

SPECIES THAT MAY BE IMPACTED BY DROUGHT OR WILDFIRE: FISH

DISCLAIMER: This list was developed as an initiative of the Wildlife and Wildfire Work Group of the Governor's Drought Task Force, and represents the input of a number of wildlife specialists (see list of participants attached). The list does not represent the legal or scientific conclusions, opinions or positions of the State of New Mexico, its agencies or officials. The intent is to provide land managers with an additional tool to use in making decisions about development, environmental, and other projects affecting habitat. It may also provide information that could be used in preparedness planning for, or mitigation of, the impacts of drought or wildfire on these species. While these potential impacts can raise concerns, there are numerous variables that could affect the actual impact on any species, including those on this list. The duration and extremity of drought; the severity, duration and coverage of a wildfire; and numerous other factors will determine whether there is, in fact, an actual impact on any particular species and whether that impact is harmful or beneficial to the species and the ecosystem as a whole. It is therefore important to understand that this list is provided for information purposes only. It is in no way intended to list only species that might be affected, nor is it a definitive statement about what the actual impact on these or other species may

		Federal Status	Critical Habitat	State Status	Drought Risk	Wildfire Risk	Comments
Fish							
Spikedace	<i>Meda fulgida</i>	T	17.95(e)	T	2	2	drought reduces habitat and ash flows from fire suffocate individuals and reduce habitat quality
Shiner, Rio Grande	<i>Notropis jemezianus</i>	SOC		S	1	4	drought reduces habitat and flow intermittency causes direct mortality
Pikeminnow, Colorado	<i>Ptychocheilus lucius</i>	E		E	2	4	habitat loss and decrease in water quality, changes in Navajo releases may have negative impact
Chub, Roundtail	<i>Gila robusta</i>	SOC		E	2	4	same as pikeminnow
Sucker, Blue	<i>Cycoreus elongatus</i>	SOC		E	1	4	golden algae blooms killed large number blue sucker in lower Pecos--blooms probably increase with diminished flows and elevated water temperatures
Catfish, Headwater	<i>Ictalurus lupus</i>	SOC		S	1	4	drought (and maybe water diversion) apparently eliminated headwater catfish from Delaware R--its primary NM habitat.
Pupfish, Pecos	<i>Cyprinodon pecosensis</i>	SOC		T	2	2	drought causes loss of river populations and increases likelihood of sheepshead minnow spread (nonnative congener that hybridizes with Pecos pupfish), drought also diminishes sinkhole habitats.
Pupfish, White Sands	<i>Cyprinodon tularosa</i>	SOC		T	3	4	Wildfire impacted populations on Bitter Lake National Wildlife Refuge
Trout, Gila	<i>Oncorhynchus gilae</i>	E		T	2	1	drought causes some contraction of playa habitats occupied by White Sands pupfish
							Drought diminishes suitable habitat and with habitat contraction decline in numbers with affected populations. Wildfire has eliminated several trout populations and forced evacuation of others
Minnow, Silvery, Rio Grande	<i>Hybognathus amarus</i>	E	17.95(e)	E	1	4	drought and greatly diminished Rio Grande flows have caused near-extinction of species in wild. Drought this year will likely eliminate species from much of its current habitat.
Chub, Speckled (NM)	<i>Macrhybopsis aestivalis aestivalis</i>				2	4	reduced flows and discharge intermittency coupled with reduced water quality have diminished abundance
Chub, Speckled, Canadian (NM)	<i>Macrhybopsis aestivalis tetranemus</i>	SOC		T	2	4	diminished flows impact extant populations
Shiner, Arkansas River (Native pop.)	<i>Notropis girardi</i>	T	17.95(e)	E	2	4	same as Canadian speckled chub
Shiner, Bluntnose, Pecos (NM)	<i>Notropis simus pecosensis</i>	T	17.95(e)	T	1	4	flow intermittency and reduced discharge have diminished abundance in Pecos. Dry channel reduces recolonization of depopulated stream reaches
Dace, Redbelly, Southern	<i>Phoxinus erythrogaster</i>			E	3	4	reduced snowpack may diminish spring flows in habitat occupied by this species
Minnow, Loach	<i>Rhinichthys cobitis</i>	T	17.95(e)	T	2	2	same as spikedace, except ash sediment more directly impacts loach minnow as it is benthic species
							distribution very restricted, single wildfire could eliminate species. Drought diminishes very limited habitat and like diminishes water quality
Sucker, Bluehead, Zuni (NM)	<i>Catostomus discobolus yarrowi</i>	C		E	1	1	habitat and like diminishes water quality
Redhorse, Gray	<i>Moxostoma congestum</i>	SOC		T	2	4	same as blue sucker
Gambusia, Pecos	<i>Gambusia nobilis</i>	E		E	3	3	drought (and increased ground water pumping) diminishes water levels in sinkhole and spring habitats occupied by Pecos gambusia. Washing of fire ash into Bitter Lake National Wildlife Refuge habitats likely affected this species.

Darter, Greenthroat	<i>Etheostoma lepidum</i>	SOC		T	3	4	drought reduces surface water on Bitter Lake National Wildlife Refuge and ground water pumping diminishes flows in creeks.
Logperch, Bigscale (Native pop.)	<i>Percina macrolepida</i>			T	3	4	diminished flows in Pecos reduce habitat and water quality
Chub, Chihuahua	<i>Gila nigrescens</i>	T		E	1	1	distribution of species extremely limited in New Mexico. During drought periods this species survive largely in a single spring. Ash-laden flows caused fish kills in Mimbres-- Chihuahua chub were among dead fish
Sucker, Razorback	<i>Xyrauchen texanus</i>	E	17.95(e)		2	4	same as Colorado pikeminnow
Trout, Cutthroat, Rio Grande (NM)	<i>Oncorhynchus clarki virginialis</i>	SOC			2	1	drought reduces suitable habitat. Wildfire directly and indirectly affects by ash flows, water quality degradation, and habitat modification
Chub, Gila	<i>Gila intermedia</i>	E	17.95(e)	E	3	1	Drought diminishes suitable habitat and wildfire might have eliminated the sole New Mexico population
Minnnow, Suckermouth	<i>Phenacobius mirabilis</i>			T	3	4	diminished discharge reduces available habitat and water quality
Chub, Rio Grande	<i>Gila pandora</i>			S	3	2	drought diminished habitat. Ash flows associated with wildfire directly (suffocation) and indirectly (sedimentation and scouring) affect this species.
Sucker, Rio Grande	<i>Catostomus plebeius</i>				3	2	drought and wildfire diminished population in Mimbres and likely has similar effects elsewhere
Tetra, Mexican	<i>Astyanax mexicanus</i>			T	3	4	decrease spring and spring-run flows during drought diminish habitat and quality
Trout, Rainbow	<i>Oncorhynchus mykiss</i>				3	1	wildfire eliminated several wild populations in southwest New Mexico
Trout, Brown	<i>Salmo trutta</i>				3	1	same as rainbow trout
Catfish, Channel	<i>Ictalurus punctatus</i>				2	3	diminished flows and dry river channel caused substantial mortality in RG in each of past 3 years
Catfish, Flathead	<i>Pylodictis olivaris</i>				2	3	same as channel catfish
Chub headwater	<i>Gila nigra</i>				2	2	Drought reduces suitable habitat (deep undercut banks). Flashier flows after wildfire scours streams and causes loss of preferred habitat.
Dace Longfin	<i>Agosia chrysogaster</i>				3	2	response similar to that of spikedace. Longfin dace colonizing ability and use of low velocity habitats for spawning mitigate to some extent impact of drought

1 = directly impacted, within impact area, measurable and substantial effects
2 = direct impacts, but not substantial, in vicinity of impact
3 = largely indirect impacts, in vicinity of impact
4 = not likely to have discernable impact or not known

E - Endangered
T - Threatened
S - Sensitive/Wildlife of Concern
C - Candidate

Please contact the U.S. Fish and Wildlife Service and the New Mexico Department of Game and Fish for current species status information

15-Dec-05

SPECIES THAT MAY BE IMPACTED BY DROUGHT OR WILDFIRE: BIRDS

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		Federal Status	Critical Habitat	State Status	Drought Risk	Wildfire Risk	Comments
Birds							
Grebe, Eared	<i>Podiceps nigricollis</i>				1		Loss/degradation of higher elevation wetland breeding habitat through drainage, conversion, flooding and/or dewatering for irrigation, grazing of emergent vegetation; contaminants.
Cormorant, Neotropic	<i>Phalacrocorax brasilianus</i>			T	1	3	Loss/degradation of breeding sites, including loss of trees/snags for nest substrate; disturbance to breeding colonies; fluctuations in fish prey base; illegal shooting and other persecution.
Bittern, American	<i>Botaurus lentiginosus</i>				1		Loss, degradation, or fragmentation of wetland habitat; pesticides and contaminants; acid precipitation; human disturbance; small, isolated populations.
Pintail, Northern	<i>Anas acuta</i>				1		Range wide population decline related to drought and wetland conversion; wintering habitat losses from increased urbanization of agricultural lands and native habitats; degradation of playa habitats.
Osprey	<i>Pandion haliaetus</i>				1		Human disturbance and shoreline development; prey population fluctuations; pesticides and contaminants; electrocution; collision; illegal shooting
Eagle, Bald	<i>Haliaeetus leucocephalus</i>	AD, T		T	1	3	Human disturbance to nests and winter roosts; loss/degradation of breeding and wintering habitat, including declines in prey populations and in nest/roost site availability; environmental contamination; electrocution; illegal killing by shooting and poisoning.
Harrier, Northern	<i>Circus cyaneus</i>				1	2	Loss/alteration of marsh/wet meadow breeding habitat from draining/drying marshes, conversion to monotypic agriculture, livestock grazing; disturbance of nest sites from agricultural practices; pesticides and contaminants; illegal shooting.
Goshawk, Northern	<i>Accipiter gentilis</i>	SOC		S	2	2	Loss or alteration of forest habitat from timber harvest; fire; disturbance to nesting birds; illegal shooting and taking.
Black-Hawk, Common	<i>Buteo galus anthracinus</i>	SOC		T	1	2	Loss/fragmentation/degradation of southwestern cottonwood-sycamore riparian habitat; stream dewatering; human disturbance at nest sites; illegal shooting.
Hawk, Ferruginous	<i>Buteo regalis</i>				2		Loss or alteration of native grassland habitats, including through urbanization, conversion, energy development, road construction, and shrub encroachment; decreased prey populations due to human activities; human disturbance at nest sites; illegal shooting.
Falcon, Aplomado	<i>Falco femoralis</i>	E		E	1	3	Loss, degradation, or alteration of desert grassland habitat leading to reduced grass cover, increased brush encroachment, and reduced prey populations, resulting from excessive livestock grazing or agricultural conversion; fire; pesticides and other contaminants; electrocution; accidental drowning; human disturbance including research activities; lack of regulatory protection measures for individuals and habitats
Falcon, Peregrine	<i>Falco peregrinus</i>	SOC		T	2	3	Chemical contamination of environment; disturbance of nesting pairs; illegal taking.
Grouse, Blue	<i>Dendragapus obscurus</i>				2	2	Habitat loss or alteration from urbanization, agriculture, timber harvest, fire, livestock grazing, and road building
Ptarmigan, White-tailed	<i>Lagopus leucurus</i>			E	1	2	Loss or alteration of limited alpine tundra habitat through overuse by grazing ungulates including elk and bighorn, increased human use, ski area development, construction of snow catchment fences, construction and operation of microwave relay stations.
Prairie-Chicken, Lesser	<i>Tympanuchus pallidicinctus</i>	C		S	1	2	Loss, degradation, fragmentation of habitat through excessive livestock grazing, shrub control, and oil and gas development; small-population phenomena
Turkey, Wild, Gould's	<i>Meleagris gallopavo mexicana</i>	SOC		T	1	1	Habitat loss from removal of vegetation, fire, livestock grazing; lack of water sources; hybridization with non-native turkeys; human killing and disturbance
Quail, Montezuma	<i>Cyrtonyx montezumae</i>				2	2	Overgrazing of understory grasses necessary for food and nesting cover; altered fire regimes leading to replacement of required habitat; habitat loss to development and urbanization.
Crane, Sandhill	<i>Grus canadensis</i>				2	2	Loss or degradation of limited wetland and playa habitats; disturbance to roosting birds; disease; low recruitment rates.
Plover, Snowy	<i>Charadrius alexandrinus</i>	T	17,95(b)		2	2	Loss or degradation of breeding alkali flats and playas from flooding, drying, and/or vegetation encroachment; disturbance to nesting birds.
Curlew, Long-billed	<i>Numenius americanus</i>				1	1	Loss, alteration, and fragmentation of native prairie breeding habitat from agricultural conversion, urbanization, excessive livestock grazing, shrub encroachment.
Phalarope, Wilson's	<i>Phalaropus tricolor</i>				1	1	Loss of wetland/wet meadow breeding areas from water diversion, livestock grazing, agricultural conversion, chemical contamination
Tern, Least	<i>Sterna antillarum</i>	E		E	2	2	Loss or alteration of riverine habitats from altered flow regimes, channelization, inundation; chemical contamination of prey base; human disturbance of nesting flats
Pigeon, Band-tailed	<i>Columba fasciata</i>				2	2	Long-term population declines potentially linked to habitat alteration due to fire or drought; disease.
Ground-Dove, Common	<i>Columbina passerina</i>			E	2	3	Loss of lower elevation riparian shrublands; altered hydrology leading to dewatered riparian areas.
Cuckoo, Yellow-billed	<i>Coccyzus americanus</i>	C		S	1	1	Loss, fragmentation, and degradation of riparian habitats from clearing for urban or agricultural development, excessive livestock grazing, flood control, schemes to eradicate exotic vegetation.
Owl, Screech, Whiskered	<i>Megascops trichopsis</i>	SOC		T	3	1	Loss of pine-oak and oak woodland within restricted range from vegetation removal and natural and prescribed fires; human disturbance
Owl, Elf	<i>Micrathene whiteyi</i>				2	2	Loss or degradation of mature riparian and canyon forest nesting habitat; human disturbance
Owl, Boreal	<i>Aegolius funereus</i>			T	2	2	Loss of undisturbed spruce-fir and similar forests from timber harvest or other factors
Owl, Spotted, Mexican	<i>Srix occidentalis lucida</i>	T	17,95(b)	S	2	1	Loss of preferred mature and old growth forest habitat from timber harvest and other cutting, altered fire regimes, stand-replacing fires.
Night Jar, Buff-collared	<i>Caprimulgus ridgwavi ridgwavi</i>			E	2	2	Loss of native habitat through vegetation clearing, burning or overgrazing; human disturbance
Swift, Black	<i>Cypseloides niger</i>			S	1	1	Disturbance at nesting caves
Hummingbird, Broad-billed	<i>Cyanthus latirostris</i>			T	2	1	Loss of southwestern riparian canyon woodlands from fire, excessive livestock grazing, and clearing.
Hummingbird, White-eared	<i>Hylocharis leucotis</i>			T	2	1	Loss of preferred montane canyon habitat through road-building, mining, pollution, wildfires, overgrazing or timber harvest
Hummingbird, Violet-crowned	<i>Amazilia violiceps</i>			T	2	1	Loss of low-elevation broadleaf riparian canyon woodlands, especially loss of scarce big-tree riparian habitats from fire; loss of food sources such as agaves from fire.
Hummingbird, Lucifer	<i>Calothorax lucifer</i>			T	2	1	Loss of native dry-canyon/hillside habitats, including loss of food plants from burning or overgrazing.
Hummingbird, Costa's	<i>Calypte costae</i>			T	2	2	Loss of native xeric hillside vegetation and adjacent riparian habitats in southwestern New Mexico from burning or overgrazing
Trogon, Elegant	<i>Trogon elegans</i>			E	1	1	Loss of limited broadleaf riparian foraging and breeding habitat, including large trees with suitable nesting cavities, from fire, wood cutting, and excessive livestock grazing; human disturbance of nesting birds.
Woodpecker, Lewis's	<i>Melanerpes lewis</i>				2	2	Loss or alteration of ponderosa pine nesting habitat from altered fire regimes, timber harvest including salvage logging, excessive livestock grazing; progressive loss of mature cottonwood bosque breeding habitat
Woodpecker, Red-headed	<i>Melanerpes erythrocephalus</i>				2	2	Loss or degradation of breeding habitat, especially mature cottonwood bosque, from urbanization, clearing and other cutting, agricultural conversion, river channelization; competition for nest sites with exotic European starlings
Woodpecker, Gila	<i>Melanerpes uropygialis</i>			T	2	1	Habitat destruction from cutting or other destructive clearing (burning, inundation) of mature cotton and sycamore riparian stands; progressive fragmentation of remaining habitat patches; competition for nest sites with exotic European starlings
Sapsucker, Williamson's	<i>Sphyrapicus thyroideus</i>			T	2	2	Loss or alteration of mature mixed and deciduous forest habitats, especially mature aspen groves, from fire and timber operations.
Tyrannulet, Beardless, N.	<i>Camptostoma imberbe</i>			E	2	1	Loss or degradation of native riparian habitat through clearing, burning, and overgrazing.
Pewee, Greater	<i>Contopus pertinax</i>				2	1	Loss, alteration, or degradation of southwestern pine-oak and mixed conifer habitats, especially loss of large conifers; reduced prey base from pesticide use in forest habitats.
Flycatcher, Willow, SW.	<i>Empidonax traillii extimus</i>	E	17,95b	E	1	1	Loss, fragmentation, or alteration of riparian habitat from water manipulation, urbanization, excessive livestock grazing, fire, and vegetation eradication programs; negative impacts from recreation and research; demography of fragmented populations.
Kingbird, Thick-billed	<i>Tyrannus crassirostris</i>			E	2	1	Loss or degradation of broadleaf riparian woodland habitat from fire, lowered water tables, excessive livestock grazing

Shrike, Loggerhead	<i>Lanius ludovicianus</i>			S	2	Significant rangewide declines potentially linked to habitat loss/degradation from changing agricultural practices, brush control programs or other land use changes; pesticide contamination; collision with vehicles	
Swallow, Bank	<i>Riparia riparia</i>				1	Destruction or alteration of streambank nesting habitat from flood- and erosion-control projects, bank stabilization projects, inundation, road building	
Jay, Pinyon	<i>Gymnorhinus cyanocephalus</i>				2	Loss, degradation, or fragmentation of pinyon-juniper woodlands from conversion, clearing, firewood cutting, overgrazing, and altered fire regimes; illegal shooting.	
Titmouse, Juniper	<i>Baeolophus ridgwayi</i>				2	Rangewide declining trends potentially related to loss of pinyon-juniper habitat from clearing, range conversion, excessive firewood and fence post cutting.	
Thrasher, Sage	<i>Oreoscoptes montanus</i>				2	Loss or degradation of sagebrush habitat through mechanical or chemical clearing, invasion of non-native plants, conversion to agriculture, fire	
Thrasher, Bendire's	<i>Toxostoma bendirei</i>				2	Total population small and restricted; significant rangewide population declines potentially related to habitat changes or to unknown factors	
Pipit, Sprague's	<i>Anthus spragueii</i>				1	2	Loss or fragmentation of native grassland habitats from excessive livestock grazing, land conversion, brush encroachment, and oil and gas development
Vireo, Bell's	<i>Vireo bellii</i>	SOC		T	2	2	Loss or fragmentation of dense shrubby/woody riparian habitats from urbanization, agricultural conversion, excessive livestock grazing, firewood cutting, flood control and reservoir construction; cowbird parasitism
Vireo, Gray	<i>Vireo vicinior</i>			T	2	2	Loss or alteration of quality juniper-grassland habitat from clearing, burning, and overgrazing; cowbird parasitism
Warbler, Lucy's	<i>Vermivora luciae</i>				2	2	Loss or degradation of southwestern riparian habitats from clearing, firewood cutting, livestock grazing, fire, and inundation.
Warbler, Gray, Black-throated	<i>Dendroica nigrescens</i>				2	2	Loss or alteration of pinyon-juniper and oak-juniper woodlands through thinning, clearing, fire, or disease.
Warbler, Grace's	<i>Dendroica graciae</i>				2	2	Loss, alteration, or fragmentation of ponderosa pine habitat from timber harvest, firewood harvest, excessive livestock grazing, fire suppression, and urban development
Warbler, Red-faced	<i>Cardellina rubrifrons</i>				2	2	Loss or alteration of undisturbed montane riparian and forest habitats from timber harvest, catastrophic fire, and excessive livestock grazing; human disturbance to nesting birds.
Redstart, Painted	<i>Myioborus pictus</i>				2	2	Loss or alteration of middle elevation oak and pine-oak riparian woodlands from timber management, fire, and drought; human disturbance to nesting birds
Towhee, Abert's	<i>Pipilo aberti</i>			T	1	1	Loss, alteration, or degradation of native southwestern riparian habitats from livestock grazing, clearing, or conversion.
Sparrow, Botteri's	<i>Aimophila botterii</i>			S	1	1	Loss or degradation of limited tall-grass habitat from excessive livestock grazing and fire.
Sparrow, Baird's	<i>Ammodramus bairdii</i>	SOC		T	1	2	Loss or degradation of native grassland habitat from excessive livestock grazing, shrub encroachment, land development, and oil and gas development.
Sparrow, Grasshopper	<i>Ammodramus savannarum</i>				1	2	Loss or degradation of native grassland habitat, primarily from excessive livestock grazing and ill-timed (late spring-early summer) fires
Sage Sparrow	<i>Amphispiza belli</i>				2	2	Rangewide declines linked to fragmentation, degradation, or destruction of sagebrush habitat from mechanical, chemical, and burning programs; overgrazing of disturbed/treated sagelands; altered fire regimes; exotic plant encroachment.
Junco, Yellow-eyed	<i>Junco phaeonotus</i>			T	2	1	Small, isolated populations vulnerable to montane forest habitat loss or modification
Bunting, Varied	<i>Passerina versicolor</i>			T	1	1	Loss of dense, shrubby riparian habitats from clearing, conversion, burning, overgrazing, and/or urbanization.
Bunting, Painted	<i>Passerina ciris</i>				2	2	Loss or degradation of riparian habitats, including programs to eradicate non-native plants; documented population declines
Hooded Oriole	<i>Icterus cucullatus</i>				1	2	Loss or fragmentation of broadleaf riparian habitat from clearing, dewatering, fire, and overgrazing; cowbird parasitism

1 - High Risk
2 - Moderate Risk
3 - Low Risk
Blank - No Risk

E - Endangered
T - Threatened
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C - Candidate
AD - Proposed delisting
SOC - Species of Concern

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15-Dec-05

SPECIES THAT MAY BE IMPACTED BY DROUGHT OR WILDFIRE: REPTILES

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Reptiles								
western painted turtle	<i>Chrysemys picta bellii</i>				1	1	generally a "big-river" species; drought can cause "drawdown" of reservoirs/rivers thus desiccating habitat and causing problems with increased hatchling predation and desiccation; stock tank/oxbow populations in Rio Grande drainage may suffer direct mortality from wildfire	
western river cooter	<i>Pseudemys gorzugi</i>			T	1	1	a "big-river" species; drought can cause "drawdown" of reservoirs/rivers thus desiccating habitat & causing problems with increased hatchling predation & desiccation	
Midland smooth softshell turtle	<i>Trionyx muticus muticus</i>				1	1	a "big-river" species; drought can cause "drawdown" of reservoirs/rivers thus desiccating habitat and causing problems with increased hatchling predation and desiccation	
Big Bend slider	<i>Trachemys gaigeae</i>			S	1	1	a "big-river" species; drought can cause "drawdown" of reservoirs/rivers thus desiccating habitat and causing problems with increased hatchling predation and desiccation	
Sonoran mud turtle	<i>Kinosternon sonoriense</i>					2	limited to stock tanks & temporary streams in SW; drought reduces/eliminates habitat	
regal horned lizard	<i>Phrynosoma solare</i>				2	1	very limited in Guadalupe Canyon; wildfires may cause direct mortality	
sand dune lizard	<i>Sceloporus arenicolus</i>	C		E	2	1	long-term drought may impact prey base; wildfires cause direct mortality, eliminate habitat	
bunch grass lizard	<i>Sceloporus slevini</i>				T	2	1	long-term drought may impact prey base
giant spotted whiptail	<i>Cnemidophorus burti</i>				2	1	wildfires cause habitat destruction and direct mortality; may temporarily eliminate prey base	
gray-checked whiptail	<i>Cnemidophorus dixonii</i>	SOC		E	2	1	very localized desert species in SW NM; wildfire may temporarily eliminate insect prey base	
mountain skink	<i>Eumeces callicephalus</i>				T	2	1	wildfires cause habitat destruction and direct mortality; may temporarily eliminate prey base
Sonoran mountain kingsnake	<i>Lampropeltis pyromelana</i>				2	1	wildfires cause habitat destruction and direct mortality; may temporarily eliminate prey base	
blotched water snake	<i>Nerodia erythrogaster transversa</i>			E	1	1	wildfires cause habitat destruction and direct mortality; associated ash flow could eliminate fish prey base	
green rat snake	<i>Senticolis triaspis intermedia</i>				T	2	1	wildfires cause habitat destruction and direct mortality; may temporarily eliminate lizard and rodent prey base
Yaqui blackhead snake	<i>Tamilla yaquia</i>			S	2	1	wildfires cause habitat destruction and direct mortality; may temporarily eliminate prey base	
Mexican garter snake	<i>Thamnophis eques megalops</i>	SOC		E	1	2	very localized in NM; long-term drought could eliminate habitat	
arid land ribbon snake	<i>Thamnophis proximus diabolicus</i>				T	2	1	drought eliminates or reduces available habitat
narrowhead garter snake	<i>Thamnophis rufipunctatus rufipunctatus</i>	SOC			T	2	1	wildfires cause habitat destruction and direct mortality; associated ash flow could eliminate fish prey base
New Mexico garter snake	<i>Thamnophis sirtalis dorsalis</i>				1	2	only in Rio Grande valley; abundant at Bosque del Apache National Wildlife Refuge; drought may eliminate habitat.	
NM ridgenose rattlesnake	<i>Crotalus willardi obscurus</i>	T	17.95.c	E	2	1	wildfires cause habitat destruction and direct mortality	

1 - Directly impacted by drought, directly dependent on the presence of water and/or associated habitats, habitat destruction/direct mortality due to wildfire, limited distribution

2 - Indirectly impacted by drought or wildfire (i.e. low precipitation will have adverse effects).

3 - Drought poses minimal risk (i.e. wide spp distribution, habitat generalists).

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SOC - Species of Concern

SPECIES THAT MAY BE IMPACTED BY DROUGHT OR WILDFIRE: MAMMALS

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		Federal Status	Critical Habitat	State Status	Drought Risk	Wildfire Risk	Comments
Mammals							
masked shrew	<i>Sorex cinereus cinereus</i>				1	3	Loss of mesic forests
Crawford's desert shrew	<i>Notiosorex crawfordi crawfordi</i>				2	3	Degradation of mesic microhabitats in various habitats
Merriam's shrew	<i>Sorex merriami leucogenys</i>				2	3	Loss of mesic forests
water shrew	<i>Sorex palustris navigator</i>				1	2	Aquatic habitat loss/degradation
Arizona shrew	<i>Sorex arizonae</i>			F	1	3	Habitat loss/conversion, wildfire, small populations
least shrew	<i>Cryptotis parva</i>			T	1	3	Overgrazing, habitat loss/conversion, wetland drying
New Mexico shrew	<i>Sorex neomexicanus</i>				2	3	Timber overharvest, habitat loss/conversion, wildfire
Preble's Shrew	<i>Sorex preblei</i>				1	3	Habitat loss/conversion, overgrazing, drought/climate change
Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	SOC		S	1	1	Roost disturbance; mine closures
Allen's big-eared bat	<i>Idionycteris phyllotis</i>	SOC		S	1	1	Roost disturbance; mine closures
western red bat	<i>Lasiurus blossevillii</i>	SOC		S	1	1	Riparian habitat loss/conversion, small populations
hoary bat	<i>Lasiurus cinereus cinereus</i>				1	2	Riparian habitat loss/conversion
long-eared myotis	<i>Myotis evotis evotis</i>			S	1	1	Habitat loss/conversion; roost disturbance
long-legged myotis	<i>Myotis volans interior</i>			S	1	1	Habitat loss/conversion; roost disturbance
southwestern myotis	<i>Myotis auriculus apache</i>				1	1	Habitat loss/conversion; roost disturbance
Yuma myotis	<i>Myotis yumanensis yumanensis</i>			S	1	1	Habitat loss/conversion; roost disturbance
lesser long-nosed bat	<i>Leptonycteris curasoae yerbabuena</i>	E		T	2	2	Roost disturbance, wildfire, loss of nectar plants
Mexican long-nosed bat	<i>Leptonycteris nivalis</i>	E		E	2	2	Roost disturbance, wildfire, loss of nectar plants
Mexican long-tongued bat	<i>Choeronycteris mexicana</i>				2	2	Roost disturbance, wildfire, loss of nectar plants
Goat Peak Pika	<i>Ochotona princeps nigrescens</i>	SOC		S	3	1	Habitat loss/conversion, climate change, small populations
snowshoe hare	<i>Lepus americanus</i>				2	2	Loss of dense forests through logging, development, wildfire
white-tailed jackrabbit	<i>Lepus townsendii</i>			S	2	3	Grassland loss within sage community, fragmentation, overgrazing
white-sided jackrabbit	<i>Lepus callotis gaillardi</i>	SOC		T	1	1	Overgrazing, habitat loss/conversions, small populations
Manzano mountain cottontail	<i>Sylvilagus cognatus</i>				2	3	Forest habitat loss/conversion; drought; wildfire
Abert's squirrel	<i>Sciurus aberti</i>				2	2	Forest habitat loss/conversion; drought; wildfire
Arizona gray squirrel	<i>Sciurus arizonensis arizonensis</i>				3	1	Riparian habitat loss/conversion, small populations
Ruidoso chickaree	<i>Tamiasciurus hudsonicus lynchuchus</i>				3	2	Forest habitat loss/conversion; drought; wildfire
Organ Mountain Colorado chipmunk	<i>Neotamias quadrivittatus australis</i>	SOC		T	2	2	Woodland habitat loss/conversion
Oscura Mountains Colorado chipmunk	<i>Neotamias quadrivittatus oscuraensis</i>	SOC		T	2	2	Woodland habitat loss/conversion
Penasco least chipmunk	<i>Neotamias minimus atristriatus</i>	SOC		E	2	2	Habitat loss/fragmentation; species competition
black-tailed prairie dog	<i>Cynomys ludovicianus ludovicianus</i>	SOC		S	2	3	Sylvatic plague, habitat loss/fragmentation, unregulated taking
Gunnison's prairie dog	<i>Cynomys gunnisoni</i>			S	2	3	Sylvatic plague, unregulated taking, habitat loss/fragmentation
Chuskan northern pocket gopher	<i>Thomomys talpoides fossor</i>				2	3	Small population; forest loss/conversion
Mt. Taylor northern pocket gopher	<i>Thomomys talpoides taylori</i>			S	2	3	Small population; forest loss/conversion
southern pocket gopher	<i>Thomomys umbrinus emotus</i>			T	2	3	Habitat loss/conversion; wildfire; small populations
fulvous harvest mouse	<i>Reithrodontomys fulvescens</i>				2	2	Grassland loss and conversion
northern pygmy mouse	<i>Baiomys taylori ater</i>				2	2	Overgrazing; grassland habitat loss/conversion; small populations
Arizona cotton rat	<i>Sigmodon arizonae cienegae</i>				2	2	Grassland loss/degradation

tawny-bellied cotton rat	<i>Sigmodon fulviventer minimus</i>				2	2	Grassland loss/degradation
yellow-nosed cotton rat	<i>Sigmodon ochrognathus</i>				2	2	Overgrazing; grassland habitat loss/conversion; small populations
southern red-backed vole	<i>Clethrionomys gapperi</i>				2	2	Forest habitat loss/conversion; drought; wildfire
montane vole	<i>Microtus montanus fusus</i>				1	2	Forest/wetland habitat loss/conversion; drought; wildfire
prairie vole	<i>Microtus ochrogaster</i>			S	1	3	Overgrazing; wetland habitat loss/conversion; small populations
meadow vole	<i>Microtus pennsylvanicus modestus</i>				1	3	Forest/wetland habitat loss/conversion; drought; wildfire
Arizona montane vole	<i>Microtus montanus arizonensis</i>			E	1	2	Overgrazing; wetland habitat loss/conversion; small populations
western heather vole	<i>Phenacomys intermedius intermedius</i>			S	1	2	Forest habitat loss/conversion; drought; wildfire
New Mexican jumping mouse	<i>Zapus hudsonius luteus</i>	SOC		T	1	2	Overgrazing; wetland habitat loss/conversion; small populations
red fox	<i>Vulpes vulpes macroura</i>			S	2	3	Predator control; habitat loss/conversion
swift fox	<i>Vulpes velox velox</i>	SOC		S	3	3	Grassland habitat loss/conversion; road mortality
white-nosed coati	<i>Nasua narica</i>	SOC		S	2	2	Madrean/riparian habitat loss/fragmentation; small populations; spring loss
long-tailed weasel	<i>Mustela frenata</i>				2	3	Forest habitat loss/conversion; drought; wildfire
American marten	<i>Martes americana origenes</i>	SOC		T	3	1	Timber overharvest, forest habitat loss/conversion; wildfire
ermine	<i>Mustela erminea muricus</i>				2	2	Forest habitat loss/conversion; drought; wildfire
Canada Lynx	<i>Lynx canadensis</i>	T			2	2	Marginal occurrence; forest habitat loss
desert bighorn sheep	<i>Ovis canadensis mexicana</i>			E	2	3	Disease/habitat degradation/lion predation

- 1 - Directly impacted by drought, directly dependent on the presence of water and/or associated habitats.
2 - Indirectly impacted by drought (i.e. low precipitation will have adverse effects).
3 - Drought poses minimal risk (i.e. wide spp distribution, habitat generalists).

E - Endangered
T - Threatened
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15-Dec-05

SPECIES THAT MAY BE IMPACTED BY DROUGHT OR WILDFIRE: CRUSTACEANS

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		Federal Status	Critical Habitat	State Status	Drought Risk	Wildfire Risk	Comments
Crustaceans							
Isopod, Socorro	<i>Thermosphaeroma thermophilum</i>	E		E	1	3	limited distribution; drought could diminish spring discharge; ash loads from fire result in indirect ecosystem impacts.
Amphipod, Noel's	<i>Gammarus desperatus</i>	PE		E	1	3	limited distribution; demonstrated effects of fire (NMDGF reports) and drought (Cole 1981, 1985)
Amphipod, cryptic species, BLNWR	<i>Gammarus sp.</i>				1	3	limited distribution; drought diminishes spring discharge; ash loads from fire result in indirect ecosystem impacts.
Amphipod, cryptic species, Sit. Bull Sp.	<i>Gammarus sp.</i>				1	3	limited distribution; drought diminishes spring discharge; ash loads from fire result in indirect ecosystem impacts.
Sideswimmers / Scuds (amphipod)	<i>Hyaella spp.</i>				1	3	drought diminishes spring discharge; ash loads from fire result in indirect ecosystem impacts.
Crayfish, Conchas	<i>Orconectes deanae</i>			S	1	3	limited distribution; ash loads from fire result in indirect ecosystem impacts; drought reduces suitable habitat.
Crayfish, No Common Name (NM)	<i>Procambarus simulans simulans</i>				1	3	ash loads from fire result in indirect ecosystem impacts; drought reduces suitable habitat.
Crayfish, Verile	<i>Orconectes virilis</i>				1	3	ash loads from fire result in indirect ecosystem impacts; drought reduces suitable habitat.

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 PE - Proposed Endangered
 S - Sensitive/Wildlife of Concern

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15-Dec-05

SPECIES THAT MAY BE IMPACTED BY DROUGHT OR WILDFIRE - MOLLUSKS

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		Federal Status	Critical Habitat	State Status	Drought Risk	Wildfire Risk	Comments
Mollusks							
Snail, Pyrg, Chupadera	<i>Pyrgulopsis chupadera</i>	C		E	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Pyrg, Socorro	<i>Pyrgulopsis neomexicana</i>	E		E	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Pyrg, Pecos	<i>Pyrgulopsis pecosensis</i>	SOC		T	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Pyrg, Roswell	<i>Pyrgulopsis roswellensis</i>	PE		E	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Pyrg, Mimbres	<i>Pyrgulopsis n. sp.</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Pyrg, Gila	<i>Pyrgulopsis gilae</i>	C		T	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Pyrg, Hotspring, NM	<i>Pyrgulopsis thermalis</i>	C		T	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Tryonia, Alamosa	<i>Pseudotryonia alamosae</i>	E		E	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Tryonia, Koster's	<i>Juturnia kosteri</i>	PE		E	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Assiminea, Pecos	<i>Assiminea pecos</i>	PE		E	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Peaclam, Sangre De Cristo	<i>Pisidium sanguinichristi</i>	SOC		T	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Peaclam, Lilljeborg's	<i>Pisidium lilljeborgi</i>			T	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Ramshorn, Say's	<i>Gyraulus parvus</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Star Gyro	<i>Gyraulus crista</i>			T	3	4	drought diminishes suitable habitat; short- & long-term return effects of fire unknown
Snail, Ramshorn, New Mexico	<i>Pecosorbis kansasensis</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Ancyloid, Creeping	<i>Ferrissia rivularis</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Limpet, River	<i>Ferrissia californica</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Mussel, Paper-shell	<i>Utterbackia imbecillis</i>			E	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Hornshell, Texas	<i>Popenaias popeii</i>	C		E	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Fingernailclam, Swamp	<i>Musculium partumeium</i>			T	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Fingernailclam, Lake	<i>Musculium lacustre</i>			T	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Fingernailclam, Long	<i>Musculium transversum</i>			T	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Peaclam, Striate	<i>Sphaerium striatinum</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Peaclam, Ubiquitous	<i>Pisidium castertanum</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Peaclam, Ridged-beak	<i>Pisidium compressum</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Peaclam, Shiny	<i>Pisidium nitidum</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Peaclam	<i>Pisidium contortum</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Peaclam	<i>Pisidium insigne</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Peaclam, Held's	<i>Pisidium milium</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Peaclam, Striate	<i>Pisidium punctiferum</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Peaclam	<i>Pisidium variabile</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality

Peaclam, Globular	<i>Pisidium ventricosum</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Fossoria, Rock	<i>Fossoria modicella</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Fossoria, Pygmy	<i>Fossoria parva</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Fossoria, Golden	<i>Fossaria obrussa</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Marshsnail, Wrinkled	<i>Stagnicola caperata</i>			E	1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Pondsnail, Marsh	<i>Stagnicola elodes</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Ramshorn, Obstructed	<i>Bioamphalaria obstructa</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Ramshorn, Tryon's	<i>Gyraulus circumstriatus</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Ramshorn, Keeled	<i>Promenetus exacuous</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Ramshorn, Cockrell's	<i>Promenetus umbilicatellus</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Ramshorn, Mexican	<i>Planorbella tenuis</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Pondsnail, Marsh	<i>Physa anatina</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Physa, Tadpole	<i>Physa gyrina</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Ramshorn, Two-ridged	<i>Helisoma anceps</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Snail, Ramshorn, Marsh	<i>Planorbella trivolvis</i>				1	3	drought diminishes available habitat; ash deposition reduces habitat quality
Woodlandsnail, Hacheta Grande	<i>Ashmunella hebaridi</i>	SOC		T	3	4	drought diminishes suitable habitat; short- & long-term return effects of fire unknown
Talussnail, Dona Ana	<i>Sonorella todseni</i>	SOC		T	3	4	drought diminishes suitable habitat; short- & long-term return effects of fire unknown
Snail, Vertigo, Ovate	<i>Vertigo ovata</i>	SOC		T	3	4	drought diminishes suitable habitat; short- & long-term return effects of fire unknown
Woodlandsnail, Cook's Peak	<i>Ashmunella macromphala</i>	SOC		T	3	4	drought diminishes suitable habitat; short- & long-term return effects of fire unknown
Snail, Snaggletooth, Shortneck (NM)	<i>Gastrocopta dalliana dalliana</i>	SOC		E	3	4	drought diminishes suitable habitat; short- & long-term return effects of fire unknown

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15-Dec-05

SPECIES THAT MAY BE IMPACTED BY DROUGHT OR WILDFIRE: PLANTS

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		Federal Status	State Status	Drought Risk	Wildfire Risk	Comments
Plants						
Organ Mountains giant Hyssop	<i>Agastache pringlei</i> var <i>verticillata</i>		SoC	2		Mesic habitat
Goodding's onion	<i>Allium gooddingii</i>	SoC	E	1		Riparian habitat
Chapline's columbine	<i>Aquilegia chrysantha</i> var <i>chaplinei</i>		SoC	2		Riparian habitat
Kerr's milkvetch	<i>Astragalus kerrii</i>		SoC		2	P-J woodland
Pecos mariposa lily	<i>Calochortus gunnisonii</i> var. <i>perpulcher</i>		SoC		2	Aspen forest
Gila thistle	<i>Cirsium gilense</i>		SoC	2		Mesic habitat
Sacramento Mountains thistle	<i>Cirsium vinaceum</i>	T	E	1		Wetland habitat
Wright's marsh thistle	<i>Cirsium wrightii</i>	SoC	SoC	1		Wetland habitat
Wooton's hawthorn	<i>Crataegus wootoniana</i>		SoC	2	2	Mixed conifer forest
Kuenzler's hedgehog cactus	<i>Echinocereus fendleri</i> var. <i>kuenzleri</i>	E	E		2	Desert grassland & P-J
Giant helleborine orchid	<i>Epipactis gigantea</i>			2		Riparian habitat
Villard's poncushion cactus	<i>Escobaria villardii</i>	SoC	E		1	Desert grassland
Tall prairie-gentian	<i>Eustoma exaltatum</i>			2		Wetland habitat
Showy prairie-gentian	<i>Eustoma russellianum</i>			2		Wetland habitat
Todsen's pennyroyal	<i>Hedeoma todsenii</i>	E	E		2	P-J woodland
Mckittrick pennyroyal	<i>Hedeoma apiculata</i>	SoC	SoC	2		Mesic habitat
Puzzle sunflower	<i>Helianthus paradoxus</i>		E	1		Wetland habitat
Arizona coralroot	<i>Hexaletris spicata</i> var. <i>arizonica</i>		E		2	Oak woodland
Sierra Blanca cliff daisy	<i>Ionactis elegans</i> (= <i>Chaetopappa</i> e.)	SoC	SoC	2		Mesic habitat
Organ evening-primrose	<i>Oenothera organensis</i>	SoC	SoC	2		Mesic habitat
Heartleaf groundsel	<i>Packera cardamine</i> (= <i>senecio cardamine</i>)		SoC		2	Mixed conifer forest
Gila groundsel	<i>Packera quaerens</i> (= <i>senecio</i> q.)		SoC	2		Mesic habitat
Metcalfe's penstemon	<i>Penstemon metcalfei</i>		SoC	2	2	Mixed conifer forest
Five-flower rockdaisy	<i>Perityle quinqueflora</i>		SoC	2		Mesic habitat
Mescalero milkwort	<i>Polygala rimulicola</i> var <i>mescaleroorum</i>		E	1		Mesic habitat
Guadalupe milkwort	<i>Polygala rimulicola</i> var <i>rimulicola</i>			2		Mesic habitat
Davidson's cliff carrot	<i>Pteryxia davidsonii</i>		SoC		2	P-J woodland
Parish's alkali grass	<i>Puccinellia parishii</i>	SoC	E	1		Wetland habitat (springs)
Arizona willow	<i>Salix arizonica</i>	SoC	SoC	2		Wetland habitat

smooth figwort	<i>Scrophularia laevis</i>	SoC	SoC	2		Mesic habitat
Mimbres figwort	<i>Scrophularia macrantha</i>		SoC	2		Mesic habitat
Great plains ladies'-tresses	<i>Spiranthes magnicamporum</i>		E	2		Wetland habitat
Hooded ladies'-tresses	<i>Spiranthes romanzoffiana</i>			2		Wetland habitat
Mogollon clover	<i>Trifolium longipes</i> var <i>neurophyllum</i>	SoC	SoC	2		Wetland habitat
Guadalupe valerian	<i>Valeriana texana</i>			2		Mesic habitat
Mogollon death camas	<i>Zigadenus mogollonensis</i>				2	Mixed conifer forest

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15-Dec-05

SPECIES THAT MAY BE IMPACTED BY DROUGHT OR WILDFIRE: AMPHIBIANS

DISCLAIMER: This list was developed as an initiative of the Wildlife and Wildfire Work Group of the Governor's Drought Task Force, and represents the input of a number of wildlife specialists (see list of participants attached). The list does not represent the legal or scientific conclusions, opinions or positions of the State of New Mexico, its agencies or officials. The intent is to provide land managers with an additional tool to use in making decisions about development, environmental, and other projects affecting habitat. It may also provide information that could be used in preparedness planning for, or mitigation of, the impacts of drought or wildfire on these species. While these potential impacts can raise concerns, there are numerous variables that could affect the actual impact on any species, including those on this list. The duration and extremity of drought; the severity, duration and coverage of a wildfire; and numerous other factors will determine whether there is, in fact, an actual impact on any particular species and whether that impact is harmful or beneficial to the species and the ecosystem as a whole. It is therefore important to understand that this list is provided for information purposes only. It is in no way intended to list only species that might be affected, nor is it a definitive statement about what the actual impact on these or other species may be.

		Federal Status	Critical Habitat	State Status	Drought Risk	Wildfire Risk	Comments	
Amphibians								
Sacramento Mtn. Salamander	<i>Aneides hardii</i>	SOC		T	2	2	limited distribution, drought & wildfire desiccates & destroys habitat; direct mortality likely during late season fires	
Jemez Mountain Salamander	<i>Plethodon neomexicanus</i>	SOC		E	2	1	limited distribution, drought & wildfire desiccates & destroys habitat; direct mortality likely during late season fires	
Chiricahua leopard frog	<i>Rana chiricahuensis</i>			T	S	2	1	limited distribution, drought eliminates habitat; wildfire & resultant ash flows desiccates & destroys habitat; direct mortality of tadpoles/adults likely during wildfires
northern leopard frog	<i>Rana pipiens</i>					2	1	limited distribution, drought eliminates habitat; wildfire & resultant ash flows desiccates & destroys habitat; direct mortality of tadpoles/adults likely during wildfires
lowland leopard frog	<i>Rana yavapaiensis</i>	SOC			E	2	1	limited distribution, drought eliminates habitat; wildfire & resultant ash flows desiccates & destroys habitat; direct mortality of tadpoles/adults likely during wildfires
western boreal toad	<i>Bufo boreas boreas</i>	SOC			E	1	1	very rare or extirpated in NM; reintroduction discussions ongoing w/ Boreal Toad Recovery Team; drought eliminates habitat; wildfire/resultant ash flows desiccates & destroys habitat; direct mortality of tadpoles & adults from wildfires
eastern barking frog	<i>Eleutherodactylus augusti latrans</i>					2	4	limited distribution, drought desiccates habitat; limits reproduction (needs torrential rains for reproduction)
Rio Grande leopard frog	<i>Rana berlandieri</i>					2	1	limited distribution, drought eliminates habitat; wildfire and resultant ash flows desiccates and destroys habitat; direct mortality of tadpoles and adults likely during wildfires
plains leopard frog	<i>Rana blairi</i>					2	4	limited distribution, drought eliminates habitat; mostly a prairie frog, breeding in widespread stock tanks that are not very prone to wildfire effects
Great Plains narrowmouth frog	<i>Gastrophryne olivacea</i>				E	1	2	drought eliminates habitat; very localized and rare in SW and NE NM; required torrential rains for reproduction
Colorado River toad	<i>Bufo alvarius</i>				T	2	4	limited distribution, drought eliminates habitat; wildfire and resultant ash flows desiccates and destroys habitat; direct mortality of tadpoles and adults likely during wildfires
Arizona toad	<i>Bufo microscaphus microscaphus</i>				S	2	1	limited distribution, drought eliminates habitat; wildfire and resultant ash flows desiccates and destroys habitat; direct mortality of tadpoles and adults likely during wildfires
mountain tree frog	<i>Hyla eximia</i>					2	1	drought eliminates habitat; wildfire and resultant ash flows desiccates and destroys habitat; direct mortality of tadpoles and adults likely during wildfires
western chorus frog	<i>Pseudacris triseriata</i>					2	4	drought eliminates habitat; mostly a prairie frog, breeding in widespread stock tanks that are not very prone to wildfire effects

1 = directly impacted, within impact area, measurable and substantial effects
 2 = direct impacts, but not substantial, in vicinity of impact
 3 = largely indirect impacts, in vicinity of impact
 4 = not likely to have discernable impact or not known

E - Endangered
 T - Threatened
 S - Sensitive/Wildlife of Concern
 SOC - Species of Concern

Please contact the U.S. Fish and Wildlife Service and the New Mexico Department of Game and Fish for current species status information.

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