

APPENDIX E1

Federally-Listed Species List from the U.S. Fish and Wildlife Service



Bur. of Land Management

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MAY 16 2006

NEVADA STATE OFFICE
RENO, NEVADA

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Nevada Fish and Wildlife Office

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May 12, 2006

File No. 1-5-06-SP-500

Memorandum

To: Project Manager, Nevada Groundwater Projects, Nevada State Office,
Bureau of Land Management, Reno, Nevada

From: Field Supervisor, Nevada Fish and Wildlife Office, Reno, Nevada

Subject: Species List for the Proposed Lincoln County Land Act Groundwater
Development and Utility Right-of-Way Project, Lincoln County, Nevada

This responds to your letter received on April 10, 2006, requesting a species list for the Lincoln County Land Act (LCLA) Groundwater Development and Utility Right-of-Way Project in Lincoln County, Nevada. The proposed project would require a right-of-way grant authorized by the Bureau of Land Management (BLM) for the construction and operation of a groundwater development and delivery system, including the installation of approximately eight production wells located in the Tule Desert hydrographic basin; up to ten production wells located in the Clover Valley hydrographic basin; a system of pipelines that would transport water to the LCLA development area; associated ancillary facilities to provide power and communication for the project facilities; and a natural gas pipeline that would parallel the water pipeline from the existing Kern River Natural Gas pipeline south to the LCLA development area. The following federally listed species may occur in or near the vicinity of the subject project area:

- Southwestern willow flycatcher (*Empidonax traillii extimus*), endangered
- Designated critical habitat for the southwestern willow flycatcher
- Virgin River chub (*Gila seminuda*), endangered
- Designated critical habitat for the Virgin River chub
- Desert tortoise (*Gopherus agassizii*) (Mojave population), threatened
- Designated critical habitat for the desert tortoise
- Big Spring spinedace (*Lepidomeda mollispinis pratensis*), threatened

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- Woundfin (*Plagopterus argentissimus*), endangered
- Designated critical habitat for the woundfin
- Ute ladies'-tresses (*Spiranthes diluvialis*), threatened
- Yuma clapper rail (*Rallus longirostris yumanensis*), endangered
- Yellow-billed cuckoo (*Coccyzus americanus*) (Western Distinct Population Segment), candidate

This list fulfills the requirement of the Fish and Wildlife Service (Service) to provide information on listed species pursuant to section 7(c) of the Endangered Species Act of 1973, as amended (Act), for projects that are authorized, funded, or carried out by a Federal agency. If it is determined by BLM that a listed species may be affected by the proposed project, then formal consultation should be initiated pursuant to 50 CFR § 402.14. The written request for formal consultation is typically submitted once a Biological Assessment has been prepared for the project. Formal consultation is initiated by the Service on the date the written request and Biological Assessment is received, if the Service determines the information received is sufficient. Informal consultation may be utilized prior to a written request for formal consultation to exchange information and resolve conflicts with respect to listed species. Please note that candidate species receive no legal protection under the Act, but could be proposed for listing in the near future. Consideration of these species during project planning may assist species conservation efforts and may prevent the need for future listing actions.

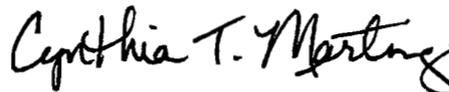
The Nevada Fish and Wildlife Office no longer provides species of concern lists. Most of these species for which we have concern, are also on the sensitive species list for Nevada maintained by the State of Nevada's Natural Heritage Program (Heritage). Instead of maintaining our own list, we have adopted Heritage's sensitive species list and partnered with them to provide distribution data and information on the conservation needs for sensitive species to agencies or project proponents. The mission of Heritage is to continually evaluate the conservation priorities of native plants, animals, and their habitats, particularly those most vulnerable to extinction or is in serious decline. Consideration of these sensitive species and exploring management alternatives early in the planning process can provide long-term conservation benefits and avoid future conflicts.

For a list of sensitive species by county, visit Heritage's website at www.heritage.nv.gov. For a specific list of sensitive species that may occur in the project area, you can obtain a data request form from the website or by contacting Heritage at 901 South Stewart Street, Suite 5002, Carson City, Nevada, 89701-5245, 775-684-2900. Please indicate on the form that your request is being obtained as part of your coordination with the Service under the Act. During your project analysis, if you obtain new information or data for any Nevada sensitive species, we request that you provide the information to Heritage at the above address. Furthermore, certain species of fish and wildlife are classified as protected by the State of Nevada (<http://www.leg.state.nv.us/NAC/NAC-503.html>). Before a person can hunt, take, or possess any parts of wildlife species classified as protected, they must first obtain the appropriate license, permit, or written authorization from the Nevada Department of Wildlife (<http://www.ndow.org>; 702-486-5127).

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Please reference File No. 1-5-06-SP-500 in future correspondence concerning this species list. We will be providing scoping comments in the near future that will outline in more detail our concerns regarding the project and the potential affect to species and their habitat. In the meantime, if you have any questions regarding this correspondence or require additional information, please contact Jeri Krueger in our Southern Nevada Field Office at (702) 515-5230.



for Robert D. Williams

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**BLM and Nevada State Listed Special Status Species that may
potentially Occur in or Near the Project Area**

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<p>BLM Sensitive Species are taxa that are not already included as BLM Special Status Species under (1) Federally listed, proposed, or candidate species; or (2) State of Nevada listed species.</p> <p>State Listed in NAC Chapter 503. "Endangered" means when a species or subspecies is in danger of extinction throughout all or a significant portion of its range. "Protected" means when a species or subspecies is classified as protected by the Commission pursuant to NAC 503.103. "Sensitive" means when a species or subspecies is classified as sensitive by the Commission pursuant to NAC 503.104. "Threatened" means when a species or subspecies is likely to become an endangered species in the near future throughout all or a significant portion of its range.</p>						
Common Name	Scientific Name	Special Status Species			Habitat Type	Potential for Occurrence in the Project Area
		Nevada State Sensitive, Protected, Endangered or Threatened	Species of Conservation Priority	BLM Sensitive Species		
Mammals						
Nelson desert bighorn sheep	<i>Ovis canadensis nelsoni</i>	X	X	X	Rough, rocky, and brush covered terrain with canyons and washes	Potentially occurring in the southern portion of the project area near the Mormon Mountains.
Mule deer	<i>Odocoileus hemionus</i>	X	X		Occurs in coniferous forests, desert shrub, chaparral, grasslands with shrubs.	Potentially occurring throughout the project area.
Kit fox	<i>Vulpes macrotis</i>	X			Occurs in open desert, shrubby, or shrub-grass habitat and in the Mojave Desert it typically is associated with creosote bush.	Potentially occurring in the Tule Desert.
Ringtail	<i>Bassariscus astutus</i>		X		Desert scrub, chaparral, pine-oak, and conifer woodlands in rocky areas with cliffs or crevices.	Potentially occurring throughout the project area, typically within 0.5 miles of water.
Pygmy rabbit	<i>Brachylagus idahoensis</i>	X	X	X	Dense stands of big sagebrush growing in deep loose soils.	Potentially occurring wherever big sagebrush is present.
Desert kangaroo rat	<i>Dipodomys deserti</i>		X		Low deserts with sandy soil. Most often associated with deposits of deep wind-blown sand.	Potentially occurring in the Tule Desert where sand deposits occur.
Desert pocket mouse	<i>Chaetodipus penicillatus</i>		X		Sparsely vegetated sandy desert floors and rock-free bottomland soils near rivers and streams.	Potentially occurring in the project area in the Tule Desert.
Desert Valley kangaroo mouse	<i>Microdipodops megacephalus albiventer</i>	X	X	X	Occurs in loose sands and gravel of shadscale scrub, sagebrush scrub, and alkali sink plant communities	Potentially occurring in the project area in the Tule Desert.

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Brush mouse	<i>Peromyscus boylii</i>				Typically in rough, rocky canyons of coniferous brush, open pine forests, riparian zones, oak woodland, scrub oak on flats and steep slopes, and juniper woodland where rocks and heavy brush are present.	Potentially occurring throughout the project area.
Pallid bat	<i>Antrozous pallidus</i>	X		X	Roosts in cave, mine shafts, bridges, buildings, and trees; forages in woodlands, over water, and desert washes.	Potentially occurring throughout the project area.
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	X	X	X	Roosts in caves and mines, forages in piñon-juniper forest.	Potentially occurring throughout the project area, most likely in the Clover Mountains.
Brazilian free-tailed bat	<i>Tadarida brasiliensis</i>	X		X	Roosts in trees, caves, abandoned buildings, and under bridges; forages over water and desert washes, and in woodlands	Potentially occurring throughout the project area.
Big brown bat	<i>Eptesicus fuscus</i>			X	Roosts in buildings, hollow trees, and rock crevices. Occurs in wooded and semi-open habitats, typically with deciduous trees but also in conifer forests.	Potentially occurring throughout the project area.
Spotted bat	<i>Euderma maculatum</i>	X	X	X	Roosts in caves, crevices, talus, trees, bridges, and buildings; forages over water, and in desert washes, and woodlands	Potentially occurring throughout the project area.
Allen's lappet-browed bat	<i>Idionycteris phyllotis</i>	X	X	X	Typically roosts in large, dead snags. Uses riparian areas in southern Nevada.	No suitable habitat in the project area. May occur to the south along the Virgin River.
Silver-haired bat	<i>Lasionycteris noctivagans</i>			X	Roosts in trees, caves, mine shafts, bridges, and buildings, and forages over water and in woodlands	Potentially occurring in the northern portion of the project area in the Clover Mountains.
Western red bat	<i>Lasiurus blossevillii</i>	X	X	X	Wooded habitats	Potentially occurring throughout the project area.
Hoary bat	<i>Lasiurus cinereus</i>		X	X	Roosts in trees, cliffs, mines, caves, and talus; forages over water and in woodlands	Potentially occurring in the northern portion of the project area in the Clover Mountains.

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Western yellow bat	<i>Lasiurus xanthinus</i>		X		Most often associated with fan palm oases, but may use riparian areas as well.	No suitable habitat in the project area. Closest potential habitat is south of the project area.
Big free-tailed bat	<i>Nyctinomops macrotis</i>		X	X	Roost in rock crevices in rocky areas of arroyo, scrub desert, and riparian habitats	Potentially occurring throughout the project area.
Fringed myotis	<i>Myotis thysanodes</i>	X	X	X	Forages in desert scrub and piñon-juniper woodlands; breeds and roosts in mines, building, rock crevices, caves, and under tree bark	Potentially occurring in the northern portion of the project area in the Clover Mountains.
California myotis	<i>Myotis californicus</i>			X	Roosts in caves, crevices, talus, trees, bridges, and buildings; forages over water, and in desert washes, and woodlands	Potentially occurring throughout the project area.
Small-footed myotis	<i>Myotis ciliolabrum</i>		X	X	Desert, badland, semidesert, and desert mountain habitats from 1,000 to 11,000 feet, typically found in desert scrub	Potentially occurring throughout the project area.
Little brown myotis	<i>Myotis lucifugus</i>		X	X	Prefers to forage over water. Usually hibernates in caves and mines, often roosts and breeds in buildings	Potentially occurring throughout the project area where water is present.
Long-legged myotis	<i>Myotis volans</i>			X	Piñon-juniper woodlands and ponderosa pine forests; roosts in trees, caves, mine shafts, cliffs, crevices, abandoned buildings, and under bridges; forages over water	Potentially occurring in the northern portion of the project area in the Clover Mountains.
Yuma myotis	<i>Myotis yumanensis</i>			X	Roosts in trees, caves, mine shafts, cliffs, crevices, abandoned buildings, and under bridges; forages over water	Potentially occurring throughout the project area where water is present.
Pahranagat Valley montane vole	<i>Microtus montanus fucosus</i>	X	X	X	Low elevation wet valleys	Occurs locally in the Pahranagat Valley approximately 50 miles west of the project area.
Sagebrush vole	<i>Lemmiscus curtatus</i>		X		Occurs in semi-arid prairies, rolling hills, and brushy canyons, with loose, well-drained soils where sagebrush and bunch grasses are present.	No suitable habitat in the project area.

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Western pipistrelle	<i>Pipistrellus hesperus</i>			X	Roosts in trees, caves, abandoned buildings, and under bridges; forages over water and desert washes, and in woodlands	Potentially occurring in the southern portion of the project area in the Tule Desert.
Merriam's shrew	<i>Sorex merriami leucogenys</i>		X		Occurs in grassy areas in sagebrush scrub and piñon-juniper habitats.	Potentially occurring throughout the project area.
Water shrew	<i>Sorex palustris</i>		X		Most abundant along cold mountain streams, usually found in areas with water.	Unlikely to occur in the project area due to a lack of surface water.
Vagrant shrew	<i>Sorex vagrans</i>		X		Occurs in forest, meadows, and riparian habitats, typically mesic.	Potentially occurring in the northern portions of the project area, north of the Tule Desert.
Birds						
Northern goshawk	<i>Accipiter gentilis</i>	X	X	X	Typically associated with dense woodlands, but forages over open areas near riparian zones.	Potentially occurring north of the Tule Desert.
Clark's grebe	<i>Aechmophorus clarkii</i>		X		Marshes and lakes during the breeding season. During migration will utilize rivers as well.	No potential habitat in the project area.
Western grebe	<i>Aechmophorus occidentalis</i>		X		Marshes and lakes during the breeding season.	No potential habitat in the project area.
White-throated swift	<i>Aeronautes saxatalis</i>		X		Occurs in mountainous country where cliffs and canyons are present for breeding.	Potentially occurring throughout the project area where suitable habitat exists.
Sage sparrow	<i>Amphispiza belli</i>		X		Prefers semi-open habitats where sagebrush is present for breeding. Also occurs in salt-bush brushland, shadscale, antelope brush, rabbitbrush, mesquite, and chaparral.	Potentially occurring as a breeding resident north of the Tule Desert and as a winter resident in the Tule Desert.
Northern pintail	<i>Anas acuta</i>		X		Winters in southern Nevada in freshwater and brackish water areas.	No suitable wintering habitat in the project area.
Golden eagle	<i>Aquila chrysaetos</i>			X	Open country, especially hilly and mountainous regions	Potentially occurring throughout the project area.
Short-eared owl	<i>Asio flammeus</i>		X	X	Winters in southern Nevada in open areas with abundant prey base.	Potentially occurring as a winter resident in the project area.

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Long-eared owl	<i>Asio otus</i>			X	Riparian areas and other dense stands of trees, edges of coniferous forest	Potentially occurring in the northern portion of the project area in the Clover Mountains.
Western burrowing owl	<i>Athene cunicularia hypugea</i>		X	X	Nests in grasslands and shrublands, often in association with ground squirrels and badgers, which excavate burrows it uses for nesting	Potentially occurring throughout the project area.
Verdin	<i>Auriparus flaviceps</i>		X		Desert and arid brush of creosote bush.	Potentially occurring in the Tule Desert.
Redhead	<i>Aythya americana</i>		X		Winters in marshes, lakes, and rivers in southern Nevada.	No potential wintering habitat in the project area.
Canvasback	<i>Aythya valisineria</i>		X		Winters on deep, freshwater lakes and rivers in southern Nevada.	No potential wintering habitat in the project area.
Juniper titmouse	<i>Baeolophus ridgwayi</i>			X	Occurs in piñon-juniper woodlands	Potentially occurring in the northern portion of the project area in the Clover Mountains.
Ferruginous hawk	<i>Buteo regalis</i>		X	X	Prefers to nest at interface of piñon-juniper zone and desert shrub communities	Potentially occurring in the project area south of the Clover Mountains. Only two known records in southern California from the Las Vegas and Pahranaagat valleys.
Swainson's hawk	<i>Buteo swainsoni</i>		X	X	Nests in deciduous trees and shrubs in riparian areas or around springs	Potentially occurring in the northern portion of the project area in the Clover Mountains. Common spring and fall migrant in the desert.
Least sandpiper	<i>Calidris minutilla</i>		X		Migrant through Nevada. Migration areas are typically near water.	No potential migration habitat in the project area.
Costa's hummingbird	<i>Calypte costae</i>		X		Occurs in Desert and semi-desert arid brushy foothills and chaparral. Typically nests in canyons and washes.	Potentially occurring throughout the Tule Desert.
Cassin's finch	<i>Carpodacus cassinii</i>		X		Breeds in open coniferous forests; winters in deciduous woodlands, scrub, brushy areas, and partly open situations with scattered trees	Possible breeding resident north of the Tule Desert and winter resident in the Tule Desert.
Greater sage grouse	<i>Centrocercus urophasianus</i>	X	X		Sage brush habitat and wet meadows and riparian areas for brood rearing	No potential habitat in the project area.
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>		X	X	Winter resident of southern Nevada in dry mud or salt flats, sandy shores of rivers, lakes, and ponds.	No suitable wintering habitat in the project area.

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		Nevada State Sensitive, Protected, Endangered or Threatened	Species of Conservation Priority	BLM Sensitive Species		
Black tern	<i>Chlidonias niger</i>		X	X	Winter resident of southern Nevada in marshes, rivers, lake shores, impoundments, or in wet meadows.	No suitable wintering habitat in the project area.
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	X	X		Breeds in large, dense riparian forests with cottonwood and willow.	No suitable habitat in the project area.
Olive-sided flycatcher	<i>Contopus cooperi (borealis?)</i>		X		Breeds in a variety of forest, woodland, and open situations with scattered trees, especially where tall dead snags are present.	Potentially occurring as a breeding resident of areas north of the Tule Desert.
Grace's warbler	<i>Dendroica graciae</i>		X		Montane pine and pine-oak forests where ponderosa pines are present.	Potentially occurring north of the Tule Desert.
Snowy egret	<i>Egretta thula</i>		X		Found in herbaceous wetlands, scrub-shrub wetlands, marshes, lakes, and ponds.	No potential habitat in the project area.
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	X	X		Occurs in thickets, scrubby and brushy areas, open second growth, and open riparian woodland.	No suitable habitat in the project area.
Prairie falcon	<i>Falco mexicanus</i>			X	Grasslands, savannas, rangeland, agricultural areas, desert scrub; nests on cliffs or bluffs	Potentially occurring throughout the project area south of the Clover Mountains. Typically a spring resident.
Peregrine falcon	<i>Falco peregrinus</i>	X	X	X	Cliffs or canyons near water for cover and nesting	Potentially occurring wherever suitable nesting cliffs are present. Known to occur near the Panaca Hills 25 miles north of the project area and in the Pahrnagat Valley (Gullion et al. 1959).
Common loon	<i>Gavia immer</i>		X		Occurs at lakes and reservoirs as a migrant through Nevada.	No potential migration habitat in the project area.
(Greater) Sandhill crane	<i>Grus canadensis</i>		X	X	Winter habitat typically consists of river channels or wetlands for roosting and pastures, marshes, and meadows for foraging	No suitable habitat in the project area.
Piñon jay	<i>Gymnorhinus cyanocephalus</i>		X	X	Occurs in piñon-juniper woodlands, occasionally visiting pine forests	Potentially occurring in the northern portion of the project area in the Clover Mountains.
Bald eagle	<i>Haliaeetus leucocephalus</i>	X	X		Winter roosts typically occur in conifers.	Potentially occurring as a winter resident north of the Tule Desert.

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		Nevada State Sensitive, Protected, Endangered or Threatened	Species of Conservation Priority	BLM Sensitive Species		
Black-necked stilt	<i>Himantopus mexicanus</i>		X		Migrant through southern Nevada.	No suitable habitat in the project area.
Yellow-breasted chat	<i>Icteria virens</i>			X	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles and dense brush	No suitable habitat in the project area. Possible spring migrant.
Scott's oriole	<i>Icterus parisorum</i>		X		Occurs in Mojave mid-elevation desert scrub and lower montane woodland.	Potentially occurring throughout the project area.
(Western) Least bittern	<i>Ixobrychus exilis</i>		X	X	Dense emergent wetland vegetation, sometimes interspersed with woody vegetation and open water	No suitable habitat in the project area.
Loggerhead shrike	<i>Lanius ludovicianus</i>	X	X	X	Open ground including grassland, riparian, open woodland	Potentially occurring throughout the project area south of the Clover Mountains.
Black rosy-finch	<i>Leucosticte atrata</i>		X	X	Barren, rocky, or grassy areas; occasionally in brushy areas and open situations	Not expected to occur in the project area.
Long-billed dowitcher	<i>Limnodromus scolopaceus</i>		X		Migrates through Nevada utilizing freshwater.	No suitable migration habitat in the project area.
Lewis's woodpecker	<i>Melanerpes lewis</i>		X	X	Wooded areas.	Potentially occurring as a winter resident of the project area north of the Tule Desert.
Long-billed curlew	<i>Numenius americanus</i>		X	X	Emergent mudflats	No suitable habitat in the project area.
Flammulated owl	<i>Otus flammeolus</i>			X	Mountain pine forests	Potentially occurring in the northern portion of the project area in the Clover Mountains.
American white pelican	<i>Pelecanus erythrorhynchos</i>		X		Migrates through Nevada.	No potential aquatic habitat for migration within the project area.
Phainopepla	<i>Phainopepla nitens</i>		X	X	Desert scrub and mesquite and juniper woodlands	Potentially occurring throughout the project area, most likely south of the Clover Mountains.
Red-necked phalarope	<i>Phalaropus lobatus</i>		X		Migrates through Nevada.	No potential aquatic habitat for migration within the project area.
Abert's towhee	<i>Pipilo aberti</i>		X		Usually associated with rivers and streams in woodlands and thickets of mesquite, willow, and cottonwood. Also occurs in desert scrub habitat.	Potentially occurring in the southern portions of the project area.

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		Nevada State Sensitive, Protected, Endangered or Threatened	Species of Conservation Priority	BLM Sensitive Species		
White-faced ibis	<i>Plegadis chihi</i>		X		Migrates through Nevada.	No potential aquatic habitat for migration within the project area.
Eared grebe	<i>Podiceps nigricollis</i>		X		Breeds in shallow, alkaline lakes and ponds.	No potential habitat in the project area.
Vesper sparrow	<i>Pooecetes gramineus</i>		X		Dry sagebrush shrublands, savannahs, arid scrub, and woodland clearings	Potentially occurring in the project area south of the Clover Mountains. Uncommon spring and fall migrant.
Yuma clapper rail	<i>Rallus longirostris yumanensis</i>	X	X		Breeds in freshwater marshes containing dense stands of cattails and bulrushes.	No potential habitat in the project area.
American avocet	<i>Recurvirostra americana</i>		X		Migrates through Nevada.	No potential aquatic habitat for migration within the project area.
Black phoebe	<i>Sayornis nigricans</i>		X		Usually found near water of marshy ponds, open woodlands along streams, and near farm ponds and irrigation ditches.	Potentially occurring throughout the project area where water is present.
Rufous hummingbird	<i>Selasphorus rufus</i>		X		Migrant throughout Nevada.	Potentially occurring as a migrant in meadows where nectar plants are present.
Red-naped sapsucker	<i>Sphyrapicus nuchalis</i>			X	Forest and open woodland habitats, typically coniferous forests with aspen and other hardwoods	Potentially occurring in the northern portion of the project area in the Clover Mountains.
Black-chinned sparrow	<i>Spizella atrogularis</i>		X		Breeds in chaparral, sagebrush, and arid scrub on gentle hillsides to steep, rocky slopes, or in brushy canyons.	Potentially occurring throughout the project area.
Brewer's sparrow	<i>Spizella breweri</i>	X	X		Breeds in sagebrush and desert scrub habitats.	Potentially occurring in the Tule Desert and southern areas of the Clover Mountains.
Forster's tern	<i>Sterna forsteri</i>		X		Migrates through Nevada.	No potential aquatic habitat for migration within the project area.
Bendire's thrasher	<i>Toxostoma bendirei</i>		X		Occurs in sagebrush and scattered junipers at higher elevations and at lower elevations, occurs in desert grassland and shrubland with spiny shrubs or cacti, such as cholla, Joshua tree, mesquite, catclaw, desert-thorn or agave.	Potentially occurring throughout the project area.

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Crissal thrasher	<i>Toxostoma crissale</i>		X	X	Permanent resident of desert successional scrub	Potentially occurring in the project area south of the Clover Mountains. Typically associated with mesquite thickets of the Las Vegas, Pahrump and Moapa valleys south of the project area.
LeConte's thrasher	<i>Toxostoma lecontei</i>		X	X	Prefers open desert scrub, washes, alkali desert scrub, and desert succulent shrub habitats	Potentially occurring in the Tule Desert.
Lucy's warbler	<i>Vermivora luciae</i>		X	X	Occurs in deserts and in riparian woodlands	Potentially occurring in the project area south of the Clover Mountains.
Virginia' warbler	<i>Vermivora virginiae</i>		X		Occurs in arid montane woodlands, oak thickets, piñon-juniper woodlands, coniferous scrub, and chaparral.	Potentially occurring in areas north of the Tule Desert.
Arizona Bell's vireo	<i>Vireo bellii arizonae</i>		X		Occurs near water typically in areas with dense, low, shrubby vegetation, generally early successional stages in riparian areas, brushy fields, young second-growth forest or woodland, scrub oak, and mesquite brushlands.	Potentially occurring throughout the Tule Desert where suitable habitat occurs.
Gray vireo	<i>Vireo vicinior</i>		X	X	Inhabits shrubby, semi-arid habitats in shrubby piñon-juniper woodlands and desert scrub	Potentially occurring throughout the project area. Recorded from the Clover Mountains and Tule Desert.
Reptiles						
Western banded gecko	<i>Coleonyx variegatus</i>		X		Occurs in rocky areas of creosote bush and sagebrush desert.	Potentially occurring in the Tule Desert.
Great Basin collared lizard	<i>Crotaphytus insularis bicinctores</i>		X		Occurs in xeric, sparsely vegetated rocky areas.	Potentially occurring in the Tule Desert.
Desert iguana	<i>Dipsosaurus dorsalis</i>		X		Typically occupies areas of creosote bush desert with loose sand and patches of firm ground with scattered rocks.	Potentially occurring in the Tule Desert.
Long-nosed leopard lizard	<i>Gambelia wislizenii</i>		X		Occupies desert and semidesert areas with scattered shrubs and other low plants, especially areas with abundant rodent burrows.	Potentially occurring in the Tule Desert.
Desert tortoise	<i>Gopherus agassizii</i>	X	X		Occurs in desert habitats with firm ground and herbaceous plant cover.	Potentially occurring in the Tule Desert.

APPENDIX E-2

Common Name	Scientific Name	Special Status Species			Habitat Type	Potential for Occurrence in the Project Area
		Nevada State Sensitive, Protected, Endangered or Threatened	Species of Conservation Priority	BLM Sensitive Species		
Gila monster	<i>Heloderma supectum</i>	X	X	X	Shrubby, grassy, and succulent desert	Potentially occurring in the project area south of the Clover Mountains.
Sonoran mountain king snake	<i>Lampropeltis pyromelana</i>	X	X	X	Piñon-juniper and pine woodlands in mountainous areas.	Potentially occurring in the Clover Mountains.
Desert horned lizard	<i>Phrynosoma phatyrhinos</i>		X		Found in arid regions in sandy flats, alluvial fans, washes, and at the edge of dunes in sagebrush habitat as well as creosotebush, greasewood, and cactus deserts.	Potentially occurring in the Tule Desert.
Chuckwalla	<i>Sauromalus obesus</i>		X	X	Deserts with rocky hillsides and outcrops, creosote typically present	Potentially occurring in the project area south of the Clover Mountains.
Sonoran lyre snake	<i>Trimorphodon biscutatus lambda</i>		X		Inhabits rocky areas of lowlands, mesas, and lower mountain slopes where desert grassland, desert scrub, chaparral, piñon-juniper and oak woodland, and open coniferous forest vegetation types occur.	Potentially occurring throughout the project area.
Long-tailed brush lizard	<i>Urosaurus graciosus</i>		X		Occurs in areas of loose sand where creosote bush, other bushes, and trees are present.	Potentially occurring in the Tule Desert.
Desert night lizard	<i>Xantusia vigilis</i>		X		Typically in arid and semiarid granite outcroppings and rocky areas, but occasionally will travel into piñon-juniper woodlands.	Potentially occurring throughout the project area.
Amphibians						
Arizona (Southwestern) toad	<i>Bufo microscaphus</i>		X	X	Found in washes, streams, and arroyos of semiarid habitats	Only known from the upper reaches of Meadow Valley Wash.
Relict leopard frog	<i>Rana onca</i>	X	X		Occur in spring, spring outflow, and associated marsh and wetland habitats.	No potential habitat in the project area, only known to occur in Lake Mead today. Historic distribution included the Virgin and Muddy rivers.
Northern leopard frog	<i>Rana pipiens</i>	X	X	X	Frequents streams or marshes with permanent water and cattails, but may occur in grasslands, brushlands, woodlands, and forests	Potentially occurring in the northern portion of the project area in the Clover Mountains.

APPENDIX E-2

Common Name	Scientific Name	Special Status Species			Habitat Type	Potential for Occurrence in the Project Area
		Nevada State Sensitive, Protected, Endangered or Threatened	Species of Conservation Priority	BLM Sensitive Species		
Fish						
Meadow Valley Wash desert sucker	<i>Catostomus clarki</i> ssp. 2	X		X	Only located in the Meadow Valley Wash	Populations are known from the Meadow Valley Wash, approximately 12 miles west of the project area.
Flannelmouth sucker	<i>Catostomus latipinnis</i>		X	X	Moderate to large rivers with pools and deep runs.	Known to occur in the Virgin River.
Pahranagat roundtail chub	<i>Gila robusta jordani</i>	X	X		Protected pools in the Pahranagat Valley.	Restricted to the Pahranagat Valley.
Virgin River chub	<i>Gila robusta seminuda</i>	X	X	X	Located in areas of slow to moderate flow with deep runs or pools where large boulders or root snags provide instream cover in the Virgin River	Restricted to areas of the Virgin River upstream of the Mesquite Diversion south of the project area and the middle and upper reaches of the Muddy River southwest of the project area.
Virgin River spinedace	<i>Lepidomeda mollispinis mollispinis</i>	X	X	X	Populations currently exist in the mainstem Virgin River and eleven of its tributaries including East Fork Virgin River, Shunes Creek, North Fork Virgin River, North Creek, La Verkin Creek, Ash Creek, Santa Clara River, Beaver Dam Wash, Coal Pits Wash, Moody Wash and Magotsu Creek (Lentsch 2002)	Only expected to occur in the mainstem of the Virgin River south of the project area.
Moapa dace	<i>Moapa coriacea</i>	X	X		Known to occur in springs, pools, spring feeders, small outflow streams, and the Muddy River of the Warm Springs Area where turbidity is low.	Known to occur in pools and streams in the Warm Springs area as well as the mainstem of the Muddy River.
Woundfin	<i>Plagopterus argentissimus</i>	X	X		Occupies runs and quiet waters adjacent to riffles.	Known to occur in the mainstem of the Virgin River from La Verkin Springs in Utah downstream to Lake Mead and in the lower portions of La Verkin Creek in Utah.
Meadow Valley Wash speckled dace	<i>Rhinichthys osculus</i> ssp.	X	X	X	Found in Meadow Valley Wash	Populations are known from the Meadow Valley Wash, approximately 12 miles west of the project area.

APPENDIX E-2

Common Name	Scientific Name	Special Status Species			Habitat Type	Potential for Occurrence in the Project Area
		Nevada State Sensitive, Protected, Endangered or Threatened	Species of Conservation Priority	BLM Sensitive Species		
Moapa speckled dace	<i>Rhinichthys osculus moapae</i>		X	X	Known to occur in springs, pools, spring feeders, small outflow streams, and the Muddy River of the Warm Springs Area where turbidity is low.	The species is restricted to warm springs, their outflows and the warm waters of the upper mainstream Muddy River.
Pahranagat speckled dace	<i>Rhinichthys osculus velifer</i>		X	X	Found in Crystal Springs	Only known in the Pahranagat Valley near Crystal Springs, approximately 50 miles west of the project area.
Razorback sucker	<i>Xyrauchen texanus</i>	X	X		Only known to occur in Lake Mead in Nevada.	Only known to occur in Lake Mead in Nevada.
Invertebrates						
White River wood nymph	<i>Cercyonis pegala pluvialis</i>			X	Associated with riparian and wetland habitats.	Known to occur in the White River and possibly the Steptoe and Spring valleys.
Pahranagat naucorid bug	<i>Pelocoris shoshone shoshone</i>			X	Associated with riparian and wetland habitats.	Closest potential occurrence is in the Pahranagat Valley, approximately 50 miles west of the project area.
Grated tryonia	<i>Tryonia clathrata</i>		X		Freshwater spring systems, typically in algae and detritus substrates. Known to occur in the Cardy Lamb and Muddy Spring systems; likely to occur in the Warm Springs area, all in Clark County, Nevada. May also occur in the Pahranagat and White River valleys to the north.	Closest potential occurrence is in the Pahranagat Valley, approximately 50 miles west of the project area.

APPENDIX E3

Wildlife Species That May Occur In Or Near The Project Area

Appendix E-3
Wildlife Species Expected to Occur In or Near the Project Area

Common Name	Scientific Name
Mammals	
American badger	<i>Taxidea taxus</i>
Bobcat	<i>Lynx rufus</i>
Coyote	<i>Canis latrans</i>
Elk	<i>Cervus elaphus</i>
Gray fox	<i>Urocyon cinereoargenteus</i>
Kit fox	<i>Vulpes macrotis</i>
Mountain lion	<i>Puma concolor</i>
Mule deer	<i>Odocoileus hemionus</i>
Nelson (Desert) bighorn sheep	<i>Ovis canadensis nelsoni</i>
Black-tailed jackrabbit	<i>Lepus californicus</i>
Crechetid mice	<i>Onychomys, Reithrodontomys megalotis, Peromyscus</i>
Desert cottontail	<i>Sylvilagus audobonii</i>
Desert wood rat	<i>Neotoma lepida</i>
Merriam's kangaroo rat	<i>Dipodomys merriamii</i>
Pocket gopher	<i>Thomomys bottae</i>
Pocket mice	<i>Perognathus, Chaetodipus</i>
Rock squirrel	<i>Spermophilus variegatus</i>
Round-tailed ground squirrel	<i>Spermophilus tereticaudus</i>
White-tailed antelope squirrel	<i>Ammospermophilus leucurus</i>
Ringtail	<i>Bassariscus astutus</i>
Spotted skunk	<i>Spilogale gracilis</i>
Big brown bat	<i>Eptesicus fuscus</i>
California myotis	<i>Myotis californicus</i>
Fringed myotis	<i>Myotis thysanodes</i>
Leafnose bat	<i>Macrotus californicus</i>
Little brown myotis	<i>Myotis lucifugus</i>
Long-eared myotis	<i>Myotis evotis</i>
Long-legged myotis	<i>Myotis volans</i>
Pallid bat	<i>Antrozous pallidus</i>
Small-footed myotis	<i>Myotis subulatus</i>
Western pipistrelle	<i>Pipistrellus hesperus</i>
Yuma myotis	<i>Myotis yumanensis</i>
Herpetiles	
Bullfrog	<i>Rana catesbeiana</i>
Great basin spadefoot	<i>Spea intermontana</i>
Great Plains toad	<i>Bufo cognatus</i>
Red-spotted toad	<i>Bufo punctatus</i>
Western toad	<i>Bufo boreas</i>
Woodhouse's toad	<i>Bufo woodhousei</i>
Chuckwalla	<i>Sauromalus (Obesus) ater</i>
Coachwhip	<i>Masticophis flagellum</i>
Common kingsnake	<i>Lampropeltis getula</i>
Desert horned lizard	<i>Phrynosoma platyrhinos</i>
Desert iguana	<i>Dipsosaurus dorsalis</i>
Desert spiny lizard	<i>Sceloporus magister</i>
Gila monster	<i>Heloderma suspectum</i>

Appendix E-3
Wildlife Species Expected to Occur In or Near the Project Area

Common Name	<i>Scientific Name</i>
Glossy snake	<i>Arizona elegans</i>
Gopher snake	<i>Pituophis catenifer</i>
Great Basin collared lizard	<i>Crotaphytus bicinctores</i>
Ground snake	<i>Sonora semiannulata</i>
Long-nosed leopard lizard	<i>Gambelia wislizenii</i>
Long-nosed snake	<i>Rhinocheilus lecontei</i>
Lyre snake	<i>Trimorphodon biscutatus</i>
Mojave rattlesnake	<i>Crotalus scutulatus</i>
Night snake	<i>Hypsiglena torquata</i>
Patch-nosed snake	<i>Salvadora hexalepis</i>
Side-blotched lizard	<i>Uta stansburiana</i>
Sidewinder (Horned rattlesnake)	<i>Crotalus cerastes</i>
Southwestern black-headed snake	<i>Tantilla hobartsmithi</i>
Speckled rattlesnake	<i>Crotalus mitchellii</i>
Spotted leaf-nosed snake	<i>Phyllorhynchus decurtatus</i>
Western banded gecko	<i>Coleonyx variegatus</i>
Western blind snake	<i>Leptotyphlops humilis</i>
Western whiptail	<i>Cnemidophorus Aspidosceles tigris</i>
Zebra-tailed lizard	<i>Callisaurus draconoides</i>
Birds	
American kestrel	<i>Falco sparverius</i>
Barn owl	<i>Tyto alba</i>
Burrowing owl	<i>Athene cunicularia</i>
Golden eagle	<i>Aquila chrysaetos</i>
Great-horned owl	<i>Bubo virginianus</i>
Prairie falcon	<i>Falco mexicanus</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Ash-throated flycatcher	<i>Myiarchus cinerascens</i>
Black-chinned hummingbird	<i>Archilochus alexandri</i>
Black-chinned sparrow	<i>Amphispiza bilineata</i>
Black-tailed gnatcatcher	<i>Polioptila melanura</i>
Cactus wren	<i>Campylorhynchus brunneicapillus</i>
Canyon wren	<i>Catherpes mexicanus</i>
Common poorwill	<i>Phalaenoptilus nuttallii</i>
Common raven	<i>Corvus corax</i>
Dark-eyed junco	<i>Junco hyemalis</i>
Gambel's quail	<i>Callipepla gambelii</i>
Greater roadrunner	<i>Geococcyx californianus</i>
Horned lark	<i>Eremophila alpestris</i>
House wren	<i>Troglodytes aedon</i>
Ladder-backed woodpecker	<i>Picoides scalaris</i>
Lesser nighthawk	<i>Chordeiles acutipennis</i>
Loggerhead shrike	<i>Lanius ludovicianus</i>
Mountain bluebird	<i>Sialia currucoides</i>
Mountain chickadee	<i>Poecile gambeli</i>
Mourning dove	<i>Zenaida macroura</i>
Northern flicker	<i>Colaptes auratus</i>
Phainopepla	<i>Phainopepla nitens</i>

Appendix E-3
Wildlife Species Expected to Occur In or Near the Project Area

Common Name	<i>Scientific Name</i>
Piñon jay	<i>Gymnorhinus cyanocephalus</i>
Rock wren	<i>Salpinctes obsoletus</i>
Say's phoebe	<i>Sayornis saya</i>
Scott's oriole	<i>Icterus parisorum</i>
Spotted towhee	<i>Pipilo maculatus</i>
Verdin	<i>Auriparus flaviceps</i>
Western kingbird	<i>Tyrannus verticalis</i>
Western scrub-jay	<i>Aphelocoma californica</i>
Western wood-peewee	<i>Contopus sordidulus</i>
White-breasted nuthatch	<i>Sitta carolinensis</i>
White-throated swift	<i>Aeronautes saxatalis</i>