Northern Leopard Frog	Sonoran Mud Turtle	Wilson's Phalarope	

^{1]} Species of Greatest Conservation Concern (*aka* SWP at-Risk Species), which have the potential for targeted NRCS conservation efforts.

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last updated at the October 29, 2013 meeting

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Appendix 4 - Local Priorities Identified

Local Priorities Identified - related to Fish and Wildlife (FY2013)

Local Working Groups		<i>Resource Concern: Fish and Wildlife – Inadequate Habitat</i>	
None Identified		Priority Resource Concern	Secondary Resource Concern
	X		
	X		X
		Population Imbalance, Inadequate Food/Water, T&E Species.	
		Rangeland - Inadequate Food/Water and Shelter.	
		Population Imbalance, Inadequate Food/Water, T&E Species. Wetlands.	
		Inadequate Food/Water	
		Inadequate Water	Improved native range plants for wildlife.
	X		
			Inadequate Cover/Shelter, T&E species. Playas
	X		
	X		
	X		
		Inadequate Cover/Shelter, Inadequate Food/ Water, T&E species	
		Inadequate Water/ Food, Inadequate Shelter.	
		Inadequate Water (rangeland)	
		Population Imbalance (forest)	
		Population Imbalance (forest)	
		Inadequate Water (rangeland)	
	X		
		Inadequate Food/Water	
		Inadequate Water and Cover/Shelter, Habitat Fragmentation, T&E species	
		Inadequate Habitat (specified 2% of EQIP funds allocated).	
	X		
	X		
		Playa Restoration/Wildlife Habitat	
	X		
		Inadequate Habitat and T&E Plant Species	
	X		
	X		
	X		
		Inadequate Water, Inadequate Cover/Shelter (rangeland and forestland)	
		Inadequate Water (rangeland)	
		Inadequate Habitat	
		Inadequate Water	
		Inadequate Habitat and T&E Species. Has its own EQIP ranking sheet.	

35 LWG's

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