E-1 – Federally-Listed Species List from USFWS

E-2 – BLM Sensitive Plant and Wildlife Species That May Occur Within or Near the Project Area

E-3 – State of Nevada Classified Wildlife Species That May Occur In or Near the Project Area

E-4 – Common Wildlife Species That Are Expected to Occur Within or Near the Project Area

FEDERALLY-LISTED SPECIES LIST FROM USFWS





May 8, 2006 File No.1-5-06-SP-499

Memorandum

To:	Project Manager, Nevada Groundwater Projects, Bureau of Land Management, Reno, Nevada
From:	Field Supervisor, Nevada Fish and Wildlife Office, Reno, Nevada
Subject:	Species List for the Proposed Kane Springs Valley Groundwater Development Project, Lincoln County, Nevada

In response to your letter received on April 10, 2006, the following federally listed species may occur in or near the subject project area:

- Southwestern willow flycatcher (Empidonax traillii extimus), endangered
- Moapa dace (Moapa coriacea), endangered
- Desert tortoise (Gopherus agassizii) (Mojave population), threatened
- Designated critical habitat for the desert tortoise
- Yellow-billed cuckoo (Coccyzus americanus) (Western U.S. 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 (Act), as amended, for projects that are authorized, funded, or carried out by a Federal agency. If it is determined by the Bureau of Land Management (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 (BA) has been prepared for the project. Formal consultation is initiated by the Service on the date the written request and BA is received, if the Service determines the information received is sufficient. Informal consultation 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.



Project Manager

File No. 1-5-06-SP-499

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 the State of Nevada maintained by the Nevada 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 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 (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, pennit, or written authorization from the Nevada Department of Wildlife (http://www.ndow.org; 702-486-5127).

Please reference File No. 1-5-06-SP-499 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 mean time, if you have any questions regarding this correspondence or require additional information, please contact me or Annalaura Averill-Murray at (775) 861-6300.

- Genthia T. Marting for Robert D. Williams

BLM SENSITIVE PLANT AND WILDLIFE SPECIES THAT MAY OCCUR WITHIN OR NEAR THE PROJECT AREA

Common Name	Scientific Name	Habitat	Potential for Occurrence
		Plants	
Sheep Mountain milkvetch	Astragalus amphioxys var. musimonum	Carbonate alluvial gravels, particularly along drainages, roadsides, and in other microsites with enhanced run-off, in mixed desert shrub communities.	No suitable habitat in the project area; no known occurrences near pipeline corridor; population very localized.
Black woollypod	Astragalus funereus	Dry, open scree, talus, or gravelly alluvium derived from light-colored volcanic tuff, on east, south less commonly west, rarely north aspects.	No suitable habitat in the project area; no known occurrences near pipeline corridor; population very localized.
Gilman milkvetch	Astragalus gilmanii	On light-colored volcanic tuff slopes in pinyon-juniper woodland.	No suitable habitat in the project area; no known occurrences near pipeline corridor; population very localized.
Currant milkvetch	Astragalus uncialis	Dry, open, sparsely- vegetated, calcareous sandy- clay soils on flats and gentle slopes of hillsides and alluvial fans.	No known occurrences near pipeline corridor; population very localized.
Cane Spring suncup	Camissonia magalantha	Generally dry, open, loose soils on sandy to gravelly flats, slopes, or scree, sometimes in outcrop crevices derived mainly from whitish to brownish volcanic tuff or tuffaceous sedimentary deposits, usually in places with frequent light disturbance such as shifting slopes, washes, roadsides (or in lightly used road beds), or on older recovering disturbances, mainly in salt desert shrub communities.	No suitable habitat in the project area; no known occurrences near pipeline corridor; population very localized.
Sanicle biscuitroot	Cymopterus ripleyi var. saniculoides	Loose sandy to gravelly, often somewhat alkaline soils on volcanic tuff deposits and mixed valley alluvium, typically in small drainage-ways, in the blackbrush, mixed-shrub, sagebrush, and lower pinyon-juniper zones.	No suitable habitat in the project area; no known occurrences near pipeline corridor; population very localized.
Sheep fleabane	Erigeron ovinus	Crevices in carbonate cliffs and ridgeline outcrops in the pinyon-juniper and montane conifer zones.	No suitable habitat in the project area; no known occurrences near pipeline corridor; population very localized.

Common Name	Scientific Name	Habitat	Potential for Occurrence
Sunnyside green gentian	Frasera gypsicola	Open, dry, whitish, alkaline, often salt-crusted and spongy silty-clay soils on calcareous flats and barrens, with little if any gypsum content, in cushion-plant associations surrounded by sagebrush, greasewood and occasionally barberry and swamp cedar (Juniperus scopulorum) vegetation, with Artemisia pygmaea, A. tridentata, Eriogonum shockleyi, Physaria chambersii, Cryptantha welshii, Hymenopappus filifolius, Phlox tumulosa, lepidium nanum.	No suitable habitat in the project area; no known occurrences near pipeline corridor; population very localized.
Rock purpusia	Ivesia arizonica var. saxosa	Crevices of cliffs and boulders on volcanic and possibly carbonate rocks in the upper mixed-shrub, sagebrush and pinyon- juniper zones.	No suitable habitat in the project area; no known occurrences near pipeline corridor; population very localized.
Waxflower	Jamesia tetrapetala	Crevices in limestone cliffs.	No suitable habitat in the project area; no known occurrences near pipeline corridor.
Tiehm blazingstar	Mentzelia tiehmii	Mostly on hilltops of white soil, sparsely vegetated white calcareous knolls and bluffs with scattered perennials. Occurring with: Artemisia nova, Atriplex confertifolia, Enceliopsis nudicaulis var. nudicaulis, Lepidium nanum, Chrysothamnus parryii var. asper, Hymenopappus filifolius var. nanus, Phlox tumulosus.	No suitable habitat in the project area; no known occurrences near pipeline corridor.
Tunnel Springs beardtongue	Penstemon concinnus	Sandy to gravelly loams in pinyon-juniper with big sage and Nevada ephedra. Known from a western exposure with 0-5 degree slope.	No suitable habitat in the project area; no known occurrences near pipeline corridor.
Beatley scorpion plant	Phacelia beatleyae	Dry, open, nearly barren scree and loose gravelly soils on slopes and bases of white to brownish volcanic tuff outcrops on all slopes and aspects, and in adjacent drainages, in the mixed- shrub, blackbrush, shadscale, and upper creosote-bursage zones.	No suitable habitat in the project area; no known occurrences near pipeline corridor; population very localized.

Common Name	Scientific Name	Habitat	Potential for Occurrence
Pygmy poreleaf	Porophyllum pygmaeum	Dry, open relatively deep,	No suitable habitat in the project area;
		rocky carbonate soils of	no known occurrences near pipeline
		alluvial fans and hillsides,	corridor; population very localized.
		often in slight depressions,	
		low benches adjacent to	
		minor dramages, or other	
		microsites in the blackbrush	
		mixed shrub, and lower	
		pinyon-juniper zones.	
Nachlinger catchfly	Silene nachlingerae	Generally dry, exposed or	No suitable habitat in the project area;
		somewhat sheltered	no known occurrences near pipeline
		carbonate (rarely quartzite)	corridor; elevation range higher than
		crevices in ridgeline	pipeline corridor.
		outcrops, talus or very rocky	
		source of at the base of steep slopes or cliffs on all	
		aspects but predominantly on	
		northwesterly to	
		northeasterly exposures,	
		mainly in the subalpine	
		conifer zone with sparse	
		Petrophytum caespitosum,	
		Erigeron cf. simplex, Pinus	
		flexilis, P. longaeva,	
		Cercocarpus betuloides	
		Ericameria watsonii	
		Symphoricarpos oreophila.	
		Leucopoa nevadensis,	
		Jamesia tetrapetala, Primula	
		nevadensis.	
Currant summit clover	Trifolium andinum var.	Crevices of volcanic or	No suitable habitat in the project area;
	podocephalum	carbonate rock in the pinyon-	no known occurrences near pipeline
De als arialat		Juniper zone.	corridor; population very localized.
ROCK VIOlet	viola lithion	steep carbonate or quartzite	no suitable nabitat in the project area;
		outcrops in shaded northeast-	corridor: population very localized:
		facing avalanche chutes and	elevation range higher than pipeline
		cirque headwalls in the	corridor.
		subalpine conifer zone with	
		Symphoricarpos oreophilus,	
		Ribes montigenum,	
		Heuchera rubescens,	
		Aquilegia scopulorum, Thalictrum faradlari Dinus	
		flexilis Populus tremuloides	
		etc.	
White bearpoppy	Arctomecon merriamii	On a wide variety of dry to	Potential habitat occurring in the
1 112		sometimes moist basic soils,	project area; survey did not locate
		including alkaline clay and	individuals or populations.
		sand, gypsum calcareous	
		alluvial gravels, and	
Maadow Valle-	Anonania stan an	Carbonate rock outcrops.	Detential habitat accumin - in the
sandwort	Arenaria sienomeres	canyon walls and rocky	project area: survey did not locate
sanawort		slopes on all aspects above	individuals or populations
		the Larrea tridentata zone.	receile of populations.

Common Name	Scientific Name	Habitat	Potential for Occurrence
Eastwood milkweed	Asclepias eastwoodiana	In open areas on a wide variety of basic (pH usually 8 or higher) soils, including calcareous clay knolls, sand, carbonate or basaltic gravels, or shale outcrops, generally barren and lacking competition, frequently in small washes or other moisture-accumulating microsites, in the shadscale, mixed-shrub, sagebrush, and lower pinyon-juniper zones.	Potential habitat occurring in the project area; survey did not locate individuals or populations.
One-leaflet Torrey milkvetch	Astragalus calycosus var. monophyllidius	Decaying carbonate derived young soils, with sparse vegetation in sagebrush and piñon-juniper communities.	Potential habitat occurring in the project area; survey did not locate individuals or populations.
Needle Mountain milkvetch	Astragalus eurylobus	Generally deep, barren, sandy, gravelly, or clay soils derived from sandstone or siliceous volcanics frequently in or along drainages.	Potential habitat occurring in the project area; survey did not locate individuals or populations.
Straw milkvetch	Astragalus lentiginosus var. stramineus	Similar to Sticky buckwheat: Deep loose sandy soils in washes, flats, roadsides, steep aeolian slopes, and stabilized dune areas, with Ambrosia dumosa, Larrea tridentata, Pleuraphis rigida, Krameria parvifolia, Achnatherum hymenoides, Tamarix ramosissima, Tessaria sericea, Astragalus geyeri var. triquestrus, A. sabulonum, Eriogonum trichopes, Ephedra torreyana, Dicoria canascens, Pediomelum, Croton californicus, Sporobolus cryptandrus, Psorothamnus fremontii, Abronia, Tiquilia, etc. Can withstand moderate temporary disturbance. Dependent on sand dunes or deep sand in Nevada.	Potential habitat occurring in the project area; survey did not locate individuals or populations.
Halfring milkvetch	Astragalus mohavensis var. hemigyrus	Carbonate gravels and derivative soils on terraced hills and ledges, open slopes, and along washes in the creosote-bursage, blackbrush, and mixed shrub zones.	Potential habitat occurring in the project area; survey did not locate individuals or populations.
Remote rabbitbrush	Chrysothamnus eremobius	Crevices or rubble of north- facing carbonate cliffs in and just below the pinyon- juniper-sagebrush zone with Cercocarpus intricatus, Hecostocleis shockleyi, Rhus trilobata, Petradoria, etc.	Potential habitat occurring in the project area; survey did not locate individuals or populations.

Common Name	Scientific Name	Habitat	Potential for Occurrence
Common Name White River catseye	Scientific Name Cryptantha welshii	Habitat Dry, open, sparsely vegetated outcrops, and derived sandy to silty or clay soils, of whitish calcareous or carbonate deposits, often forming knolls or gravelly hills, and on soils adjacent to such habitats, mostly in Juniperus-Artemisia- Chrysothamnus vegetation with Artemisia pygmaia, Stenotus acaulis, Eriogonum shockleyi, Hymenopappus filifolius, Physaria, Erigeron compactus, Enceliopsis nudicaulis, Lepidium nanum, L. montanum, Linum perenne, Stanleya pinnata, Hilaria jamesii, Astragalus calycosus, Leucelene ericoides, Phlox tumulosa, Frasera albomarginata.	Potential for Occurrence Potential habitat occurring in the project area; survey did not locate individuals or populations.
Las Vegas buckwheat	Eriogonum corymbosum	On or near gypsum soils, often forming low mounds or outcrops in washes and drainages.	Potential habitat occurring in the project area; survey did not locate individuals or populations.
Clokey buckwheat	Eriogonum heermannii var. clokeyi	Carbonate outcrops, talus, scree, and gravelly washes and banks in the creosote- bursage, shadscale, and blackbrush zones.	Potential habitat occurring in the project area; survey did not locate individuals or populations.
Scarlet buckwheat	Eriogonum phoeniceum	White tuffaceious knolls, bluffs, and rocky flats, openings in pinyon and juniper woodland, with Artemisia tridentata, Purshia tridentata, Petradoria pumila, etc.	Potential habitat occurring in the project area; survey did not locate individuals or populations.
Sticky buckwheat	Eriogonum viscidulum	Deep loose sandy soils in washes, flats, roadsides, steep aeolian slopes, and stabilized dune areas, with Ambrosia dumosa, Larrea tridentata, Pleuraphis rigida, Krameria parvifolia, Achnatherum hymenoides, Tamarix ramosissima, Tessaria sericea, Astragalus geyeri var. triquestrus, A. sabulonum, Eriogonum trichopes, Ephedra torreyana, Dicoria canascens, Pediomelum, Croton californicus, Sporobolus cryptandrus, Psorothamnus fremontii, Abronia, Tiquilia, etc. Can withstand moderate temporary disturbance. Dependent on sand dunes or deep sand in Nevada.	Potential habitat occurring in the project area; survey did not locate individuals or populations.

Common Name	Scientific Name	Habitat	Potential for Occurrence
Pioche blazingstar	Mentzelia argillicola	Dry, soft, silty clay soils on knolls and slopes with sparce vegetation consisting mainly of Artemisia pygmaea, Eriogonum nummulare, Gutierrezia sarothrae, Salvia	Potential habitat occurring in the project area; survey did not locate individuals or populations.
Beaver dam breadroot	Pediomelum castoreum	Dry, sandy deserts.	Potential habitat occurring in the project area; survey did not locate individuals or populations.
Beatley scorpion plant	Phacelia beatleyae	Dry, open, nearly barren scree and loose gravelly soils on slopes and bases of white to brownish volcanic tuff outcrops on all slopes and aspects, and in adjacent drainages, in the mixed- shrub, blackbrush, shadscale, and upper creosote-bursage zones.	Potential habitat occurring in the project area; survey did not locate individuals or populations.
Clarke phacelia	Phacelia filiae	Flat areas or low knolls of valley floors and foothills of desert mountains on light colored soils including calcareous sandstone, siltstone, tuffaceous claystone, and limestone occurring with shadscale, blackbrush, and creosote.	Potential habitat occurring in the project area; survey did not locate individuals or populations.
Parish phacelia	Phacelia parishii	Moist to superficially dry, open, flat to hummocky, mostly barren, often salt- crusted silty-clay soils on valley bottom flats, lake deposits, and playa edges, often near seepage areas, sometimes on gypsum deposits, surrounded by saltbush scrub vegetation but with few immediate associates such as Atriplex confertifolia, A. canescens, A. agrentea, Poa secunda, Monolepis nuttalliana, Phacelia fremontii, Lepidium flavum, Sarcobatus vermiculatus, etc. Aquatic or wetland dependent in Nevada.	Potential habitat occurring in the project area; survey did not locate individuals or populations.

Common Name	Scientific Name	Habitat	Potential for Occurrence
Schlesser pincushion	Sclerocactus schlesseri	Open, stable or stabilized,	Potential habitat occurring in the
		gravelly, sandy silt or silty	project area; survey did not locate
		clay soils derived from	individuals or populations.
		somewhat ashy and/or	
		gypsiferous lacutrine	
		microsites created and/or	
		maintained by gentle north to	
		east aspects, dense shrub	
		and/or grass canopies, high	
		clay and silt content of the	
		soil, and /or cryptobiotic soil	
		crusts, usually associated	
		with such soil crusts in the	
		confertifolia Gutierrezia	
		sarothra. Ericameria	
		viscidiflora puberla,	
		Krasheninnikovia lanata,	
		Pleuraphis jamesii,	
		Montpelier albicaulis,	
T 1 1 11		Mimulus parryii, etc.	
Jones globematiow	Sphaeraicea caespitosa	calcareous soil mixed shrub	project area: survey did not locate
		pinyon-juniper and grass	individuals or populations
		community.	individuals of populations.
Charleston	Townsendia jonesii var.	Open, sparsely vegetated	Potential habitat occurring in the
grounddaisy	tumulosa	calcareous areas, on shallow	project area; survey did not locate
		gravelly carbonate soils on	individuals or populations.
		slopes and exposed knolls in	
		forest clearings mostly in the	
		Pinus ponderosa extending	
		to the pinvon-juniper.	
		mountain mahogany, and	
		lower subalpine conifer	
		zones, recurring on knolls of	
		whate, alkaline, calcareous,	
		silty lacustrine deposits in	
		shrub and lower sagebrush	
		zones.	
		Mammals	
Pallid bat	Antrozous pallidus	Roosts in cave, mine shafts,	Potentially occurring throughout the
		bridges, buildings, and trees;	project area.
		forages in woodlands, over	
Duamy rabbit	Brachylagus idahoansis	Dense stands of big	No suitable sage brush habitat in the
r ygniy rabbit	Drachylagus laundensis	sagebrush growing in deep	project area.
		loose soils.	project area.
Big brown bat	Eptesicus fuscus	Roosts in buildings, hollow	No potential habitat in the project area.
		trees, and rock crevices.	
		Occurs in wooded and semi-	
		open habitats, typically with	
		deciduous trees but also in	
		conner torests.	

Common Name	Scientific Name	Habitat	Potential for Occurrence
Spotted bat	Euderma maculatum	Roosts in caves, crevices,	Potentially occurring throughout the
		talus, trees, bridges, and	project area.
		water and in desert washes	
		and woodlands	
Silver-haired bat	Lasionycteris noctivagans	Roosts in trees, caves, mine	No potential habitat in the project area.
		shafts, bridges, and	
		buildings, and forages over	
Western red bat	Lasiurus blossevillii	Wooded habitats	No potential habitat in the project area
Hoary bat	Lasiurus cinereus	Roosts in trees, cliffs, mines,	No potential habitat in the project area.
5		caves, and talus; forages	
		over water and in woodlands	
Desert Valley	Microdipodops magazonhalus albiventer	Occurs in loose sands and	Known to occur near the project area.
Kaligatoo mouse	megacephalus albiventer	sagebrush scrub, and alkali	
		sink plant communities	
Pahranagat Valley	Microtus montanus	Low elevation wet valleys	No potential habitat within the project
montane vole	fucosus		area.
California myotis	Myotis californicus	Roosts in caves, crevices,	Potentially occurring throughout the
		buildings: forages over	project area.
		water, and in desert washes,	
		and woodlands	
Small-footed myotis	Myotis ciliolabrum	Desert, badland, semidesert,	Potentially occurring throughout the
		from 1 000 to 11 000 feet	project area.
		typically found in desert	
		scrub	
Little brown myotis	Myotis lucifugus	Prefers to forage over water.	No potential habitat within the project
		Usually hibernates in caves	area.
		breeds in Buildings	
Fringed myotis	Myotis thysanodes	Forages in desert scrub and	Potentially occurring throughout the
		piñon-juniper woodlands;	project area.
		breeds and roosts in mines,	
		caves and under tree bark	
Long-legged myotis	Myotis volans	Piñon-juniper woodlands and	No potential habitat in the project area.
		ponderosa pine forests;	1 1 5
		roosts in trees, caves, mine	
		shafts, cliffs, crevices,	
		under bridges; forages over	
		water	
Yuma myotis	Myotis yumanensis	Roosts in trees, caves, mine	No potential habitat within the project
		shafts, cliffs, crevices,	area.
		under bridges: forages over	
		water	
Big free-tailed bat	Nyctinomops macrotis	Roost in rock crevices in	Potentially occurring throughout the
		rocky areas of arroyo, scrub	project area.
Desert highorn sheep	Ovis canadensis nelsoni	Rough rocky and brush	Potentially migrates through the
2 corr orgnorn sheep		covered terrain with canyons	project area.
		and washes	

Common Name	Scientific Name	Habitat	Potential for Occurrence
Western pipistrelle	Pipistrellus hesperus	Roosts in trees, caves,	Potentially occurring throughout the
		abandoned buildings, and	project area.
		under bridges; forages over	
		water and desert washes, and	
Prozilion from toiled	Tadarida brazillionsis	In woodlands	Potentially occurring throughout the
braziliali liee-talleu	Taaariaa Draziiiiensis	abandoned buildings and	project area
Uai		under bridges: forages over	project area.
		water and desert washes, and	
		in woodlands	
	1	Birds	
Golden eagle	Aquila chrysaetos	Open country, especially	Potentially occurring throughout the
		hilly and mountainous	project area.
		regions	
Long-eared owl	Asio otus	Riparian areas and other	Potentially occurring throughout the
		of conjferous forest	project area.
Western hurrowing	Athono cunicularia	Nests in grasslands and	Known to occur in the project area
owl	hvnugea	shrublands often in	Known to occur in the project area.
0.01	nypugeu	association with ground	
		squirrels and badgers, which	
		excavate burrows it uses for	
		nesting	
Juniper titmouse	Baeolophus griseus	Occurs in piñon-juniper	No potential habitat in the project area.
_		woodlands	
Ferruginous hawk	Buteo regalis	Prefers to nest at interface of	Potentially occurring throughout the
		piñon-juniper zone and	project area. Only two known records
		desert shrub communities	in southern Nevada from the Las
			Vegas and Pahranagat valleys.
Swainson's hawk	Buteo swainsoni	Nests in deciduous trees and	Common spring and fall migrant in the
		shrubs in riparian areas or	desert.
Greater sage grouse	Centrocercus	Sage brush habitat and wet	No potential habitat in the project area
Greater suge grouse	urophasianus	meadows and riparian areas	i to potentiar natitat în the project area.
	un opneustentus	for brood rearing	
Prairie falcon	Falco mexicanus	Grasslands, savannas,	Potentially occurring throughout the
		rangeland, agricultural areas,	project area. Typically a spring
		desert scrub; nests on cliffs	resident.
		or bluffs	
Peregrine falcon	Falco peregrinus	Cliffs or canyons near water	Potentially occurring wherever suitable
		for cover and nesting	nesting cliffs are present. Known to
			occur near the Panaca Hills northeast
			Of the project area and in the Debraneget Valley (Cullion et al.
			1959).
Sandhill crane	Grus canadensis	Winter habitat typically	No suitable habitat in the project area.
~		consists of river channels or	
		wetlands for roosting and	
		pastures, marshes, and	
		meadows for foraging	
Piñon jay	Gymnorhinus	Occurs in piñon-juniper	No potential habitat in the project area.
	cyanocephalus	woodlands, occasionally	
		visiting pine forests	
Y ellow-breasted chat	Icteria virens	Dense, relatively wide	No suitable habitat in the project area.
		thickets of willows wins	Possible spring migrant.
		tangles and dense brush	
		tangies and dense brush	

Common Name	Scientific Name	Habitat	Potential for Occurrence
Least bittern	Ixobrychus exilis	Dense emergent wetland	No suitable habitat in the project area.
		vegetation, sometimes	
		interspersed with woody	
Loggerhead shrike	Lanius ludovicianus	Open ground including	Potentially occurring throughout the
Loggernead shrike	Lanius indovicianus	grassland, riparian, open	project area.
		woodland	FJ
Black rosy-finch	Leucosticte atrata	Barren, rocky, or grassy	Not expected to occur in the project
		areas; occasionally in brushy	area.
x 1.11 1 1		areas and open situations	XT 1. 11 1 1
Long-billed curlew	Numenius americanus	Emergent mudflats	No suitable habitat in the project area.
Phainopenla	Dius flammeolus Phainopepla nitens	Nountain pine forests	No suitable nabitat in the project area.
Гпатюрерта	1 nanopepia niiens	and juniper woodlands	project area.
Vesper sparrow	Pooecetes gramineus	Dry sagebrush shrublands,	Potentially occurring throughout the
		savannahs, arid scrub, and	project area. Uncommon spring and
		woodland clearings	fall migrant.
Red-naped sapsucker	Sphyrapicus nuchalis	Forest and open woodland	No suitable habitat in the project area.
		habitats, typically coniferous	
		forests with aspen and other	
Crissal thrasher	Toxostoma crissale	Permanent resident of desert	Potentially occurring in the project
		successional scrub	area. Typically associated with
			mesquite thickets of the Las Vegas,
			Pahrump and Moapa valleys south of
			the project area.
LeConte's thrasher	Toxostoma lecontei	Prefers open desert scrub,	Potentially occurring in the Tule
		wasnes, alkali desert scrub,	Desert.
		habitats	
Lucy's warbler	Vermivora luciae	Occurs in deserts and in	Potentially occurring throughout the
		riparian woodlands	project area.
Gray vireo	Vireo vicinor	Inhabits shrubby, semi-arid	Potentially occurring throughout the
		habitats in shrubby piñon-	project area. Recorded from the Clover
		juniper woodlands and desert	Mountains and Tule Desert.
		Reptiles	
Gila monster	Heloderma supectum	Shrubby, grassy, and	Potentially occurring throughout the
		succulent desert	project area.
Chuckwalla	Sauromalus obesus	Deserts with rocky hillsides	Potentially occurring throughout the
		and outcrops, creosote	project area.
		typically present	
Arizona toad	Buto microscaphus	Eound in washes streams	Only known from the upper reaches of
7 mizona toud	microscaphus	and arrovos of semiarid	Meadow Valley Wash. Not likely to
		habitats	occur.
Northern leopard frog	Rana pipiens	Frequents streams or	No suitable habitat in the project area.
		marshes with permanent	
		water and cattails, but may	
		occur in grassiands,	
		forests	
		Fish	
Meadow Valley Wash	Catostomus clarki ssp.	Only located in the Meadow	Populations are known from the
desert sucker		Valley Wash	Meadow Valley Wash, approximately
			12 miles east of the project area.
Flannelmouth sucker	Catostomus latipinnis	Moderate to large rivers with	Known to occur in the Virgin River.
		pools and deep runs.	

Common Name	Scientific Name	Habitat	Potential for Occurrence
Virgin River chub	Gila seminude	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 southeast of the project area and the middle and upper reaches of the Muddy River south of the project area.
Virgin River spinedace	Lepidomeda mollispinis mollispinis	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 southeast of the project area.
Meadow Valley Wash speckled dace	Rhinichthys osculus ssp.	Found in Meadow Valley Wash	Populations are known from the Meadow Valley Wash, approximately 12 miles east of the project area.
Pahranagat speckled dace	Rhinichthys osculus velifer	Found in Crystal Springs	Only known in the Pahranagat Valley near Crystal Springs, approximately 45 miles northwest of the project area.
	•	Invertebrates	
White River wood nymph	Cercyonis pegala pluvialis	Associated with riparian and wetland habitats.	Known to occur in the White River and possibly the Steptoe and Spring valleys.
Pahranagat naucorid bug	Pelocoris shoshone shoshone	Associated with riparian and wetland habitats.	
Moapa Warm Spring riffle beetle	Stenelmis moapa	Outlet streams from warm temperature springs in swift, shallow water; found on gravel, vegetation, and bare tree roots.	Only known to occur in the Warm Springs area of the Muddy River.
Grated tryonia	Tryonia clathrata	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, west of the project area and the Warm Springs area south of the project area.

STATE OF NEVADA CLASSIFIED WILDLIFE SPECIES THAT MAY OCCUR IN OR NEAR THE PROJECT AREA

Common Name	Scientific Name	Habitat	Potential for Occurrence
	<u>.</u>	MAMMALS	·
Ringtail (SS)	Bassariscus astutus	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 (SS)	Bruchylugus icluhoensis	Dense stands of big sagebrush growing in deep loose soils.	No suitable habitat in the project area.
Desert pocket mouse (SS)	Chaetoclipus penicillatus	Sparsely vegetated sandy desert floors and rock-free bottomland soils near rivers and streams	No suitable habitat in the project area.
Desert kangaroo rat (SS)	Dipoclomys cleserti	Low deserts with sandy soil. Most often associated with deposits of deep wind-blown sand.	Potentially occurring in areas where sand deposits occur.
Spotted bat (SS)	Euclerma maculatum	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 big-eared bat (SS)	Iclionyctarus phylottis	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.
Western yellow bat (SS)	Lasiurus xanthinus	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.
Sagebrush vole (SS)	Lemmiscus curtatus	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.
Desert Valley kangaroo mouse (SS)	Microclipoclops megacephalus albiventer	Occurs in loose sands and gravel of shadscale scrub, sagebrush scrub, and alkali sink plant communities	Known to occur near the project area.
Pahranagat Valley montane vole (SS)	Microtus montanus fucosus	Low elevation wet valleys	No suitable habitat in the project area.
Small-footed myotis (SS)	Myotis ciliolabrum	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 (SS)	Myotis lucifugus	Prefers to forage over water. Usually hibernates in caves and mines, often roosts and breeds in Buildings	No suitable habitat in the project area.
Big free-tailed bat (SS)	Nyctinomops macrotis	Roost in rock crevices in rocky areas of arroyo, scrub desert, and riparian habitats	Potentially occurring throughout the project area.
Mule deer (SS)	Odocoileus hemionus	Occurs in coniferous forests, desert shrub, chaparral, grasslands with shrubs.	No suitable habitat in the project area.
Desert bighorn sheep (SS)	Ovis cunudensis nelsoni	Rough, rocky, and brush covered terrain with canyons and washes	Potentially migrates through the project area.
Merriam's shrew (SS)	Sorex merriumileucogenys	Occurs in grassy areas in sagebrush scrub and pinon juniper habitats.	No suitable habitat in the project area.
Water shrew (SS)	Sorex palustris	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.
Kit fox (SS)	Vulpes macrotis	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 project area.

Common Name	Scientific Name	Habitat	Potential for Occurrence
	•	BIRDS	
White-throated swift (SS)	Aeronautes saxatalis	Occurs in mountainous country where cliffs and canyons are present for breeding.	Potentially occurring throughout the project area where suitable habitat exists.
Sage sparrow (SS)	Amphispiza belli	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 winter resident.
Short-eared owl (SS)	Asio flammeus	Winters in southern Nevada in open areas with abundant prey base.	Potentially occurring as a winter resident in the project area.
Western burrowing owl (SS)	Athene cuniculuriu hypugea	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 (SS)	Auriparus flaviceps	Desert and arid brush of creosote bush.	Potentially occurring in the project area.
Ferruginous hawk (SS)	Buteo regalis	Prefers to nest at interface of pinon juniper zone and desert shrub communities	Potentially occurring in the project area. Only two known records in southern Nevada from the Las Vegas and Pahranagat valleys.
Costa's hummingbird (SS)	Calypte costae	Occurs in Desert and semi-desert arid brushy foothills and chaparral. Typically nests in canyons and washes.	Potentially occurring throughout the project area.
Cassin's finch (SS)	Carpodacus cassinii	Breeds in open coniferous forests; winters in deciduous woodlands, scrub, brushy areas, and partly open situations with scattered trees	Possible winter resident in the project area.
Peregrine falcon (SS)	Falco peregrinus	Cliffs or canyons near water for cover and nesting	No suitable nesting cliffs are present. Known to occur near the Panaca Hills and in the Pahranagat Valley (Gullion et al. 1959).
Scott's oriole (SS)	Icterus purisorum	Occurs in Mojave mid-elevation desert scrub and lower montane woodland.	Potentially occurring throughout the project area.
Loggerhead shrike (SS)	Lunius lucloviciunus	Open ground including grassland, riparian, open woodland	Potentially occurring throughout the project area.
Phainopepla (SS)	Phuinopeplu nitens	Desert scrub and mesquite and juniper woodlands	Potentially occurring throughout the project area.
Abert's towhee (SS)	Pipilo uberti	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 project area.
Black Phoebe (SS)	Suyomis nigricuns	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 (SS)	Selusphorus rufus	Migrant throughout Nevada.	Potentially occurring as a migrant in meadows where nectar plants are present.
Black-chinned sparrow (SS)	Spizellu utroguluris	Breeds in chaparral, sagebrush, and arid scrub on gentle hillsides to steep, rocky slopes, or in brushy canyons.	Potentially occurring throughout the project area.

Common Name	Scientific Name	Habitat	Potential for Occurrence
Brewer's sparrow (SS)	Spizellu breweri	Breeds in sagebrush and desert	Potentially occurring in the project
		scrub habitats.	area.
Bendire's thrasher (SS)	Toxostomu benclirei	Occurs in sagebrush and scattered	Potentially occurring throughout
		junipers at higher elevations and at	the project area.
		lower elevations, occurs in deserv	
		shrubs or cacti such as cholla	
		Ioshua tree mesquite catclaw	
		desert-thorn or agave.	
Crissal thrasher (SS)	Toxostomu crissule	Permanent resident of desert	Potentially occurring in the project
		successional scrub	area. Typically associated with
			mesquite thickets of the Las Vegas,
			Pahrump and Moapa valleys south
			of the project area.
LeConte's thrasher (SS)	Toxostoma lecontei	Prefers open desert scrub, washes,	Potentially occurring in the project
		alkali desert scrub, and desert	area.
		succulent shrub habitats	
Lucy's warbler (SS)	Vermivora luciae	Occurs in deserts and in riparian	Potentially occurring in the project
	,	woodlands	area.
Arizona Bell's vireo (SS)	Vireo bellii arizonae	Occurs near water typically in	Potentially occurring throughout
		areas with dense, low, shrubby	the project area where suitable
		vegetation, generally early	habitat occurs.
		successional stages in riparian	
		growth forest or woodland, scrub	
		oak, and mesouite brushlands.	
Grav vireo (SS)	Vireo vicinor	Inhabits shrubby, semi-arid	Potentially occurring throughout
onu) (,		habitats in shrubby pifion juniper	the project area.
		woodlands and desert scrub	1 J
		REPTILES	
Western banded gecko (SS)	Coleonyx vuriegutus	Occurs in rocky areas of creosote	Potentially occurring in the project
		bush and sagebrush desert.	area.
Great Basin collared lizard	Crotaphytus bicinctores	Occurs in xeric, sparsely vegetated	Potentially occurring in the project
(SS)		rocky areas.	area.
Desert iguana (SS)	Dipsosaurus clorsalis	Typically occupies areas of	Potentially occurring in the project
		creosote bush desert with loose	area.
		sand and patches of firm ground	
Long-nosed leonard	Cumhaliu wislizanii	Occupies desert and semidesert	Potentially occurring in the project
lizard(SS)	Gumbenu wisuzenn	areas with scattered shrubs and	area
		other low plants especially areas	aica.
		with abundant rodent burrows.	
Desert tortoise (SS)	Gopherus agassizii	Occurs in desert habitats with firm	Known to occur in the project area.
		ground and herbaceous plant	1 5
		cover.	
Gila monster (SS)	Heloclernua supectum	Shrubby, grassy, and succulent	Potentially occurring in the project
		desert	area.
Desert horned lizard (SS)	Phrynosomu phutyrhinos	Found in arid regions in sandy	Potentially occurring in the project
		flats, alluvial fans, washes, and at	area.
		the edge of dunes in sagebrush	
		habitat as well as creosotebush,	
		greasewood, and cactus deserts.	Definition of the project
Chuckwalla (SS)	Sauromalus obesus	Deserts with rocky nillsides and	Potentially occurring in the project
		outcrops, creosole typicany present	area.

Common Name	Scientific Name	Habitat	Potential for Occurrence
Sonoran lyre snake (SS)	Trimorphodon biscutatus	Inhabits rocky areas of lowlands,	Potentially occurring throughout
	lambda	mesas, and lower mountain slopes	the project area.
		where desert grassland, desert	
		scrub, chaparral, pinon juniper and	
		oak woodland, and open	
		connerous rorest vegetation types	
Long-tailed brush lizard (SS)	Urosuurus gruciosus	Occurs in areas of loose sand	Potentially occurring throughout
Long-tanea orasii fizara (55)	erosuaras graciosas	where creosote bush, other bushes.	the project area.
		and trees are present.	
Desert night lizard (SS)	Xantusia vigilis vigilis	Typically in arid and semiarid	Potentially occurring throughout
		granite outcroppings and rocky	the project area.
		areas, but occasionally will travel	
		into pinonjuniper woodlands.	
	A	MPHIBIANS	
Relict leopard frog (SP)	Rana once	Occur in spring, spring outflow,	No potential habitat in the project
		and associated marsh and wetland	area, only known to occur in Lake
		habitats.	Mead today. Historic distribution
			rivers
		FISH	liveis.
Pahranagat roundtail chub	Gila robusta iordani	Protected pools in the Pahranagat	Restricted to the Pahranagat Valley.
(SE)		Valley.	
Virgin River chub (SE)	Gila seminude	Located in areas of slow to	Restricted to areas of the Virgin
		moderate flow with deep runs or	River upstream of the Mesquite
		pools where large boulders or root	Diversion south of the project area
		snags provide instream cover in the	and the middle and upper reaches
		Virgin River	of the Muddy River south of the
Vincia Dimensionale et (CD)			project area.
Virgin River spinedace (SP)	Lepidomedu mollispinis	Populations currently exist in the	University expected to occur in the
	monispinis	of its tributaries including East	of the project area
		Fork Virgin River Shunes Creek	or the project area.
		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)	
Moapa dace (SE)	Moupu coriuceu	Known to occur in springs, pools,	Known to occur in pools and
		spring feeders, small outflow	streams in the Warm Springs area
		streams, and the Muddy River of	as well as the mainstem of the
		turbidity is low	Muddy River.
Woundfin (SF)	Plagonterus urgentissimus	Occupies runs and quiet waters	Known to occur in the mainstern of
woundrin (SE)	i iugopierus urgeniissimus	adjacent to riffles	the Virgin River from La Verkin
			Springs in Utah downstream to
			Lake Mead and in the lower
			portions of La Verkin Creek in
			Utah.
Moapa speckled dace (SS)	Rhinichthys osculus moapae		

COMMON WILDLIFE SPECIES THAT ARE EXPECTED TO OCCUR WITHIN OR NEAR THE PROJECT AREA

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

Common Name	Scientific Name
Desert horned lizard	Phrynosoma platyrhinos
Desert iguana	Dipsosaurus dorsalis
Desert spiny lizard	Sceloporus magister
Gila monster	Helodenna suspectum
Glossy snake	Arizona elegans
Gopher snake	Pituophis catenifer
Great Basin collared lizard	Crotaphytus bicinctores
Ground snake	Sonora semiannulata
Long-nosed leopard lizard	Gambelia wislizenii
Long-nosed snake	Rhinocheilus lecontei
Lyre snake	Trimorphodon biscutatus
Mojave rattlesnake	Crotalus scutulatus
Night snake	Hypsiglena torquata
Patch-nosed snake	Salvadora hexalepis
Side-blotched lizard	Uta stansburiana
Sidewinder (Horned rattlesnake)	Crotalus cerastes
Southwestern black-headed snake	Tantilla hobartsmithi
Speckled rattlesnake	Crotalus mitchellii
Spotted leaf-nose snake	Phyllorhynchus decurtatus
Western banded gecko	Coleonyx variegatus
Western blind snake	Leptotyphlops humilis
Western whiptail	Cnemidophorus Aspidosceles tigris
Zebra-tailed lizard	Callisaurus draconoides
	Birds
American kestrel	Falco sparverius
Barn owl	Tyto alba
Burrowing owl	Athene cunicularia
Golden eagle	Aquila chrysaetos
Great-horned owl	Bubo virginianus
Prairie falcon	Falco rnexicanus
Red-tailed hawk	Buteo jamaicensis
Ash-throated flycatcher	Myiarchus cinerascens
Black-chinned hummingbird	Archilochus alexandri
Black-chinned sparrow	Amphispiza bilineata
Black-tailed gnatcatcher	Polioptila melanura
Cactus wren	Campylorhynchus brunneicapillus
Canyon wren	Catherpes mexicanus
Common poorwill	Phalaenoptilus nuttallii
Common raven	Corvus corax
Gambel's quail	Callipepla gambelii
Greater roadrunner	Geococcyx californianus
Horned lark	Eremophila alpestris

Common Name	Scientific Name
Ladder-backed woodpecker	Picoides scalaris
Lesser nighthawk	Chordeiles acutipennis
Loggerhead shrike	Lanius ludovicianus
Mourning dove	Zenaida macroura
Phainopepla	Phainopepla nitens
Rock wren	Salpinctes obsoletus
Say's phoebe	Sayornis saya
Scott's oriole	Icterus parisorum
Verdin	Auriparus faviceps
Western kingbird	Tyrannus verticalis
White-throated swift	Aeronautes saxatalis