# APPENDIX L SPECIAL-STATUS PLANT AND WILDLIFE SPECIES

Table 1: Special-Status Plants with Potential to Occur in the Vicinity of the DesertXpress Project: California

Common Name Scientific Name	Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Chaparral sand-verbena Abronia villosa var. aurita	-/-/1B.1/-/-	Central and southern South Coast, western Sonora desert	Sandy soils in chaparral, coastal scrub, desert dunes; 80–1,600 meters	Jan-Sep	Potential, suitable habitat present.
Mormon needle grass Achnatherum aridum	-/-/2.3/-/-	Eastern Mojave desert with occurrences in Inyo, Mono, and San Bernadino Counties; Nevada, Arizona	Carbonate soils in pinyon-juniper woodland, Joshua tree woodland; 500–2,570 meters	May-Jul	Potential, suitable habitat present; known to occur in Mountain Pass near study area.
Desert Ageratina Ageratina herbacea	-/-/2.3/-/-	Eastern Desert mountains; Colorado, New Mexico, Texas	Rocky soils in pinyon-juniper woodland; 1,525–2,200 meters	Jul-Oct	No potential; no suitable habitat present, although species occurs within ten miles.
Ripley's aliciella (gilia) Aliciella ripleyi (formerly Gilia ripleyi)	-/-/2.3/-/NE	Mojave Desert in Inyo and San Bernardino Counties; Nevada	Carbonate soils in Mohavean desert scrub; 305-1,900 meters	May-Jul	Potential, suitable habitat present.
Nevada onion Allium nevadense	-/-/2.3/-/-	Desert mountains	Sandy or gravelly soils in pinyon-juniper woodland; 1,300–1,700 meters	Apr-May	No potential, no suitable habitat present.
Spanish needle onion Allium shevockii	-/-/1B.3/-/W	Southern high Sierra Nevada: Spanish Needle Peak in northeastern Kern County	Rocky areas in pinyon-juniper woodland and upper montane coniferous forest; 1,465-2,500 meters	Jun	No potential, outside range of species, no suitable habitat present.
Small-flowered androstephium Androstephium breviflorum	-/-/2.3/-/W	Eastern Desert with occurrences in Inyo, Riverside, and San Bernadino Counties; Arizona, Nevada, Utah	Desert dunes, bajadas in mojavean desert scrub; 220–640 meters	Mar–Apr	Potential, suitable habitat present; known to occur close to study area.
Darwin rock cress Arabis pulchra var. munciensis	-/-/2.3/S/NE	Great Basin, Mojave Desert regions, including portions of Inyo, San Bernardino Counties; Nevada	Carbonate soils in chenopod scrub, Mohavean desert scrub; 1,100-2,075 meters	Apr	Potential but unlikely, suitable habitat present.
Shockley's rock cress Arabis shockleyi	-/-/2.2/-/NE	San Bernardino Mountains, Mojave Desert: Inyo and San Bernardino Counties; Nevada, Utah	Carbonate or quartzite, rocky or gravelly soils in pinyon-juniper woodland; 875-2,205 meters	May-Jun	No potential, no suitable habitat present.
White bear poppy Arctomecon merriamii	-/-/2.2/-/NE	Northeastern Mojave desert; southern Nevada	Rocky soils in chenopod scrub, Mojavean desert scrub; 490–1,800 meters	Apr-May	Potential, suitable habitat present.

Common Name Scientific Name	Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Charleston sandwort Arenaria congesta var. charlestonensis	-/-/1B.3/-/-	Desert mountains; southwest Nevada	Sandy soils in pinyon-juniper woodland; 2,200–2,225 meters	Jun	No potential, no suitable habitat present.
Cloak fern Argyrochosma limitanea var. limitanea	-/-/2.3/-/NE	Eastern Desert mountains; Utah, New Mexico, northwestern Mexico	Carbonate, rocky soils in pinyon-juniper woodland; 1,800 meters	Sporolates from Apr– Oct	No potential, no suitable habitat present.
Mojave milkweed Asclepias nyctaginifolia	-/-/2.3/-/-	Mojave Desert; New Mexico	Mojavean desert scrub, pinyon-juniper woodland; 1,000–1,700 meters	May-Jun	Potential, suitable habitat present.
Cushenbury milk-vetch Astragalus albens	E/-/1B.1/-/W	Known from fewer than 20 occurrences in San Bernadino County, including the Northeast San Bernardino Mountains and Cushenbury Canyon	Carbonate or granitic soils in Joshua tree woodland, Mohavean desert scrub, pinyon-juniper woodland; 1,095-2,000 meters	Mar-May	No potential, outside known range of this highly localized species.
Playa milk-vetch Astragalus allochrous var. playanus	-/-/2.2/-/NE	Eastern Mojave Desert in San Bernardino County; Arizona, New Mexico, Texas, Utah	Sandy areas in Mohavean desert scrub; 800 meters	Apr	Potential, suitable habitat present.
Darwin Mesa milk-vetch Astragalus atratus var. mensanus	-/-/1B.1/S/NE	Desert mountains north and west of Panamint Valley, Inyo County	Volcanic clay or gravelly soils in Great Basin scrub, Joshua tree woodland, pinyon-juniper woodland; 1,340-2,315 meters	Apr-Jun	No potential, outside range of species.
Cima milk-vetch Astragalus cimae var. cimae	-/-/1B.2/-/-	Eastern Desert mountains	Clay soils in pinyon-juniper woodland, Great Basin scrub, Joshua tree woodland; 890–1,850 meters	Apr–May	Potential, suitable habitat present.
Walker Pass milk-vetch Astragalus ertterae	-/-/1B.3/-/W	Reported occurrences near Walker Pass in Kern County in the Southern High Sierra	Pinyon-juniper woodland on sandy, granitic soils; 1,705-1,900 meters	Apr-May	No potential, outside range of species, no suitable habitat present.
Black milk-vetch Astragalus funereus	-/-/1B.2/S/NE	Northeastern desert mountains, Funeral mountains (east of Death Valley) in Inyo County; also Nevada	Mojavean desert scrub, sometimes on carbonate, gravelly, clay, or rocky soils; 1,280-1,500 meters	Mar-May	No potential, outside range of species.
Geyer's milk-vetch Astragalus geyeri var. geyeri	-/-/2.2/S/NE	East of Sierra Nevada: Inyo, Lassen, and Mono Counties; Nevada, Oregon, Washington, and elsewhere	Sandy soils in chenopod scrub, Great Basin scrub; 1,160-1,550 meters	May-Aug	No potential, outside range of species.

Common Name Scientific Name	Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Gilman's milk-vetch Astragalus gilmanii	-/-/1B.2/S/NE	Northern desert mountains, Panamint Mountains in Inyo County; also Nevada	Gravelly or rocky soils in Great Basin scrub, pinyon-juniper woodland; 2,000-3,050 meters	May-Aug	No potential, outside range of species, no suitable habitat present.
Lane Mountain milk- vetch Astragalus jaegerianus	E/-/1B.1/-/W	Vicinity of Lane Mountain, San Bernardino County	Granitic, sandy or gravelly substrates in Joshua tree woodland and Mohavean desert scrub, on dry stony hillsides and desert mesas, usually under shrubs; 900-1,200 meters	Apr-Jun	No potential, outside range of species.
Shining milk-vetch\ Astragalus lentiginosus var. micans	-/-/1B.2/-/NE	Northern Mojave Desert, Eureka Valley in Inyo County	Desert dunes; 770-1,175 meters	Mar-Jun	No potential, outside range of species.
Sodaville milk-vetch Astragalus lentiginosus var. sesquimetralis	-/E/1B.1/-/NE	Northern Mojave Desert, northern Death Valley, eastern slope of Last Chance Mountains in Inyo County; also adjacent Nevada	Alkaline meadows and seeps; 955-965 meters	Apr-Jul	No potential, outside range of species.
Curved-pod milk-vetch Astragalus mojavensis var. hemigyrus	-/-/1A/-/NE	Formerly known from desert mountains, Darwin Mesa, west of Death Valley in Inyo* County; Nevada	Carbonate soils in Joshua tree woodland, Mohavean desert scrub; 1,250-1,600 meters	Apr-Jun	No potential, outside range of species.
Little big-pod or broad- keeled milk-vetch Astragalus platytropis	-/-/2.2/-/NE	East of Sierra Nevada: Inyo and Mono Counties; Idaho, Nevada, Oregon, Utah, and elsewhere	Rocky areas in alpine boulder and rock field, pinyon-juniper woodland, subalpine coniferous forest; 2,345-3,550 meters	Jun-Sep	No potential, outside range of species, no suitable habitat present.
Preuss's milk-vetch Astragalus preussii var. preussii	-/-/2.3/-/NE	Eastern Mojave Desert, southeastern Inyo County, northeastern San Bernardino County; Arizona, Nevada, Utah	Clay soils in chenopod scrub, Mohavean desert scrub; 750-780 meters	May-Jun	Potential, suitable habitat present.
Naked milk-vetch Astragalus serenoi var. shockleyi	-/-/2.2/-/NE	White and Indio mountains, northern desert mountains: Inyo and Mono Counties; Nevada	Alkaline, granitic alluvium soils in chenopod scrub, Great Basin scrub, pinyon-juniper woodland; 1,500-2,250 m	May-Jul	No potential, outside range of species
Triple-ribbed milk-vetch Astragalus tricarinatus	E/-/1B.2/-/W	Riverside and San Bernardino Counties, near Whitewater and Morongo Valley	On sandy or gravelly soils in alluvial deposits along desert washes in Joshua tree woodland and Sonoran desert scrub; 450-1,190 meters	Feb-May	No potential, outside range of species

Common Name Scientific Name	Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Scaly cloak fern Astrolepis cochisensis ssp. cochisensis	-/-/2.3/-/NE	Desert mountains with reported occurrences in San Bernadino County; Arizona, Baja California, New Mexico	Carbonate soils in pinyon-juniper woodland, Joshua tree woodland; 900–1,800 meters	Apr-Oct	Potential, suitable habitat present.
Ayenia Ayenia compacta	-/-/2.3-/NE	Eastern desert mountains, Providence mountains, western and central Sonoran Desert, Eagle Mountains, in Riverside, San Bernardino, and San Diego Counties; Arizona, Baja California, Sonora (Mexico)	In sandy, gravelly desert washes and dry rocky canyons in creosote bush scrub, Mojavean and Sonoran desert scrub; 150-1095 meters	Mar-Apr	Potential, suitable habitat present.
Fremont barberry Berberis fremontii	-/-/3/-/NE	Eastern and southern Mojave desert, Peninsular ranges in San Bernardino and San Diego Counties; Arizona, Nevada, Baja California, Sonora (Mexico); and elsewhere	Rocky areas in chaparral, Joshua tree woodland, and pinyon-juniper woodland; 840-1,850 meters	Apr-Jun	Potential, suitable habitat present.
King's eyelash grass Blepharidachne kingii	-/-/2.3/-/NE	East of Sierra Nevada with occurrences in Inyo and Mono Counties; also Nevada and elsewhere	Great Basin scrub usually on carbonate substrates; 1,065-2,135 m	May	No potential, outside range of species, no suitable habitat present.
Red grama Bouteloua trifida	-/-/2.3/-/NE	Eastern Desert mountains; Utah, Texas	Carbonate or rocky soils in Mojavean desert scrub; 700–2,000 meters	May-Sep	Potential, suitable habitat present.
Alkali mariposa lily Calochortus striatus	-/-/1B.2/-/W	Western Mojave Desert, Kern, Los Angeles, San Bernardino, and Tulare Counties; Nevada	Alkaline mesic soils in chaparral, chenopod scrub, Mohavean desert scrub; 70-1,595 meters	Apr-Jun	Potential, suitable habitat present.
Booth's evening- primrose Camissonia boothii ssp. boothii	-/-/2.3/-/-	East of Sierra Nevada, Inyo, Mono, and San Bernardino Counties, Arizona, Nevada	Joshua tree woodland and pinyon- juniper woodland; 900 - 2400 meters	Apr-May	Potential, suitable habitat present; known to occur close to study area.
Crucifixion thorn Castela emoryi	-/-/2.3/-/NE, W	Desert Province	Gravelly soils in Sonoran desert scrub, playas, Mojavean desert scrub; 90–670 meters	Jun-Jul (uncommo- nly in Apr)	Potential, suitable habitat present; known to occur close to study area.

Common Name Scientific Name	Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Jaeger's caulostramina Caulostramina jaegeri	-/-/1B.2/S/NE	Inyo mountains, Inyo County	Rocky or carbonate soils in Great Basin scrub, pinyon-juniper woodland, and subalpine coniferous forest; 2,135-2,800 meters	May-Jul	No potential, outside range of species, no suitable habitat present.
Wooton's lace fern Cheilanthes wootonii	-/-/2.3/-/NE	East of Sierra Nevada, desert mountains in Inyo and San Bernardino Counties; Arizona, Baja California, New Mexico, Nevada, Sonora (Mexico), Utah	Rocky places in Joshua tree woodland, pinyon-juniper woodland; 1,600-1,900 meters	May-Oct	No potential, no suitable habitat present.
Desert bird's-beak Cordylanthus eremicus ssp. eremicus	-/-/4.3/-/NE	Northern desert mountains, Inyo and San Bernardino Counties	Joshua tree woodland, Mohavean desert scrub, pinyon-juniper woodland on rocky substrate; 1000 - 3000 meters	Aug-Oct	Potential, suitable habitat present.
Purple bird's-beak Cordylanthus parviflorus	-/-/2.3/-/NE	Eastern desert mountains, New York mountains, Providence mountains, San Bernardino County; Arizona, Idado, Nevada, Utah	Joshua tree woodland, Mohavean desert scrub, pinyon-juniper woodland; 700 - 2200 meters	Aug-Oct	Potential, suitable habitat present.
Tecopa bird's-beak Cordylanthus tecopensis	-/-/1B.2/-/NE	Southeastern Sierra Nevada range, northern Mojave Desert, Inyo and San Bernardino Counties; Nevada	Alkaline meadows, flats, saltbush scrub, and Mohavean desert scrub, 200-3,000'	Jul-Oct	No potential, outside range of species.
Desert pincushion Coryphantha chlorantha	-/-/2.2/-/-	Northeastern San Bernardino County	Carbonate, gravelly, or rocky soils in Joshua tree woodland, Mojavean desert scrub, or pinyon-juniper woodland; 45- 1525 meters	Apr-Sep	Potential, suitable habitat present.
Viviparous foxtail cactus Coryphantha vivipara var. rosea	-/-/2.2/-/-	Desert mountains in northeastern San Bernadino County; southern Nevada, northwestern Arizona	Carbonate soils in Mojavean desert scrub and pinyon-juniper woodland; 1,250–2,700 meters	May-Jun	Potential, suitable habitat present.
Clokey's cryptantha Cryptantha clokeyi	-/-/1B.1/-/-	North of Barstow, San Bernardino County, last seen 1935	Mohavean desert scrub on sandy or gravelly soils; 800-1280 meters	Apr	Potential but unlikely, suitable habitat present.
Desert cymopterus Cymopterus deserticola	-/-/1B.2/-/W	Historically known from Kern, Los Angeles and San Bernardino Counties, currently known from Edwards Air Force Base	Joshua tree woodland, Mohavean desert scrub on fine to coarse, loose, sandy soil of flats in old dune areas with well-drained sand; 630-1500 meters	Mar-May	No potential, outside current range of species.
Gilman's cymopterus Cymopterus gilmanii	-/-/2.3/-/NE	Inyo, and San Bernardino Counties; Nevada	Mohavean desert scrub, often on carbonate rock; 915-2000 meters	Apr-May	Potential, suitable habitat present.

Common Name Scientific Name	Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Ripley's cymopterus Cymopterus ripleyi var. saniculoides	-/-/1B.2/-/NE	Inyo; Nevada	Joshua tree woodland, Mohavean desert scrub on sandy, carbonate soils	Apr-Jun	No potential, outside range of species.
July gold  Dedeckera eurekensis	-/R/1B.3/-/NE	Inyo and Mono Counties	Mohavean desert scrub on carbonate soils	Jun-Aug	No potential, outside range of species.
Panamint dudleya  Dudleya saxosa ssp. saxosa	-/-/1B.3/-/NE	Inyo, Riverside, and San Bernardino Counties	Mohavean desert scrub, pinyon-juniper woodland on granitic or carbonate substrates; 960-2200 meters;	Apr-Sep	No potential, outside range of species.
Howe's hedgehog cactus Echinocereus engelmannii var. howei	-/-/1B.1/S/NE	San Bernardino County	Mohavean desert scrub; 430-775 meters	Apr-May	Potential, suitable habitat present.
Panamint daisy Enceliopsis covillei	-/-/1B.2/S/NE	Inyo County	Subalkaline soils in Mohavean desert scrub	Mar-Jun	No potential, outside range of species.
Nine-awned pappus grass Enneapogon desvauxii	-/-/2.3/-/NE	Eastern Mojave desert; Texas, Colorado, northern Mexico	Rocky or carbonate soils in pinyon- juniper woodland; 1,275–1,825 meters	Aug-Sep	No potential, no suitable habitat present; species occurs within ten miles.
Gilman's goldenbush Ericameria gilmanii	-/-/1B.3/NE	Inyo and Kern Counties	Subalpine coniferous forest, upper montane coniferous forest on carbonate or granitic, rocky substrates; 2100-3400 meters	Aug-Sep	No potential, outside range of species, no suitable habitat present.
Hall's daisy Erigeron aequifolius	-/-/1B.3/-/W	Fresno, Kern, and Tulare Counties	On rocky, granitic substrates in boadleaved upland forest, lower and upper montane coniferous forest, pinyon-juniper woodland; 1500-2400 meters	Jul-Aug	No potential, outside range of species, no suitable habitat present.
Parish's daisy Erigeron parishii	T/-/1B.1/-/W	Riverside and San Bernardino Counties	Mohavean desert scrub, pinyon-juniper woodland, usually on carbonate substrates; 800-2000 meters	May-Jun	Potential, suitable habitat present.

Common Name Scientific Name	Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Limestone daisy Erigeron uncialis var. uncialis	-/-/1B.2/-/-	Inyo and San Bernardino Counties, Nevada	Great Basin scrub, subalpine coniferous forest on carbonate substrates; 1900-2900 meters	Jun-Jul	No potential, no suitable habitat present; species occurs within ten miles.
Utah daisy Erigeron utahensis	-/-/2.3/-/-	Eastern Desert mountains; Colorado, Arizona	Carbonate soils in pinyon-juniper woodland; 1,500–2,320 meters	May-Jun	No potential, no suitable habitat present.
Narrow-leaved yerba santa Eriodictyon angustifolium	-/-/2.3/-/-	Eastern Desert mountains (New York and Granite mountains)	Pinyon-juniper woodland; 1,500–1,900 meters	May-Aug	No potential, no suitable habitat present.
Forked buckwheat Eriogonum bifurcatum	-/-/1B.2/-/NE	Inyo and San Bernardino Counties; Nevada	Sandy soils in chenopod scrub; 700-810 meters	Apr-Jun	Potential, suitable habitat present.
Reveal's buckwheat Eriogonum contiguum	-/-/2.3/-/NE	Inyo and San Bernardino Counties; Nevada	Sandy soils in Mohavean desert scrub; 30-1320 meters	Feb-Jun	Potential, suitable habitat present.
Wildrose Canyon buckwheat <i>Eriogonum eremicola</i>	-/-/1B.3/S/NE	Inyo County	On sandy or gravelly substrate in pinyon-juniper woodland, upper montane coniferous forest; 2200-3100 meters	Jun-Sep	No potential, no suitable habitat present.
Thorne's buckwheat Eriogonum ericifolium var. thornei	-/E/1B.2/-/NE	Eastern Desert mountains (New York mountains)	Gravelly soils in pinyon-juniper woodland; 1,800–1,830 meters	Jul-Aug	No potential, no suitable habitat present.
Kern buckwheat Eriogonum kennedyi var. pinicola	-/-/1B.1/-/W	Southeastern Kern County	On clay soils in chaparral, pinyon- juniper woodland; 1340-1950 meters	May-Jun	No potential, outside range of species and no suitable habitat present.
Jointed buckwheat Eriogonum intrafractum	-/-/1B.3/-/NE	Inyo County	On carbonate substrates in Mohavean desert scrub; 610-1950 meters	May-Oct	No potential, outside range of species
Panamint Mountains Buckwheat Eriogonum microthecum var. panamintense	-/-/1B.3/S/NE	Inyo County	Rocky areas in pinyon-juniper woodland; 1890-3250 meters	Jun-Oct	No potential, outside range of species and no suitable habitat present.

Common Name Scientific Name	Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Cushenbury buckwheat Eriogonum ovalifolium var. vineum	E/-/1B.1/-/W	San Bernardino County	On carbonate substrates in Joshua tree woodland, Mohavean desert scrub, pinyon-juniper woodland; 1400-2440 meters	May-Aug	No potential, outside range of species.
Juniper buckwheat Eriogonum umbellatum var. juniporinum	-/-/2.3/-/-	Eastern Desert mountains in eastern San Bernadino County	Mojavean desert scrub, pinyon-juniper woodland; 1,300–2,500 meters	Jul-Oct	Potential, suitable habitat present.
Hairy erioneuron Erioneuron pilosum	-/-/2.3/-/-	East of Sierra Nevada, eastern Desert mountains	Rocky, sometimes carbonate soils in pinyon-juniper woodland; 1,500–2,010 meters	May-Jun	No potential, no suitable habitat present; species occurs within ten miles.
Barstow woolly sunflower Eriophyllum mohavense	-/-/1B.2/-/W	Central Mojave desert in western and central San Bernadino County	Chenopod scrub, Mojavean desert scrub, playas; 500–960 meters	Apr-May	Potential, suitable habitat present; known to occur close to study area west of Barstow.
Red Rock poppy Eschscholzia minutiflora ssp. twisselmannii	-/-/1B.2/-/W	Kern County	Volcanic tuff in Mohavean desert scrub; 680-1230 meters	Mar-May	No potential, outside range of species and no suitable habitat present.
Kingston Mtns. Bedstraw Galium hilendiae ssp. kingstonense	-/-/1B.3/S/NE	San Bernardino County; Nevada	Rocky areas in lower montane coniferous forest and pinyon-juniper woodland; 1200-2100 meters	Jun	No potential, no suitable habitat present.
Wright's bedstraw Galium wrightii	-/-/2.3/-/-	San Bernardino County; Arizona, Baja California, New Mexico, Texas, Sonora Mexico	Rocky areas in lower montane coniferous forest, pinyon-juniper woodland, on carbonate substrate; 1600-2000 meters	Jun-Oct	No potential, no suitable habitat present; species occurs within ten miles.
Little San Bernardino Mtns. gilia Gilia maculata (syn. Linanthus maculatus)	-/-/1B.2/-/W	Riverside and San Bernardino Counties, near Joshua Tree National Monument	Desert dunes, Joshua tree woodland, creosote bush scrub, in areas of braided wash; 195-2075 meters	Apr-May	Potential but unlikely, suitable habitat present.
Golden carpet Gilmania luteola	-/-/1B.3/-/NE	Inyo County	Alkaline barrens in chenopod scrub	Mar-Apr	No potential, outside range of species.

Common Name Scientific Name	Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Pungent glossopetalon Glossopetalon pungens	-/-/1B.2/S/NE	San Bernardino County; Nevada	Carbonate soils in chaparral, pinyon- juniper woodland; 1675-2000 meters	May-Jun	No potential, no suitable habitat present; species occurs within ten miles.
Ash Meadows gumplant Grindelia fraxino- pratensis	T/-/1B.2/-/NE	Inyo County: known from two occurrences in Carson Slough, Amargosa Desert; Nevada	Meadows in moist clay soils; 635-700 meters	Jun-Oct	No potential, outside range of species.
Red Rock tarplant Hemizonia arida (syn. Deinandra arida)	-/R/1B.2/-/W	Kern County	Mohavean desert scrub on clay soils; 300-950 meters	Apr-Nov	No potential, outside range of species.
Mohave tarplant Hemizonia mohavensis (syn. Deinandra mohavensis)	-/E/1B.3/-/W	Riverside and San Bernardino Counties	Riparian scrub, Mojave desert scrub, and Joshua tree woodland, on low sand bars in river bed; 640-1600 meters	Jul-Oct	Potential but unlikely, suitable habitat present.
Inyo hulsea Hulsea vestita ssp. inyoensis	-/-/2.2/S/NE, W	Inyo and Mono Counties; Nevada	Great Basin scrub, pinyon-juniper woodland on rocky substrate; 2835- 3900 meters	Apr-Jun	No potential, outside range of species and no suitable habitat present.
Yellow ivesia Ivesia arizonica var. arizonica	-/-/3/- /NE	Inyo County; Arizona, Nevada, Utah	Rocky areas in pinyon-juniper woodland, subalpine and upper montane coniferous forest; 1200-3100 meters	May-Aug	No potential, outside range of species and no suitable habitat present.
Jaeger's ivesia Ivesia jaegeri	-/-/1B.3/S/NE	Clark Mountains, San Bernardino County; Nevada	Pinyon-juniper woodland, upper montane coniferous forest on carbonate, rocky substrates; 1830-3600 meters	Jun-Jul	No potential, no suitable habitat present; species occurs within ten miles.
Kingston Mtns. ivesia  Ivesia patellifera	-/-/1B.3/S/NE	San Bernardino County	Pinyon-juniper woodland on granitic, rocky substrate; 1400-2100 meters	Jun-Oct	No potential, no suitable habitat present.
Knotted rush Juncus nodosus	-/-/2.3/-/-	Inyo, and possibly Tulare Counties	Moist meadows and lake margins; 13- 1980 meters	Jul-Sep	No potential, outside range of species
Hillside wheat grass Leymus salinus ssp. mojavensis	-/-/2.3/-/-	Desert mountains; Idaho, Colorado	Rocky soils in pinyon-juniper woodland; 1,350–2,135 meters	May–Jun	No potential, no suitable habitat present; species occurs within ten miles.

Common Name Scientific Name	Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Are
Sand linanthus Linanthus arenicola	-/-/-/NE, W	Inyo and San Bernardino Counties; Nevada	Joshua tree woodland, Mohavean desert scrub, and desert dunes, on sandy soils 366—1372 meters	Mar-Apr	Potential, suitable habitat present.
Plains stoneweed Lithospermum incisum	-/-/2.3/-/-	Desert mountains in Keystone Canyon, New York mountains, San Bernadino County; Nevada, Montana, British Columbia	Pinyon-juniper woodland; 1,650–1,720 meters	May	No potential, no suitable habitat prese
Sagebrush loeflingia Loeflingia squarrosa var. artemisiarum	-/-/2.2/S/W	Inyo, Kern, Lassen,and Los Angeles counties; Nevada, Oregon, Wyoming	Great Basin scrub and Sonoran desert scrub on sandy flats and dunes; 700-1615 meters	Apr-May	Potential, suitable habitat present.
Owens Peak lomatium Lomatium shevockii	-/-/1B.3/-/W	Kern County: known from two occurrences in Owens Peak and Mt. Jenkins area	Rocky areas in lower and upper montane coniferous forest; 1770-2200 meters	Apr-May	No potential, outside range of species and suitable habitat prese
Scrub lotus Lotus argyraeus var. multicaulis	-/-/1B.3/-/-	Desert mountains in the New York mountains	Granitic soils in pinyon-juniper woodland; 1,200–1,500 meters	Apr–Jun	No potential, no suitable habitat prese
Providence Mtns. lotus Lotus argyraeus var. notitius	-/-/1B.3/-/NE	San Bernardino County: one occurrence in the Providence Mtns.	Pinyon-juniper woodland; 1200-2000 meters	May-Aug	No potential, outside range of species and suitable habitat prese
Panamint Mountains lupine <i>Lupinus magnificus</i> var. <i>magnificus</i>	-/-/1B.2/S/NE	Inyo County	Great Basin scrub, Mohavean desert scrub, upper montane coniferous forest; 1000-2285 meters	Apr-Jun	No potential, outside range of species
Wolftail Lycurus phleoides var. phleoides	-/-/2.2/-/NE	San Bernardino County: known in California from onw occurrences in the New York Mountains; Arizona	Joshua tree woodland, pinyon-juniper woodland; 500 meters	Aug-Sep	Potential but unlikely, suitable habitat prese
Spearleaf Matelea parvifolia	-/-/2.3/-/NE	Sonoran desert, Riverside, San Bernardino, and San Diego Counties; Arizona, Baja California, Nevada, Texas	Dry rocky ledges and slopes in creosote bush scrub; 440-1095 meters	Mar-May	Potential but unlikely, suitable habitat prese

Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
-/-/2.3/-/NE	San Bernardino County; Arizona, Sonora (Mexico), Texas	Joshua tree woodland, Mohavean desert scrub, on carbonate soils; 760- 1525 meters	Apr-May	Potential, suitable habitat present.
-/R/1B.2/-/NE	Inyo County: Titus and Fall canyons	Mohavean desert scrub on rocky carbonate soils; 515-1675 meters	Apr-Jun	No potential, outside range of species.
-/-/1B.3/-/-	Central Mojave desert	Mojavean desert scrub; 700–1,160 meters	Mar–May	Potential, suitable habitat present, known to occur close to study area.
-/-/2.1/-/NE	Mono and Inyo Counties; Nevada	Meadows, pinyon-juniper woodland; 610-2000 meters	Apr	No potential, no suitable habitat present.
-/-/1B.2/-/W	Mojave desert near Barstow, San Bernadino County	Sandy or gravelly washes in Joshua tree woodland, Mojavean desert scrub; 600–1,200 meters	Apr–Jun	Potential, suitable habitat present; known to occur close to study area.
-/-/1B.2/-/W	Kern County	Joshua tree woodland, pinyon-juniper woodland, on sandy, granitic substrates; 800-1340 meters	Mar-May	No potential, outside known range of species.
-/-/1B.3/S/W	Inyo, Kern, and Tulare Counties: known from few occurrences on the eastern Sierran crest	Granitic substrates in aAlpine boulder and rock field, subalpine and upper montane coniferous forest; 2500-3500 meters	Jul-Sep	No potential, outside range of species and no suitable habitat present.
-/-/1B.3/S/W	Riverside and San Bernardino Counties	Pinyon-juniper woodland; 610-1500 meters	Apr-Oct	No potential, no suitable habitat present.
-/-/2.2/-/NE	San Bernardino County, San Clemente Island, Arizona; Baja California	Rocky areas in coastal scrub, Mohavean desert scrub, valley and foothill grassland; 20-1600 meters	Apr-May	Potential, suitable habitat present.
	CNPS/BLM/ HCP <sup>a</sup> -/-/2.3/-/NE  -/R/1B.2/-/NE  -/-/1B.3/-/-  -/-/1B.2/-/W  -/-/1B.3/S/W	CNPS/BLM/HCPa  -/-/2.3/-/NE  San Bernardino County; Arizona, Sonora (Mexico), Texas  -/R/1B.2/-/NE  Inyo County: Titus and Fall canyons  -/-/1B.3/-/-  Central Mojave desert  -/-/1B.2/-/W  Mojave desert near Barstow, San Bernadino County  -/-/1B.2/-/W  Kern County  -/-/1B.3/S/W  Inyo, Kern, and Tulare Counties: known from few occurrences on the eastern Sierran crest  -/-/1B.3/S/W  Riverside and San Bernardino Counties  -/-/2.2/-/NE  San Bernardino County, San Clemente Island, Arizona; Baja	CNPS/BLM/HCPa Geographic Distribution/Floristic Province Habitat Requirements  -/-/2.3/-/NE San Bernardino County; Arizona, Sonora (Mexico), Texas Joshua tree woodland, Mohavean desert scrub, on carbonate soils; 760-1525 meters  -/-R/1B.2/-/NE Inyo County: Titus and Fall Canyons Mohavean desert scrub on rocky carbonate soils; 515-1675 meters  -/-/1B.3/-/- Central Mojave desert Mojavean desert scrub; 700–1,160 meters  -/-/2.1/-/NE Mono and Inyo Counties; Nevada Meadows, pinyon-juniper woodland; 610-2000 meters  -/-/1B.2/-/W Mojave desert near Barstow, San Bernadino County Joshua tree woodland, Mojavean desert scrub; 600–1,200 meters  -/-/1B.3/S/W Inyo, Kern, and Tulare Counties: known from few occurrences on the eastern Sierran crest Riverside and San Bernardino County, San Clemente Island, Arizona; Baja Rocky areas in coastal scrub, Mohavean desert scrub, valley and	CNPS/BLM/ HCP*  Geographic Distribution/Floristic Province  Habitat Requirements  San Bernardino County; Arizona, Sonora (Mexico), Texas  Joshua tree woodland, Mohavean desert scrub, on carbonate soils; 760-1525 meters  Inyo County: Titus and Fall Mohavean desert scrub on rocky carbonate soils; 515-1675 meters  Mohavean desert scrub on rocky carbonate soils; 515-1675 meters  Apr-Jun Mar-May Meters  Mojavean desert scrub; 700-1,160 Mar-May meters  Mojavean desert scrub; 700-1,160 Mar-May meters  Mojavean desert scrub; 700-1,160 Mar-May meters  Mojave desert near Barstow, San Bernadino County  Sandy or gravelly washes in Joshua tree woodland, Mojavean desert scrub; 600-1,200 meters  Mar-May  Mojave desert near Barstow, San Bernadino County  Joshua tree woodland, pinyon-juniper woodland, on sandy, granitic substrates; 800-1340 meters  Mar-May  Mar-May  Mar-May  T-/-/1B.3/S/W Inyo, Kern, and Tulare Counties: known from few occurrences on the eastern Sierran crest  Mojavean desert scrub; 67 farnitic substrates in aAlpine boulder and rock field, subalpine and upper montane coniferous forest; 2500-3500 meters  T-/-/1B.3/S/W Riverside and San Bernardino Pinyon-juniper woodland; 610-1500 Apr-Oct meters  Apr-May  Clemente Island, Arizona; Baja  Rocky areas in coastal scrub, Wohavean desert scrub, valley and

Common Name Scientific Name	Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Tough muhly <i>Muhlenbergia arsenei</i>	-/-/2.3/-/-	Desert mountains in the Clark mountains; Utah, New Mexico, Baja California	Rocky or carbonate soils in pinyon-juniper woodland; 1,400–1,860 meters	Aug-Oct	No potential, no suitable habitat present; species occurs within ten miles.
Delicate muhly Muhlenbergia fragilis	-/-/2.3/-/NE	San Bernardino County; Arizona, Baja California, New Mexico, Sonora (Mexico), Texas	Pinyon-juniper woodland on carbonate, gravelly substrates; 1600 meters	Oct	No potential, no suitable habitat present.
Few-flowered muhly Muhlenbergia pauciflora	-/-/2/-/NE	San Bernardino County; Arizona	Rocky areas in pinyon-juniper woodland; 1755-1860 meters	Sep	No potential, no suitable habitat present.
Few-flowered muhly Muhlenbergia pauciflora	-/-/2/-/-	Desert mountains in the New York mountains; Colorado, Texas, Mexico	Rocky soils in pinyon-juniper woodland; 1,755–1,860 meters	Sep-Oct	No potential, no suitable habitat present.
False buffalo-grass Munroa squarrosa	-/-/2.2/-/NE	San Bernardino County; Arizona, Nevada,	Pinyon-juniper woodland on gravelly or rocky substrates; 1500-1800 meters	Oct	No potential, no suitable habitat present; species occurs within ten miles.
Forked purple mat Nama dichotomum var. dichotomum	-/-/2.3/-/-	Desert mountains in the New York mountains; Texas, Mexico	Granitic or carbonate soils in pinyon- juniper woodland; 1,900–2,200 meters	Sep-Oct	No potential, no suitable habitat present.
Twisselmann's nemacladus Nemacladus twisselmannii	-/R/1B.2/-/NE	Kern and Tulare Counties	Upper montane coniferous forest on sandy or rocky, granitic substrates; 2240-2450 meters		No potential, outside range of species and no suitable habitat present.
Amargosa nitrophila Nitrophila mohavensis	E/E/1B.1/-/NE	Inyo County: near Carson Slough in the Amargosa Desert; Nevada	Mesic playas, on clay soils; 425-750 meters	May-Oct	No potential, outside range of species.
Short-joint beavertail Opuntia basilaris var. brachyclada	-/-/1B.2/-/-	Los Angeles and San Bernardino Counties	Chaparral, Joshua tree woodland, Mohavean desert scrub, pinyon-juniper woodland, desert washes, riparian woodland on dry slopes; 425-1800 meters	Apr-Jun	Potential, suitable habitat present.
Curved-spine beavertail Opuntia curvospina	-/-/2.2/-/-	Desert mountains in the New York mountains and eastern San Bernadino County	Chaparral, Mojavean desert scrub, pinyon-juniper woodland; 1,000–1,400 meters	Apr–Jun	Potential, suitable habitat present.

Common Name Scientific Name	Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Beautiful cholla Opuntia pulchella	-/-/2.2/-/NE	Inyo and Mono Counties; Arizona, Nevada, Utah	Desert dunes, Great Basin scrub, Mohavean desert scrub, on sandy soils; 1500-1980 meters	May-Jun	No potential, outside range of species.
Cushenbury oxytheca Oxytheca parishii var. goodmaniana (syn. Acanthoscyphus)	E/-/1B.1	Cushenbury area in San Bernardino County	Pinyon-juniper woodland on sandy talus carbonate soils; 1300-2375 meters	May-Sep	No potential, no suitable habitat present.
Watson's oxytheca Oxytheca watsonii	-/-/2.2/-/NE	Inyo and Nevada Counties	Joshua tree woodland, Mohavean desert scrub on sandy soils; 1200-2000 meters	May-Jul	No potential, outside range of species.
Cliff brake Pellaea truncata	-/-/2.3/-/-	Eastern Desert mountains in the New York and Providence mountains	Volcanic, granitic, or rocky soils in pinyon-juniper woodland; 1,200–2,150 meters	Apr–Jun	No potential, no suitable habitat present; species occurs within ten miles.
White-margined beardtongue Penstemon albomarginatus	-/-/1B.2/-/W	San Bernardino County; Arizona, Nevada	Stabilized desert dunes, Mohavean desert scrub, on sandy soils; 640-1065 meters	Mar-May	Potential, suitable habitat present.
Rosy two-toned beardtongue Penstemon bicolor ssp. roseus	-/-/2.3/-/-	Northeastern San Bernadino County	Joshua tree woodland, Mohavean desert scrub, pinyon-juniper woodland, on gravelly, rocky substrates; 700-1500 meters	May	Potential, suitable habitat present.
Limestone beardtongue Penstemon calcareus	-/-/1B.3/-/NE	Inyo and San Bernardino Counties; Nevada	Joshua tree woodland, Mohavean desert scrub, pinyon-juniper woodland, on carbonate, rocky substrates; 1065- 2040 meters	Apr-May	Potential, suitable habitat present.
Death Valley beardtongue Penstemon fruticiformis var. amargosae	-/-/1B.3/S/NE	Inyo and San Bernardino Counties; Nevada	Mohavean desert scrub; 850-1400 meters	Apr-Jun	Potential, suitable habitat present.
Stephens's beardtongue Penstemon stephensii	-/-/1B.3/S/NE	Inyo and San Bernardino Counties	Mohavean desert scrub, pinyon-juniper woodland, on rocky carbonate substrates; 60-1850 meters	Apr-Jun	Potential, suitable habitat present.

Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
-/-/2.3/-/-	Eastern Desert mountains in the New York and Clark mountains; Utah, Arizona	Gravelly, carbonate soils in pinyon-juniper woodland; 1,500–2,700 meters	May–Jun	No potential, no suitable habitat present; species occurs within ten miles.
-/-/2.3/-/-	Eastern Desert mountains in the New York and Kingston mountains; Utah, Arizona	Rocky soils in chenopod scrub, Great Basin scrub, Mojavean desert scrub, pinyon-juniper woodland; 1,065–2,500 meters	Apr-May	Potential, suitable habitat present.
-/-/1B.2/S/NE	Inyo County: southern Inyo Mtns.	Carbonate rocky areas in pinyon-juniper woodland, Great Basin scrub; 1800-2710 meters	Jun-Aug	No potential, outside range of species, no suitable habitat present.
-/-/1B.3/S/NE	Inyo County: endemic to mountinas of Death Valley National Park	Carbonate rocky areas in pinyon-juniper woodland, Great Basin scrub; 1700-2600 meters	Jun	No potential, outside range of species, no suitable habitat present.
-/-/1B.3/S/NE	Inyo County	Desert dunes, Mohavean desert scrub; 260-1445 meters	May-Sep	No potential, outside range of species.
-/-/3.3-/NE	Inyo County	Riparian scrub, subalpine coniferous forest, in gravelly areas; 500-700 meters	Apr-May	No potential, outside range of species.
-/-/2.3/-/-	Eastern Desert mountains in the New York mountains; Utah	Carbonate, sandy, or gravelly soils in Joshua tree woodland, pinyon-juniper woodland; 1,200–1,500 meters	Apr-May	Potential, suitable habitat present; known to occur near the study area at Mountain Pass.
-/-/2.3/-/-	Eastern Mojave desert; Utah, Texas, Mexico	Mojavean desert scrub, pinyon-juniper woodland; 1,400–2,000 meters	Apr-May	Potential, suitable habitat present.
-/-/1B.3/S/NE/	Desert mountains, Inyo and San Bernardino Counties; Nevada	In crevices on the face of limestone cliffs, volcanic outcrops, or gravel talus in Mohavean desert scrub and pinyon-juniper woodland; 730-2620 meters	May-Jul	Potential but unlikely, suitable habitat present.
	CNPS/BLM/ HCP <sup>a</sup> -/-/2.3/-/-  -/-/2.3/-/-  -/-/1B.2/S/NE  -/-/1B.3/S/NE  -/-/1B.3/S/NE  -/-/3.3-/NE	CNPS/BLM/HCPa Geographic Distribution/Floristic Province  -/-/2.3/-/ Eastern Desert mountains in the New York and Clark mountains; Utah, Arizona  -/-/2.3/-/ Eastern Desert mountains in the New York and Kingston mountains; Utah, Arizona  -/-/1B.2/S/NE Inyo County: southern Inyo Mtns.  -/-/1B.3/S/NE Inyo County: endemic to mountinas of Death Valley National Park  -/-/1B.3/S/NE Inyo County  -/-/2.3/-/ Eastern Desert mountains in the New York mountains; Utah  -/-/2.3/-/ Eastern Desert mountains in the New York mountains; Utah  -/-/2.3/-/ Eastern Mojave desert; Utah, Texas, Mexico  -/-/1B.3/S/NE/ Desert mountains, Inyo and San	CNPS/BLM/ HCP³ Province Habitat Requirements  -/-/2.3/-/ Eastern Desert mountains in the New York and Clark mountains; Utah, Arizona Fastern Desert mountains in the New York and Kingston mountains; Utah, Arizona Fastern Desert Mountains; Utah Fastern Desert Mountains; Utah Fastern Desert Mountains of Death Valley National Park Fastern Desert Mountains; Utah Fastern Desert Mountains; Utah Fastern Desert Mountains; Utah Fastern Desert Mountains; Utah Fastern Desert Mojave desert; Utah, Texas, Mexico Fastern Desert Mountains, In crevices on the face of limestone cliffs, volcanic outcrops, or gravel talus in Mohavean desert scrub and pinyon-ignore.  -/-/1B.3/S/NE/ Desert mountains, Inyo and San Bernardino Counties; Nevada Fastern Scrub and pinyon-ignore.    Habitat Requirements   Gravelly, carbonate soils in pinyon-juniper woodland; 1,500−2,700 meters    -/-/2.3/-/	CNPS/BLM/ HCP³         Geographic Distribution/Floristic Province         Habitat Requirements         Blooming Period           -/-/2.3/-/-         Eastern Desert mountains in the New York and Clark mountains; Utah, Arizona         Gravelly, carbonate soils in pinyon- juniper woodland; 1,500–2,700 meters         May–Jun           -/-/2.3/-/-         Eastern Desert mountains in the New York and Kingston mountains; Utah, Arizona         Rocky soils in chenopod scrub, Great Basin scrub, Mojavean desert scrub, pinyon-juniper woodland; 1,065–2,500 meters         Apr–May           -/-/1B.2/S/NE         Inyo County: southern Inyo Mtns.         Carbonate rocky areas in pinyon-juniper woodland, Great Basin scrub; 1800- 2710 meters         Jun           -/-/1B.3/S/NE         Inyo County: endemic to mountinas of Death Valley National Park         Carbonate rocky areas in pinyon-juniper woodland, Great Basin scrub; 1700- 2600 meters         Jun           -/-/1B.3/S/NE         Inyo County         Desert dunes, Mohavean desert scrub; 260-1445 meters         May-Sep           -/-/3.3-/NE         Inyo County         Riparian scrub, subalpine coniferous forest, in gravelly areas; 500-700 meters         Apr-May           -/-/2.3/-/-         Eastern Desert mountains in the New York mountains; Utah         Carbonate, sandy, or gravelly soils in Joshua tree woodland, pinyon-juniper woodland; 1,200-1,500 meters         Apr-May           -/-/2.3/-/-         Eastern Mojave desert; Utah, Texas, Mexico         Mojavean desert scrub, pinyon-juniper woodland; 1,400-2,000 meters

Common Name Scientific Name	Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Charlotte's Phacelia Phacelia nashiana	-/-/1B.2/-/-	Inyo, Kern, and Tulare Counties	Joshua tree woodland, Mohavean desert scrub, pinyon-juniper woodland on granitic sandy or rocky areas on steep slopes or flats; 600-2200 meters	Mar-Jun	No potential, outside range of species.
Nine Mile Canyon Phacelia Phacelia novenmillensis	-/-/1B.2/-/-	Inyo, Kern, and Tulare Coutnies	Broadleaved upland forest, cismontane woodland, pinyon-juniper woodland, upper montane coniferous forest, on sandy or gravelly soils; 1645-2640 meters	May-Jun	No potential, outside range odf speceis, no suitable habitat present.
Parish's phacelia Phacelia parishii	-/-/1B.1/-/W	Western Mojave desert in northwestern San Bernadino County; Nevada	Clay or alkaline soils in playas, Mojavean desert scrub; 540–1,200 meters	Apr–Jul	Potential, suitable habitat present; known to occur near study area at Yermo.
Jaeger's phacelia Phacelia perityloides var. jaegeri	-/-/1B.3/-/-	Northeastern San Bernardino County	Carbonate soils in pinyon-juniper woodland; 1,830–2,345 meters	May-Jul	No potential, no suitable habitat present; species occurs within ten miles.
Goodding's phacelia Phacelia pulchella var. gooddingii	-/-/2.3/-/NE	Inyo County; Arizona, Nevada, Utah	Mohavean desert scrub on clay, often alkaline soils; 800-1000 meters	Apr-Jun	Potential, suitable habitat present.
Chambers's physaria Physaria chambersii	-/-/2.3/-/-	Northern desert mountains in the Clark and Grapevine mountains	Carbonate or rocky soils in pinyon- juniper woodland; 1,500–2,590 meters	Apr-May	No potential, no suitable habitat present; species occurs within ten miles.
Two-needle pinyon pine Pinus edulis	-/-/3.3/-/NE	San Bernardino County; eastern Nevada, Arizona	Lower montane coniferous forest, pinyon-juniper woodland; 1300-2700 meters		No potential, no suitable habitat present.
Small-flowered rice grass Piptatherum micranthum	-/-/2.3/-/NE	Inyo, Mono, and San Bernardino Counties, Idaho	Pinyon-juniper woodland, on gravelly, carbonate substrates; 700-2950 meters	Jun-Sep	No potential, no suitable habitat present; species occurs within ten miles.
			,		

Common Name Scientific Name	Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Parish's popcorn-flower Plagiobothrys parishii	-/-/1B.1/-/-	East of Sierra Nevada, Mojave desert: known from two occurrences at Rabbit Springs in San Bernardino Co. and north of Cartago in Inyo Co.	Alkaline or mesic areas in Great Basin scrub or Joshua tree woodland; 750– 1,400 meters	Mar-Jun (uncommo- nly until Nov	Potential but unlikely, suitable habitat present.
Desert popcorn-flower Plagiobothrys salsus	-/-/2.2/-/NE	Inyo and Modoc Counties; Nevada, Oregon	Alkaline playas; 700 meters	May-Aug	Potential but unlikely, suitable habitat present.
Thorny milkwort Polygala acanthoclada	-/-/2.3/-/-	Mojave Desert in Eagle and New York Mountains, Lucerne Valley; Utah, Arizona	Joshua tree woodland, chenopod scrub, pinyon-juniper woodland; 760–2,285 meters	May-Aug	Potential, suitable habitat present.
Notch-beaked milkwort Polygala heterorhyncha	-/-/2.3/-/NE	Inyo County: Funeral Mtns.; Nevada	Mohavean desert scrub, on alkaline soils; 900-1600 meters	Apr-May	No potential, outside range of species.
Narrow-leaved cottonwood Populus angustifolia	-/-/2.2/-/NE	Inyo and San Bernardino Counties; Arizona, Idaho, Nevada, Oregon	Riparian forest; 1200-1800 meters	Mar-Apr	Potential but unlikely, suitable habitat present.
Parish's alkali-grass Puccinellia parishii	-/-/1B.1/-/W	Known only from Rabbit Springs, Kern Co; widely disjunct localities in California, Arizona, New Mexico	Alkaline springs and seeps; 700-1000 meters	Apr-May	No potential, no suitable habitat present.
Muir's Raillardella Raillardiopsis muirii (syn. Carlquistia muirii)	-/-/1B.3/-/-	Fresno, Kern, Monterey, and Tulare Counties	Montane chaparral, lower and upper montane coniferous forest; 1100-2500 meters	Jul-Aug	No potential, outside range of species and no suitable habitat present.
Abert's sanvitalia Sanvitalia abertii	-/-/2.2/-/NE	San Bernardino County; Arizona, Sonora (Mexico), Texas	Pinyon-juniper woodland on carbonate derived soils; 1570-1800 meters	Aug-Sep	No potential, no suitable habitat present; species occurs within ten miles.
Many-flowered Schkuhria Schkuhria multiflora var. multiflora	-/-/2.3/-/-	Eastern Mojave desert; Texas, New Mexico	Sandy soils in pinyon-juniper woodland; 1,500–1,700 meters	Sep-Oct	No potential, no suitable habitat present; species occurs within ten miles.
Burro grass Scleropogon brevifolius	-/-/2.3/-/NE	San Bernardino County; Arizona, Nevada	Mohavean desert scrub, in areas of decomposed granitic soils; 1585-1600 meters	Oct	Potential but unlikely - occurs at higher elevations.

Common Name Scientific Name	Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Mojave fish-hook cactus Sclerocactus polyancistrus	-/-/4.2/-/-	Inyo, Kern, and San Bernardino Counties, Nevada	Joshua tree woodland, Mohavean desert scrub, usually on carbonate derived soils; 640-2320 meters	Apr-Jul	Potential, suitable habitat present.
Southern skullcap Scutellaria bolanderi ssp. austromontana	-/-/1B.2/-/-	San Bernardino Mountains, Peninsular Ranges, and adjacent Mojave desert in Riverside, San Bernardino*, and San Diego Counties	Along streambanks in oak or pine woodland and chaparral, on gravelly soils; 600-2000 meters	Jun-Aug	No potential, no suitable habitat present; species occurs within ten miles.
Desert wing-fruit Selinocarpus nevadensis	-/-/2.3/-/NE	Inyo County: known from one occurrences in Kingston Range; Arizona, Nevada, Utah	Rocky areas in Joshua tree woodland, Mohavean desert scrub; 1160-1250 meters	Jun-Sep	No potential, outside range of species.
Rusby's desert mallow Sphaeralcea rusbyi var. eremicola	-/-/1B.2/S/NE	Death Valley region, eastern Inyo County, Clark Mountains, northeastern San Bernadino County;	Mojavean desert scrub, Joshua tree woodland; 975–1,500 meters	May-Jun	Potential, suitable habitat present; known to occur close to study area.
Piute Mtns. jewel-flower Streptanthus cordatus var. piutensis	-/-/1B.2/ S/W	Kern County	Broadleaved upland forest, closed-cone coniferous forest, and pinyon-juniper woodland along roadbanks and cliffs, on metamorphic red clay soils; 1095-1735 meters	May-Jul	No potential, outside range of species, no suitable habitat present.
San Bernardino aster Symphotrichium defoliatum	-/-/1B.2/-/-	Riverside, Orange, Los Angeles, San Diego, Kern, Ventura, and southeastern San Bernardino Counties	Wet areas within coastal scrub, cismontane woodland, lower montane coniferous forest, meadows, marshes, swamps, and valley/foothill grassland; 2-2040 meters	Jul-Nov	Potential but unlikely, suitable habitat present.
Holly-leaved tetracoccus Tetracoccus ilicifolius	-/-/1B.3/-/NE	Inyo County: Death Valley	Rocky areas in Mohavean desert scrub, on carbonate derived soils; 600-1830 meters	May-Jun	No potential, outside range of species.
Dedecker's Clover Trifolium dedeckerae (syn. T. macilentum var. dedeckerae)	-/-/1B.3/S/W	Eastern Sierras in Tulare and Inyo Counties,the White Mountains in Inyo County, south to Spanish Needle area in Kern County	Rocky, gravelly slopes in variety of arid vegetation types including coniferous forest, pinyon-juniper woodland, and sagebrush scrub; 2100-3500 meters.	Jun-Jul	No potential, outside range of species, no suitable habitat present.
Plummer's woodsia Woodsia plummerae	-/-/2.2/-/NE	Desert mountains; Texas, New Mexico	Granitic or rocky soils in pinyon-juniper woodland; 1,600–2,000 meters	May-Sep	No potential, no suitable habitat present.

Common Name Scientific Name	Federal/State/ CNPS/BLM/ HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	<u> </u>	3	Potential for Occurrence in the Biological Study Area
--------------------------------	-------------------------------------------------	--------------------------------------------	----------------------	----------	---	-------------------------------------------------------------

Status explanations:

### **Federal**

- E = listed as endangered under the Federal Endangered Species Act.
- T = listed as threatened under the Federal Endangered Species Act.
- = no listing.

### **California State**

- E = listed as endangered under the California Endangered Species Act.
- = no listing.

# California Native Plant Society (CNPS)

- 1B = List 1B species: rare, threatened, or endangered in California and elsewhere.
- 2 = List 2 species: rare, threatened, or endangered in California but more common elsewhere
- = no listing.

### **BLM**

- S = plant species that are not on Federal or state lists as endangered, threatened, candidate, or proposed, but are designated by the BLM State Director for special management consideration
- = no listing.

### **HCP**

- W = species covered by the West Mojave Habitat Conservation Plan
- NE = species covered by the Northern and Eastern Mojave Plan.
- = no listing.

Table 2: Special-Status Plants with Potential to Occur in the Vicinity of the DesertXpress Project: Nevada Portion

Common Name Scientific Name	Federal/State/ BLM/HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Rough angelica  Angelica scabrida	-/-/S/C	Endemic to Spring Mountains	Mixed conifer communities near springs, in moist, gravelly soils of washes, ephemeral streams, gullies, montane slopes, avalanche chutes, wash margins in riparian woodland and shrubland; 2,012–2,804 meters	Jun-Aug	No potential, study area is outside the known range of species.
Menzies' anacolia moss Anacolia menziesii	-/-/C	Only Nevada occurence found in Red Rock Canyon, Clark County.	A single location in pinyon-juniper and blackbrush habitat in the Spring Mountains at approximately 1600 meters.	Not applicable	No potential, study area is outside the known range of species.
Charleston pussytoes Antennaria soliceps	-/-/S/C	Endemic to Spring Mountains	Alpine and bristlecone pine habitat on gravelly, open ridge slopes; 2,652–3,536 meters	Jul-Sep	No potential, study area is outside the known range of species.
Sticky ringstem  Anulocaulis leisolenus	-/-/S/C	Known primarily from Frenchman Mountain area east of Las Vegas and further east to Muddy Mountains and Gold Butte; Arizona, New Mexico, Texas	Mojave desert scrub and salt desert scrub, on gypsiferous soils on rolling hills and terraces.	Jun-Oct	No potential, this species is known to occur north and east of Las Vegas on gypsiferous soils.
Las Vegas bear poppy Arctomecon californica	-/FP/S/C	Endemic to the eastern Mojave Desert in southeastern Nevada and northwestern Arizona. Majority of populations in Clark County, Nevada	Primarily within Mojave desert scrub and salt desert scrub habitats on gypsum outcrops	Feb-Jul	Potential but unlikely to occur, species is known to occur on gypsiferous soils north and east of Las Vegas.
White bear poppy Arctomecon merriamii	-/-/S/C	Northeastern Mojave desert; southern Nevada	Rocky soils in chenopod scrub, Mojavean desert scrub; 490–1,800 meters	Apr-Jul	Potential, suitable habitat present.
Rosy king sandwort  Arenaria kingii ssp. rosea	-/-/C	Endemic to Spring Mountains	Dry, rocky hillsides in bristlecone pine, mixed conifer fores on limestone and carbonate-derived substrates; 1,798–2,896 meters	Jun-Aug	No potential, study area is outside the known range of species.

Common Name Scientific Name	Federal/State/ BLM/HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Clokey eggvetch Astragalus oophorus var. clokeyanus	-/-/C	Spring Mountains in Clark County, Nevada Test Site and Belted Range in Nye County	Pinyon-juniper and mixed conifer communities on moist to dry, often disturbed gravelly soils in openings of forests, shrublands, and woodlands.	May-Jun	No potential, study area is outside the known range of species.
Clokey milkvetch Astragalus aequalis	-/-/C	Endemic to Spring Mountains	Pinyon-juniper, mixed conifer, and sagebrush habitats on flat to gently sloping sites with dry, gravelly soils of alluvial fans; 1,829–2,560 meters	May-Jun	No potential, study area is outside the known range of species.
Threecorner milkvetch Astragalus geyeri var. triquetrus	-/-/C	Endemic to southeastern Mojave Desert in Lincoln and Clark Counties in Nevada; Arizona	Mojave desert scrub communities; sandy soils formed from sedimentary formations adjacent to Lake Mead and its tributary valleys in Clark County, NV. Associated with Aztec sandstone outcrops	Feb-May	No potential, species is known to occur on windblown sands deposits north of Las Vegas.
Mojave milk-vetch Astragalus mohavensis var. mohavensis	_/_/_	Occurs in Clark and Nye counties, Nevada.	Gravel soils on terraced hills and ledges, open slopes, and along washes in Mohavean desert scrub.	May	Potential but unlikely to occur, suitable habitat present.
Spring Mountain milkvetch Astragalus remotus	-/-/S/C	Endemic to Spring Mountains	Gravelly soils, rocky hillsides, and desert washes in pinyon-juniper, sagebrush, grassland, blackbrush, and Mojave desert scrub.	Apr-May	Potential, suitable habitat present.
Alkali mariposa lily Calochortus striatus	-/-/S/C	Western Mojave Desert, Kern, Los Angeles, San Bernardino, and Tulare Counties; Nevada	Alkaline mesic soils in chaparral, chenopod scrub, Mohavean desert scrub; 70-1,595 meters	Apr-Jun	Potential but unlikely to occur, suitable habitat present.
Clokey paintbrush Castilleja martinii var. clokeyi	-/-/-/C	Inyo County; mountain ranges of southern Nevada: Sheep Range, Spring Mountains, and Quinn Canyon Range in Nye County	Bristlecone pine and mixed conifer on dry gravelly slopes; 1,981–3,124 meters	May-Aug	No potential, study area is outside the known range of species.
Clokey thistle Cirsium clokeyi	-/-/C	Endemic to Spring Mountains	Alpine, bristlecone pine, and mixed conifer communities on gravelly slopes, dry ridges, and around springs; 2,774–3,353 meters	Jun-Jul	No potential, study area is outside the known range of species.

Common Name Scientific Name	Federal/State/ BLM/HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Un-named moss Claopodium whippleanum	-/-/C	Only Nevada occurence found in Red Rock Canyon, Clark County.	Pinyon-juniper habitat at approximately 1,600 meters.	Not applicable	No potential, study area is outside the known range of species.
Las Vegas catseye Cryptantha insolita	-/FP/S/-	Known only from the Las Vegas Valley and adjacent lower slopes of the Spring Mountains.	Alkaline clay flats and low hills in Mohavean desert scrub.	May	Potential, suitable habitat present.
Un-named moss Dicranoweisia crispula	-/-/C	Southernmost population of a widespread western North American species; found in Lee Canyon in the Spring Mountains, Clark County.	Occurs on downed logs associated with mixed conifer and pinyon juniper.	Not applicable	No potential, no suitable habitat present.
Jaeger whitlowgrass Draba jaegeri	-/-/S/C	Endemic to Spring Mountains	At or near the timberline in alpine and bristlecone pine communities in fell fields and talus rubble; 2,941–3,413 meters	Jun-Aug	No potential, study area is outside the known range of species.
Charleston draba  Draba paucifructa	-/-/C	Endemic to Spring Mountains	At and above timberline in alpine and bristlecone pine communities in moist areas (e.g., seeps, late-lying snow drifts); 2,515–3,475 meters	Jun-Jul	No potential, study area is outside the known range of species.
Sheep fleabane Erigeron ovinus	-/-/S/-	Known from Mount Irish and the Sheep and Groom ranges, in Clark and Nye Counties, Nevada.	Crevices in carbonate cliffs and ridgeline outcrops in the pinyon-juniper and montane conifer habitats.	June- August	No potential, study area is outside the known range of species.
Inch high fleabane Erigeron uncialis ssp. conjugans	-/-/C	Endemic to southern Nevada in the Spring Mountains and Sheep Range	Limestone cliffs (i.e., cracks in vertical faces) and boulders within bristlecone pine, mixed conifer, pinyon-juniper, and sagebrush communities; 2,194–3, 505 meters	May-Jul	No potential, study area is outside the known range of species.
Forked buckwheat Eriogonum bifurcatum	-/-/S/C	Inyo and San Bernardino Counties; Nevada	Sandy soils in chenopod scrub; 700-810 meters	Aug-Sep	Potential but unlikely to occur, species is not known to occur with the study area.

Common Name Scientific Name	Federal/State/ BLM/HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Las Vegas buckwheat Eriognum corymbosum var. aureum	-/-/S/-	Known occurrences in Clark County, Nevada.	On and near gypsum soils, often forming low mounds or outcrops in washes and drainages, or in areas of generally low relief; 579-1170 meters.	Sep-Nov	Potential, the species and suitable habitat occur in the immediate project area.
Sticky buckwheat Eriogonum viscidulum	-/-/S/C	Endemic to the eastern Mojave Desert in Clark and Lincoln Counties, Nevada; Arizona	Loose, sandy soils in Mojavean desert scrub in low dunes, washes, beaches, and areas of aeolian accumulation; 457–762 meters	Apr-Jun	No potential, the species is known to occur on loose sand deposits northeast of Las Vegas.
Sticky greasebush Glossopetalon clokeyi	-/-/C	Endemic to Spring Mountains	Cracks and crevices on northern side of vertical and near vertical limestone cliffs in mixed coniferous forest; 2,134–2,804 meters	Jun-Sep	No potential, study area is outside the known range of species.
Pungent glossopetalon Glossopetalon pungens	-/-/S/C	San Bernardino County; Nevada	Limestone soils in chaparral, pinyon-juniper woodland; 1675-2000 meters	Apr-Jul	No potential, study area is outside the known elevation range of species.
Smooth pungent greasebush Glossopetalon pungens var. glabra	-/-/C	Endemic to Mojave Desert mountains in San Bernadino County; Nevada	Pinyon-juniper and sagebrush communities on limestone cliffs and rocky slopes; 1,219–1,981 meters	Apr-Jul	No potential, study area is outside the known range of species.
Pungent dwarf greasbush Glossopetalon pungens var. pungens	-/-/C	Endemic to southern Nevada in the Spring Mountains and Sheep Range	Pinyon-juniper and sagebrush communities on limestone cliffs and rocky slopes	Apr-Jul	No potential, study area is outside the known range of species.
Red rock canyon aster lonactis caelestis	-/-/S/C	Endemic to Red Rock Canyon in Clark County, Nevada.	Open mixed conifer forest; occurs on rocky, sandstone outcrops within ponderosa pine potential habitat includes approximately 6,400 acres of Red Rock escarpment in Aztec sandstone crevices.	Jun-Aug	No potential, study area is outside the known range of species.

Common Name Scientific Name	Federal/State/ BLM/HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Hidden ivesia Ivesia cryptocaulis	-/-/C	Endemic to the Spring Mountains, found only on Charleston Peak ridgeline, Mummy Mountain.	Alpine at or just above tree line on talus and scree slopes, rocky ridge lines; 3600-4000 meters	May-Aug	No potential, study area is outside the known range of species.
Jaeger's ivesia Ivesia jaegeri	-/-/C	Endemic to Spring Mountains, Nevada, and Clark Mountains in San Bernardino, California.	Pinyon-juniper woodland, upper montane coniferous forest on carbonate, rocky substrates; 1830-3600 meters	Jun-Jul	No potential, study area is outside the known range of species.
Hitchcock bladderpod Lesquerella hitchcockii	-/-/C	Charleston Peak area in Kyle and Lee Canyons; extends from Clark County north to central eastern Nevada in White Pine County.	Alpine, bristlecone pine, and mixed conifer communities; on flat or sloping ground, talus slopes, dry ridges, and rocky hillsides; 2,730-3,800 meters	Jun-Aug	No potential, study area is outside the known range of species.
Blue diamond cholla Opuntia whipplei var. multigeniculata	-/-/C	Endemic to the Blue Diamond Hills west of Las Vegas, Nevada.	Restricted to dry limestone hills, underlain by gypsum, occurring mostly on north-facing slopes and exposed ridges in Mohavean desert scrub.	May	No potential, study area is outside the known range of species.
Charleston pinewood lousewort Pedicularis semibarbata var. charlestonensis	-/-/C	Southern Nevada endemic, all of range within Clark County.	Mixed conifer forest and bristlecone pine communities; 2800 - 3,300 meters	May-Aug	No potential, study area is outside the known range of species.
White-margined beardtongue Penstemon albomarginatus	-/-/S/C	San Bernardino County; Arizona, Nevada.	Stabilized desert dunes, Mohavean desert scrub, on sandy soils; 640-1065 meters	Mar-May	Potential, suitable habitat present. This species is known to occur in the project vicinity between Jean and Primm, NV.
Yellow twotone beardtongue beardtongue Penstemon bicolor ssp. bicolor	-/-/S/-	Known from Clark County, Nevada.	Calcareous or carbonate soils in washes, roadsides, rock crevices, outcrops, in creosote-bursage, blackbrush, mixedshrub, and lower juniper habitats.	Apr-May	Potential, suitable habitat present.

Common Name Scientific Name	Federal/State/ BLM/HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Rosy twotone beardtongue Penstemon bicolor ssp. roseus	_/_/_	Clark and Nye counties, Nevada; also in Arizona and California.	Rocky calcareous, granitic, or volcanic soils in washes, roadsides, rockcrevices, in creosote-bursage, blackbrush, and mixed-shrub habitats; 700-1500 meters	Mar-May	Potential, species and suitable habitat present.
Charleston beardtongue Penstemon leiophyllus var. keckii	-/-/C	Endemic to the Spring Mountains at high elevations, above and in upper Kyle and Lee Canyons	Bristlecone pine and mixed conifer forest communities, aspen on gravelly or rocky slopes, or open meadows on ledges and talus slopes; 2,300 - 3,700 meters.	Jun-Aug	No potential, study area is outside the known range of species.
Jaeger beardtongue Penstemon thompsoniae var. jaegeri	-/-/C	Southern Nevada endemic, all of range in Clark county.	Mixed conifer forest and pinyon-juniper woodlands on gravelly limestone banks and hillsides; 2,100 - 3,100 meters.	May-Aug	No potential, study area is outside the known range of species.
Parish's phacelia Phacelia parishii	-/-/S/C	Western Mojave desert in northwestern San Bernadino County; Nevada	Clay or alkaline soils in playas, Mohavean desert scrub; 540–1,200 meters	Apr–Jul	Potential, suitable habitat present.
Clokey Mountain sage Salvia dorrii var. clokeyi	-/-/S/C	Southern Nevada endemic: Spring Mountains and Sheep Range in Clark County.	Bristlecone pine, mixed conifer, and pinyon- juniper communities typically on shallow gravelly soils derived from limestone, dolomites, and sandstone, along ridges and where bedrock outcrops occur; and in rocky slope drainages; 2,300 - 9,300 meters	Jun-Sep	No potential, study area is outside the known range of species.
Clokey catchfly Silene clokeyi	-/-/C	Endemic to the Spring Mountains, known on Mummy Mountain and along the Charleston Peak ridge line.	Alpine and bristlecone pine communities on fell-fields, steep eastern drop-offs of high ridge lines, and gently sloping plateaus; 3,800 - 3,800 meters.	Jul-Aug	No potential, study area is outside the known range of species.
Charleston tansy Sphaeromeria compacta	-/-/C	Endemic to the Spring Mountains. Known on Mummy Mountain and along the Charleston Peak ridge line.	Alpine and bristlecone pine, on talus and scree slopes, rocky ridge lines and slopes, and rock outcrops; 3,600 - 4,000 meters.	Jul-Aug	No potential, study area is outside the known range of species.
Charleston kittentails Synthyris ranunculina	-/-/C	Endemic to the Spring Mountains. Known to occur in upper Kyle and Lee Canyons, from the vicinity of Mummy Mountain, and on the ridgeline in the vicinity of Griffith Peak.	Alpine, bristlecone pine, and mixed conifer forest in high elevation springs and seeps and permanently damp areas; 2,800 - 3,900 meters	Jun-Sep	No potential, study area is outside the known range of species.

Common Name Scientific Name	Federal/State/ BLM/HCP <sup>a</sup>	Geographic Distribution/Floristic Province	Habitat Requirements	Blooming Period	Potential for Occurrence in the Biological Study Area
Un-named moss Syntrichia princeps	-/-/C	Common West Coast species with the only two Nevada collections from the Spring and Virgin Mountains, Clark County.	Occurs in the pinyon-juniper zone at approximately 1,600 meters.	Not applicable	No potential, suitable habitat is not present.
Charleston grounddaisy Townsendia jonesii var. tumulosa	-/-/S/C	Southern Nevada endemic in the Spring Mountains, Sheep Mountains, and Sunnyside, Nye County.	Bristlecone pine, mixed conifer, and pinyon- juniper communities on shallow gravelly soils along ridges, rocky outcrops, and slopes; 2,200 - 3,200 meters.	May-Aug	No potential, study area is outside the known range of species.
Limestone violet Viola purpurea var. charlestonensis	-/-/C	Southwestern desert endemic, found primarily in the Sheep Mountains.	Mixed conifer forest and pinyon-juniper communities; 2,200 - 3,200 meters.	May-Jun	No potential, study area is outside the known range of species.

<sup>&</sup>lt;sup>a</sup> Status explanations:

# Federal

- = no listing.

# **Nevada State**

FP = Fully protected by the state of Nevada

- = no listing.

# BLM

S = plant species that are not on Federal or state lists as endangered, threatened, candidate, or proposed, but are designated by the BLM State Director for special management consideration

- = no listing.

# **HCP**

C = species listed as "Covered" by the Clark County Multiple Species Habitat Conservation Plan

– = no listing.

Table 3: Special-Status Wildlife Species with Potential to Occur in the Vicinity of the DesertXpress Project: California

Common and Scientific Name	Federal/State/BLM/HCP <sup>a</sup>	California Distribution	Habitats	Occurrence in Project Study Area
Invertebrates				
Shoshone cave whip-scorpion Hubbardia (Trithyreus) shoshonensis	//S/NE	Known only from Shoshone cave in the northern Mojave desert	Occurs in and around wood debris in the warmer, humid regions of Shoshone cave.	No potential. The project study area is outside of known range for this species.
Fish				
Amargosa River pupfish Cyprinodon nevadensis amargosae	/SSC/S/NE	Found only in the Amargosa river in Death Valley National Park, Inyo County.	Occurs in both pools and fast-moving areas of the river, with a fine silt, mud, and clay substrate.	No potential. Suitable habitat does not occur in the project study area and is outside the known range of this species.
Saratoga springs pupfish Cyprinodon nevadensis nevadensis		Found in three open water ponds fed by Saratoga springs near the southern boundary of Death Valley National Park, Inyo County.	Found in open water ponds surrounded by hydrophytic vegetation.	No potential. Suitable habitat does not occur in the project study area.
Shoshone pupfish Cyprinodon nevadensis shoshone		Historically occurred in Shoshone spring and its outlet creek; its range is now restricted to a pond near the creek and occasionally in portions of the heavily modified outlet creek.	Open water pond surrounded by hydrophitic vegetation.	No potential. Suitable habitat does not occur in the project study area.
Mohave tui chub Gila bicolor mohavensis	E/E//W	Historically occurred in the Mojave River, natural populations found also in Soda Spring at the Desert Studies Center, near Baker, California. Has been introduced into Lark Seep at the China Lake Naval Air Weapons Center, Camp Cady, and at the California Desert Information Center in Barstow.	Found in deep pools and slough areas in the Mojave River, also in relatively deep ponds that allow fish access to cool water. Often found in association with aquatic ditchgrass (Ruppia maritima).	Potential. Suitable habitat occurs in the Mojave River.

Common and Scientific Name	Federal/State/BLM/HCP <sup>a</sup>	California Distribution	Habitats	Occurrence in Project Study Area
Arroyo chub Gila orcutti		Although native to the Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita rivers (as well as their tributaries), they have been successfully introduced into the Santa Ynez, Santa Maria, Cuyama, and Mojave river systems.	Habitat generalists but prefer sand or mud bottoms in cool, clear water with abundant vegetation.	Potential. Suitable habitat occurs in the Mojave River.
Amargosa Canyon Speckled Dace Rhinichthys osculus		Found in the Armargosa river, Willow creek, and Willow reservoir in southern Inyo County.	Prefers relatively deep pools with slow-moving water.	No potential. Suitable habitat does not occur in the project study area.
Amphibians				
Inyo Mountains slender salamander Batrachoseps campi	/SSC/S/NE	Inyo mountains, Inyo County, from around 1,800-8,600 feet	Found in isolated spring and stream areas below the pinon-juniper belt, under stones and in crevices near water, surrounding slopes are arid	No potential. Suitable habitat does not occur in the project study area.
Black toad <i>Bufo exsul</i>	/T, FP//NE	Deep Springs Valley, between Inyo and White Mtns., Inyo County, at around 5,000 feet	Found in springs, water courses, wet meadows, and marshes of grass, sedge, dwarf bulrush and watercress. Highly aquatic but found up to 40 feet from nearest water.	No potential. Suitable habitat does not occur in the project study area.
California red- legged frog Rana aurora draytoni	T/SSC//	Found along the coast and coastal mountain ranges of California from Marin County to San Diego County and in the Sierra Nevada from Tehema County to Fresno County.	Permanent and semipermanent aquatic habitats, such as creeks and cold-water ponds, with emergent and submergent vegetation. May estivate in rodent burrows or cracks during dry periods.	No potential. Suitable habitat does not occur in the project study area.
Reptiles				
Southwestern pond turtle Clemmys marmorata pallida		Occurs along the central coast of California east to the Sierra Nevada and along the southern California coast inland to the Mojave and Sonora Deserts; range overlaps with that of the northwestern pond turtle throughout the Delta and in the Central Valley	Woodlands, grasslands, and open forests; aquatic habitats, such as ponds, marshes, or streams, with rocky or muddy bottoms and vegetation for cover and food	Potential. Suitable habitat occurs in the Mojave River.
		Delia and in the Central Valley		

Common and Scientific Name	Federal/State/BLM/HCP <sup>a</sup>	California Distribution	Habitats	Occurrence in Project Study Area
Desert tortoise Gopherus agassizii	T/T//W, NE	Bernardino, Kern, Los Angeles, Riverside, San Diego, and Imperial Counties	Desert areas from 300 to 900 feet with sandy loam to gravelly soils for digging dens; favors creosote and cactus scrub habitats with high densities of annual blooms in spring for feeding	
Panamint alligator lizard Gerrhonotus (=Elgaria) panamintinus	/SSC/S/W, NE	Mountains, the Inyo Mountains, the Nelson Mountains, and the Cosos Mountains of Inyo	Inhabits desert riparian areas and rocky canyons near seeps or springs, generally in association with creosote, sagebrush, and pinyon-juniper habitats.	No potential. The project study area is outside the known range of this species.
Banded gila monster (population west of Colorado River) Heloderma suspectum cinctum	/SSC/S/W, NE	Eastern San Bernardino and Riverside Counties	Rocky areas in association with desert scrub and semi-desert grassland; found from 0-3600 feet.	Potential, suitable habitat occurs in the rocky habitats of Eastern San Bernardino County.
San Diego horned lizard Phrynosoma coronatum blainvillii	/SSC/S/W, NE	Transverse and Peninsular Ranges from Ventura County through San Diego County	Occurs in a variety of habitats, from brush- lands to coniferous forests; requires open areas for sunning	Potential. Suitable habitat occurs between Victorville and Barstow.
Mojave fringe-toed lizard <i>Uma scoparia</i>	/SSC/S/W, NE	Extreme northeastern Los Angeles, San Bernardino, western Riverside, and Inyo counties	Creosote bush scrub in areas of aeolian sand, typically no coarser than 0.75 mm in diameter	Potential. Suitable habitat occurs between Victorville and Barstow in dune habitat.
Birds				
American white pelican Pelecanus erythrorhynchos (nesting colony)	/SSC//W	California; only breeding colonies in the state occur at lower Klamath National Wildlife	Freshwater lakes with islands for breeding; inhabits river sloughs, freshwater marshes, salt ponds, and coastal bays during the rest of the year	No potential. Suitable nesting habitat does not occur in the project study area and is outside the known range of this species.

Common and Scientific Name	Federal/State/BLM/HCP <sup>a</sup>	California Distribution	Habitats	Occurrence in Project Study Area
Double-crested cormorant Phalacrocorax auritus (rookery site)			and nests in riparian forests or on protected islands, usually in snags	No potential. Suitable nesting habitat does not occur in the project study area.
Western least bittern Ixobrychus exilis hesperis (nesting)	/SSC//NE	Permanent residents along the Colorado River and Salton Sea and in isolated areas in Imperial, San Diego, and Los Angeles Counties; summers at Tulare Lake and parts of Fresno, Merced, Madera, Siskiyou, and Modoc Counties; and in marshlands of Yolo, Sutter	and rushes can provide cover; nests are built low in the tules over the water	No potential. Suitable nesting habitat does not occur in the project study area.
White-faced ibis Plegadis chihi (rookery site)		San Diego, Ventura, and Fresno Counties;	cattails, and rushes, but may nest in trees and forage in flooded agricultural fields,	No potential. Suitable nesting habitat does not occur in the project study area.
Northern harrier Circus cyaneus	/SSC//W, NE	Occurs throughout lowland California. Has been recorded in fall at high elevations	seasonal and agricultural wetlands	No potential. Suitable nesting habitat does not occur in the project study area.
Golden eagle Aquila chrysaetos	PR/SSC,FP//NE	Foothills and mountains throughout California. Uncommon nonbreeding visitor to lowlands such as the Central Valley	overlooking open country. Forages in annual grasslands, chaparral, and oak woodlands with plentiful medium and large-sized	Potential. Ssuitable nesting habitat occurs in areas containing cliffs and rocky outcrops.

Common and Scientific Name	Federal/State/BLM/HCP <sup>a</sup>	California Distribution	Habitats	Occurrence in Project Study Area
Bald eagle Haliaeetus Ieucocephalus	T/E//W		In western North America, nests and roosts in coniferous forests within 1 mile of a lake, reservoir, stream, or the ocean	No potential. Suitable nesting habitat does not occur in the project study area.
Sharp-shinned hawk <i>Accipiter striatus</i>		Permanent resident in the Sierra Nevada, Cascade, Klamath, and north Coast Ranges at mid elevations and along the coast in Marin, San Francisco, San Mateo, Santa Cruz, and Monterey Counties. Winters over the rest of the state except at very high elevations	Dense canopy ponderosa pine or mixed- conifer forest and riparian habitats	No potential. Suitable nesting habitat does not occur in the project study area.
Cooper's hawk Accipiter cooperii	/SSC//W, NE	Throughout California except high altitudes in the Sierra Nevada. Winters in the Central Valley, southeastern desert regions, and plains east of the Cascade Range	Nests in a wide variety of habitat types, from riparian woodlands and digger pine-oak woodlands through mixed conifer forests	Potential. Suitable nesting habitat occurs in the riparian forest within the project study area.
Swainson's hawk Buteo swainsoni	/T//W, NE	Lower Sacramento and San Joaquin Valleys, the Klamath Basin, and Butte Valley. Highest nesting densities occur near Davis and Woodland, Yolo County	Nests in oaks or cottonwoods in or near riparian habitats. Forages in grasslands, irrigated pastures, and grain fields	Potential. Suitable nesting habitat occurs in the riparian forest within the project study area.
Ferruginous hawk <i>Buteo regali</i> s		Does not nest in California; winter visitor along the coast from Sonoma County to San Diego County, east-ward to the Sierra Nevada foothills and south-eastern deserts, the Inyo- White Mountains, the plains east of the Cascade Range, and Siskiyou County	Open terrain in plains and foothills where ground squirrels and other prey are available	No potential. This species does not nest in California.

Common and Scientific Name	Federal/State/BLM/HCP <sup>a</sup>	California Distribution		Occurrence in Project Study Area
Prairie falcon Falco mexicanus		Permanent resident in the south Coast, Transverse, Peninsular, and northern Cascade Ranges, the southeastern deserts, Inyo-White Mountains, foothills surrounding the Central Valley, and in the Sierra Nevada in Modoc, Lassen, and Plumas Counties. Winters in the Central Valley, along the coast from Santa Barbara County to San Diego County, and in Marin, Sonoma, Humboldt, Del Norte, and Inyo Counties	overlooking dry, open terrain or uplands	Potential. Suitable nesting habitat occurs in areas containing cliffs and rocky outcrops.
Yuma clapper rail Rallus longirostris yumanensis	E/E//W	along the Colorado River in San Bernardino,	requires regenerating marsh for foraging and mature cattail and bulrush for nesting	No potential. Suitable nesting habitat does not occur in the project study area.
Mountain plover Charadrius montanus			grasses or very sparse vegetation; nearby	No potential. This species does not nest in California.
Western snowy plover (inland population) Charadrius alexandrinus nivosus	/SSC//W, NE	central, and southern California, including Mono Lake and Salton Sea	alkaline or saline lakes, reservoirs, ponds and riverine sand bars; also along sewage, saltevaporation, and agricultural waste-water	Potential. Suitable nesting habitat occurs near several alkaline lakes within the project study area.
Long-billed curlew Numenius americanus	/SSC//W	Siskiyou, and Lassen Counties. Winters along the coast and in interior valleys west of Sierra Nevada	to lakes or marshes. During migration and in winter; frequents coastal beaches and	No potential. Suitable nesting habitat does not occur in the project study area.

Common and Scientific Name	Federal/State/BLM/HCP <sup>a</sup>	California Distribution	Habitats	Occurrence in Project Study Area
California gull Larus californicus (nesting colony)		Columbia to Mexico; in the interior of	Forages in a variety of habitats, including beaches, mudflats, freshwater and alkali marshes, rivers, lakes, and urban areas; nests colonially on islands isolated from mainland predators	No potential. Suitable nesting habitat does not occur in the project study area.
Western yellow- billed cuckoo Coccyzus americanus occidentalis	/E//W, NE	Feather, south fork of the Kern, Amargosa, Santa Ana, and Colorado Rivers	Wide, dense riparian forests with a thick understory of willows for nesting; sites with a dominant cottonwood overstory are preferred for foraging; may avoid valley-oak riparian habitats where scrub jays are abundant	No potential. Suitable nesting habitat was determined not to occur in the riparian forest within the project study area.
Western burrowing owl Athene cunicularia hypugea	/SSC/S/W, NE	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas. Rare along south coast	Level, open, dry, heavily grazed or low stature grassland or desert vegetation with available burrows	Potential. Ssuitable nesting habitat occurs throughout the project study area.
Long-eared owl Asio otus		Permanent resident east of the Cascade Range from Placer County north to the Oregon border, east of the Sierra Nevada from Alpine County to Inyo County. Scattered breeding populations along the coast and in southeastern California. Winters throughout the Central Valley and southeastern California	Nests in abandoned crow, hawk, or magpie nests, usually in dense riparian stands of willows, cottonwoods, live oaks, or conifers	Potential. Suitable nesting habitat occurs in the riparian forest and scrub within the project study area.
Vaux's swift Chaetura vauxi	/SSC//W	Coastal belt from Del Norte County south to Santa Cruz County and in mid elevation forests of the Sierra Nevada and Cascade Range	Nests in hollow, burned-out tree trunks in large conifers	No potential. Suitable nesting habitat does not occur in the project study area
Brown-crested flycatcher <i>Myiarchus</i> <i>tyrannulus</i>		localities scattered in the southern deserts	Breeds in cottonwood and/or willow riparian forests dominated by large trees. Has been known to nest in residential areas with large trees near the Colorado river. Nests in tree cavities made by excavating species such as woodpeckers.	Potential. Suitable nesting habitat occurs in the riparian forest within the project study area.

Common and Scientific Name	Federal/State/BLM/HCP <sup>a</sup>	California Distribution	Habitats	Occurrence in Project Study Area
Vermilion flycatcher Pyrocephalus rubinus (nesting)			Nests in desert riparian habitats dominated by cottonwood, willow, and mesquite trees adjacent to open areas	Potential. Suitable nesting habitat occurs in the riparian forest and scrub within the project study area.
Southwestern willow flycatcher Empidonax traillii extimus		Los Angeles Basin, the San	Densely vegetated riparian habitat with streamside associations of cottonwoods and willows	Potential. Suitable nesting habitat occurs in the riparian forest and scrub within the project study area.
Bank swallow <i>Riparia riparia</i>		Occurs along the Sacramento River from Tahama County to Sacramento County, along the Feather and lower American Rivers, in the Owens Valley; and in the plains east of the Cascade Range in Modoc, Lassen, and northern Siskiyou Counties. Small populations near the coast from San Francisco County to Monterey County. Deemed extirpated from southern California	Nests in bluffs or banks, usually adjacent to water, where the soil consists of sand or sandy loam	No potential. Suitable nesting habitat does not occur in the project study area.
Le Conte's thrasher Toxostoma lecontei	/SSC//W, NE	Resident of the deserts of southern California from Inyo County south to the Mexican border	Occurs in desert scrub habitats, open washes, and in Joshua tree habitat	Potential. Suitable nesting habitat occurs throughout the project study area.
Bendire's thrasher Toxostoma bendirei	/SSC/S/W, NE	Mojave Desert	Habitat in the California portion of the Mojave is characterized by Joshua trees and/or other yucca spp. and cholla cactus.	
Crissale thrasher Toxostoma crissale (=dorsale)	/SSC//NE	most common along the Lower Colorado river	Inhabits the dense understory of desert riparian and desert wash habitats. In the eastern Mojave Desert of San Bernardino and Inyo counties, occurs in shrubs of washes in pinyon-juniper habitats	Potential. Suitable nesting habitat occurs in desert washes within the project study area.

Common and Scientific Name	Federal/State/BLM/HCP <sup>a</sup>	California Distribution	Habitats	Occurrence in Project Study Area
Loggerhead shrike Lanius Iudovicianus	/SSC//W	Resident and winter visitor in lowlands and foothills throughout California. Rare on coastal slope north of Mendocino County, occurring only in winter	Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches	Potential. Suitable nesting habitat occurs throughout the project study area.
Gray vireo Vireo vicinior (nesting)	/SC/S/W, NE	Summer resident throughout the mountains of the southeastern deserts from 600-2,000 m including the northeastern slopes of the San Bernardino Mountains, the San Jacinto Mountains, and the southern slopes of the Laguna Mountains	Breeds in arid, shrub covered slopes with moderate cover and small trees including oaks, pinyon pine, and juniper	Potential. Suitable nesting habitat occurs in desert scrub habitats within the project study area.
Least Bell's vireo Vireo bellii pusillus	E/E//W, NE	Small populations remain in southern Inyo, southern San Bernardino, Riverside, San Diego, Orange, Los Angeles, Ventura, and Santa Barbara Counties	Riparian thickets either near water or in dry portions of river bottoms; nests along margins of bushes and forages low to the ground; may also be found using mesquite and arrow weed in desert canyons	Potential. Suitable nesting habitat occurs in the riparian forest and scrub within the project study area.
Hepatic tanager Piranga flava	/SSC//W, NE	Breeds in the mountain ranges of eastern San Bernardino County	Often found in mixed montane woodlands in association with oak and pine trees, but also observed breeding in arid coniferous woodland.	No potential. Suitable nesting habitat does not occur in the project study area.
Summer tanager Piranga rubra (nesting)	/SSC//W, NE	Along the Colorado river valley and in scattered locations inland in the desert, including northeastern Los Angeles county	Breeds in mature, desert riparian habitats dominated by cottonwood and willow	Potential. Suitable nesting habitat occurs in the riparian forest within the project study area.
Yellow-breasted chat <i>Icteria viren</i> s	/SSC//W, NE	Nests locally in coastal mountains and Sierra Nevada foothills, east of the Cascades in northern California, along the Colorado river, and very locally inland in southern California	Nests in dense riparian habitats dominated by willows, alders, Oregon ash, tall weeds, blackberry vines, and grapevines	Potential. Suitable nesting habitat occurs in the riparian forest within the project study area.
Yellow warbler Dendroica petechia brewsteri (nesting)	/SSC//W, NE	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Two small permanent populations in San Diego and Santa Barbara Counties	cottonwoods, sycamores, or alders or in mature chaparral; may also use oaks, conifers, and urban areas near stream courses	Potential. Suitable nesting habitat occurs in the riparian forest within the project study area.

Common and Scientific Name	Federal/State/BLM/HCP <sup>a</sup>	California Distribution	Habitats	Occurrence in Project Study Area
Virginia's warbler Vermivora virginiae	/SSC//W, NE	Five breeding populations in California: one on the border of Mono and Inyo Counties and four in San Bernardino County	pine and white fir; scattered shrubs required for cover on the ground	No potential. Suitable nesting habitat does not occur in the project study area.
Inyo California towhee Pipilo crissalis cromophilus	T/E//W, NE	Restricted to a 95-square-mile area of the Mojave Desert west of Death Valley, Inyo County	forages in sparsely vegetated desert scrub	No potential. Suitable nesting habitat does not occur in the project study area.
California gray- headed junco <i>Junco hyemalis</i> <i>caniceps</i> (nesting)	/SSC//W,NE			No potential. Suitable nesting habitat does not occur in the project study area.
Tricolored blackbird Agelaius tricolor	/SSC/S/W, NE	Permanent resident in the Central Valley from Butte County to Kern County. Breeds at scattered coastal locations from Marin County south to San Diego County; and at scattered locations in Lake, Sonoma, and Solano Counties. Rare nester in Siskiyou, Modoc, and Lassen Counties	vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grainfields. Habitat must be large enough to support 50 pairs. Probably	No potential. Suitable nesting habitat does not occur in the project study area.
Mammals				
Bats				
Pallid bat Antrozous pallidus	/SSC/S/W, NE	Sierra from Shasta to Kern County and the northwest coast, primarily at lower and mid elevations	coniferous forest. Most closely associated with oak, yellow pine, redwood, and giant	Potential. Suitable habitat occurs in the desert scrub habitats within the project study area.
Pacific Townsend's (=western) big- eared bat Corynorhinus townsendii townsendii	/SSC/S/W, NE	to Santa Barbara County		Potential. Suitable habitat occurs in the desert scrub habitats within the project study area.

Common and Scientific Name	Federal/State/BLM/HCP <sup>a</sup>	California Distribution	Habitats	Occurrence in Project Study Area
Greater western mastiff bat Eumops perotis californicus				desert scrub habitats
Spotted bat Euderma maculata	/SSC/S/W, NE	Joaquin Valley. One recent record from northern California in the Trinity Alps. Probably	Found in a wide variety of habitats from low desert to high elevation coniferous forest, primarilly in areas associated with cliff and canyon habitat. Females may favor ponderosa pine forests during reproduction	Potential. Suitable roosting habitat occurs in areas containing cliffs and rocky outcrops.
Silver-haired bat Lasionycteris noctivagans	/SSC//		Roosts in tree cavities, under bark, or in old snags in coniferous and deciduous forest. Forages over water or in openings in the forest.	Potential. Suitable roosting habitat occurs in riparian habitat.
Hoary bat <i>Lasiurus cinereus</i>	/SSC//	Occurs in wooded habitat throughout California except at higher elevations in the Sierra Nevada Mountain Range	Roosts under foliage in trees, in cavities, or under bark in heavily forest areas of both coniferous and deciduous woodland.	No potential. Suitable habitat does not occur in the project study area.
California leaf- nosed bat <i>Lasiurus cinereus</i>	SC/SSC/S*	and San Diego	Day roosts are usually large caves or deep mine tunnels with high ceilings and humid conditions.	Potential. Suitable roosting habitat occurs in areas containing cliffs and rocky outcrops.
Western small- footed myotis <i>Myotis ciliolabrum</i>	//S/NE	the Great Basin	Open stands in forests and woodlands, as well as shrub lands and desert scrub. Uses caves, crevices, trees, and abandoned buildings	Potential. Suitable habitat occurs in the desert scrub habitats within the project study area.
Long-eared myotis Myotis evotis			Occurs primarily in high elevation coniferous forests, but also found in mixed hardwood/conifer, high desert, and humid coastal conifer habitats	No potential. The project study area is outside the known range of this species.

Common and Scientific Name	Federal/State/BLM/HCP <sup>a</sup>	California Distribution	Habitats	Occurrence in Project Study Area
Fringed myotis Myotis thysanodes	//S/W, NE	Occurs throughout California except the southeastern deserts and the Central Valley	Found in a wide variety of habitats from low desert scrub to high elevation coniferous forests. Day and night roosts in caves, mines, trees, buildings, and rock crevices	No potential. The project study area is outside the known range of this species.
Cave myotis Myotis velifer	/SSC/S/	Found in the Colorado River Valley and adjacent mountain ranges in San Bernardino, Riverside, and Imperial Counties	Typically roosts in caves, but may also use mines and buildings; hibernation and nursery caves are relatively warm and humid with standing or running water.	No potential. The project study area is outside the known range of this species.
Long-legged myotis <i>Myotis volan</i> s	//W	Found in the mountains of the Mojave Desert, central San Diego County, the Coast Ranges, and the Tehachapis.	Roost in abandoned buildings, mines, rock crevices and trees in coniferous montane forest habitats.	No potential. Suitable habitat does not occur in the project study area.
Yuma myotis Myotis yumanensis	//S/	Common and widespread throughout most of California except the Colorado and Mojave deserts	Found in a wide variety of habitats from sea level to 11,000 ft., but uncommon above 8,000 ft. Optimal habitat is open forests and woodlands near water bodies	No potential. The project study area is outside the known range of this species.
Pocketed free-tailed bat Nyctinomops femorosaccus	/SSC//W, NE	Occurs in Riverside, San Diego, and Imperial Counties	Favors rocky desert areas with high cliffs or rock outcrops for roosts; roosts in crevices; reproduces in crevices, caverns, or buildings	No potential. The project study area is outside the known range of this species.
Rodents				
Pallid San Diego pocket mouse Chaetodipus (=Perognathus) fallax pallidus	/SSC/	San Diego County, Riverside County west of Palm Springs, San Bernardino County from Cactus Flat and Oro Grande east to Twenty Nine-Palms	Occurs in arid coastal and desert habitats including coastal scrub, chaparral, chamise-redshank, desert scrub, pinyon-juniper, and annual grassland	No potential. The project study area is outside the known range of this species.
Mojave River vole Microtus californicus mohavensis	/SSC//W	Mojave River near Victorville and Oro Grande, San Bernardino County	Weedy herbaceous growth in wet areas along river	Potential. Suitable habitat occurs along the Mojave river.
Tehachapi pocket mouse Perognathus alticola inexpectatus	/SSC//W	Known only near Tehachapi Pass and Mount Pios in Kern and Los Angeles Counties	Annual grassland and desert scrub communities from 3,500 to 6,000 feet	No potential. The project study area is outside the known range of this species.

Common and Scientific Name	Federal/State/BLM/HCP <sup>a</sup>	California Distribution	Habitats	Occurrence in Project Study Area
Yellow-eared pocket mouse Perognathus xanthonotus	//S/W	Restricted to a single locality near Walker Pass, Kern County	Pinyon-juniper, Joshua Tree and mixed montane chaparral habitats	No potential. The project study area is outside the known range of this species.
Mohave ground squirrel Spermophilus mohavensis	/T//W, NE	Southwestern Inyo County, eastern Kern County, northwestern San Bernardino County, and northeastern Los Angeles County	Saltbush, alkali desert, and creosote bush scrub at elevations from 1,800 to 5,000 feet	Potential. Suitable habitat occurs in the desert scrub habitats within the project study area.
Argus Mountain Kangaroo Rat Dipodomys panamintinus argusensis	//W	Observed on the western slopes of the Argus Mountains in Inyo County	Creosote scrub, saltbush scrub, Joshua tree and juniper woodland habitats, generally on course sandy and gravelly soils.	No potential. The project study area is outside the known range of this species.
Mustelids	•			
American badger <i>Taxidea taxidus</i>		Found throughout most of California except in the northern North Coast area. Suitable habitat is characterized by herbaceous, shrub, and open stages of most habitats with dry, friable soils.	Dig burrows in friable soils for cover. Frequently uses old burrows.	Potential. Suitable habitat occurs throughout the project study area.
Ungulates				
Nelson's (Desert) bighorn sheep Ovis canadensis nelsoni		Desert mountain ranges from white mountains of Mono & Inyo Co. south to San Bernadino Mtns and southeast to the Mexican border	Pinyon-juniper, desert scrub and sagebrush habitats	Potential. Suitable habitat occurs in the cliff areas within the project study area.

Common and				Occurrence in
Scientific Name	Federal/State/BLM/HCP <sup>a</sup>	California Distribution	Habitats	Project Study Area

<sup>&</sup>lt;sup>a</sup> Status explanations:

### Federal

E = listed as endangered under the Federal Endangered Species Act.

T = listed as threatened under the Federal Endangered Species Act.

PE = proposed for Federal listing as endangered under the Federal Endangered Species Act.

PT = proposed for Federal listing as threatened under the Federal Endangered Species Act.

Security of the proposed rule is precluded.

FS = U.S. Forest Service sensitive species (Region).

= no listing.

### State

E = listed as endangered under the California Endangered Species Act.

T = listed as threatened under the California Endangered Species Act.

FP = fully protected under the California Fish and Game Code.

SSC = species of special concern in California.

-- = no listing.

#### $\mathsf{BLN}$

S = listed as sensitive by the Bureau of Land Management.

-- = no listing.

#### HCE

W = species covered by the West Mojave Habitat Conservation Plan.

NE = species covered by the Northern and Eastern Mojave Plan

-- = no listing.

Table 4. Special-Status Wildlife Species with Potential to Occur in the Vicinity of the DesertXpress Project: Nevada

Common and Scientific Name	Federal/State/ BLM/HCP <sup>a</sup>	Nevada Distribution	Habitats	Occurrence in Project Study Area			
Invertebrates	nvertebrates						
Gastropods	astropods						
Spring Mountains springsnail Pyrgulopsis deaconi	//S/C	Endemic to southern Nevada, with known occurrences at Willow and Red Springs in Red Rock Canyon NCA, and Kiup Spring in the Spring Mountains.	Found in spring and seep habitats.	No potential. Project study area is outside of species' range.			
Southern Nevada springsnail Pyrgulopsis turbatrix	//S/C	Endemic to the Spring Mountains in southern Nevada. Found only on the eastern slopes of the Spring Mountains.	Found in spring and seep habitats.	No potential. Project study area is outside of species' range.			
Insects							
Spring Mountains acastus checkerspot Chlosyne acastus robusta	//S/C	Endemic to the Spring Mountains in southern Nevada.	Mixed conifer and pinyon-juniper; also found in sagebrush. Larval host plants previously believed to be Chrysothamnus, however, current research indicates other species may be used. The nectar species is believed to be Viguiera multiflora.	No potential. Project study area is outside of species' range.			
Dark blue butterfly Euphilotes enoptes ssp.	//S/C	Endemic to the Spring Mountains in southern Nevada.	Mixed conifer and pinyon-juniper; also uses sagebrush and wet areas near springs. Larval host plants: Eriogonum umbellatum var. subaridum; known nectar species: E. umbellatum. Found at mid elevations (5,900 to 8,200 feet)	No potential. Project study area is outside of species' range.			
Morand's checkerspot butterfly Euphydryas anicia morandi	//S/C	Endemic to the Spring Mountains in southern Nevada.	Primarily meadows within bristlecone pine; also occurs in mixed conifer and pinyon-juniper forest. Larval host plants: Castilleja linearifolia and C. martinii var. clokeyi. Known nectar species: Taraxacum officinale, Erysimum asperum.	No potential. Project study area is outside of species' range.			

Common and Scientific Name	Federal/State/ BLM/HCP <sup>a</sup>	Nevada Distribution	Habitats	Occurrence in Project Study Area
Spring Mountains comma skipper Hesperia comma mojavensis	//S/C	Endemic to the Spring Mountains in southern Nevada.	Primarily bristlecone pine; also occurs in mixed conifer, pinyon-juniper, sagebrush, and wet areas near high-elevation springs. Larval host plants: perennial grasses/Carex, which are common in the Spring Mountains. Known nectar species: Cirsium sp., Chaenactis douglasii, Apocynum androsaemifolium, Chrysothamnus sp., Taraxacum officinale, Sarcostemma cynanchoides, Penstemon palmeri, Erysimum asperum.	No potential. Project study area is outside of species' range.
Spring Mountains icarioides blue Icaricia icarioides austinorum	//S/C	Endemic to the Spring Mountains in southern Nevada.	Open stands and meadows, primarily in bristlecone pine and mixed conifer; also uses pinyon-juniper, sagebrush, and wet areas near high-elevation springs. Larval host plants: Lupinus argenteus. Known nectar species: Eriogonum umbellatum, Chaenactis douglasii, Potentilla sp., Lupinus sp., Linum lewisii, Melilotus albus, Erigeron sp., Senecio douglasii.	No potential. Project study area is outside of species' range.
Mount Charleston blue butterfly Icaricia shasta charlestonensis	//C	Endemic to the Spring Mountains in southern Nevada.	Primarily bristlecone pine, but also in mixed conifer between 6,000 and 8,000 ft. Known larval host species: Astragalus calycosus var. mancus, which prefers shallow rocky soils. Nectar plants: Hymenoxys lemmonii, Aster sp., and Eriogonum sp.	No potential. Project study area is outside of species' range.
Nevada admiral Limenitus weidemeyerii nevadae	//S/C	Endemic to southern Nevada, specifically the Spring and Sheep Mountains	Primarily bristlecone pine, but also mixed conifer, pinyon-juniper, and wet areas near high-elevation springs. Larval host plants: Populus tremuloides, Salix sp., Prunus virginiana, and Amelanchier utahensis, and possibly Populus angustifolia and/or P. fremontii. Nectar species: Eriodictyon angustifolium, Cirsium sp., Clematis ligusticifolia, Marrubium vulgare	No potential. Project study area is outside of species' range.
Carole's silverspot butterfly Speyeria zerene carolae	//S/C	Endemic to the Spring Mountains in southern Nevada	Primarily bristlecone pine; also occurs in mixed conifer, pinyon-juniper, and sagebrush. Larval host plants: Viola purpurea var. charlestonensis. Known nectar species: Cirsium arizonicum, Erysimum asperum, Apocynum androsaemifolium, Rosa woodsii, Angelica scabrida, Chaenactis sp., Lupinus sp.	No potential. Project study area is outside of species' range.

Common and Scientific Name	Federal/State/ BLM/HCP <sup>a</sup>	Nevada Distribution	Habitats	Occurrence in Project Study Area
Vertebrates				
Amphibians				
Arizona toad Bufo microscaphus microscaphus	//S/E		Inhabits a range of habitats including riparian washes, rocky streams, basins, agricultural, and urban areas up to 6,000 ft. They burrow in loose gravelly areas or sandy banks and range up to 500 ft from water.	No potential. Project study area is outside of species' range.
Relict leopard frog Rana onca	//C	Endemic to Clark County. Clark County populations remain within small areas on National Park Service Lands, in the Rogers/Blue Point Springs area south of Overton, and in springs in Black Canyon below Hoover Dam.	Desert riparian habitat along permanent streams, tributaries, and springs and other water impoundments up to 2,500 ft elevation.	No potential. Project study area is outside of species' range.
Reptiles				
Banded gecko Coleonyx variegatus	//C	Endemic to the southwestern deserts, found in southern Nevada; widespread throughout Clark County.	Inhabits blackbrush, Mojave desert scrub, mesquite, and catclaw acacia habitats. Less commonly found in pinyon-juniper, sagebrush, and desert riparian habitats. Rocks, crevices, fallen logs, limbs, and rubbish piles provide shelter.	Potential. Suitable habitat occurs throughout project study area outside of urban areas.
Great Basin collared lizard Crotaphytus insularis bicinctores	//C	Endemic to the Great Basin and southwestern deserts, found in western and southern Nevada; widespread throughout Clark County.	Found in Mojave desert scrub, salt desert scrub, mesquite, catclaw acacia, desert riparian, blackbrush, sagebrush, and pinyon-juniper habitats in rocky terrain: arroyos, hill slopes, washes with sparse vegetative cover, up to 7,500 ft.	Potential. Suitable habitat occurs throughout project study area outside of urban areas.
Desert iguana Dipsosaurus dorsalis	//C	Found in the southwestern deserts south into Mexico. Species is found in southern Nevada; widespread throughout Clark County.	Mojave desert scrub flats with sandy hummocks, mesquite, and salt desert scrub habitats are most common, but also found in rocky stream beds, on bajadas, and in rocky hilly areas below 5,000 feet.	Potential. Suitable habitat occurs throughout project study area outside of urban areas.

Common and Scientific Name	Federal/State/ BLM/HCP <sup>a</sup>	Nevada Distribution	Habitats	Occurrence in Project Study Area
Western red-tailed skink Eumeces gilberti rubricaudatus	//C	Found in southern Nevada in isolated montane populations (Spring, Sheep, and Newberry Mountains) as well as in the eastern Mojave Desert in limited montane habitats.	canyon bottoms near water. Less common in higher-	No potential. Project study area is outside of species' range.
Large-spotted leopard lizard Gambelia wislizenii wislizenii	//C	Endemic to the Great Basin and southwestern deserts, widespread throughout Clark County.		Potential. Suitable habitat occurs throughout project study area outside of urban areas.
Desert tortoise Gopherus agassizii	T/P//C	Endemic to the Mojave desert, found in lowland desert habitat in Clark County.		Potential. Suitable habitat occurs throughout project study area outside of urban areas.
Banded gila monster (population west of Colorado River) Heloderma suspectum cinctum	//S/E	Found in the eastern Mojave and northern Sonoran deserts, with historical records occurring in Clark and Lincoln Counties.		Potential. Suitable habitat occurs where project study area crosses lower mountain passes.
Western chuckwalla Sauromalus obesus obesus	//C	deserts, found in southern Nevada; widespread throughout Clark	•	Potential. Suitable habitat occurs where project study area crosses lower mountain passes.
Sidewinder Crotalus cerastes	//C	Endemic to the Mojave desert, found in southern Nevada; widespread throughout Clark County.		Potential. Suitable habitat occurs throughout project study area outside of urban areas.

Common and Scientific Name	Federal/State/ BLM/HCP <sup>a</sup>	Nevada Distribution	Habitats	Occurrence in Project Study Area
Speckled rattlesnake Crotalus mitchelli	//C	Endemic to the Mojave and Sonoran deserts, found in southern Nevada; widespread throughout Clark County.	Pinyon-juniper, sagebrush, Mojave desert scrub, and blackbrush habitats up to 7,800 ft. Primarily found in rocky terrain on outcrops and boulders, but will also occupy loose soil and sand.	Potential. Suitable habitat occurs throughout project study area outside of urban areas.
Mojave green rattlesnake Crotalus scutulatus scutulatus	//C	Found in the Mojave and Sonoran deserts south into central Mexico. Species is found in southern Nevada; widespread throughout Clark County.	Mojave desert scrub and blackbrush flats	Potential. Suitable habitat occurs throughout project study area outside of urban areas.
Glossy snake Arizona elegans	//C	Endemic to the southwestern deserts, found in southern Nevada; widespread throughout Clark County.	Mojave desert scrub and salt desert scrub habitats with open sandy surface, scattered brush, and rocky areas; extending into grasslands and pinyon-juniper habitats to 7,000 ft.	Potential. Suitable habitat occurs throughout project study area outside of urban areas.
Common king snake Lampropeltis getulus californiae	//C	Found in southern Nevada, throughout Clark County.	Wide ranging, most commonly found in Mojave desert scrub and salt desert habitats in the vicinity of rock outcrops or clumps of vegetation; can range up to 7,000 ft	Potential. Suitable habitat occurs throughout project study area outside of urban areas.
Western leaf-nosed snake Phyllorhynchus decurtatus	//C	Found in southern Nevada, throughout Clark County.	Mojave desert scrub and salt desert scrub habitats in rocky areas and sandy flats.	Potential. Suitable habitat occurs throughout project study area outside of urban areas.
Western long- nosed snake Rhinocheilus lecontei lecontei	//C	the extreme northern regions of the	Mojave desert scrub and salt desert scrub with open sandy surface, scattered brush, and in rocky areas below 5,000 ft.	Potential. Suitable habitat occurs throughout project study area outside of urban areas.
Sonoran lyre snake Trimorphodon biscutatus lambda	//C	Found in the eastern Mojave and Sonoran deserts, in the southernmost region of Nevada.	Rocky areas in Mojave desert scrub, pinyon-juniper, and mixed conifer habitat in lowlands, mesas, and lower mountain slopes up to 7,400 ft.	Potential. Suitable habitat occurs where project study area crosses lower mountain passes.

Common and Scientific Name	Federal/State/ BLM/HCP <sup>a</sup>	Nevada Distribution	Habitats	Occurrence in Project Study Area
Birds				
American peregrine falcon	/P/S/C	Known to occur in the Spring Mountains, Logandale, Overton State Wildlife Management Area, Newberry Mountains, Desert National Wildlife Range, Black Mountains, Mormon Farm, Henderson, Lake Mead, and Black Canyon.	Inhabit mixed conifer, pinyon-juniper, sagebrush, lowland riparian, and grassland habitats, as well as agricultural and urban areas. Nests in rocky areas, cliffs, and on manmade structures.	Potential. Suitable habitat occurs where project study area crosses lower mountair passes.
Western yellow- billed cuckoo Coccyzus americanus occidentalis	/P//C	Muddy, and Colorado River	Wide, dense riparian forests with a thick understory of willows for nesting; sites with a dominant cottonwood overstory are preferred for foraging; may avoid valley-oak riparian habitats where scrub jays are abundant	No potential. No suitable habitat in project study area.
Vermilion flycatcher Pyrocephalus rubinus (nesting)	//C	Resident along the Colorado River, Virgin River system, and desert oases. Winters in desert scrub.	Nests in desert riparian habitats dominated by cottonwood, willow, and mesquite trees adjacent to open areas	No potential. No suitable habitat in project study area.
Southwestern willow flycatcher Empidonax traillii extimus	E/P/S/C	Southern Nevada, southern California, Arizona, New Mexico, southern Utah, western Texas, northwestern Mexico, and southwestern Colorado.	Densely vegetated riparian habitat with streamside associations of cottonwoods and willows	No potential. No suitable habitat in project study area.
Blue grosbeak Guiraca caerulea	//C	the Virgin, Muddy, and Colorado	Occurs in desert riparian, grassland habitats, agricultural and urban areas. They are primarily found in riparian habitat, such as thickets of willow, young cottonwood, arrowweed, tamarisk along watercourses or oases and forage in adjacent openings, grasslands, and croplands.	Potential. Potential habitat may occur where project study area crosses larger washes.

Common and Scientific Name	Federal/State/ BLM/HCP <sup>a</sup>	Nevada Distribution	Habitats	Occurrence in Project Study Area
Phainopepla Phainopepla nitens	//C	Resident in the Mojave region of southern Nevada.	Found in lowland riparian and mesquite and catclaw acacia habitats, as well as agricultural fields. In deserts they are found primarily in washes, riparian areas, and other habitats that support brushy growth of mesquite, catclaw, ironwood, and palo verde. Often in association with mistletoe.	Potential. Potential habitat may occur where project study area crosses larger washes.
Summer Tanager <i>Piranga rubra</i>	//C	Found throughout the southwestern United States into Mexico.	Found in desert riparian habitat, particularly mature cottonwood-willow associations along streams.	No potential. No suitable habitat in project study area.
Arizona Bell's vireo Vireo bellii pusillus	//C	The Arizona subspecies occurs along the Colorado River and in riparian and mesic habitats in southern Arizona and northern Mexico.	Riparian thickets either near water or in dry portions of river bottoms; nests along margins of bushes and forages low to the ground; may also be found using mesquite and arrow weed in desert canyons	No potential. No suitable habitat in project study area.
Summer tanager <i>Piranga rubra</i> (nesting)	//C	Rare yearlong resident along the Colorado River, Virgin River system, and desert oases. Winter resident in desert scrub, permanent resident in riparian areas.	Breeds in mature, desert riparian habitats dominated by cottonwood and willow. May also be found in mesquite, catclaw acacia habitats adjacent to mesic areas including irrigated fields, ditches, and pastures	No potential. No suitable habitat in project study area.
Mammals				
Bats				
Silver-haired bat Lasionycteris noctivagans	//C	Occurs from northern Mexico throughout the U.S. to southern Canada, with a wide distribution throughout Nevada.	Roosts in tree cavities, under bark, or in old snags in coniferous and deciduous forest. Forages over water or in openings in the forest.	No potential. No suitable habitat in project study area.
Long-eared myotis Myotis evotis	/SS//C	Found throughout the state and is thought to be fairly common in southern Nevada with the exception of the extreme southern portion of the state.	Occurs primarily in high elevation coniferous forests, but also found in mixed hardwood/conifer, high desert, and humid coastal conifer habitats	No potential. No suitable habitat in project study area.

#

	Federal/State/ BLM/HCP <sup>a</sup>	Nevada Distribution		Occurrence in Project Study Area
Long-legged myotis <i>Myotis volans</i>		exception of the southeastern corner of the state in low desert habitat.	Roost in abandoned buildings, mines, rock crevices and trees primarily in coniferous montane forest habitats. May also use habitats such as ponderosa pine/mountain shrub, juniper, sagebrush, and sagebrush/perennial grassland.	
Rodents				
Palmer's chipmunk Tamias palmeri		range of southern Nevada and is	juniper habitats with rocky slopes or areas with free-	No potential. Project study area is outside of species' range.

# Status explanations:

### Federal

E = listed as endangered under the Federal Endangered Species Act.

T = listed as threatened under the Federal Endangered Species Act.

-- = no listing.

## State

P = protected by the state of Nevada.

SS = special status species by the state of Nevada.

-- = no listing.

## BLM

= listed as sensitive by the Bureau of Land Management.

-- = no listing.

# HCP

C = species listed as a "Covered" species by the Clark County Multiple Species Habitat Conservation Plan

E = species listed as an "Evaluation" species by the Clark County Multiple Species Habitat Conservation Plan

W = species listed as a "Watch List" species by the Clark County Multiple Species Habitat Conservation Plan

-- = no listing.