

Appendix G Biological Resources

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
PLANTS						
Mussentuchit gilia	<i>Aliciella tenuis</i> (<i>Gilia tenuis</i>)	BLM-UT	Range: Endemic to Emery, Sevier, and Wayne Counties, Utah, along the western slope of the San Rafael Swell. Total population estimated at approx. 15,400 individuals. Habitat: Typically associated with communities composed of shadscale, <i>Ephedra</i> , <i>Wyethia</i> , Indian ricegrass, pinyon-juniper and mountain mahogany on fine-textured, pale, poorly cemented limestone. Often on the Curtis Formation, as well as the Dakota and Navajo Sandstone. Elevation range 5,200 to 7,100 feet amsl. Flowering May to June.	<u>Region II</u> : Moderate. Populations have been documented approx. 9 miles south of the 2-mile transmission line corridor in Sevier County; and approx. 11 miles southeast of the 2-mile transmission line corridor in Emery County, Utah. Potential habitat for the species may be present within the 2-mile transmission line corridors in Sevier and Emery counties, Utah.	No.	NatureServe 2012; UNPS 2006.
Chatterley onion	<i>Allium geyeri</i> var. <i>chatterleyi</i>	USFS-Manti-LaSal NF	Range: Endemic to San Juan County, Utah. Habitat: Pinyon-juniper, mountain mahogany, and ponderosa pine-manzanita communities. Elevation range 6,600 to 8,200 feet amsl. Flowering late June to early August.	None.	Yes. The species is endemic to San Juan County, Utah, which is not crossed by the 2-mile transmission line corridor.	UNPS 2006.
Jones' blue star	<i>Amsonia jonesii</i>	BLM-CO	Range: Known from the Four Corners states: Utah, New Mexico, Arizona, and Colorado (Mesa and Montezuma counties). No population estimates available. Habitat: Dry, open areas with clay, sandy, or gravelly soils in desert steppe, rocky gorges, and canyons. Elevation range 4,500 to 5,000 feet amsl. Flowering April.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor and approx. 2 miles southeast of the 2-mile transmission line corridor in Mesa County, Colorado. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Mesa County, Colorado.	No.	CNHP 2002; NatureServe 2012.
Sweet-flowered rock jasmine	<i>Androsace chamaejasme</i> ssp. <i>carinata</i>	USFS-Manti-LaSal NF	Range: This species is known in Alaska and western Canada south to New Mexico in Utah, Wyoming, and Colorado. In Utah, the species is found in the LaSal Mountains in Grand and San Juan counties, Utah. Habitat: Alpine tundra, montane rock crevices, rocky soils derived from limestone dolomite. The species may occur in clearings or beneath shrub cover in leaf litter. Elevation range 10,000 to 12,600 feet amsl. Flowering May to July.	None.	Yes. Although known populations are present approx. 28 miles south of the 2-mile transmission line corridor, the species occurs at a higher elevation than that crossed by the 2-mile transmission line corridor within Grand County, Utah. The project does not cross San Juan County, Utah. As such, it is unlikely the species would be present within the 2-mile transmission line corridors.	UNPS 2006; Fertig et al. 1994; Graham and Ackerfield 2008.
Rough angelica	<i>Angelica scabrida</i>	BLM-NV	Range: Endemic to the Spring Mountains within Clark County, Nevada. Habitat: An aquatic or wetland-dependent species occupying moist rocky calcareous drainages, canyon bottoms, or seepy or north-facing slopes over carbonate or sandstone rock in the interior chaparral, mountain brush, and montane coniferous forest zones. Elevation range 4,040 to 9,350 feet amsl. Flowering July to September.	None.	Yes. The species is endemic to the Spring Mountains which are not crossed by the 2-mile transmission line corridors.	NNHP 2001; NatureServe 2012.
Meadow pussytoes	<i>Antennaria arcuata</i>	BLM-WY	Range: Regional endemic found in three disjunct areas in south-central Idaho, northeastern Idaho, and central Wyoming. In Wyoming, the species is known only from the Sweetwater River Valley and the South Pass area of the southern Wind River Range in the vicinity of Atlantic City and Jeffrey City (Fremont County) and from the northern Green River Basin (Sublette County). Total population estimated at approx. 99,000 to 130,000 individuals among 15 populations. Habitat: Primarily found in subirrigated meadows within broad stream channels. Typically associated species include <i>Deschampsia cespitosa</i> , <i>Juncus balticus</i> , <i>Poa pratensis</i> , <i>P. nevadensis</i> on hummocks, and level ground or shallow depressions on alkaline, clayey soils high in organic matter. Elevation range 4,950 to 7,900 feet amsl. Flowering July to September.	<u>Region I</u> : Low. Although species presence has not been documented within the 2-mile transmission line corridors, a WYNDD model-detailed analysis indicates the potential for occurrence within Sweetwater and Carbon counties, Wyoming.	No.	BLM 2012a; NatureServe 2012; WYNDD 2009.
Sticky ringstem	<i>Anulocaulis leiosolenus</i> var. <i>leiosolenus</i>	NPS-Lake Mead NRA; BLM-NV	Range: Known within Nevada, Arizona, northern Texas, and Mexico. Habitat: Found on calcareous clays and shales, sometimes on gypsum substrates. Elevation range 1,300 to 3,940 feet amsl. Flowering late spring-early fall.	<u>Regions III and IV</u> : The species has been documented within the 2-mile transmission line corridor in Clark County, Utah. Potential habitat may be present both within the 2-mile transmission line corridors and the analysis area in Clark County, Nevada. Based on agency consultation, this species is not likely to occur within the 2-mile transmission line corridors within the NPS-Lake Mead NRA.	No.	NPS 2012; NatureServe 2012; Southwest Environmental Information Network 2012.

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Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Atwood's columbine	<i>Aquilegia atwoodii</i>	BLM-UT	Range: Restricted in distribution to a couple of tributaries of the Green River in the Uintah County portion of Desolation Canyon including Rattlesnake Canyon within the Desolation Canyon Wilderness Study Area. Habitat: Habitat parameters are unknown.	None.	Yes. The species is restricted to the Desolation Canyon Wilderness Study Area which is not crossed by the 2-mile transmission line corridors.	BLM 2011.
Desolation Canyon columbine	<i>Aquilegia descolaticola</i>	BLM-UT	Range: Known within Desolation Canyon in Grand and Uintah counties, Utah. Habitat: Seeps and adjacent moist sandy soil in the Price River Formation along the Green River in canyons tributary to Desolation Canyon. Elevation range 4,265 to 4,430 feet amsl. Flowering period unknown.	None.	Yes. Based on the species limited elevation range and geological substrate, potential habitat is not present within the 2-mile transmission line corridors.	BLM 2011; NatureServe 2012.
Link Trail columbine	<i>Aquilegia flavescens</i> var. <i>rubicunda</i>	USFS-Manti-LaSal NF	Range: Endemic to the mountains of Emery, Garfield, and Sevier counties, Utah. Most of the documented occurrences are located within the Manti-La Sal National Forest; a few occurrences are located within the Fishlake National Forest. Habitat: Ponderosa pine, aspen, and spruce-fir communities, generally associated with seeps in Mesa Verde Group sandstones near coal measures. Associated species include river birch, Douglas fir, rose, serviceberry, willow, squawbush, and rock spirea. Elevation range 6,900 to 8,500 feet amsl. Flowering period unknown.	<u>Region II</u> : Moderate. The species has been documented approx. 4 miles northeast and approx. 6 miles southwest of the 2-mile transmission line corridor in Emery County; and approx. 4.5 miles north of the 2-mile transmission line corridor in Sevier County, Utah. Potential habitat for the species (including the presence of the Mesa Verde Group sandstone) may be present within the 2-mile transmission line corridor in Emery County, Utah within the USFS-Manti-LaSal NF.	No.	UNPS 2006; NatureServe 2012;
Graham columbine	<i>Aquilegia grahamii</i>	USFS-Ashley NF	Range: Endemic to the eastern Uinta Mountains, Uintah County, Utah. Habitat: Sandy drip lines in hanging gardens of shaded canyons of the Weber Sandstone Formation. Elevation range 7,600 feet amsl. Flowering June to July.	None.	Yes. The species is endemic to the Uinta Mountains, which are not crossed by the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006.
Laramie columbine	<i>Aquilegia laramiensis</i>	BLM-WY	Range: Endemic to the Laramie Range of southeast Wyoming within Albany and Converse counties. Habitat: Relatively poor soils on sparsely vegetated outcrops of igneous and metamorphic rock and small, shaded ledges, large crevices, soil pockets among boulders, and the bases of outcrops. Elevation range 5,400-10,100 feet amsl. Flowering June to July.	None.	Yes. The species is endemic to Albany and Converse counties, which are not crossed by the 2-mile transmission line corridors.	WYNDD 2010-2012.
Utah columbine	<i>Aquilegia scopulorum</i> var. <i>goodrichii</i>	BLM-UT	Range: Restricted to shale ridges of the West Tavaputs Plateau. Known from Avintaquin drainage east to Argyle drainage in southern Duchesne County, Utah. Habitat: Shale ridges within the Green River Formation. Species inhabits high elevation ranges. Flowering period unknown.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor within Duchesne County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area within Duchesne County, Utah.	No.	BLM 2011.
Park rockcress	<i>Arabis fernaldiana</i> var. <i>feraldiana</i> (<i>Arabis vivariensis</i>)	BLM-UT, BLM-CO	Range: Endemic to Uintah County, Utah and Moffat County, Colorado. In Utah, it is found in Dinosaur National Monument, on Diamond Mountain, and on Cliff Ridge and Blue Mountain. Habitat: Mixed desert shrub and pinyon-juniper communities in limestone and sandstone outcrops within the Weber Formation often found in pine duff in shaded areas. Elevation range 5,000 to 6,000 feet amsl. Flowering April/May to early June.	Low.	Yes. Although the species has been documented approx. 1.5 miles west of the 2-mile transmission line corridor in Uintah County, Utah, it is unlikely the species would occur within the 2-mile transmission line corridors based on the species limited distribution geographic range and associated geological formation.	BLM 2010, 2008; CNHP 2002; NatureServe 2012; UGS 2010; UNPS 2006.
UNK	<i>Arabis goodrichii</i>	BLM-UT	Range: Known within Millard County, Utah. Habitat: Mountain mahogany vegetation communities on talus slopes.	<u>Region II</u> : Low. No known populations have been identified for the species; limited data is available regarding habitat requirements. Although unlikely, potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area throughout Millard County, Utah.	No.	BLM 2011.
Small rockcress	<i>Arabis pusilla</i>	BLM-WY	Range: Endemic to the southern South Pass area of the Wind River Range in Fremont County, Wyoming. Habitat: Sparsely vegetated granite-pegmatite outcrops where coarse soil has accumulated in cracks and crevices. Elevation approx. 7,709 feet amsl. Flowering May to June.	None.	Yes. The species is endemic to Fremont County, which is not crossed by the 2-mile transmission line corridors.	NatureServe 2012.

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Las Vegas bearpoppy	<i>Arctomecon californica</i>	NPS-Lake Mead NRA; NV State CE, BLM-NV	Range: Known within Clark County, Nevada and also in Arizona and Utah. Habitat: Open, dry, spongy or powdery, often dissected, "badland", or hummocked soils with high gypsum content, often with well-developed soil crust, in areas of generally low relief on all aspects and slopes, with a sparse cover of other gypsum-tolerant species surrounded by <i>Larrea tridentata</i> , <i>Atriplex</i> , and <i>Coleogyne ramosissima</i> . Elevation range 1,060 to 3,642 feet amsl. Flowering April to May.	<u>Regions III and IV</u> : High. The species has been documented within, and adjacent to, the NPS-Lake Mead NRA and 2-mile transmission line corridors in Clark County, Nevada. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area throughout Clark County, Nevada.	No.	NNHP 2001; NPS 2012; USFWS 2010a.
Dwarf bearpoppy	<i>Arctomecon humilis</i>	FE (UT)	Range: Endemic to the eastern edge of the Mojave Desert near St. George, Utah in Washington County. This species occurs within the "Dixie Corridor", where the Mohave Desert floristic province meets the Colorado Plateau physiographic province. Habitat: Low, rolling hills and ridgetops composed of gypsiferous clay soils of the Triassic Moenkopi Formation in warm, open desert shrub communities. It is found predominantly on the Shnabkaib, and Middle and Upper Red members of the Moenkopi Formation. Elevation range 2,700 to 3,300 feet amsl. Flowering March to May.	Low.	Yes. Although the species has been documented approx. 11 miles southeast of the 2-mile transmission line corridor in Washington County, suitable habitat parameters (specifically elevation range and geological formation) are not present within the 2-mile transmission line corridor.	UNPS 2006; USFWS 2012a, 2010, 1985a.
White bearpoppy	<i>Arctomecon merriamii</i>	BLM-NV	Range: Known within Clark, Lincoln, and Nye counties, Nevada and also in California. Habitat: On a wide variety of dry to sometimes moist basic soils, including alkaline clay and sand, gypsum, calcareous alluvial gravels, and carbonate rock outcrops. Elevation range 2,000 to 6,280 feet amsl. Flowering spring.	<u>Regions III</u> : High. The species has been documented within the 2-mile transmission line corridor in Lincoln County, Nevada. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Lincoln County, Nevada. <u>Region IV</u> : Moderate. The species has been documented approx. 20 miles west of the 2-mile transmission line corridor in Clark County, Nevada. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Clark County, Nevada.	No.	NNHP 2001; NatureServe 2012.
Petiolate wormwood	<i>Artemisia campestris</i> ssp. <i>borealis</i> var. <i>petiolata</i>	USFS-Ashley NF	Range: Known only from the Uinta Mountains in Daggett and Duchesne counties, Utah. Habitat: Ponderosa pine-lodgepole pine- <i>Arcotostaphylos</i> community. Elevation range: 8,900 feet amsl. Flowering July to August.	None.	Yes. The species is endemic to the Uinta Mountains, which are not crossed by the 2-mile transmission line corridors.	UNPS 2006; NatureServe 2012.
Eastwood milkweed	<i>Asclepias eastwoodiana</i>	BLM-NV	Range: Known within Esmeralda, Lander, Lincoln, and Nye counties, Nevada. Habitat: In open areas on a wide variety of basic (pH usually 8 or higher) soils, including calcareous clay knolls, sand, carbonate or basaltic gravels, or shale outcrops, generally barren and lacking competition, frequently in small washes or other moisture-accumulating microsites, in the shadscale, mixed-shrub, sagebrush, and lower pinyon-juniper zones. Elevation range 4,680 to 7,080 feet amsl. Flowering May to June.	<u>Region III</u> : Moderate. The species has been documented approx. 10 miles north of the 2-mile transmission line corridor in Clark County, Nevada. Based on elevation range and soil substrate, potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area within Clark County, Nevada.	No.	NNHP 2001.
Barneby woody aster	<i>Aster kingii</i> var. <i>barnebyana</i>	USFS – Fishlake NF; USFS-Uinta-Wasatch-Cache NF	Range: Endemic to the Canyon Mountains in Juab and Millard counties, Utah. Habitat: Mountain mahogany-oak communities on shaded, low outcrops of Precambrian quartzite. Known within precipitous, somewhat protected locations. Elevation range 6,000 to 9,460 feet amsl. Flowering August to September.	Low.	Yes. Although the species has been documented approx. 2 miles west of the 2-mile transmission line corridor in Millard County, Utah; and approx. 4.5 miles north of the 2-mile transmission line corridor in Juab County, Utah, habitat model results indicate lack of potential habitat within the 2-mile transmission line corridors in Millard and Juab counties, Utah.	UNPS 2006; NatureServe 2012.

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Shivwitz milkvetch	<i>Astragalus ampullarioides</i>	FE (UT)	Range: Endemic to the Mojave Desert and the vicinity of St. George, Utah within Washington County. Six populations are located in the vicinity of St. George, Utah. Habitat: Warm desert shrub, creosote bush, and juniper communities on purple-hued patches of soft clay typically associated with Petrified Forest member of the Chinle Formation. Elevation range 3,018 and 4,363 feet amsl. Flowering May to June.	<u>Region III</u> : Moderate. The species has been documented approx. 4 miles southeast of the 2-mile transmission line corridor in Washington County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area within Washington County, Utah.	No.	UNPS 2006; USFWS 2012a, 2006.
Gumbo milkvetch	<i>Astragalus ampullarius</i>	BLM-UT	Range: Restricted to Kane and Washington counties, Utah, and Mohave and Coconino counties, Arizona. Habitat: Restricted habitat of clay, saline, seleniferous soils of the Chinle and Moenkopi formations. Typically found in mixed desert shrub and juniper communities. Elevation range 3,200 to 5,400 feet amsl. Flowering April to May.	Low.	Yes. Based on the presence of suitable geological formations and elevation range, potential habitat may be present within Washington County, Utah; however, it is unlikely the species would be found within the 2-mile transmission line corridors.	UNPS 2006.
Cushion milkvetch	<i>Astragalus aretoides</i>	BLM-CO	Range: Known within Moffat County, Colorado, and also in Utah and Wyoming. Habitat: Habitat information is not available for this species.	<u>Regions I and II</u> : Low. No known populations have been identified within the 2-mile transmission line corridors or analysis area. Since habitat characteristics are unavailable for this species, it is unknown if potential habitat may be present within the 2-mile transmission line corridor or analysis area. A conservative estimate was applied, assuming the presence of potential habitat within Moffat County, Colorado.	No.	NatureServe 2012.
Dana milkvetch	<i>Astragalus argophyllus</i> var. <i>stocksii</i> (<i>Astragalus henrimontanensis</i>)	USFS-Dixie NF	Range: Endemic to the Henry Mountains and Aquarius Plateau in Garfield and San Juan counties, Utah. Habitat: Mixed conifer, aspen, ponderosa pine, pinyon-juniper, and sagebrush communities on gravelly loam soil. Elevation range 7,200 to 9,200 feet amsl. Flowering April to May.	None.	Yes. The species is endemic to Garfield and San Juan counties, Utah, which are not crossed by the 2-mile transmission line corridors.	UNPS 2006; NatureServe 2012.
Torrey milkvetch	<i>Astragalus calycosus</i> var. <i>monophyllidius</i>	BLM-NV	Range: Known within Clark, Elko, Eureka, Lincoln, and Nye counties, Nevada; and also in Utah in the following watersheds: White, Muddy, Meadow Valley Wash, Pilot-Thousand Springs, Diamond-Monitor Valleys, Ralston-Stone Cabin Valleys, and Hot Creek Railroad Valleys. Habitat: Elevation range 5,350 to 7,465 feet amsl.	<u>Region III</u> : Moderate. The species has been documented approx. 4 miles west and south of the 2-mile transmission line corridor in Lincoln County, Nevada. Potential habitat may be present both within the 2-mile transmission line corridor and the analysis area in Lincoln County, Nevada.	No.	NNHP 2001; NatureServe 2012.
Bicknell milkvetch	<i>Astragalus consobrinus</i>	USFS-Fishlake NF	Range: Restricted to central and south-central Utah in Emery, Garfield, Piute, Sevier, and Wayne counties. Habitat: Sagebrush-grassland, desert shrub, and pinyon-juniper communities on the Mancos Shale Formation, volcanic gravel, open gravelly, or sandy knolls, and barren stony hillsides. Elevation range 6,000 and 8,500 feet amsl. Flowering May to July.	<u>Region II</u> : Moderate. The species has been documented approx. 2 miles south of the 2-mile transmission line corridor in Emery County, Utah, and 9.5 miles south of the 2-mile transmission line corridor within the USFS-Fishlake NF in Sevier County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area within the USFS-Fishlake NF in Sevier County, Utah.	No.	NatureServe 2012; UNPS 2006.
Debeque milkvetch	<i>Astragalus debequaeus</i>	BLM-CO	Range: Endemic to the Colorado River Valley near Debeque within Garfield and Mesa counties, Colorado. Total estimated population is 61,256 individuals from 17 documented occurrences. Habitat: Barren outcrops of dark clay interspersed with layers of sandstone on varicolored, fine textured, seleniferous, saline soils of the Wasatch Formation-Atwell Gulch Member. Elevation range 5,100 to 6,400 feet amsl. Flowering late April to May.	<u>Region II</u> : Low. The species has been documented approx. 35 miles east of the 2-mile transmission line corridor in Garfield and Mesa counties, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Mesa County, Colorado.	No.	CNHP 2002; NatureServe 2012.
Deseret milkvetch	<i>Astragalus desereticus</i>	FT (UT)	Range: Endemic to central Utah. Known from one population of 5,000 to 10,000 individuals found near the town of Birdseye, Utah. Habitat: Open to sparse juniper-sagebrush community on open, steep, naturally disturbed south and west (rarely north) facing slopes of sandy-gravelly soils of the Moroni Formation dominated by pinyon pine and Utah juniper. Elevation range 5,400 to 5,700 feet amsl. Flowering May and June.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor in Utah County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Utah County, Utah.	No.	USFWS 2012a, 2011a; UDWR 2012.

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Horseshoe milkvetch	<i>Astragalus desperatus</i> var. <i>neeseae</i> (<i>Astragalus equisolensis</i>)	BLM-UT	Range: Restricted to Uintah County, Utah and Mesa County, Colorado. In Uintah County, the species is found in scatter locations in the vicinity of Horseshoe Bend along the Green River. Habitat: Sagebrush, shadscale, horsebrush, and other mixed desert and salt desert shrub communities on sand-silty soils, river terrace sands and gravels, and ground level crevices of rock outcrops within the Duchesne River Formation. Elevation range 4,800 to 5,200 feet amsl. Flowering May to early June.	<u>Regions I and II</u> : High. The species has been documented within and approx. 1.5 miles north of the 2-mile transmission line corridors in Uintah County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Uintah County, Utah.	No.	BLM 2010; USFWS No Date; UNPS 2006; UNPS 2005.
Debris milkvetch	<i>Astragalus detritalis</i>	BLM-CO	Range: Endemic to the Uinta Basin in Duchesne and Uintah counties, Utah, and Rio Blanco and Moffat counties, Colorado. Habitat: Found in pinyon-juniper and mixed desert shrub communities associated with <i>Artemisia</i> , <i>Stipa</i> , <i>Phlox</i> , <i>Trifolium</i> , and cactus species. Often in rocky soils ranging from sandy clays to sandy loams, and on alluvial terraces with cobbles. Elevation range 5,400 to 7,200 feet amsl. Flowering late April to early June.	<u>Regions I and II</u> : High. The species has been documented within the 2-mile transmission line corridors in Moffat and Rio Blanco counties, Colorado. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Rio Blanco and Moffat counties, Colorado.	No.	CNHP 2002; NatureServe 2012.
Meadow milkvetch	<i>Astragalus diversifolius</i>	BLM-WY	Range: Known from central Idaho to northern Utah. In Wyoming, this species is known within the Great Divide Basin. Habitat: Moist, often alkaline meadows and swales in sagebrush valleys. Elevation range 4,400 to 6,300 feet amsl.	<u>Region I</u> : Moderate. The species has been documented approx. 10 miles northwest of the northern Separation Flat Ground Electrode Site and approx. 19 miles north of the 2-mile transmission line corridor in Sweetwater County, Wyoming. Potential habitat for the species may be present within the 2-mile transmission line corridor within Sweetwater County, Wyoming and at the northern Separation Flat Ground Electrode Site.	No.	WYNDD 2009.
Duchesne milkvetch	<i>Astragalus duchesnensis</i>	BLM-CO	Range: Endemic to the Uinta Basin, this species occurs in Daggett, Duchesne, and Uintah counties, Utah and in Moffat and Rio Blanco counties, Colorado. Habitat: Found in salt desert shrub and pinyon-juniper communities on sandy and gravelly pediments such as sandy mesas or around sandstone or shale outcrops. Elevation range 4,690 to 6,400 feet amsl. Flowering late July to June.	<u>Region I</u> : Moderate. The species has been documented approx. 6 miles south of the 2-mile transmission line corridor in Rio Blanco County. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Moffat County, Colorado. <u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor in Rio Blanco County, Colorado. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Rio Blanco and Moffat counties, Colorado.	No.	BLM 2010; CNHP 2002; NatureServe 2012.
Veyo milkvetch	<i>Astragalus ensiformis</i> var. <i>gracilior</i>	BLM-NV	Range: Known within Lincoln County, Nevada; and also in Washington County, Utah. Habitat: Open washes, valley floors, and hillsides in clay soils within pinyon-juniper and sagebrush communities. Elevation range 4,200 to 5,000 feet amsl. Flowering period unknown.	<u>Region III</u> : High. The species has been documented within the 2-mile transmission line corridor in Lincoln County, Nevada. Potential habitat may be present both within the 2-mile transmission line corridors and the analysis area in Lincoln County, Nevada.	No.	NatureServe 2012.
Needle Mountains milkvetch	<i>Astragalus eurylobus</i>	BLM-NV	Range: Known within Lincoln and Nye counties, Nevada and also in Arizona and Utah. Habitat: Generally deep, barren, sandy, gravelly, or clay soils derived from sandstone or siliceous volcanics, frequently in or along drainages. Elevation range 4,600 to 5,750 feet amsl. Flowering late spring.	<u>Region III</u> : High. The species has been documented within the 2-mile transmission line corridor in Lincoln County, Nevada. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Lincoln County, Nevada.	No.	NatureServe 2012; NNHP 2001.
Black woollypod	<i>Astragalus funereus</i>	BLM-NV	Range: Known within Clark, Lincoln, and Nye counties, Nevada. Habitat: Dry, open scree, talus, or gravelly alluvium derived from light-colored volcanic tuff, on east, south, less commonly west, and rarely north aspects. Elevation range 3,200 to 7,680 feet amsl. Flowering period unknown.	<u>Regions III and IV</u> : Low. Based on elevation range and soil substrate, potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Clark and Lincoln counties, Nevada.	No.	NatureServe 2012; NNHP 2001.

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Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Threecorner milkvetch	<i>Astragalus geyeri</i> var. <i>triquetrus</i>	NPS-Lake Mead NRA; NV State CE, BLM-NV	Range: Known within Clark and Lincoln counties, Nevada and also in Arizona. Habitat: Dependent on sand dunes or deep sand in Nevada, this species occupies open, deep sandy soil, generally stabilized by vegetation and/or a gravel veneer. Elevation range 1,100 to 2,400 feet amsl. Flowering late winter to early spring.	<u>Regions III and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark County, Nevada. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Clark County, Nevada. Based on agency consultation and habitat parameters, this species is not likely to occur within the 2-mile transmission line corridors within the NPS-Lake Mead NRA.	No.	NNHP 2001; NPS 2012; USFWS 2010a.
Gilman milkvetch	<i>Astragalus gilmanii</i>	BLM-NV	Range: Known within Lincoln County, Nevada and also in California. Habitat: On light-colored volcanic tuff slopes in pinyon-juniper woodland communities. Elevation range 5,380 to 6,000 feet amsl. Flowering May.	<u>Region III</u> : Low. Based on elevation range and soil substrate, potential habitat for the species may be present within the 2-mile transmission line corridors in Lincoln County, Nevada.	No.	NatureServe 2012; NNHP 2001.
Hamilton milkvetch	<i>Astragalus hamiltonii</i>	FE (UT); BLM-UT	Range: Largely confined to the Duchesne River Formation between the towns of Tridell, Lapoint, and Vernal, in Uintah County, Utah. Habitat: Found on benches and steep slopes of red, erosive, sandy clay loam soils of the Duchesne River Formation in juniper and desert shrub communities. Elevation range 4,900 to 6,200 feet amsl. Flowering period May to June.	<u>Region II</u> : Moderate. The species has been documented approx. 7 miles north of the 2-mile transmission line corridor in Uintah County, Utah. Potential habitat for the species may be present both within the 2-mile wide corridors and outside analysis area in Uintah County, Utah.	No.	BLM 2011, 2010, 2008; USFWS 2012a, 2011b; UNPS 2006.
Holmgren milkvetch	<i>Astragalus holmgreniorum</i>	FE (UT)	Range: Typically found in areas that drain to the Santa Clara and Virgin rivers. Six documented populations are located within ten miles of St. George, Utah in Washington County, Utah. Habitat: Skirt edges of small and large hill and plateau formations worn by water erosion, slightly above or at the edge of intermittent drainages. Most often the species is found on Virgin River limestone cobble and Upper Red members of the Moenkopi Formation in warm desert shrub communities on gravelly clay hills. Elevation range 2,700 to 3,000 feet amsl. Flowering April to May.	None.	Yes. The species occurs at a lower elevation than that crossed by the 2-mile transmission line corridors within the species-specific geologic formations in Washington County, Utah.	NatureServe 2012; UNPS 2006; USFWS 2012a, 2006.
Iselyi's milkvetch	<i>Astragalus iselyi</i>	BLM-UT	Range: Extremely narrow endemic to Grand and San Juan counties, Utah known from three general areas astride the Grand-San Juan county line and a single disjunct location in Grand County. Habitat: Seleniferous and gypsiferous soils derived from the Morrison and Paradox formations in pinyon-juniper communities. Elevation range 5,000 to 6,595 feet amsl. Flowering late-March to May.	None.	Yes. The species is found on specific geologic formations that are not crossed by the 2-mile transmission line corridors within Grand County, Utah.	NatureServe 2012.
Starvling milkvetch	<i>Astragalus jejunos</i> var. <i>jejunus</i> (<i>Astragalus jejunos</i>)	BLM-CO	Range: Known within Moffat County, Colorado; and also in, Idaho, Nevada, Utah, and Wyoming. No population estimates available. Habitat: Sagebrush and sagebrush-juniper communities often on dry hilltops, gullied bluffs, barren ridges, river terraces, and windswept ridgetops. Substrate is typically tuff, shale, sandstone, or clays. Elevation range 5,500 to 7,500 feet amsl. Flowering May to July.	<u>Regions I and II</u> : Low. Although populations were not identified, potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Moffat County, Colorado.	No.	NatureServe 2012.
Straw milkvetch	<i>Astragalus lentiginosus</i> var. <i>stramineus</i>	BLM-NV	Range: Locally restricted within the Upper Virgin and Lower Virgin watersheds in Clark and Lincoln counties, Nevada; and Washington County, Utah. Habitat: Sandy and gravelly flats and dunes. Elevation range 2,000 to 3,000 feet amsl. Flowering period unknown.	<u>Region III</u> : Moderate. The species has been documented approx. 1.5 miles east of the 2-mile transmission line corridor in Lincoln County, Nevada. Potential habitat may be present both within the 2-mile transmission line corridors and the analysis area in Lincoln and Clark counties, Nevada.	No.	NatureServe 2012; NNHP 2001.
Navajo Lake milkvetch	<i>Astragalus limnocharis</i> var. <i>limnocharis</i>	USFS-Dixie NF	Range: Endemic to southwestern Utah in Iron and Kane counties. Habitat: Lake shores and limestone breaks on Pink and White Limestone members of the Claron Formation, on shore of Navajo Lake or with western bristlecone pine communities. Elevation range 8,800 and 10,000 feet amsl. Flowering July to September.	None.	Yes. The species occurs at a higher elevation than that crossed by the 2-mile transmission line corridors in Iron and Kane counties, Utah.	UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Heliotrope milkvetch/ Table Cliff milkvetch	<i>Astragalus limnocharis</i> <i>var. montii</i> (<i>Astragalus montii</i> / <i>Astragalus limnocharis var. tabulaeus</i>)	FT (UT), USFS-Dixie NF	Range: Endemic to the southern Wasatch Plateau on Ferron, Heliotrope, and White mountains in Sanpete and Sevier counties, Utah. Habitat: High elevation, subalpine mixed grass-forb plant communities at timberline with shallow and poorly developed soils found in shallow, very rocky soils derived from the Flagstaff Geological Formation (limestone). Elevation range 10,500 to 11,000 feet amsl. Flowering mid June to August.	Low.	Yes. Although potential habitat may be present based on the limited presence of suitable elevation range, it is unlikely this species would occur within the 2-mile transmission line corridors given the species narrow and limited geographic range.	CPC 2010; NatureServe 2012; USFWS 2012a, 1995a; UNPS 2006.
Grand Junction milkvetch	<i>Astragalus linifolius</i>	BLM-CO	Range: Endemic to the eastern base of the Uncompahgre Plateau in Delta, Mesa, and Montrose, counties Colorado. Total population estimated at approx. 10,000 individuals between 21 known occurrences; however, population estimates have not been provided for all occurrences. Habitat: Pinyon-juniper and sagebrush communities on dry adobe hills and sandstone areas on the Chinle and Morrison formations. Elevation range 4,800 to 6,200 feet amsl. Flowering late May to June.	None.	Yes. The species is endemic to the Chinle and Morrison formations, which are not crossed by the 2-mile transmission line corridors in Mesa County, Colorado.	CNHP 2002; NatureServe 2012.
Loa milkvetch	<i>Astragalus loanus</i>	BLM-UT	Range: Endemic to central Sevier County, Utah. Habitat: Sagebrush and juniper communities on igneous gravels. Elevation range 6,300 to 6,800 feet amsl. Flowering May to early June.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor in Sevier County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Sevier County, Utah.	No.	NatureServe 2012; UNPS 2006.
Halfring milkvetch	<i>Astragalus mohavensis</i> <i>var. hemygyrus</i>	BLM-NV	Range: Known within Clark, Lincoln, and Nye counties, Nevada and also in California. Habitat: Carbonate gravels and derivative soils on terraced hills and ledges, open slopes, and along washes in the creosote-bursage, blackbrush, and mixed-shrub zones. Elevation range 3,000-5,600 feet amsl. Flowering April to June.	<u>Regions III and IV</u> : Moderate. Although known populations are present approx. 30 miles west of the 2-mile transmission line corridors in Clark County, Nevada; potential habitat is only present within the 2-mile transmission line corridors in Lincoln County, Nevada.	No.	NatureServe 2012; NNHP 2001.
Mokiak milkvetch	<i>Astragalus mokiensis</i>	NPS-Lake Mead NRA; BLM-NV	Range: Known with Clark County, Nevada and also in Arizona and Utah. Habitat: Bluffs, cliff terraces, gullied badlands, disturbed areas along streams on sandy soils. Elevation range 2,460 to 5,020 feet amsl. Flowering April to June	<u>Regions III and IV</u> : Low. Based on elevation range, suitable vegetation cover types, and soil substrate, potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Clark County, Nevada. Based on agency consultation and habitat parameters, this species is not likely to occur within the 2-mile transmission line corridors within the NPS-Lake Mead NRA.	No.	NatureServe 2012; NPS 2012; NNHP 2001.
Ferron milkvetch	<i>Astragalus musiniensis</i>	BLM-CO	Range: Known within Mesa and Garfield counties, Colorado; and also in Utah. Habitat: Gullied bluffs, knolls, benches, and open hillsides in pinyon-juniper woodlands, sagebrush, or desert shrub communities, mostly on shale, sandstone, or alluvium derived from them. Elevation range 4,700 to 7,000 feet amsl. Flowering late April through early June.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor in Garfield and Mesa counties, Colorado. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Garfield and Mesa counties, Colorado.	No.	CNHP 2002; NatureServe 2012.
Naturita milkvetch	<i>Astragalus naturitensis</i>	BLM-CO	Range: Known within Garfield, Mesa, Montezuma, Montrose and San Miguel counties, Colorado; and also in New Mexico, Utah, and the Navajo Nation. Habitat: Cracks and ledges of sandstone cliffs and flat bedrock area with some shallow soil development, within pinyon-juniper woodland communities. Elevation range 4,310 to 6,725 feet amsl. Flowering April to May.	<u>Region II</u> : Low. The species has been documented approx. 37 miles east of the 2-mile transmission line corridor in Mesa County, Colorado. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Mesa and Garfield counties, Colorado.	No.	CNHP 2002; NatureServe 2012.
Nelson's milkvetch	<i>Astragalus nelsonianus</i>	BLM-CO	Range: Regional endemic of southwest and central Wyoming, northeast Utah, and northwest Colorado. One, possibly extirpated population has been documented in Moffat County, Colorado. Habitat: Barren, alkaline flats, gullied bluffs, and bottomlands. Elevation range 6,400 to 7,000 feet amsl. Flowering period late May to August.	<u>Region I</u> : Moderate. The species has been documented approx. 2 miles northwest of the 2-mile transmission line corridor in Moffat County, Colorado. Potential habitat for the species may be present within the 2-mile transmission line corridor in Moffat County, Colorado.	No.	CNHP 2002; NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Pink egg milkvetch (Long-calyx eggvetch)	<i>Astragalus oophorus</i> var. <i>lonchocalyx</i>	BLM-UT, BLM-NV	Range: Endemic to the Great Basin within Beaver, Iron, and Washington counties, Utah; and in Lincoln County, Nevada. Habitat: Pinyon-juniper, sagebrush, and mixed desert shrub communities. Elevation range 5,800 to 7,500 feet amsl. Flowering May.	<u>Region III</u> : High. The species has been documented within the 2-mile transmission line corridor in Iron County, Utah; adjacent to the 2-mile transmission line corridors in Iron, Washington, and Beaver counties, Utah; and within the 2-mile transmission line corridor on the Lincoln Co., Nevada-Iron Co., Utah border. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Iron County, Utah and Lincoln County, Nevada.	No.	NatureServe 2012; NNHP 2001; UNPS 2006.
Ash Meadow milkvetch	<i>Astragalus phoenix</i>	BLM-NV	Range: Endemic to the Ash Meadows area in Nye County, Nevada. Habitat: Dry, hard, seasonally moist, white barren flats, washes, and knolls of calcareous alkaline soils with saltgrass, shadscale saltbush, Ash Meadows blazingstar, alkali goldenbush, and nakedstem sunray. Elevation range 2,200 to 2,350 feet amsl. Flowering period: spring.	None.	Yes. The species is endemic to the Ash Meadows, which are not crossed by the 2-mile transmission line corridors.	NatureServe 2012; NNHP 2001.
Fisher Tower's milkvetch	<i>Astragalus piscator</i>	BLM-CO	Range: Known only from locations in close proximity to the Colorado River in Grand, San Juan, and Wayne counties, Utah and from the canyon of the Dolores River in Mesa County, Colorado. Habitat: Alluvial terraces (benches) along the Dolores River, in open areas with sandy, sometimes gypsiferous soils of valley benches and gullied foothills; also in disturbed sandy habitats along the road. Elevation range 4,300 to 5,600 feet amsl. Flowering late April to early June.	Low.	Yes. Although potential habitat may be present based on the presence of suitable elevation range, vegetation cover types, and soil substrate, it is unlikely this species would occur within the 2-mile transmission line corridors given the species-specific association to the Dolores River, which is outside of the 2-mile transmission line corridors.	CNHP 2002; NatureServe 2012.
Precocious milkvetch	<i>Astragalus proimanthus</i>	BLM-WY	Range: Narrow endemic within the southern Green River Basin, in southwestern Sweetwater County. It is restricted to 320 acres in the vicinity of McKinnon, Wyoming. Habitat: Typically found in cushion plant-bunchgrass communities in sparsely vegetated rims, and gullied upper slopes of benches, bluffs, and mesa-like ridges. Found on substrates derived from the Bridger Formation, and the Laney member of the Green River Formation. Elevation range 6,400 to 7,200 feet amsl. Flowering late April to mid June.	Low.	Yes. Although the species has been documented approx. 30 miles west of the 2-mile transmission line corridor in Sweetwater County, Wyoming, it is unlikely the species would occur within the 2-mile transmission line corridors based on the lack of suitable habitat parameters.	Fertig & Welp 2001; WYNDD 2009.
Peabody milkvetch	<i>Astragalus pubentissimus</i> (<i>Astragalus pubentissimus</i> var. <i>peabodianus</i>)	BLM-UT	Range: Endemic to Emery and Grand counties, Utah. Habitat: Entrenched channels on the south and west flanks of the Tavaputs Plateau in pinyon-juniper and mixed desert shrub communities. Elevation range 4,300 to 5,800 feet amsl. Flowering May to early July.	Low.	Yes. Given the location of the Tavaputs Plateau in relation to the 2-mile transmission line corridors within Emery and Grand counties, Utah, it is unlikely that the species would be present within the 2-mile transmission line corridors in Emery and Grand counties, Utah.	BLM 2010; NatureServe 2012; UNPS 2006.
Trelease's milkvetch	<i>Astragalus racemosus</i> var. <i>treleasei</i>	BLM-WY	Range: Endemic to southwestern Wyoming; and Duchesne and Uintah counties in northeastern Utah. Found in the Green River Basin, the foothills of the Wyoming Range, and the Uinta Basin. Habitat: Eocene-Oligocene outcrops in the basins of Cenozoic lakes, Lake Gosiute, and Lake Uinta. In Wyoming, the species occurs on the Wasatch and Bridger Formations, on localized habitats of sparsely vegetated outwash flats and fluted Badland slopes. Elevation range unknown. Flowering June to July.	<u>Region I</u> : Low. Although species presence has not been documented within the 2-mile transmission line corridors, a WYNDD model-detailed analysis indicates the potential for occurrence within the 2-mile transmission line corridors in Sweetwater and Carbon counties, Wyoming.	No.	Heidel 2003; NatureServe 2012.
San Rafeal milkvetch	<i>Astragalus rafaensis</i>	BLM-CO	Range: Endemic to the Navajo Basin within Emery, and less commonly, Grand counties, Utah; the Dolores River Valley in Montrose County, Colorado; and less commonly Mesa, and La Plata counties, Colorado. Habitat: Banks of sandy clay gulches, gullied hills, washes, talus under cliffs, in pockets at the foot of sandstone outcrops, or among boulders along dry watercourses. Substrates typically seleniferous clayey, silty or sandy. Elevation range 4,400 to 6,500 feet amsl. Flowering period late April to early June.	<u>Region II</u> : Low. No populations have been documented within or adjacent to the 2-mile transmission line corridors; however, although unlikely, potential habitat may be present within the 2-mile transmission line corridor in Mesa County, Colorado.	No.	CNHP 2002; NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Spring Mountains milkvetch	<i>Astragalus remotus</i>	BLM-NV	Range: Endemic to the southeastern slopes of the Spring Mountains within Clark County, Nevada. Habitat: Rocky, gravelly, and/or sandy calcareous soils derived from carbonate or sandstone, in washes and drainages, or on hillsides or rocky ledges, within the zonal desert shrub or desert wash communities. Elevation range 3,400 to 7,050 feet amsl. Flowering April to early June.	None.	Yes. The species is endemic to the Spring Mountains, which are not crossed by the 2-mile transmission line corridors.	NatureServe 2012; NNHP 2001.
Cisco milkvetch	<i>Astragalus sabulosus</i> var. <i>sabulosus</i>	BLM-UT	Range: Endemic to the Grand River Valley within Grand County, Utah. Habitat: Salt desert shrub communities on the Mancos Shale Formation. Elevation range 4,250 to 5,250 feet amsl. Flowering late March to May.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor in Grand County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Grand County, Utah.	No.	NatureServe 2012; UNPS 2006.
Stage Station milkvetch	<i>Astragalus sabulosus</i> var. <i>vehiculus</i>	BLM-UT	Range: Narrow endemic, known near head of Courthouse Wash within Grand County, Utah. Habitat: Shadscale, woody-aster, and galleta community on the Morrison Formation. Elevation range 4,500 to 4,800 feet amsl. Flowering April to May.	None.	Yes. The species is endemic to Courthouse Wash, which is not crossed by the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006.
Escarpment milkvetch	<i>Astragalus striatiflorus</i>	BLM-UT	Range: Endemic to the Colorado Plateau within Kane and eastern Washington counties, Utah; and Coconino County, Arizona. Habitat: Interdune valleys, sandy depressions on ledges, and bars, and terraces in stream channels, in pinyon-juniper, ponderosa pine, and sandy desert shrub communities. Elevation range 4,900 to 6,600 feet amsl. Flowering May to June.	None.	Yes. The species is endemic to the Colorado Plateau within Kane and eastern Washington counties, Utah, which are not crossed by the 2-mile transmission line corridors.	UNPS 2006.
Currant milkvetch	<i>Astragalus uncialis</i>	BLM-NV	Range: Endemic to the Great Basin within Millard County, Utah; and Nye County, Nevada. Habitat: Found in shadscale and budsage communities in Utah, and sagebrush communities in Nevada. Substrate is dry alkaline soils derived from limestone on dry knolls and in gullies, often associated with ancient terraces of Pleistocene lakes. Elevation range 4,600 to 6,000 feet amsl. Flowering April to mid June.	None.	Yes. The species is endemic to Nye County, Nevada, which is not crossed by the 2-mile transmission line corridors.	NatureServe 2012; NNHP 2001; UNPS 2006.
Welsh's milkvetch	<i>Astragalus welshii</i>	BLM-UT	Range: Endemic to Garfield, eastern Iron, Kane, Piute, and Wayne counties, Utah. Habitat: Restricted to igneous gravels, in sagebrush, pinyon-juniper, and sagebrush-aspen communities. Elevation range 6,560 to 9,220 feet amsl. Flowering May to early June.	None.	Yes. Although the associated vegetation cover types and geological substrate are present, the species occurs at a higher elevation than that crossed by the 2-mile transmission line corridors within Iron County, Utah.	NatureServe 2012; UNPS 2006.
Guard milkvetch	<i>Astragalus zionis</i> var. <i>vigulus</i>	USFS-Dixie NF	Range: Endemic to the east slope of the Pine Valley Mountains in Washington County, Utah. Habitat: Pinyon-juniper, mountain mahogany, and oak-manzanita communities. Elevation range 5,900 to 8,200 feet amsl. Flowering late April to late June.	None.	Yes. The species is endemic to the east slope of the Pine Valley Mountains, which are not crossed by the 2-mile transmission line corridor.	NatureServe 2012; UNPS 2006.
Pahrump silverscale	<i>Atriplex argentea</i> var. <i>longitrichoma</i>	BLM-NV	Range: Known only from the Pahrump and Stewart valleys in southern Nye County, Nevada; and adjacent southeastern Inyo County, California. Habitat: Saline valley bottoms, open desert communities, roadways, and in agricultural fields with shrubby saltbush, creosote bush, mesquite, and annual weed species. Elevation range unknown. Flowering summer through fall.	None.	Yes. The species is endemic to Nye County, Nevada, which is not crossed by the 2-mile transmission line corridors.	FNA 2001; NatureServe 2012.
Giant fourwing saltbush	<i>Atriplex canescens</i> var. <i>gigantea</i>	BLM-UT	Range: Found within Juab, Millard, and Tooele counties, Utah. Habitat: Sand dunes in interdune valleys or on the active, leeward dune margins with scurfpea, anomalous sunflower, and other sand-loving plant species. Elevation range 4,750 to 5,250 feet amsl. Flowering late June.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridors in Juab and Millard counties, Utah. The only known population located in Jericho Dunes (i.e., Lynndyl Sand Dunes) is crossed by the 2-mile transmission line corridors. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Juab and Millard counties, Utah.	No.	CPC 2010; UNPS 2010.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

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Dainty moonwort	<i>Botrychium crenulatum</i>	USFS-Ashley NF, USFS-Uinta-Wasatch-Cache NF; BLM-NV	Range: Found within Cache, Juab, Summit, and Wasatch counties, Utah; and also known throughout western U.S. and Canada. Habitat: Wet, marshy and springy areas, such as marshy meadows, marsh edges, saturated soils of seeps, bottom and stabilized margins of small streams, and occasionally along roads and ditches where moist. Prefers areas with shade, and dense cover within the montane zone. Elevation at approx. 8,000 feet amsl. Fronds mature June to July.	<u>Region II</u> : Moderate. The species has been documented approx. 24 miles north of the 2-mile transmission line corridor in Wasatch County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Utah, Juab, and Wasatch counties, Utah within the USFS-Uinta-Wasatch-Cache NF. Based on detailed habitat modeling, suitable habitat was not identified within the 2-mile transmission line corridors within the USFS-Uinta NF.	No.	NatureServe 2012; NNHP 2001; UNPS 2006.
Slender moonwort	<i>Botrychium lineare</i>	USFS-Ashley NF, USFS-Uinta-Wasatch-Cache NF	Range: Found within Duchesne and Salt Lake counties, Utah; and also in Alaska, California, Colorado, Idaho, Minnesota, Montana, Nevada, Oregon, and Washington, and Canada. Habitat: Typical habitat varies for the species. In Utah, it is normally found in grass-forb meadows, under trees in woods, and on shelves on limestone cliffs. Elevation range 4,900 to 6,600 feet amsl. Spores mature in late June or July.	<u>Region II</u> : Moderate. The species has been documented approx. 1 mile southeast of the 2-mile transmission line corridor in Duchesne County, Utah. Potential habitat for the species may be present within the 2-mile transmission line corridors within the USFS-Ashley NF in Duchesne County, Utah; and within the USFS-Uinta-Wasatch-Cache NF in Utah and Wasatch counties, Utah.	No.	NatureServe 2012; UNPS 2006.
Paradox moonwort	<i>Botrychium paradoxum</i>	USFS-Dixie NF	Range: Widely disjunct in Duchesne and Garfield counties in Utah; and in Montana, British Columbia, Alberta, and Saskatchewan. Total population estimates are unknown; however, the species is known from 21 to 80 occurrences. Habitat: In Utah, the species occur in open, moist, high elevation meadows. Elevation at approximately 10,800 feet amsl. Flowering July to August.	None.	Yes. The species occurs at a higher elevation than that crossed by the 2-mile transmission line corridors within Duchesne and Garfield counties, Utah.	NatureServe 2012; UNPS 2006.
Alkali mariposa lily	<i>Calochortus striatus</i>	BLM-NV	Range: Known only within Nye and Clark counties, Nevada. Habitat: Moist, alkaline meadows around springs, creosote bush zone with <i>Distichlis spicata</i> , <i>Cleomella brevipes</i> , <i>Iva acerosa</i> , <i>Anemopsis californica</i> , and <i>Dodecatheon pulchellum</i> . Elevation range 2,100 to 3,700 feet amsl. Flowering April to June.	<u>Regions III and IV</u> : Moderate. The species has been documented approx. 14 miles west of the 2-mile transmission line corridors in Clark County, Nevada. Potential habitat for the species may be present within the 2-mile transmission line corridors in Clark County, Nevada.	No.	NatureServe 2012; NNHP 2001.
Baird camissonia	<i>Camissonia bairdii</i>	BLM-UT	Range: Endemic to Washington County, Utah. Habitat: Blackbrush and pinyon-juniper communities. Elevation range 3,900 to 4,300 feet amsl. Flowering period unknown.	<u>Region III</u> : Moderate. The species has been documented approx. 0.25 mile southeast of the 2-mile transmission line corridor in Washington County, Utah. Potential habitat for the species may be present within the 2-mile transmission line corridor in Washington County, Utah.	No.	UNPS 2006.
Bolander's camissonia	<i>Camissonia bolanderi</i>	BLM-UT	Range: Narrowly restricted edaphic endemic to Emery County, Utah; known only from the upper Tidewell Draw in the San Rafael Desert. Habitat: Known only on the gypsiferous Triassic Moenkopi Formation, associated with <i>Atriplex</i> and <i>Ephedra</i> . Elevation of approximately 4,780 feet amsl.	None.	Yes. The species is endemic to the Triassic Moenkopi Formation which is not crossed by the 2-mile transmission line corridors in Emery County, Utah.	NatureServe 2012.
Gould camissonia	<i>Camissonia gouldii</i>	BLM-UT	Range: Known only from the volcanic cones north of St. George in Washington County, Utah, and from Mohave and Coconino counties, Arizona. Habitat: Volcanic ash cones in pinyon-juniper and big sagebrush communities. Elevation range 3,500 to 4,600 feet amsl. Flowering mid May to early July.	<u>Region III</u> : Moderate. The species has been documented approx. 9 miles southeast of the 2-mile transmission line corridor in Washington County, Utah. Potential habitat may be present within the 2-mile transmission line corridor in Washington County, Utah.	No.	UNPS 2006.
Aquarius paintbrush	<i>Castilleja aquariensis</i>	USFS-Dixie NF	Range: Endemic to south-central Utah on the Aquarius Plateau in Garfield and Wayne counties, Utah. Habitat: Sagebrush/mixed-forb meadow openings with <i>Ribes</i> , columbine, silver sagebrush, groundsel, yarrow, fescue, penstemon, and cinquefoil, in open spruce-fir stands. Elevation range 9,800 to 11,300 feet amsl. Flowering July to August.	None.	Yes. The species is endemic to Garfield and Wayne counties, Utah, which are not crossed by the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Tushar paintbrush	<i>Castilleja parvula</i> var. <i>parvula</i>	USFS-Dixie NF, USFS-Fishlake NF	Range: Endemic to Beaver, Garfield, and Piute counties, Utah. Habitat: Alpine ridgetops and talus slopes above timberline on tertiary igneous sandy gravel with Engelmann spruce, <i>Cymopterus</i> , <i>Happlopappus</i> , <i>Monardella</i> , and <i>Ribes</i> . Elevation range 10,000 to 12,000 feet amsl. Flowering July.	None.	Yes. The species occurs at a higher elevation than that crossed by the 2-mile transmission line corridors within Beaver, Garfield, and Piute counties, Utah.	NatureServe 2012; UNPS 2006.
Reveal paintbrush	<i>Castilleja revealii</i> (<i>Castilleja parvula</i> var. <i>revealii</i>)	USFS-Dixie NF	Range: Endemic to southern Utah in Garfield, Kane, and Iron counties. Habitat: Ponderosa and bristlecone pine communities on gravelly soils of the Wasatch Limestone Formation. Elevation range 7,500 to 10,000 feet amsl. Flowering late June to August.	None.	Yes. The species occurs at a higher elevation and on different geologic formations than that crossed by the 2-mile transmission line corridors within Garfield, Kane, and Iron counties, Utah.	NatureServe 2012; UNPS 2006.
Monte Neva paintbrush	<i>Castilleja salsuginosa</i>	BLM-NV; NV State CE	Range: Endemic to Nevada; known within Eureka and White Pine counties. Habitat: An aquatic or wetland-dependent species occupying damp, open, alkaline to saline clay soils of hummocks and drainages on travertine hot spring mounds with <i>Sarcobatus vermiculatus</i> , <i>Chrysothamnus nauseosus</i> , and <i>Sporobolus airoides</i> . Elevation range 5,965 to 6,130 feet amsl. Flowering June to July.	None.	Yes. The species is endemic to Eureka and White Pine counties, Nevada, which are not crossed by the 2-mile transmission line corridors.	NatureServe 2012; NNHP 2001.
Spring-loving centaury	<i>Centaureum namophilum</i>	BLM-NV	Range: Endemic to the Ash Meadows area in Nye County, Nevada. Habitat: An aquatic or wetland-dependent species found in open, moist to wet, alkali-crusted clay soil of seeps, springs, outflow drainages, meadows, and hummocks with saltbush, goldenweed, mountain rush, yerba mansa, and boraxweed. Elevation range 2,100 to 2,350 feet amsl. Flowering in summer.	None.	Yes. The species is endemic to Nye County, Nevada, which is not crossed by the 2-mile transmission line corridors.	NatureServe 2012; NNHP 2001.
Foothills Palo verde	<i>Cercidium microphyllum</i>	NPS-Lake Mead NRA	Range: Mojave and Sonoran deserts of Arizona, California, and Baja Mexico. Habitat: Habitat parameters unknown.	None.	Yes. Based on agency consultation, it is unlikely this species would occur within the 2-mile transmission line corridors.	NPS 2012.
Virgin River thistle	<i>Cirsium mohavense</i>	BLM-NV	Range: Restricted to the Mohave Desert region in Nevada; and also in California and Arizona. Habitat: Moist, low canyons, streambanks, and poorly drained alkaline flats, seeps, and springs in the desert, associated with saltbush. Elevation range 1,394 to 5,988 feet amsl. Flowering in summer.	None.	Yes. The species is endemic to the Mohave Desert region of Nevada, which is not crossed by the 2-mile transmission line corridors.	NatureServe 2012; NNHP 2001.
Ownbey's thistle	<i>Cirsium ownbeyi</i>	BLM-WY	Range: Endemic to the eastern flank of the Uinta Mountains in Daggett County and northern Uintah County, Utah; the Green River Basin on the east side of Flaming Gorge Reservoir in Sweetwater County, Wyoming; and Moffat County, Colorado. Habitat: Semi-barren rims or steep slopes of broken gray slate below shaley cliffs. Elevation range 6,440 to 8,200 feet amsl. Flowering June to August.	<u>Region I</u> : Low. Although the species has been documented approx. 54 miles west of the 2-mile transmission line corridors, potential habitat may be present both within the 2-mile transmission line corridors and the analysis area in Sweetwater and Carbon counties, Wyoming.	No.	CNHP 2002; BLM 2010; NatureServe 2012; UNPS 2006; WYNDD 2009.
Cedar Rim thistle	<i>Cirsium pulcherrimum</i> var. <i>aridum</i> (<i>Cirsium aridum</i>)	BLM-WY	Range: Endemic to the Green River Basin in Sublette County; Beaver Rim area in Fremont County; Sweetwater River Valley in Carbon County; and the east side of Flaming Gorge in Sweetwater County, Wyoming. Total population estimated at approx. 40,000 to 50,000 individuals. Habitat: Sparsely vegetated openings in Wyoming big sagebrush grasslands on barren chalky hills, gravelly slopes, fans and fine-textured sandy-shaley draws. Typically found on whitish-gray sandstone, chalk, tuffaceous colluvium or clay substrates derived from the Split Rock, White River, Wagon Bed, Wind River, Green River, and Wasatch formations. Elevation range 5,800 to 7,500 feet amsl. Flowering June to July.	<u>Region I</u> : Low. Although the species has been documented approx. 54 miles west of the 2-mile transmission line corridors, potential habitat may be present both within the 2-mile transmission line corridors and the analysis area in Sweetwater and Carbon counties, Wyoming.	No.	NatureServe 2012; WYNDD 2009.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Virgin thistle	<i>Cirsium virginensis</i>	NPS-Lake Mead NRA; BLM-UT	Range: Endemic to the Mojave Desert within Washington County, Utah; Clark County, Nevada; and Mohave County, Arizona. Habitat: Hanging gardens, saline seeps, washes, and stream terraces. Elevation range 2,800 to 3,100 feet amsl. Flowering May to September.	Low.	<u>NPS-Lake Mead NRA</u> : Yes. Based on agency consultation, this species is not likely to occur within the 2-mile transmission line corridors within the NPS-Lake Mead NRA. <u>BLM-UT</u> : Yes. Although potential habitat may be present based on the presence of suitable topography and elevation range, it is unlikely that this species would occur within the 2-mile transmission line corridors.	NatureServe 2012; NPS 2012; NNHP 2001; UNPS 2006.
Goodrich cleomella	<i>Cleomella palmeriana</i> var. <i>goodrichii</i>	BLM-UT	Range: Endemic to Uintah County, Utah. Habitat: Eroded slopes of heavy clay in the Mancos, Tropic, and Morrison formations associated with <i>Machaeranthera venusta</i> , <i>Phacelia demissa</i> , <i>Astragalus flavus</i> , and <i>Atriplex corrugata</i> . Elevation range 4,000 to 6,000 feet amsl. Flowering May.	None.	Yes. Although the species has been documented approx. 7 miles south of the 2-mile transmission line corridor in Uintah County, Utah, it is unlikely this species would occur given the lack of species-specific geological formations within the 2-mile transmission line corridor.	BLM 2010; UNPS 2006.
Tecopa birdbeak	<i>Cordylanthus tecopensis</i>	BLM-NV	Range: In Nevada, known only from the Ash Meadows area and Fishlake Valley within Esmeralda and Nye counties, Nevada; and also in California. Habitat: Dependent on wetland margin areas in Nevada, this species occupies open, moist to saturated, alkali-crusted clay soils of seeps, springs, outflow drainages, and meadows, with <i>Distichlis spicata</i> , <i>Juncus balticus</i> , <i>Eleocharis</i> , <i>Spiranthes infernalis</i> , <i>Centaureum namophilum</i> , <i>Typha</i> , <i>Cirsium</i> , <i>Ivesia kingii</i> var. <i>eremica</i> , and <i>Ericameria albida</i> . Elevation range 2,100 to 4,900 feet amsl. Flowering summer to early fall.	None.	Yes. The species is known only from Esmeralda and Nye counties, Nevada, which are not crossed by the 2-mile transmission line corridors.	NNHP 2001.
Barneby's catseye	<i>Cryptantha barnebyi</i>	BLM-UT	Range: Endemic to the Uinta Basin in Uintah County, Utah. Habitat: Locally abundant on domed or gently-sloping white shale knolls of the Green River Formation, mostly in shadscale and pinyon-juniper communities. Elevation range 6,060 to 7,875 feet amsl. Flowering May to June.	<u>Region II</u> : High. The species has been documented within the 2-mile-wide corridor in Uintah County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Uintah County, Utah.	No.	BLM 2010; NatureServe 2012.
Tufted cryptantha	<i>Cryptantha caespitosa</i>	BLM-CO	Range: Regional endemic to central and southern Wyoming and adjacent Utah, Idaho, and Moffat and Rio Blanco counties, Colorado. Habitat: Rocky or chalky ridgetops in cushion plant communities, forb-grass, pinyon-juniper, mountain brush, limber pine, and spruce-fir forests of adobe soils. Elevation range 6,400 to 10,240 feet amsl. Flowering late April/May to June/early July.	<u>Region I</u> : High. The species has been documented within the 2-mile transmission line corridor in Moffat County, Colorado. Potential habitat for the species may be present within the 2-mile transmission line corridor and the analysis area, and associated with the Little Snake West and Little Snake East Ground Electrode Sites in Moffat County, Colorado. <u>Region II</u> : Moderate. The species has been documented approx. 11 miles south and west of the 2-mile transmission line corridor in Rio Blanco County, Colorado. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Rio Blanco County, Colorado	No.	CNHP 2002; NatureServe 2012.
Mound cryptantha	<i>Cryptantha compacta</i>	BLM-UT	Range: Endemic to southwestern Millard County, Utah. Total population estimated at approx. 100,000 individuals. Habitat: Salt desert shrub and mixed desert shrub communities on Sevey Dolomite and gravelly loam on open slopes and ridges. Elevation range 6,200 to 7,400 feet amsl. Flowering May to July.	Low.	Yes. Although the species has been documented approx. 28 miles northwest of the 2-mile transmission line corridor in Millard County, Utah, it is unlikely the species would occur within the 2-mile transmission line corridors based on the lack of suitable elevation range within Millard County, Utah.	NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Creutzfeldt-flower	<i>Cryptantha creutzfeldtii</i>	USFS-Manti-LaSal NF; BLM-UT	Range: Endemic to central Utah in Carbon, Emery and Sevier counties. Habitat: Shadscale and mat <i>Atriplex</i> communities on the Mancos Shale Formation. Elevation range 5,250 to 6,500 feet amsl. Flowering late April to June.	<u>Region II</u> : Moderate. The species has been documented immediately adjacent (300 feet) northwest of the 2-mile transmission line corridor in Sevier County, Utah; and one mile north of the 2-mile transmission line corridor in Emery County, Utah. Potential habitat for the species may be present within the 2-mile transmission line corridors in Emery and Sevier, counties, Utah. Based on detailed habitat modeling, suitable habitat was not identified within the 2-mile transmission line corridors within the USFS-Manti-LaSal NF.	No.	BLM 2010; NatureServe 2012; UNPS 2006.
Graham's catseye	<i>Cryptantha grahamii</i>	BLM-UT	Range: Endemic to the Uinta Basin in Duchesne and Uintah counties, Utah. Habitat: Mixed desert shrub, sagebrush, pinyon-juniper and mountain shrub communities on Green River shale. Elevation range 5,000 to 7,400 feet amsl. Flowering May to June.	<u>Region II</u> : Moderate. The species has been documented approx. 0.5 mile south of the 2-mile transmission line corridor in Duchesne County, Utah; and 4 miles south of the 2-mile transmission line corridor in Uintah County, Utah. Potential habitat for the species may be present within the 2-mile transmission line corridors in Duchesne and Uintah counties, Utah.	No.	NatureServe 2012; UNPS 2006.
Las Vegas catseye	<i>Cryptantha insolita</i>	NV State CE	Range: Known only from the Las Vegas Valley and adjacent lower slopes of the Spring Mountains within Clark County, Nevada. Habitat: Light-colored, alkaline clay flats and low hills in the creosote bush zone. Elevation range 1,900 to 2,000 feet amsl. Flowering April to June.	<u>Region IV</u> : Moderate. The species has been documented approx. 6 miles west of the 2-mile transmission line corridor in Clark County, Nevada. Potential habitat for the species may be present within the Las Vegas Valley within the 2-mile transmission line corridors in Clark County, Nevada.	No.	NatureServe 2012; NNHP 2001.
Yellow-white catseye	<i>Cryptantha ochroleuca</i>	USFS-Dixie NF	Range: Endemic to Garfield and Iron counties in south-central Utah. Habitat: Pinyon-juniper, ponderosa pine, and bristlecone pine communities on the Pink limestone member of the Wasatch Formation, on unconsolidated alluvium. Elevation range 7,500 to 9,350 feet amsl. Flowering May to June.	None.	Yes. The species occurs at a higher elevation than that crossed by the 2-mile transmission line corridors within Garfield and Iron counties, Utah.	NatureServe 2012; UNPS 2006.
Osterhout cryptantha	<i>Cryptantha osterhoutii</i>	BLM-CO	Range: Endemic to the Navajo Basin and found on the Colorado Plateau, this species is known within Mesa County, Colorado; Grand, Wayne, Garfield and San Juan counties, Utah; and perhaps Arizona. Habitat: Dry barren sites in reddish purple decomposed sandstone or in dry sandy soil in the desert, in blackbrush, mixed desert shrub, oak brush, salt bush, and pinyon-juniper communities. Elevation range 4,500 to 6,560 feet amsl. Flowering April to early June/July.	Low.	Yes. Although potential habitat may be present based on the presence of suitable vegetation cover types and elevation range, it is unlikely this species would occur within the 2-mile transmission line corridor in Mesa County, Colorado.	CNHP 2002; NatureServe 2012.
Rollins cryptantha	<i>Cryptantha rollinii</i>	BLM-CO	Range: Known from southwestern Wyoming; Emery, Uintah, Duchesne, and Carbon counties, Utah; and Moffat and Rio Blanco counties, Colorado. Habitat: Known from white shale slopes of the Green River Formation within pinyon-juniper woodlands and cold desert shrubland communities. Elevation range 5,300 to 5,800 feet amsl. Flowering May to June.	<u>Regions I and II</u> : High. The species has been documented within the 2-mile transmission line corridor in Rio Blanco County, Colorado. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Rio Blanco and Moffat counties, Colorado.	No.	CNHP 2002; NatureServe 2012.
Virgin River cryptantha	<i>Cryptantha virginensis</i>	NPS-Lake Mead NRA	Range: Endemic to California. Habitat: Sagebrush scrub, bristlecone pine forests, and pinyon-juniper woodland communities. Elevation range 6,234 to 10,171 feet amsl. Flowering period April to June.	None.	Yes. Based on agency consultation and lack of suitable habitat parameters, it is unlikely this species would occur within the 2-mile transmission line corridors.	Calflora 2012; NPS 2012.
Jones cycladenia	<i>Cycladenia humilis</i> var. <i>jonesii</i> (<i>Cycladenia jonesii</i>)	FT (UT)	Range: Endemic to Emery, Garfield, Grand, and Kane counties, Utah; and Coconino County, Arizona. Habitat: Gypsiferous saline soils on the Chinle, Cutler, and Summerville formations in <i>Eriogonum/Ephedra</i> , cool desert shrub, and juniper communities. Elevation range 4,400 to 6,000 feet amsl. Flowering mid May to June.	<u>Region II</u> : Moderate. The species has been documented approx. 8.5 miles southwest of the 2-mile transmission line corridor in Emery County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Emery County, Utah.	No.	BLM 2010; USFWS 2012a; UDWR 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Intermountain wavewing	<i>Cymopterus basalticus</i>	BLM-NV	Range: A Great Basin endemic, known within White Pine County, Nevada; and also in Utah. Habitat: Bare, basaltic rocks, barren clays, and gravelly hills and alluvial fans, mostly on dolomite (in Utah). Elevation range 5,800 to 6,900 (in Nevada). Flowering in spring.	Low.	Yes. Although suitable parameters may be present within Lincoln County, Nevada, it is unlikely the species would occur with the 2-mile transmission line corridors.	NNHP 2001.
Pinnate springparsley	<i>Cymopterus beckii</i>	USFS-Dixie NF, USFS-Manti-LaSal NF	Range: Endemic to San Juan and Wayne counties in Utah; and Navajo Nation Tribal Lands in Arizona. Habitat: Pinyon-juniper, mountain brush, ponderosa pine/Manzanita, conifer/oak, and Douglas-fir communities in sandy or stony places, often in rock crevices and near cliff bases on north and east exposures. Elevation range 5,600 to 7,500 feet amsl. Flowering April to July.	None.	Yes. The species is endemic to San Juan and Wayne counties, Utah, which are not crossed by the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006.
Uinta Basin springparsley	<i>Cymopterus duchesnesis</i>	BLM-CO	Range: Known only from Duchesne and Uintah counties, Utah; and in adjacent Rio Blanco, Moffat, and Mesa counties, Colorado. Habitat: Found in cold desert shrub, sagebrush, and juniper communities on sandy clay and clay semi-barrens of the Mancos and Morrison shales (i.e., Morrison, Uintah, Wasatch and Green River formations). Elevation range 4,700 to 6,800 feet amsl. Flowering April and May.	<u>Region I</u> : Moderate. The species has been documented approx. 25 miles southwest of the 2-mile transmission line corridor in Rio Blanco County, Colorado. Potential habitat for the species may be present within the 2-mile transmission line corridors in Moffat County, Colorado. <u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor in Mesa County, Colorado. Potential habitat may be present both within the 2-mile transmission line corridor and the analysis area in Mesa and Rio Blanco counties, Colorado.	No.	BLM 2010; CNHP 2002; NatureServe 2012.
Cedar Breaks biscuitroot	<i>Cymopterus minimus</i>	USFS-Dixie NF	Range: Endemic to Garfield, Iron, and Kane counties, Utah. Habitat: Bristlecone pine, ponderosa pine, and spruce-fir communities on Claron Limestone. Elevation range 8,000 to 10,400 feet amsl. Flowering July to August.	None.	Yes. The species occurs at a higher elevation than that crossed by the 2-mile transmission line corridors within Iron County, Utah.	NatureServe 2012; UNPS 2006.
Brownie ladyslipper	<i>Cypripedium fasciculatum</i>	USFS-Ashley NF	Range: Known from Cache, Daggett, Salt Lake, Uintah, and Summit counties, Utah; and also Montana, Idaho, Wyoming, Colorado, Wahsington, Oregon, and California. Habitat: Duff in spruce-fir or lodgepole pine forests and along shaded streams. Elevation range 8,000 to 9,000 feet amsl. Flowering June to July.	None.	Yes. The species is not known to occur within the southern extent of the Ashley NF within Wasatch and Duchesne counties, Utah and is, therefore, unlikely to occur within the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006.
Stream stippleback lichen	<i>Dermatocarpon luridum</i>	BLM-NV	Range: Known distribution includes Washington, Oregon and California. Although the species is broadly distributed globally, the species is not known to occur within Nevada, Habitat: Grows on rocks, small boulders, and bedrock, submerged or seasonally emergent, adjacent to or in clear mountain streams, on seepy terraces, and in streams and rivers with red alder, Douglas-fir, western hemlock and riparian vegetation ranging from young stands to old-growth, and in streams in alpine meadows. Elevation range 1,000 to 6,500 feet amsl.	None.	Yes. The 2-mile transmission line corridors do not cross the geographic range of the species.	NatureServe 2012.
Wyoming tansymustard	<i>Descurainia torulosa</i>	BLM-WY	Range: Endemic to the southern Absaroka Range in Fremont, Park, and Teton counties, Wyoming; and the Rock Springs Uplift in Sweetwater County, Wyoming. Total population estimated at approx. 1,500 individuals. Habitat: Found at the base of volcanic breccias or sandstone cliffs, in sandy soil under slight overhangs, in cavities, in volcanic rock or on ledges. Elevation range 7,700 to 10,500 feet amsl. Flowering period unknown.	<u>Region I</u> : Moderate: The species has been documented approx. 7 miles northwest of the Pio-Springs and approx. 6 miles west of the Shell Creek ground electrode sites in Sweetwater County, Wyoming. Potential habitat for the species may be present within the aforementioned ground electrode sites in Sweetwater County, Wyoming.	No.	WYNDD 2009.
Gold Butte moss	<i>Didymodon nevadensis</i>	BLM-NV	Range: Known within Clark County, Nevada. Habitat: On or near gypsiferous deposits and outcrops or limestone boulders, especially on east to north facing slopes of loose uncompacted soil often associated with other mosses and lichens. Elevation range 1,310 to 2,315 feet amsl. Flowering late-winter to spring (i.e., October-April).	<u>Regions III and IV</u> : Low. Potential habitat for the species may be present within the 2-mile transmission line corridors near Las Vegas and Lake Mead, Nevada.	No.	NNHP 2001.

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Rockcress draba	<i>Draba globosa</i> (<i>Draba densifolia</i> var. <i>apiculata</i>)	USFS-Ashley NF, USFS-Uinta-Wasatch-Cache NF	Range: Known within Duchesne, Juab, Salt Lake, and Summit counties, Utah; Gunnison and Lake counties, Colorado; and also Wyoming, Idaho, and Montana. Total population estimated at approx. 40 individuals. Habitat: Alpine meadows, granitic talus slopes, and rock crevices. Elevation range 11,500 to 12,500 feet amsl. Flowering June to August.	None.	Yes. The species occurs at a higher elevation than that crossed by the 2-mile transmission line corridors within Duchesne counties, Utah.	CNHP 2002; NatureServe 2012.
Maguire draba	<i>Draba maguirei</i>	USFS-Uinta-Wasatch-Cache NF	Range: Endemic to Cache County, Utah. Habitat: Open areas in spruce and fir forests with substrates typically comprised of dolomite. Elevation range 5,500 to 9,500 feet amsl. Flowering June to July.	None.	Yes. The species is endemic to Cache County, Utah which is not crossed by the 2-mile transmission line corridors.	CPC 2010; UNPS 2006.
Creeping draba	<i>Draba sobolifera</i>	USFS-Dixie NF, USFS-Fishlake NF	Range: Endemic to the Tushar Mountains of Beaver and Piute counties, Utah. Habitat: Alpine tundra and spruce-fir communities in igneous gravels and talus. Elevation range 10,000 to 12,100 feet amsl. Flowering July to August.	None.	Yes. The species occurs at a higher elevation and in very limited geographic range than that crossed by the 2-mile transmission line corridors within Beaver County, Utah.	NatureServe 2012; UNPS 2006.
Chalk liveforever	<i>Dudleya pulverulenta</i>	NPS-Lake Mead NRA	Range: Known with Clark and Nye counties, Nevada; and also within Arizona, California, and possibly Utah. Habitat: Habitat parameters unknown. Elevation range 2,100 to 5,512 feet amsl. Flowering period February to June.	None.	Yes. Based on agency consultation and lack of suitable habitat parameters, it is unlikely this species would occur within the 2-mile transmission line corridors.	NNHP 2001; NPS 2012.
Dune wildrye	<i>Elymus simplex</i> var. <i>luxurians</i>	BLM-WY	Range: Known only from the upper Green River Basin in Sweetwater County, Wyoming. No population estimates available. Habitat: Drifting sand dunes. Elevation at approx. 7,130 feet amsl.	Low.	Yes. Although the species has been documented approx. 37 miles northwest of the 2-mile transmission line corridor; it is unlikely the species would be present within the 2-mile transmission line corridor in Sweetwater County, Wyoming based on the species narrow and limited geographic range and lack of suitable habitat.	WYNDD 2009.
Silverleaf sunray	<i>Enceliopsis argophylla</i>	NPS-Lake Mead NRA; BLM-NV	Range: Restricted to the Lake Mead area within Clark County, Nevada; and also known in Arizona and Utah. Habitat: Dry, open, relatively barren areas on gypsum badlands, volcanic gravels, loose sands in the creosote-bursage zone. Elevation range 1,165 to 2,380 feet amsl. Flowering continually.	<u>Regions III and IV</u> : High. The species has been documented within, and adjacent to, the NPS-Lake Mead NRA and within the 2-mile transmission line corridor in Clark County, Nevada. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Clark County, Nevada.	No.	NNHP 2001; NPS 2012.
Ash Meadows sunray	<i>Enceliopsis nudicaulis</i> var. <i>corrugata</i>	BLM-NV	Range: Occurs within the Ash Meadows area within Nye County, Nevada; and also possibly in California. Habitat: Dry to somewhat moist, open, hard, whitish, strongly alkaline silty to clay soils, often on or near low calcareous outcrops, in spring and seep areas in the creosote-bursage and shadscale zones with shadscale saltbush, alkali goldenbush, saltgrass, and broom snakeweed. Elevation range 2,200 to 2,360 feet amsl. Flowering early spring.	None.	Yes. The species is endemic to Nye County, Nevada, which is not crossed by the 2-mile transmission line corridors.	NatureServe 2012; NNHP 2001.
Nevada willowherb	<i>Epilobium nevadense</i>	USFS-Fishlake NF, BLM-UT, BLM-NV	Range: Known within Iron, Millard, and Washington counties; and within the Charleston Mountains in Clark, Lincoln, and Eureka counties, Nevada. Habitat: Slopes with limestone outcrops or talus associated with singleleaf pinyon and ponderosa pine. Elevation range 6,000 to 8,930 feet amsl. Flowering July to September.	<u>Regions II and III</u> : Moderate. The species has been documented adjacent to the 2-mile transmission line corridors in Millard and Washington counties, Utah. Based on the presence of suitable elevation range, vegetation cover types, and soil substrate, potential habitat for the species may be present within the 2-mile transmission line corridors in Washington, Iron, Juab, and Millard counties, Utah; and Lincoln County, Nevada.	No.	NatureServe 2012; NNHP 2001; UNPS 2006.

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Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Antelope Canyon goldenbush	<i>Ericameria cervina</i>	BLM-NV	Range: Known within Clark and Lincoln counties, Nevada; and also in Utah and Arizona. Habitat: Rock crevices and talus in shadsacale and Douglas-fir-bristlecone pine communities. Often on calcareous substrates and less commonly on ash flow tuff. Elevation range 3,120 to 6,230 feet amsl. Flowering summer to early-fall.	<u>Region III</u> : Low. Although no known populations have been documented within or adjacent to the 2-mile transmission line corridors, suitable habitat parameters may be present within the 2-mile transmission line corridors in Lincoln County, Nevada.	No.	NatureServe 2012; NNHP 2001.
Greenwood goldenbush	<i>Ericameria lignumviridis</i> (<i>Haplopappus lignumviridis</i>)	BLM-UT	Range: Endemic to Sevier County, Utah. Habitat: According to UNPS, this species occupies crevices in igneous rock outcrops and cliffs above streams. According to FNA and NatureServe, this species occupies riparian areas with willow, nettle, conyza, and other bottomland plant species. Elevation range 6,150 to 6,250 feet amsl. Flowering August to September.	Low.	Yes. Although sparse patches of appropriate elevation range are present, it is unlikely the species would be present within the 2-mile transmission line corridors in Sevier County, Utah.	UNPS 2006; FNA 1995; NatureServe 2012.
Abajo daisy	<i>Erigeron abajoensis</i>	USFS-Manti-LaSal NF	Range: Endemic to Garfield, Piute, San Juan, and Sevier counties, Utah. Habitat: Rocky or gravelly open slopes in evergreen communities typically composed of sagebrush, pinyon-juniper, ponderosa pine, or spruce-fir on limestone and igneous substrates. Elevation range 6,562 to 11,483 feet amsl. Flowering July to August.	Low.	Yes. Although potential habitat may be present based on the presence of suitable elevation range, vegetation cover types, and soil substrate, it is unlikely this species would occur within the 2-mile transmission line corridors within the Manti-LaSal NF.	FNA 1994; NatureServe 2012.
Carrington daisy	<i>Erigeron carringtonae</i>	USFS-Manti-LaSal NF	Range: Endemic to Emery, Sanpete, and Sevier counties, Utah. Habitat: Meadows and escarpment margins on Flagstaff Limestone. Elevation range 10,000 to 11,000 feet amsl. Flowering July to early August.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor in Emery County, Utah. Potential habitat for the species may be present both within and outside of the 2-mile transmission line corridor within the USFS Manti-LaSal NF in Emery County, Utah.	No.	UNPS 2006.
Cronquist daisy	<i>Erigeron cronquistii</i>	USFS-Uinta-Wasatch-Cache NF	Range: Endemic to the Bear River Range in Cache County, Utah. Habitat: Crevices in limestone cliffs and talus. Elevation range 5,750 to 8,500 feet amsl. Flowering May to August.	None.	Yes. The species is endemic to Cache County, Utah which is not crossed by the 2-mile transmission line corridors.	UNPS 2006.
Kachina daisy	<i>Erigeron kachinensis</i>	USFS-Manti-LaSal NF; BLM-CO	Range: Endemic to the Colorado Plateau within White and Dark Canyons and Elk Ridge within San Juan County, Utah; and the Dolores River drainage within Montrose County, Colorado. Habitat: Habitats range from low elevation seeps and hanging gardens to high elevation mesic sandstone outcrops in aspen and ponderosa pine communities on saline soil. Elevation range 4,800 to 8,200 feet amsl. Flowering late April to August.	None.	Yes. The species is endemic to San Juan County, Utah and Montrose County, Colorado which are not crossed by the 2-mile transmission line corridors.	CNHP 2002; NatureServe 2012; UNPS 2006.
Maguire daisy	<i>Erigeron maguirei</i>	USFS-Fishlake NF; BLM-UT	Range: Endemic to Emery, Garfield, and Wayne counties, Utah. Habitat: Cool, mesic wash bottoms and dry, partially shaded slopes of eroded sandstone cliffs within mountain shrub, Douglas-fir, ponderosa pine, and the lower limits of the juniper woodland communities on the Wingate, Chinle, and Navajo Sandstone formations. Elevation range 5,400 to 7,100 feet amsl. Flowering June to July.	<u>Region II</u> : High. The species has been documented within and immediately adjacent to the 2-mile transmission line corridor in Emery County, Utah. Based on the presence of suitable vegetation cover types, elevation range, and soil substrate, potential habitat for the species may be present within the 2-mile transmission line corridor in Emery County, Utah. Based on detailed habitat modeling, suitable habitat was not identified within the 2-mile transmission line corridors within the USFS-Fishlake NF.	No.	BLM 2010; NatureServe 2012; UNPS 2006.
LaSal daisy	<i>Erigeron mancus</i>	USFS-Manti-LaSal NF	Range: Endemic to the LaSal Mountains of Grand and San Juan counties, Utah. Habitat: Subalpine fir, alpine grass/sedge and forb communities and found frequently in rockstripes. Elevation range 10,000 to 12,200 feet amsl. Flowering July to August.	None.	Yes. The species occurs at a higher elevation than that crossed by the 2-mile transmission line corridors within Grand County, Utah.	UNPS 2006.
Sheep fleabane	<i>Erigeron ovinus</i>	BLM-NV	Range: Known only from the Sheep and Groom ranges and Mount Irish within Clark and Lincoln counties, Nevada. Habitat: Crevices in carbonate cliffs and ridgeline outcrops in the pinyon-juniper and montane conifer zones. Elevation range 3,600 to 8,400 feet amsl. Flowering late June.	Low.	Yes. The species is only known within the Sheep and Groom Ranges and Mount Irish, which are not crossed by the 2-mile transmission line corridors.	NNHP 2001.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Untermann daisy	<i>Erigeron untermanii</i>	USFS-Ashley NF, BLM-UT	Range: Endemic to Duchesne County, Utah. Habitat: Pinyon-juniper, mountain mahogany, limber and bristlecone pine, and sagebrush communities on calcareous shale, sandstone, and siltstone of the Uinta and Green River formations. Elevation range 7,000 to 9,400 feet amsl. Flowering May to June.	<u>Region II</u> : High. The species has been documented both within and outside of the USFS Ashley NF within the 2-mile transmission line corridor in Duchesne County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridors within the USFS-Ashley NF and on BLM lands in Duchesne County, Utah.	No.	BLM 2008; NatureServe 2012; UNPS 2006.
Single-stemmed wild buckwheat	<i>Eriogonum acaule</i>	BLM-CO	Range: Known within Moffat County, Colorado; and also in eight counties in Wyoming. Habitat: Ridge tops, chalky or ashy barrens, and clay flats. Elevation range 5,680 to 6,820 feet amsl. Flowering June to July.	<u>Regions I and II</u> : Low. Based on the limited data available for the species it is possible that potential habitat may be present within the 2-mile transmission line corridors in Moffat County, Colorado.	No.	NatureServe 2012.
Widtsøe buckwheat	<i>Eriogonum aretioides</i>	USFS-Dixie NF	Range: Endemic to Garfield County, Utah. Habitat: Bristlecone pine, ponderosa pine, Douglas-fir, and Rocky Mountain juniper communities on the Pink Limestone member of the Claron Formation. Elevation range 7,400 to 8,700 feet amsl. Flowering late May/June to August.	None.	Yes. The species is endemic to Garfield County, Utah which is not crossed by the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006.
Kaye's wild buckwheat	<i>Eriogonum artificis</i>	BLM-UT	Range: Known from one location in Beaver County, Utah. Habitat: Sandy to somewhat gravelly, volcanic slopes in mixed grassland and sagebrush communities, and juniper woodlands. Elevation range 6,000 to 6,040 feet amsl. Flowering August to September.	Low.	Yes. Although suitable vegetation cover types and soil substrate are present, it is unlikely this species would occur within the 2-mile transmission line corridors given the species-specific elevational range.	University of Maryland 2003.
Elsinore buckwheat	<i>Eriogonum batemanii</i> var. <i>ostlundii</i>	USFS-Fishlake NF	Range: Endemic to Piute and Sevier counties, Utah. Habitat: Shadscale, mixed desert shrub, sagebrush, juniper and ponderosa pine communities on igneous gravels. Elevation range 5,500 to 6,500 feet amsl. Flowering July to September.	<u>Region II</u> : Moderate. Based on the presence of suitable vegetation cover types, elevation range, and soil substrate, potential habitat for the species may be present within the 2-mile transmission line corridor in Sevier County, Utah within the USFS-Fishlake NF.	Yes.	UNPS 2006.
Pahrump Valley buckwheat	<i>Eriogonum bifurcatum</i>	BLM-NV	Range: Known within Clark and Nye counties, Nevada; and also in California. The distribution, as currently understood, straddles the Nevada/California state line, from Stewart Valley southeastward to Mesquite Valley. Habitat: Barren, saline, heavy clay or silty hardpan soils on and near dry playa margins, and on adjacent shore terraces and stabilized sand dunes, with <i>Atriplex confertifolia</i> , <i>A. hymenelytra</i> , <i>Prosopis glandulosa</i> var. <i>torreyana</i> , <i>Suaeda torreyana</i> , and <i>Grayia spinosa</i> . Elevation range 2,300 to 2,800 feet amsl. Flowering mid May to mid June.	Low.	Yes. Based on the species limited distribution, it is unlikely the species would be found within the 2-mile transmission line corridors.	NNHP 2001.
Logan buckwheat	<i>Eriogonum brevicaule</i> var. <i>loganum</i>	USFS-Uinta-Wasatch-Cache NF	Range: Known within northern Utah in Box Elder, Cache, and Morgan counties. Habitat: Sagebrush-bunchgrass communities to sagebrush-subalpine conifer woodlands on rocky outcrops on sandy, gravelly, or limestone slopes. Elevation range 4,400 to 10,175 feet amsl. Flowering May to August.	None.	Yes. The species is known only within Box Elder, Cache, and Morgan counties, Utah, which are not crossed by the 2-mile transmission line corridors.	UNPS 2006.
UNK	<i>Eriogonum brevicaule</i> var. <i>mitophyllum</i>	BLM-UT	Range: Known along Lost Creek near Sigurd, Utah in Sevier County, Utah. Habitat: Saltbush and juniper communities on Arapien Shale.	<u>Region II</u> : Low. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Sevier County, Utah.	No.	BLM 2011.
Darin buckwheat	<i>Eriogonum concinnum</i>	BLM-NV	Range: A Nevada endemic, known within Nye County, Nevada. Habitat: Deep loose sand derived from, or in crevices of light-colored tuff or other volcanic rocks, often at bases of cliffs or outcrops, in pinyon-juniper, sagebrush, mixed-shrub, Blackbrush, and shadscale zones. Possibly dependent on sand dunes and deep sand. Elevation range 2,525 to 6,640 feet amsl. Flowering late-spring to early-fall.	None.	Yes. The species is endemic to Nye County, Nevada, which is not crossed by the 2-mile transmission line corridors.	NNHP 2001.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Grand buckwheat	<i>Eriogonum contortum</i>	BLM-CO	Range: Known within Mesa and Garfield counties, Colorado; and Grand County, Utah. Habitat: Shadscale and saltbrush communities on Mancos shale. Elevation range 4,200 to 5,100 feet amsl. Flowering May to August.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor in Garfield and Mesa counties, Colorado. Potential habitat for the species may be present both within the 2-mile transmission line corridor and analysis area in Garfield and Mesa counties, Colorado.	No.	CNHP 2002; NatureServe 2012.
Las Vegas buckwheat	<i>Eriogonum corymbosum</i> var. <i>nilesii</i>	FC (NV), BLM-NV, NV State CE#	Range: Known within Clark County and Lincoln County (near Toquop Wash), Nevada; and also in Washington County, Utah. Habitat: On and near gypsum soils, often forming low mounds or outcrops in washes and drainages, or in areas of generally low relief, often with <i>Arctomecon californica</i> and other gypsum-tolerant species, surrounded by <i>Ambrosia dumosa</i> , <i>Stanleya pinnata</i> , <i>Atriplex canescens</i> , <i>Ephedra torreyana</i> , <i>Larrea tridentata</i> , <i>Acacia greggii</i> , <i>Suaeda torreyana</i> , and <i>Psoralea fremontii</i> . Elevation range 1,900 to 3,839 feet amsl. Flowering August to November.	<u>Region III (Nevada)</u> : High. The species has been documented within the 2-mile transmission line corridors in Clark and Lincoln counties, Nevada. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Lincoln County, Nevada. <u>Region III (Utah)</u> : Moderate. The species has been documented approximately 26 miles east of the 2-mile transmission line corridor in Washington County, Utah. Although unlikely, potential habitat may be present within the 2-mile transmission line corridors in Washington County, Utah. <u>Region IV</u> : Moderate. The species has been documented approx. 9 miles west of the 2-mile transmission line corridor in Clark County, Nevada. Potential habitat for the species may be present within the 2-mile transmission line corridors in Clark County, Nevada.	No.	Logan Simpson Design 2013; NatureServe 2012; NNHP 2001; Styles 2010; USFWS 2012a, 2010a.
Flat Top buckwheat	<i>Eriogonum corymbosum</i> var. <i>smithii</i>	BLM-UT	Range: Endemic to the Colorado Plateau within Emery and Wayne counties, Utah. Habitat: Found on the Entrada Formation and seleniferous stabilized dunes associated with purple-sage, matchweed, Ephreda/Indian ricegrass, desert shrub, and rabbitbrush communities. Elevation range 4,500 to 5,600 feet amsl. Flowering August to September.	Low.	Yes. Although potential habitat may be present within Emery County, Utah based on the presence of suitable elevation and soil substrate, it is unlikely the species would occur within the 2-mile transmission line corridors.	BLM 2010; UNPS 2006.
Ephedra buckwheat	<i>Eriogonum ephredoides</i>	BLM-CO	Range: Known within Rio Blanco and Moffat counties, Colorado; and adjacent Uintah County, Utah. Habitat: Found in juniper and sagebrush-grass communities on white shale of the Green River Shale Formation. Elevation range 5,600 to 6,030 feet amsl. Flowering June through late July/September.	<u>Regions I and II</u> : Moderate. The species has been documented approx. 5 miles south of the 2-mile transmission line corridor in Rio Blanco County, Colorado. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Moffat and Rio Blanco counties, Colorado.	No.	BLM 2010; NatureServe 2012.
Clokey buckwheat	<i>Eriogonum heermannii</i> var. <i>clokeyi</i>	BLM-NV	Range: Known within Clark and Nye counties, Nevada. Habitat: Carbonate outcrops, talus, scree, and gravelly washes and banks in the creosote-bursage, shadscale, and blackbrush zones. Elevation range 4,000 to 6,000 feet amsl. Flowering late spring to summer.	Low.	Yes. Although known populations have been documented approx. 25 miles west of the 2-mile transmission line corridor in Clark County, Nevada, it is unlikely that potential habitat is present within the 2-mile transmission line corridors based on the lack of suitable habitat parameters.	NNHP 2001.
Ibex buckwheat	<i>Eriogonum nummulare</i> var. <i>ammophilum</i>	BLM-UT	Range: Endemic to Juab and Millard counties, Utah. Habitat: Shadscale, horsebrush, winterfat, rabbitbrush, ephedra, and pinyon-juniper communities on alluvium and sandy soil. Elevation range 4,800 to 6,000 feet amsl. Flowering late June to mid August.	<u>Regions II and III</u> : Moderate. The species has been documented approx. 25 miles west of the 2-mile transmission line corridor in Millard County, Utah; and approx. 32 miles northwest of the 2-mile transmission line corridor in Juab County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Millard County, Utah.	No.	UNPS 2006.
Wirestem buckwheat	<i>Eriogonum pharnaceoides</i> var. <i>cervinum</i>	BLM-UT	Range: Endemic to Iron and Washington counties, Utah. Habitat: Pinyon-juniper, oakbrush, and ponderosa pine communities. Elevation range 6,000 to 8,700 feet amsl.	<u>Region III</u> : High. The species has been documented within and immediately adjacent to the 2-mile transmission line corridor in Washington County, Utah. Potential habitat may be present both within the 2-mile transmission line corridor and the analysis area in Washington County, Utah.	No.	UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Scarlet buckwheat	<i>Eriogonum phoenicium</i> (<i>Eriogonum microthecum</i> var. <i>phoeniceum</i>)	BLM-UT, BLM-NV	Range: Endemic to the Wah Wah Mountains within Millard County, Utah; and the Mahogany Mountains of Lincoln County, Nevada. Habitat: Found in pinyon-juniper woodlands and mountain mahogany communities on gray-white tuffaceous soils associated with sagebrush and <i>Eriogonum microthecum</i> . Elevation range 5,700 to 6,800 feet amsl. Flowering June to September.	Utah – None. Nevada - Low.	Utah – Yes. The species is endemic to the Wah Wah Mountains, which are not crossed by the 2-mile transmission line corridors. Nevada - Yes. Based on the species limited geographic range, elevation range, and substrate, potential habitat may be present in Lincoln County, Nevada; however, it is unlikely the species would be found within the 2-mile transmission line corridors in Lincoln, Nevada.	NNHP 2001; UNPS 2006.
Kaye H. Thorne's buckwheat	<i>Eriogonum spathulatum</i> var. <i>kayeae</i>	BLM-UT	Range: Known within the Squaw Peak area located south of the San Francisco Mountains in Beaver County, Utah. Habitat: Species-specific habitat parameters are unknown based on limited knowledge of the species.	None.	Yes. Based on the geographic range of the species, it is unlikely that this species would occur within the 2-mile transmission line corridors.	BLM 2011.
Frisco buckwheat	<i>Eriogonum soredium</i>	FC (UT), BLM-UT	Range: Endemic to the San Francisco Mountains within the Great Basin in Beaver County, Utah. Habitat: Restricted to soils derived from Ordovician limestone outcrops in the San Francisco Mountains, the species is typically found on sparsely vegetated exposed slopes in pinion juniper and sagebrush communities. Elevation range 6,200 and 7,228 feet amsl. Flowering June to September.	None.	Yes. The species is endemic to the San Francisco Mountains, Utah which are not crossed by the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006; USFWS 2012a, 2011b.
Woodside buckwheat	<i>Eriogonum tumulosum</i>	BLM-CO	Range: Known within Moffat County, Colorado; and also in Duchesne, Emery, and Uintah counties, Utah. Habitat: Mixed desert shrub and pinyon-juniper woodlands on rocky outcrops and sedimentary gravels or clays. Elevation range 5,800 to 6,300 feet amsl. Flowering late April to early July.	<u>Regions I and II</u> : Low. Based on the presence of suitable vegetation cover types, elevation range, and soil substrate, potential habitat for the species may be present within the 2-mile transmission line corridors in Moffat County, Colorado.	No.	CNHP 2002; NatureServe 2012.
Duchesne buckwheat	<i>Eriogonum viridulum</i>	BLM-CO	Range: Currently known only from Duchesne and Uintah counties, Utah. Known from potentially extirpated populations within Moffat County, Colorado. Habitat: Sandy or silty flats or clay slopes and hills, saltbush or sagebrush communities, pinyon-juniper woodlands. Elevation range 4,590 to 7,217. Flowering July to October.	Low.	Yes. Although potential habitat may be present, it is unlikely the species would occur within the 2-mile transmission line corridors based on the range of known occurrences.	NatureServe 2012.
Sticky buckwheat	<i>Eriogonum viscidulum</i>	NPS-Lake Mead NRA; NV State CE, BLM-NV	Range: Known within Clark and Lincoln counties, Nevada; and also in Arizona. Habitat: Dependent on sand dunes or deep sands, this species occupies deep loose sandy soils in washes, flats, roadsides, steep aeolian slopes, and stabilized dune areas associated with <i>Ambrosia dumosa</i> , <i>Larrea tridentata</i> , <i>Pleuraphis rigida</i> , <i>Krameria parvifolia</i> , <i>Achnatherum hymenoides</i> , <i>Tamarix ramosissima</i> , <i>Tessaria sericea</i> , <i>Astragalus geyeri</i> var. <i>triquetrus</i> , <i>A. sabulonum</i> , <i>Eriogonum trichopes</i> , <i>Ephedra torreyana</i> , <i>Dicoria canescens</i> , <i>Pediomelum</i> , <i>Croton californicus</i> , <i>Sporobolus cryptandrus</i> , <i>Psoralea fremontii</i> , <i>Abronia</i> , and <i>Tiquilia</i> . Elevation range 1,200 to 2,200 feet amsl. Flowering April to May.	<u>Regions III and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark County, Nevada. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Clark and Lincoln Counties, Nevada. Based on agency consultation and suitable habitat parameters, this species is not likely to occur within the 2-mile transmission line corridors within the NPS-Lake Mead NRA.	No.	NatureServe 2012; NNHP 2001; NPS 2012; USFWS 2010a.
Utah spurge	<i>Euphorbia nephradenia</i>	BLM-UT	Range: Endemic to the Colorado Plateau within Emery, Garfield, Kane, and Wayne counties, Utah; and also in Colorado. Habitat: Mat saltbush, blackbrush, ephedra, mixed sandy desert shrub, and grassland communities on dark clay hills, blow sand and stabilized dunes mainly from the Tropic Shale and Entrada formations. Elevation range 3,800 to 4,800 feet amsl. Flowering June to August.	<u>Region II</u> : Moderate. The species has been documented approx. 2.2 miles south of the 2-mile transmission line corridor in Emery County, Utah. Based on agency consultation and the presence of suitable vegetation cover types, elevation range, and soil substrate, potential habitat for the species may be present within the 2-mile transmission line corridors in Emery County, Utah.	No.	BLM 2011; UNPS 2006.
Mojave barrel cactus	<i>Ferocactus cylindraceus</i> var. <i>lecontei</i>	NPS-Lake Mead NRA	Range: Known in Clark County, Nevada, and also in California, Arizona, Utah, and Mexico. Habitat: Gravelly or rocky hillsides, canyon walls, alluvial fans, and wash margins or sandy flats in desert. Elevation range 2,460 to 4,921. Flowering period unknown.	None.	Yes. Based on agency consultation and lack of suitable habitat parameters within the 2-mile transmission line corridors, it is unlikely this species would occur within the 2-mile transmission line corridors.	EOL 2012; NPS 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Ackerman's green gentian	<i>Frasera ackermaniae</i>	BLM-UT	Range: Restricted endemic known only from Uintah County, Utah. Habitat: Clay semi-barrens of the Chinle Formation with scattered <i>Juniperus osteosperma</i> . Elevation range 5,830 to 6,000 feet amsl. Flowering June.	None.	Yes. Although the species has been documented approx. 7 miles northwest of the 2-mile transmission line corridor, it is unlikely this species would occur within the 2-mile transmission line corridors given the absence of the species-specific geological formation and elevational range.	BLM 2010; UNPS 2006.
Sunnyside green gentian	<i>Frasera gypsicola</i>	BLM-NV; NV State CE	Range: Known within Nye and the White River Valley east of the Egan Range in White Pine counties, Nevada; and also in Utah. Habitat: Open, dry, whitish, alkaline, often salt-crusted and spongy silty-clay soils on calcareous flats and barrens, with little if any gypsum content, in cushion-plant associations surrounded by sagebrush, greasewood, and occasionally barberry and swamp cedar communities with <i>Artemisia pygmaea</i> , <i>A. tridentata</i> , <i>Eriogonum shockleyi</i> , <i>Physaria chambersii</i> , <i>Cryptantha welshii</i> , <i>Hymenopappus filifolius</i> , <i>Phlox tumulosa</i> , and <i>Lepidium nanum</i> . Elevation range 5,180 to 5,510 feet amsl. Flowering June to July.	None.	Yes. Although potential habitat may be present based on the presence of suitable vegetation cover types and soil substrate, it is unlikely this species would occur within the 2-mile transmission line corridors given the species narrow and limited geographic range	NatureServe 2012; NNHP 2001.
Tufted green gentian	<i>Frasera paniculata</i>	BLM-CO	Range: Known within Mesa County, Colorado; and also in southeast Utah, northeast Arizona, and northwest New Mexico. Habitat: Dry, deep, sandy soils in desert shrub and pinyon-juniper communities. Elevation range 3,700 to 6,500 feet amsl. Flowering June to early July.	<u>Region II</u> : Low. Based on the presence of suitable vegetation cover types and elevation range, potential habitat for the species may be present within the 2-mile transmission line corridor in Mesa County, Colorado.	No.	NatureServe 2012.
Utah gentian	<i>Gentianella tortuosa</i>	BLM-CO	Range: Known from Rio Blanco County, Colorado, central and southwest Utah, and southern Nevada. Habitat: Sagebrush through spruce-fir forests on shale outcrops of the Green River Formation. Elevation range 8,500 to 10,800 feet amsl. Flowering July to August.	Low.	Yes. Although the species has been documented approx. 20 miles east of the 2-mile transmission line corridor in Rio Blanco County, Colorado, it is unlikely the species would be present within the 2-mile transmission line corridors based on the lack of suitable vegetation cover types and elevation range parameters.	CNHP 2002; NatureServe 2012.
Wonderland Alice flower	<i>Gilia caespitosa</i>	USFS-Dixie NF, USFS-Fishlake NF	Range: Endemic to Wayne County, Utah. Habitat: On Navajo and Wingate sandstone in crevices, Carmel Limestone formations, detrital slopes, and (infrequently) in sandy wash bottoms within open pinyon-juniper communities, often mixed with mountain brush, sagebrush, or ponderosa pine. Elevation range 5,100 to 9,000 feet amsl. Flowering June to July.	None.	Yes. The species is endemic to Wayne County, Utah which is not crossed by the 2-mile transmission line corridors.	NatureServe 2012.
Narrowstem gilia	<i>Gilia stenothysra</i>	BLM-CO	Range: Known from Mesa and Rio Blanco counties, Colorado; and Carbon, Duchesne, Emery and Uintah counties, Utah. Habitat: Found in open places often in hills of pinyon-juniper, salt desert shrub, sagebrush, and mountain-mahogany communities in silty to gravelly loams and sandy or clay alkaline soils, sandstone and siltstone shale or clay barrens all of the Green River and Uinta formations. Elevation range 5,000 to 9,320 feet amsl. Flowering late May to June thru early July.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridors in Moffat and Rio Blanco counties, Colorado. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Moffat and Rio Blanco counties, Colorado.	No.	CNHP 2002; NatureServe 2012.
Smooth dwarf greasebush	<i>Glossopetalon pungens</i> var. <i>glabrum</i>	BLM-NV	Range: Restricted to the Spring and Sheep ranges within Clark County, Nevada; and also in California. Habitat: Crevices of carbonate cliffs and outcrops, generally avoiding southerly exposures, in the pinyon-juniper, mountain mahogany, and montane conifer zones. Elevation range 6,000 to 7,800 feet amsl. Flowering mid April to early July.	None.	Yes. The species is restricted to the Spring and Sheep ranges, which are not crossed by the 2-mile transmission line corridors.	NNHP 2001.

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Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Ash Meadows gumplant	<i>Grindelia fraxinoprattensis</i>	BLM-NV	Range: Endemic to the Ash Meadows area in Nye County, Nevada. Habitat: Open, flat, whitish, strongly alkaline, clay soils in or bordering meadows and shallow drainages near springs and seeps, sometimes in disturbed areas within the creosote-bursage and shadscale zones in ash-mesquite woodlands, shadscale scrub, or saltgrass meadows. Aquatic or wetland-dependent species. Elevation range 2,070 to 2,320 feet amsl. Flowering in summer.	None.	Yes. The species is endemic to the Ash Meadows of Nye County, Nevada, which are not crossed by the 2-mile transmission line corridors.	NatureServe 2012; NNHP 2001.
Sand cholla	<i>Opuntia pulchella</i> (<i>Grusonia pulchella</i>)	BLM-NV; NV State CY	Range: Known within Churchill, Douglas, Esmeralda, Lander, Lincoln, Mineral, Nye, Pershing, and Washoe counties, Nevada; and also in Arizona, California, and Utah. Habitat: Dependent on sand dunes or deep sands in Nevada, this species occupies sand of dunes, dry-lake borders, river bottoms, washes, valleys, and plains. Elevation range 3,950 to 6,300 feet amsl. Flowering May to June.	<u>Region III</u> : Low. Based on the elevation range and soil substrate, potential habitat for the species may be present within the 2-mile transmission line corridors in Lincoln County, Nevada.	No.	NNHP 2001.
Pine Valley goldenweed (Pine Valley goldenbush)	<i>Ericameria crispus</i> (<i>Haplopappus crispus</i>)	USFS-Dixie NF, BLM-UT	Range: Endemic to the Pine Valley Mountains in Washington County, Utah. Habitat: Ponderosa pine, manzanita, spruce-fir, mountain mahogany, and aspen communities. Elevation range 8,100 to 10,000 feet amsl. Flowering August to October.	Low.	Yes. Although the species has been documented approx. 5 miles southeast of the 2-mile transmission line corridor, potential habitat parameters (specifically elevation range) are not present within the 2-mile transmission line corridor. It is unlikely the species would occur within the 2-mile transmission line corridors.	UNPS 2006.
Cedar Breaks goldenbush	<i>Haplopappus zionis</i>	BLM-UT	Range: Endemic to Kane, Garfield, and Iron counties, Utah. Habitat: Spruce-fir and ponderosa pine communities, mostly on limestone members of the Cedar Breaks (Claron limestone) Formation. Elevation range 8,000 to 10,000 feet amsl. Flowering mid-July to August.	None.	Yes. Based on the species elevation range and geological formation requirements, it is unlikely the species would occur within the 2-mile transmission line corridors.	UNPS 2006.
Canyon sweetvetch	<i>Hedysarum occidentale</i> var. <i>canone</i>	USFS-Manti-LaSal NF	Range: Endemic to Carbon, Duchesne, and Emery counties, Utah. Habitat: Pinyon-juniper, serviceberry, maple, mountain mahogany, and sagebrush communities. Elevation range 6,400 to 8,300 feet amsl. Flowering late June to mid August.	<u>Region II</u> : Low. The species has been documented within the 2-mile transmission line corridor in Emery County, Utah; however, no populations were documented within the USFS-MantiLaSal NF. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area within the USFS Manti-LaSal NF in Emery County, Utah.	No.	NatureServe 2012; UNPS 2006.
Jones goldenaster	<i>Heterotheca jonesii</i>	USFS-Dixie NF	Range: Endemic to southern Utah in Washington, Kane, and Garfield counties, Utah. Habitat: Ponderosa pine, manzanita, Douglas-fir communities on sandstone or in sand. Elevation range 5,200 to 9,000 feet amsl. Flowering May to September.	Low.	Yes. Based on the species vegetation cover type association requirements, it is unlikely the species would occur within the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006.
Rock hymenoxys	<i>Hymenoxys lapidicola</i>	BLM-UT	Range: Endemic to Uintah County, Utah. Habitat: Rock crevices in ponderosa pine-manzanita and pinyon-juniper communities. Elevation range 6,000 and 8,100 feet amsl. Flowering period unknown.	None.	Yes. Although the species has been documented approx. 3.5 miles north of the 2-mile transmission line corridor in Uintah County, Utah, it is unlikely this species would occur given the lack of species-specific geological formations within the 2-mile transmission line corridor.	BLM 2010; UNPS 2006.
Red Rock Canyon aster	<i>Ionactis caelestis</i>	BLM-NV	Range: Endemic to the type locality in the Sandstone Bluffs -Red Rock Canyon area of the Spring Mountains, Clark County, Nevada. Habitat: Crevices in exposed, sparsely vegetated outcrops of Aztec sandstone in the pinyon-juniper and lower montane-conifer zones, with <i>Fendlerella utahensis</i> , <i>Poa secunda</i> , <i>Amelanchier utahensis</i> , <i>Hymenopappus filifolius</i> , <i>Arctostaphylos pungens</i> , <i>Arenaria congesta</i> var. <i>charlestonensis</i> , <i>Glossopetalon pungens</i> , <i>Pinus ponderosa</i> , and <i>P. monophylla</i> . Elevation at approx. 6,810 feet amsl. Flowering June.	None.	Yes. The species is endemic to the Spring Mountains, which are not crossed by the 2-mile transmission line corridors.	NatureServe 2012; NNHP 2001.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Rock purpusia	<i>Ivesia arizonica</i> var. <i>saxosa</i>	BLM-NV	Range: Endemic to Lincoln and Nye counties, Nevada. Habitat: Crevices of cliffs and boulders on volcanic and possibly carbonate rocks in the upper mixed-shrub, sagebrush, and pinyon-juniper zones. Elevation range 4,925 to 6,800 feet amsl. Flowering late spring to summer.	Low.	Yes. Although potential habitat may be present based on the presence of suitable elevation range, it is unlikely this species would occur within the 2-mile transmission line corridors based on the lack of species-specific substrate and vegetation community type habitat requirements.	NNHP 2001.
Jaeger ivesia	<i>Ivesia jaegeri</i>	BLM-NV	Range: Restricted to the Spring Mountains within Clark County, Nevada; and also in California. Habitat: Rock crevices of limestone cliffs and lower-angle bedrock outcrops. Elevation range 5,200 to 11,060 feet amsl. Flowering June to August.	None.	Yes. The species is endemic to the Spring Mountains, which are not crossed by the 2-mile transmission line corridors.	NNHP 2001.
Ash Meadows mousetails	<i>Ivesia kingii</i> var. <i>eremica</i>	BLM-NV	Range: Endemic to the Ash Meadows area in Nye County, Nevada. Habitat: Open, moist to saturated, whitish, heavy to chalky alkaline clay soils in meadows on flats, drainages, and bluffs near springs and seeps, in saltgrass meadow, shadscale, and ash-mesquite vegetation. Aquatic or wetland-dependent species. Elevation range 2,150 to 2,350. Flowering late-spring to early-fall.	None.	Yes. The species is endemic to the Ash Meadows of Nye County, Nevada, which are not crossed by the 2-mile transmission line corridors.	NatureServe 2012; NNHP 2001.
Ostler's ivesia	<i>Ivesia shockleyi</i> var. <i>osterli</i>	BLM-UT	Range: Endemic to the Wah Wah Mountains and Needle Range of western Beaver County, Utah. Habitat: Pinyon-juniper and adjacent ponderosa pine communities in crevices of quartzite and whitish outcrops. Elevation range 6,400 to 7,900 feet amsl. Flowering May to August.	None.	Yes. Although the species has been documented approx. 14 miles northwest of the 2-mile transmission line corridor in Beaver County, Utah, the species is endemic to the Wah Wah Mountains and Needle Range, which are not crossed by the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006.
Wasatch jamesia	<i>Jamesia americana</i> var. <i>macrocalyx</i>	USFS-Uinta-Wasatch-Cache NF	Range: Endemic to the Wasatch Mountains and the Deep Creek Mountains in Salt Lake, Wasatch, Juab, and Tooele counties, Utah. Habitat: Mountain brush and spruce/fir communities, including cracks and crevices of rocky slopes, in granite or limestone cliffs. Elevation range 5,700 to 12,000 feet amsl within the Wasatch Mountains; 5,500 to 6,700 feet amsl within the Deep Creek Mountains. Flowering June to mid August.	<u>Region II</u> : Moderate. The species has been documented approx. 14 miles northwest of the 2-mile transmission line corridor in Utah County, Utah. Based on the presence of suitable vegetation cover types, elevation range, and soil substrate, potential habitat for the species may be present within the 2-mile transmission line corridors in Utah, Juab, and Wasatch counties, Utah.	No.	NatureServe 2012; UNPS 2006.
Zion jamesia	<i>Jamesia americana</i> var. <i>zionis</i>	USFS-Dixie NF	Range: Endemic to Zion Canyon, and adjacent areas near Kanab, Utah within Iron, Kane, and Washington counties, Utah. Habitat: Pinyon-juniper, oak, and ponderosa pine communities in hanging gardens, sandstone crevices, and cliff sides and bases. Elevation range 3,900 to 8,200 feet amsl. Flowering June to July, sometimes into early August.	Low.	Yes. Based on the species limited distribution and geographic range, it is unlikely the species would be found within the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006.
Four-petal jamesia (waxflower)	<i>Jamesia tetrapetala</i>	BLM-UT, BLM-NV	Range: Endemic to the Great Basin within Millard County, Utah; and Nye, Lincoln, and White Pine counties, Nevada. Habitat: Found in crevices on Paleozoic limestone outcrops and talus at cliff bases associated with chokecherry, mountain mahogany, ephedra, and sagebrush. Elevation at approx. 7,600 feet amsl. Flowering June.	Low.	Yes. Although the species has been documented approx. 19 miles west of the 2-mile transmission line corridor in Millard County, Utah, it is unlikely that this species would be present within the 2-mile transmission line corridors based on the species geologic substrate and limited elevation range.	NNHP 2001; UNPS 2006.
Bullfrog Hills sweetpea	<i>Lathyrus hitchcockianus</i>	BLM-NV	Range: Possible or probable Nevada endemic, known within Nye County, Nevada. Habitat: Open, dry to slightly moist gravels of rocky drainage bottoms in canyons and on upper alluvial slopes, often at bases of boulders or canyon walls and climbing up through shrubs, in volcanic tuff or carbonate rocks in the mixed-shrub, sagebrush, and pinyon-juniper zones. Elevation range 4,000 to 6,900 feet amsl. Flowering in spring.	<u>Region III</u> : Low. Although no known populations have been documented within or adjacent to the Project corridors, suitable habitat parameters may be present within the 2-mile transmission line corridors in Lincoln County, Nevada.	No.	NNHP 2001.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Neeses' peppergrass	<i>Lepidium montanum</i> var. <i>neeseae</i>	USFS-Dixie NF	Range: Endemic to the Table Cliff Plateau in Garfield County, Utah. Habitat: Ponderosa pine and spruce-fir communities, mainly on the Pink and White members of the Wasatch Formation and Navajo Sandstone. Elevation range 7,700 to 8,800 feet amsl. Flowering May to June.	None.	Yes. The species is endemic to Garfield County, Utah which is not crossed by the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006.
Barneby ridgecress	<i>Lepidium barnebyanum</i>	FE (UT)	Range: Known only from three ridges near Indian Canyon on the Uintah and Ouray Reservations of the Ute Indian Tribe within the Uinta Basin, Duchesne County, Utah. Total population estimated at approx. 5,000 individuals. Habitat: Poorly developed soils derived from marly shale outcrops in a zone of interbedding geologic strata from the Uinta and Green River formations within pinyon-juniper communities dominated by other similar pulvinate plants. Elevation range 6,200 to 6,500 feet amsl. Flowering early May.	<u>Region II</u> : Moderate. Known populations have been documented approx. 2.5 miles northwest and 4 miles south of the 2-mile transmission line corridors in Duchesne County, Utah. Based on the presence of suitable elevation range, vegetation cover types and geologic formations, potential habitat for the species may be present within the 2-mile transmission line corridors in Duchesne County, Utah.	No.	BLM 20101; USFWS 2012a, 1993a.
Huber pepperplant	<i>Lepidium huberi</i>	BLM-UT	Range: Endemic to Uintah County, Utah. Habitat: Black sagebrush, mountain brush, ponderosa pine, lodgepole pine, and spruce-fir communities in sand or silty sands derived from the Shinarump Member of the Chinle, Park City, and Weber Sandstones. Elevation range 5,000 to 9,700 feet amsl. Flowering June to August.	None.	Yes. Based on the species geographic range and habitat parameters, it is unlikely the species would occur within the 2-mile transmission line corridors in Uintah County, Utah.	BLM 2010; UNPS 2006.
Ostler's peppergrass	<i>Lepidium ostleri</i>	FC (UT); BLM-UT	Range: Endemic to the San Francisco Mountains within the Great Basin in Beaver County, Utah. Habitat: Crevices in limestone outcrops typically in pinyon-juniper communities. Elevation range 5,800 to 6,800 feet amsl. Flowering June to early July.	None.	Yes. The species is endemic to the San Francisco Mountains, Utah which are not crossed by the 2-mile transmission line corridors.	UNPS 2006; USFWS 2012a, 2011.
Dudley Bluffs bladderpod	<i>Lesquerella congesta</i> (<i>Physaria congesta</i>)	FT (CO)	Range: Known within the northern Piceance Basin in Rio Blanco County, Colorado. Total population estimated at approx. 550,000 to 600,000 individuals. Habitat: Barren, white shale outcrops along downcutting drainages associated with the Piceance and Yellow creeks on the Thirteenmile Creek Tongue of the Green River; and Uintah formations surrounded by mesas with pinyon-juniper woodlands. Elevation range 6,140 to 6,644 feet amsl. Flowering period unknown.	None.	Yes. The species is endemic to the Piceance Basin which is not crossed by the 2-mile transmission line corridors.	CNHP 2002; NatureServe 2012; USFWS 2012a, 1990b.
Garrett bladderpod	<i>Lesquerella garrettii</i>	USFS-Uinta-Wasatch-Cache NF	Range: Endemic to the central Wasatch Mountains, known from Big Cottonwood Canyon to Provo Peak, within Salt Lake County, Utah. Habitat: Sparsely vegetated subalpine and alpine communities on semi-stable talus slopes and basin floors with rocky-gravelly soils and also in crevices along rocky ridges, and infrequently in pockets of exposed, coarse soil on slopes with large rocks and boulders. Elevation range 8,890 to 12,010 feet amsl. Flowering June to August.	Low.	Yes. Based on the species limited distribution and geographic range, it is unlikely the species would be found within the 2-mile transmission line corridors.	NatureServe 2012.
Large-fruited bladderpod	<i>Lesquerella macrocarpa</i>	BLM-WY	Range: Endemic to the Great Divide Basin in Fremont and Sweetwater counties; the Green River Basin in Lincoln County; and the Ross Butte in Sublette County, Wyoming. Total population estimated at approx. 52,000 individuals. Habitat: Sparsely vegetated areas on flat to gentle slopes on low hills, knolls, and colluvial fans on barren, fine-textured clays and shales often with gypsum and bentonite associated with <i>Atriplex gardneri</i> - <i>Elymus elymoides</i> communities. Elevation range 6,800 to 7,700 feet amsl. Flowering mid May to late June.	Low.	Yes. Although the species has been documented approx. 34 miles northwest of the 2-mile transmission line corridor, it is unlikely the species would be present within the 2-mile transmission line corridors in Sweetwater County, Wyoming based on the species narrow and limited geographic range and lack of suitable habitat.	WYNDD 2009.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Piceance bladderpod	<i>Lesquerella parviflora</i>	BLM-CO	Range: Endemic to the Piceance Basin within Rio Blanco, Garfield, and Mesa counties, Colorado. Habitat: Outcrops of the Green River Shale Formation on ledges and slopes of canyons in open areas of pinyon-juniper communities with soils of the Torriorthent Rock outcrop complex. Frequently associated species include <i>Pinus edulis</i> , <i>Juniperus osteosperma</i> , <i>Eriogonum</i> sp., <i>Cirsium</i> sp., <i>Astragalus lutosus</i> , <i>Cercocarpus</i> sp., <i>Galium coloradense</i> , <i>Oryzopsis hymenoides</i> , <i>Penstemon</i> sp., and <i>Machaeranthera</i> sp. Elevation range 6,200-8,600 feet amsl. Flowering June to July.	None.	Yes. The species is endemic to the Piceance Basin which is not crossed by the 2-mile transmission line corridors.	CNHP 2002; NatureServe 2012.
Maquire's bitterroot	<i>Lewisia maguirei</i>	BLM-NV	Range: Endemic to the Quinn Canyon and Grant ranges in Nye County, Nevada. Habitat: Dry, sparsely vegetated carbonate scree or shallow gravelly-clay soils on steep slopes and ridgelines of all aspects in the pinyon-juniper zone with desert fraseria, Torrey's milkvetch, and stemless fournerve daisy. Elevation range 7,360 to 8,280 feet amsl. Flowering late-spring.	None.	Yes. The species is endemic to Nye County, Nevada, which which is not crossed by the 2-mile transmission line corridors.	NNHP 2001.
Canyonlands lomatium (Widleaf bisquitroot)	<i>Lomatium latilobum</i>	BLM-UT, BLM-CO, USFS-Manti-LaSal NF	Range: Endemic to Grand and San Juan counties, Utah; and Mesa County, Colorado. Habitat: Rock crevices and sandy deposits of the Entrada and Navajo Sandstone Formations or the contact point of the Wingate and Chinle formations, often found in slot canyons and between fins within pinyon-juniper and desert shrub communities. General elevation range 4,050 to 7,250 feet amsl. In Utah, 5,000 to 6,000 feet amsl. In Colorado, 5,000 to 7,000 feet amsl. Flowering April to June.	None.	Yes. Although potential habitat may be present based on the presence of suitable vegetation cover types and elevation range, it is unlikely this species would occur within the 2-mile transmission line corridors based on the lack of species-specific geologic formation associations.	NatureServe 2012; UNPS 2006.
Scrub lotus	<i>Lotus argyraeus</i> var. <i>multicaulis</i>	BLM-NV	Range: Known within the Piute Wash and Ivanpah-Pahrump Valley watersheds within Clark County, Nevada. Habitat: Pinyon-juniper woodlands. Elevation range 3,900 to 4,925 feet amsl. Flowering period unknown.	None.	Yes. The species is only known within the Piute Wash and Ivanpah-Pahrump Valley watersheds, which are not crossed by the 2-mile transmission line corridors.	Jepson Flora Project 1993; NatureServe 2012.
Dolores rushpink (Dolores River skeletonplant)	<i>Lygodesmia grandiflora</i> var. <i>doloresensis</i> (<i>Lygodesmia doloresensis</i>)	BLM-UT	Range: Known within Grand County, Utah; and Mesa County, Colorado. Habitat: Juniper, sagebrush, rabbitbrush, and blackbrush communities in reddish alluvial soil. Elevation range 4,600 to 4,700 feet amsl. Flowering June.	Low.	Yes. Although potential habitat may be present based on the presence of suitable soil substrates and elevation range, it is unlikely this species would occur within the 2-mile transmission line corridors given the lack of species-specific vegetation cover type associations.	UNPS 2006.
Entrada rushpink (Entrada skeletonplant)	<i>Lygodesmia grandiflora</i> var. <i>entrada</i> (<i>Lygodesmia entrada</i>)	BLM-UT	Range: Endemic to Emery, Grand, and San Juan counties, Utah. Habitat: Mixed desert shrub and juniper communities. Elevation range 4,400 to 4,800 feet amsl. Flowering June.	<u>Region II:</u> Low. Based on agency consultation and the presence of suitable vegetation cover types and elevation range, potential habitat for the species may be present within the 2-mile transmission line corridors in Emery and Grand counties, Utah.	No.	BLM 2010; UNPS 2006.
Pioche blazingstar	<i>Mentzelia argillicola</i>	BLM-NV, BLM-UT	Range: Known only from a relatively small area in Lincoln County, Nevada, ranging from the northern end of Meadow Valley in the vicinity of Panaca to the southern end of Lake Valley on both sides of Patterson Wash north of Pioche; and an oil shale endemic from Sanpete and Sevier counties, Utah. Habitat: In Nevada, dry soft, silty clay soils on knolls and slopes with sparse vegetation consisting most notably of <i>Artemisia pygmaea</i> , <i>Eriogonum nummulare</i> , <i>Gutierrezia sarothrae</i> , and <i>Salvia dorrii</i> var. <i>dorrii</i> . In Utah, talus or scree slopes of the Arapien Shale Formation, with little to no vegetation. Elevation range 4,890 to 5,645 feet amsl. Flowering late May to August.	<u>Region II (Utah):</u> High. The species has been documented both within the 2-mile transmission line corridor and the analysis area in Sevier County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Sevier County, Utah. <u>Region III (Nevada):</u> Low.	Utah – No. NV - Yes. The 2-mile transmission line corridors do not cross the Meadow Valley Wash Watershed in Lincoln County, Nevada; therefore, it is unlikely that the species would be present within the 2-mile transmission line corridors.	BLM 2011; Holmgren and Holmgren 2002; NatureServe 2012.
Goodrich blazingstar (Goodrich stickleaf)	<i>Mentzelia goodrichii</i>	USFS-Ashley NF, BLM-UT	Range: Endemic to the escarpments of the Willow and Argyle canyons within southern Duchesne County, Utah. Found along Bad Land Cliffs above Argyle Canyon, and west in to Avintaquin Canyon. Habitat: Steep, white, marly calciferous shale of the Green River Formation in scattered limber and pinyon pine, Douglas-fir, mountain mahogany, and rabbitbrush communities. Elevation range 8,100 to 8,800 feet amsl. Flowering July to August.	<u>Region II:</u> High. The species has been documented both within and outside of the USFS Ashley NF within the 2-mile transmission line corridor in Duchesne County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and analysis area within the USFS Ashley NF in Duchesne County, Utah.	No.	BLM 2010; NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Ash Meadows blazingstar	<i>Mentzelia leucophylla</i>	BLM-NV	Range: Endemic to the Ash Meadows area in Nye County, Nevada. Habitat: Open, generally dry, hard, salt-crusted alkaline clay or sandy-clay soils on low bluffs, swales, flats, and drainages in shadscale vegetation surrounding spring and seep areas. Elevation range 2,200 to 2,350 feet amsl. Flowering in summer.	None.	Yes. The species is endemic to Nye County, Nevada, which is not crossed by the 2-mile transmission line corridors.	NatureServe 2012; NNHP 2001.
Horse Canyon stickleaf	<i>Mentzelia multicaulis</i> var. <i>librina</i>	BLM-UT	Range: Endemic to the Colorado Plateau within Carbon and Emery counties, Utah. Habitat: Sagebrush, rabbitbrush, and pinyon-juniper communities on the Mancos Shale and Price River formations. Elevation at approx. 6,200 feet amsl. Flowering July to September.	<u>Region II</u> : Moderate. The species has been documented approx. 3 miles east of the 2-mile transmission line corridor in Emery County, Utah. Based on the presence of suitable elevation range, vegetation cover types and geologic formations, potential habitat for the species may be present within the 2-mile transmission line corridors in Emery and Carbon counties, Utah.	No.	BLM 2010; UNPS 2006.
Polished blazingstar	<i>Mentzelia polita</i>	BLM-NV	Range: Known within Esmeralda, Clark, and Lincoln counties, Nevada; and California. Habitat: Open areas in mixed desert shrub communities. Elevation range 1,475 to 4,495 feet amsl. Flowering April to May.	<u>Region III</u> : Low. Although no known populations have been documented within or adjacent to the 2-mile transmission line corridor, suitable habitat parameters may be present within the 2-mile transmission line corridors in Lincoln County, Nevada.	No.	NatureServe 2012.
Roan Cliffs stickleaf	<i>Mentzelia rhizomata</i>	BLM-CO	Range: An endemic oil shale species known within Garfield County, Colorado Habitat: Steeply sloping and constantly moving talus or scree slopes of the Green River Formation shale in Colorado associated with <i>Astragalus lutosus</i> , <i>Thalictrum heliophilum</i> , <i>Penstemon debilis</i> , and <i>Festuca dasyclada</i> . Elevation range 5,800 to 9,000 feet amsl. Flowering May to August.	Low.	Yes. Although the species has been documented approx. 42 miles east of the 2-mile transmission line corridor, it is unlikely that the species would occur within the 2-mile transmission line corridors in Garfield County, Colorado based on the lack of suitable habitat.	NatureServe 2012.
Shultz stickleaf	<i>Mentzelia shultziorum</i>	BLM-UT	Range: Endemic to Emery and Grand counties, Utah. Habitat: Shadscale, <i>Eriogonum</i> , and ephedra communities on the Cutler Formation. Elevation range at 4,100 to 5,200 feet amsl. Flowering July to August.	<u>Region II</u> : Moderate. The species has been documented approx. 1.5 miles south of the 2-mile transmission line corridor in Emery County, Utah; and approx. 17 miles south of the 2-mile transmission line corridor in Grand County, Utah. Based on agency consultation and the presence of suitable elevation range and vegetation cover types, potential habitat for the species may be present within the 2-mile transmission line corridors in Emery and Grand counties, Utah.	No.	BLM 2010; UNPS 2006.
Tiehm blazingstar	<i>Mentzelia tiehmii</i>	BLM-NV	Range: Endemic to the White River Valley within northeastern Nye County and adjacent Lincoln County, Nevada. Habitat: Sparsely vegetated, white calcareous knolls and bluffs with scattered perennials (<i>Artemisia nova</i> , <i>Atriplex confertifolia</i> , <i>Chrysothamnus parryi</i> var. <i>asper</i> , <i>Enceliopsis nudicaulis</i> var. <i>nudicaulis</i> , <i>Frasera gypsicola</i> , <i>Hymenopappus filifolius</i> var. <i>nanus</i> , <i>Lepidium nanum</i> , and <i>Phlox tumulosa</i>) and annuals (<i>Cordylanthus kingii</i> var. <i>kingii</i> and <i>Eriogonum howellianum</i>). Elevation range 4,925 to 5,200 feet amsl. Flowering late June to early September.	None.	Yes. The species is endemic to the White River Valley, which is not crossed by the 2-mile transmission line corridors.	NatureServe 2012; Holmgren and Holmgren 2001.
Eastwood monkey-flower	<i>Mimulus eastwoodiae</i>	BLM-CO	Range: Endemic to the Canyonlands of southeastern Utah and adjacent Colorado, Arizona, and New Mexico. In Colorado, approximately 8 occurrences are known from Montrose, Mesa, San Miguel, and Delta counties. Habitat: Moist seeps and hanging garden communities in sandstone cliffs in the Canyonlands associated with <i>Primula specuicola</i> , <i>Adiantum capillus-veneris</i> , <i>Aquilegia micrantha</i> , and <i>Epipactis gigantea</i> . Elevation range 4,700 to 5,800 feet amsl. Flowering late July to early September.	Low.	Yes. Although potential habitat may be present based on the presence of suitable vegetation cover types and soil substrate, it is unlikely this species would occur within the 2-mile transmission line corridors given the species narrow and limited geographic range.	CNHP 2002; NatureServe 2012.
Nuttall sandwort	<i>Minuartia nuttallii</i>	BLM-CO	Range: Common throughout Nevada, occurs throughout much of northern California, somewhat common in nine Utah counties, and extends north into southern British Columbia, Alberta, Idaho, Montana, Oregon, Utah, Washington, Wyoming, and Colorado. Habitat: Sandy and rocky slopes and ridges, barren rock, chaparral, open pine woodland, often on serpentine. Elevation range 2,000 to 12,500 feet amsl. Flowering spring to summer.	<u>Regions I and II</u> : Low. Based on the presence of suitable vegetation community types and substrates, potential habitat may be present within the 2-mile transmission line corridors in Moffat County, Colorado.	No.	FNA 1911; NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Fish Lake naiad	<i>Najas caespitosa</i>	USFS-Fishlake NF	Range: Endemic to Pelican Point, Fish Lake in Sevier County, Utah. Habitat: Shallow water to a depth of 12 inches. Elevation at approx. 8,600 feet amsl. Flowering late July to August.	None.	Yes. Based on the species limited distribution geographic range, it is unlikely the species would be found within the 2-mile transmission line corridors.	UNPS 2006.
Matted fiddleleaf	<i>Nama densum</i> var. <i>parviflorum</i>	BLM-CO	Range: In Colorado, occurs in Moffat County. Also found in Utah, California, and Nevada. Habitat: Sandy soil weathered from outcrops of calcareous sandstone and dominated by big sagebrush, and needle and thread grass. Elevation range 3,930 to 5900 feet amsl. Flowers early June.	<u>Regions I and II</u> : Low. Based on the presence of suitable vegetation community types and elevation range, potential habitat may be present within the 2-mile transmission line corridors in Moffat County, Colorado.	No.	Montana Natural Heritage Program 2010; Rosatti and Wetherwax 2001.
Amargosa niterwort	<i>Nitrophila mohavensis</i>	BLM-NV	Range: Known only from the Carson Slough-Ash Meadows area in Nye County, Nevada. Habitat: Open, moist, heavily alkaline and salt-crusted, otherwise nearly barren clay flats in low drainage and seepage areas surrounded by shadscale and saltgrass vegetation. Aquatic or wetland-dependant species. Elevation range 2,100 to 2,160 feet amsl. Flowering late-spring.	None.	Yes. The species is known only from Nye County, Nevada, which is not crossed by the 2-mile transmission line corridors.	NatureServe 2012; NNHP 2001.
Narrowleaf evening primrose	<i>Oenothera acutissima</i>	BLM-CO	Range: Restricted to Moffat County, Colorado and Daggett, Uintah, and Duchesne counties, Utah; known in the vicinity of the Flaming Gorge National Recreation Area and around Diamond Mountain, Cold Spring Mountain, and Douglas Mountain at the eastern end of the Uinta Mountains. The species has been documented as far west as Burnt Mill Spring, northwest of Roosevelt, and as far east as Boone Draw, below Sand Wash Basin in Moffat County, Colorado. Habitat: Grows along arroyos, in drainage channels, in depressions or shallow basins, in meadows or gravelly open areas, and in rock crevices within middle elevation coniferous forests (ponderosa and lodgepole pine), rocky mountain juniper-sagebrush communities, and sagebrush scrub communities. Typically restricted to sandy/gravelly soils, often growing among rocks; appears to be associated with a red quartzite of the Uinta Mountain Group. Elevation range 3,900 to 8,530 feet amsl. Flowering late May to June.	Low.	Yes. Based on the species limited distribution geographic range, it is unlikely the species would be found within the 2-mile transmission line corridors.	BLM 2010; CNHP 2002; NatureServe 2012.
Blue Diamond cholla	<i>Opuntia whipplei</i> var. <i>multigeniculata</i> (<i>Cylindropuntia multigeniculata</i>)	BLM-NV; NV State CE; NV State CY	Range: Endemic to the Blue Diamond Hills of the Spring Mountains within Clark County, Nevada. Habitat: Dry, open carbonate ledges, crevices, and rocky colluvium on gentle to steep slopes of all aspects, but predominantly on northerly exposures, canyon walls, or other cooler or more protected exposures, in close proximity to overlying gypsum beds up-slope, and associated with numerous other succulent and shrub species of the creosote bush and blackbrush vegetation zones. Elevation range 3,585 to 4,250 feet amsl. Flowering June to July.	None.	Yes. The species is endemic to the Blue Diamond Hills of the Spring Mountains, which are not crossed by the 2-mile transmission line corridors.	NatureServe 2012; NNHP 2001.
Trotter oreoxis	<i>Oreoxis trotteri</i>	BLM-UT	Range: Endemic to Emery and Grand counties, Utah. Habitat: Warm desert shrub and mixed juniper communities. Elevation range 4,800 to 6,000 feet amsl. Flowering late April to mid June.	<u>Region II</u> : Moderate. Known populations are present approx. 17 miles south of the 2-mile transmission line corridor in Grand and Emery counties, Utah. Based on agency consultation and the presence of suitable elevation range and vegetation cover types, potential habitat for the species may be present within the 2-mile transmission line corridors in Emery and Grand counties, Utah.	No.	BLM 2010; UNPS 2006.
Arctic poppy	<i>Papaver radicum</i> var. <i>pygmaeum</i>	USFS-Ashley NF	Range: Known from the Uinta Mountains in Duchesne and Summit counties, Utah; and also Montana and Alberta, Canada. Habitat: Rock stripes in alpine tundra communities with <i>Polemonium</i> , <i>Smelowskia</i> , <i>Erigeron</i> , sedges, and saxifrages. Elevation range 11,100 to 12,800 feet amsl. Flowering July to August.	None.	Yes. The species is endemic to the Uinta Mountains, which are not crossed by the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006.
Ligulate feverfew	<i>Parthenium ligulatum</i>	BLM-CO	Range: Known from Rio Blanco and Moffat counties, Colorado; and also in Utah and Nevada. Habitat: Barren or semi-barren calciferous or gypsiferous outcrops of the Green River, Uinta, Ferron, Summerville, and Carmel formations in salt desert shrub, serviceberry, rabbitbrush, Indian rice-grass, greasewood, galleta, black sagebrush, pygmy sagebrush, and pinyon-juniper communities. Elevation range 5,590 to 7,000 feet amsl. Flowering May/June.	<u>Region II</u> : Low. Based on the presence of suitable elevation range, geologic formations, and vegetation cover types, potential habitat for the species may be present within the 2-mile transmission line corridor in Mesa and Rio Blanco counties, Colorado.	No.	CNHP 2002; NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
San Rafael cactus (Despain pincushion cactus)	<i>Pediocactus despainii</i>	FE (UT)	Range: Endemic to Emery and Wayne counties, Utah. Habitat: Open pinyon-juniper communities on limestone gravels. Elevation at approx. 6,000 feet amsl. Flowering late April to early May.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor in Emery County, Utah. Potential habitat for the species may be present both within and outside of the 2-mile transmission line corridors in Emery County, Utah.	No.	BLM 2010; CPC 2010; NatureServe 2012; USFWS 2012a, 2007, 1995b; UDWR 2012; UNPS 2006.
Siler pincushion cactus	<i>Pediocactus sileri</i>	FT (UT)	Range: Known within Kane and Washington counties, Utah; and Mohave and Coconino counties, Arizona. Habitat: Salt desert shrub communities in red and gray gypsiferous, seleniferous, and calciferous shales of the Moenkopi Formation often found growing with or in thick biological soil crusts. Elevation range 3,000 to 5,200 feet amsl. Flowering March to April/May.	<u>Region III</u> : Moderate. The species has been documented approx. 23 miles southeast of the 2-mile transmission line corridor in Washington County, Utah. Based on the presence of suitable elevation range, soil substrates, and vegetation cover types, potential habitat for the species may be present within the 2-mile transmission line corridors in Washington County, Utah.	No.	USFWS 2012a, 1986; UNPS 2006.
Winkler cactus	<i>Pediocactus winkleri</i>	FT (UT)	Range: Endemic to Emery and Wayne counties, Utah. Habitat: Salt desert shrub communities on small gravel barrens or clay on the Dakota Formation. Elevation range 4,800 and 5,200 feet amsl. Flowering late March to mid May.	<u>Region II</u> : Moderate. The species have been documented approx. 1.5 miles east and 6 miles northwest of the 2-mile transmission line corridor in Emery County, Utah. Based on agency consultation and the presence of suitable elevation range, soil substrates, and vegetation cover types, potential habitat for the species may be present within the 2-mile transmission line corridors in Emery County, Utah.	No.	BLM 2010; CPC 2010; USFWS 2012a, 2007, 1995b; UDWR 2012; UNPS 2006.
Barneby breadroot	<i>Pediomelum aromaticum</i> var. <i>barnebyi</i>	BLM-UT	Range: Restricted to southeast Washington County, Utah; and adjacent Mohave County, Arizona. Habitat: Pinyon-juniper and silver buffaloberry communities on fine-textured substrates of the Chinle Formation. Elevation at approx. 4,400 feet amsl. Flowering July to August.	Low.	Yes. Although potential habitat may be present based on the presence of suitable vegetation cover types and geologic formation, it is unlikely this species would occur within the 2-mile transmission line corridors given the species limited geographic range.	UNPS 2006.
Beaver Dam breadroot	<i>Pediomelum castoreum</i>	NPS-Lake Mead NRA; BLM-NV	Range: Known within Lincoln and Clark counties, Nevada; and also in Arizona and California. Habitat: Limited information available; possibly dry, sandy deserts. Elevation range 1,280 to 5,000 feet amsl. Flowering period unknown; most common survey period: April to May.	<u>Region III</u> : High. The species has been documented within the 2-mile transmission line corridors in Clark County, Nevada. Potential habitat may be present both within the 2-mile transmission line corridors and the analysis area in Lincoln and Clark counties, Nevada. <u>Region IV</u> : Low. Potential habitat may be present both within the 2-mile transmission line corridor and the analysis area in Clark County, Nevada. Based on agency consultation and lack of suitable habitat parameters, it is unlikely that this species would occur within the 2-mile transmission line corridors within the NPS-Lake Mead NRA.	No.	NNHP 2001; NatureServe 2012; NPS 2012.
Paria breadroot	<i>Pediomelum pariense</i>	USFS-Dixie NF	Range: Endemic to Kane and Garfield counties, Utah. Habitat: Ponderosa pine and pinyon-juniper communities on calcareous or sandy soils on Wasatch Limestone. Elevation range 5,600 to 8,000 feet amsl. Flowering June to July.	None.	Yes. The species is endemic to Kane and Garfield counties, Utah which are not crossed by the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006.
Stemless beardtongue	<i>Penstemon acaulis</i> var. <i>acaulis</i>	USFS-Ashley NF, BLM-WY, BLM-UT	Range: Endemic to Daggett County, Utah; and Sweetwater County, Wyoming. Habitat: Pinyon-juniper and sagebrush-grass communities on semi-barren substrates. Elevation range 5,840 to 7,285 feet amsl. Flowering June to July.	None.	Yes. Although the species has been documented approx. 3.5 miles north of the 2-mile transmission line corridor in Uintah County, Utah, it is unlikely this species would occur given the lack of species-specific geological formations within the 2-mile transmission line corridor.	BLM 2010; NatureServe 2012; UNPS 2006; WYNDD 2001.
White-margined beardtongue	<i>Penstemon albomarginatus</i>	BLM-NV	Range: Clark and Nye counties, Nevada; and also in Arizona and California. Habitat: Dependent on sand dunes or deep sand, this species occupies stabilized desert dunes and Mojavean desert scrub habitats. Elevation range 2,750 to 5,890 feet amsl. Flowering March to May.	<u>Regions III and IV</u> : Moderate. The species has been documented approx. 7 miles west of the 2-mile transmission line corridor in Clark County, Nevada. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Clark County, Nevada.	No.	NNHP 2001.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Broadbeard beardtongue	<i>Penstemon angustifolius</i> var. <i>dulcis</i>	BLM-UT	Range: Endemic to the Great Basin within Juab and Millard counties, Utah. Habitat: Fourwing saltbush, sagebrush/ <i>Eriogonum</i> and juniper communities in dune sands. Elevation range 4,600 to 5,400 feet amsl. Flowering May to June.	<u>Regions II and III</u> : High. The species has been documented within the 2-mile transmission line corridor in Millard and Juab counties, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Millard and Juab counties, Utah.	No.	UNPS 2006.
Yellow twotone beardtongue	<i>Penstemon bicolor</i> ssp. <i>bicolor</i>	BLM-NV	Range: Possibly an endemic to Clark County, Nevada; and also in California. Habitat: Calcareous or carbonate soils in washes, roadsides, rock crevices, outcrops, or similar places receiving enhanced runoff, in the creosote-bursage, blackbrush, mixed-shrub, and lower juniper zones. Elevation range 2,500 to 5,480 feet amsl. Flowering spring.	<u>Regions III and IV</u> : Moderate. The species has been documented adjacent to the 2-mile transmission line corridors in Clark County, Nevada. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Clark County, Nevada.	No.	NNHP 2001.
Rosy twotone beardtongue	<i>Penstemon bicolor</i> ssp. <i>roseus</i>	NPS-Lake Mead NRA; BLM-NV	Range: Known within Clark and Nye counties, Nevada; and also in Arizona and California. Habitat: Rocky calcareous, granitic, or volcanic soils in washes, roadsides, scree at outcrop bases, rock crevices, or similar places receiving enhanced runoff, in the creosote-bursage, blackbrush, and mixed-shrub zones. Elevation range 1,800 to 4,840 feet amsl. Flowering mid March to mid May.	<u>Regions III and IV</u> : High. The species has been documented in numerous locations within the 2-mile transmission line corridors in Clark County, Nevada. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Clark County, Nevada. Based on agency consultation and lack of suitable habitat parameters, it is unlikely that this species would occur within the 2-mile transmission line corridors within the NPS-Lake Mead NRA.	No.	NNHP 2001; NPS 2012.
USF Red Canyon beardtongue	<i>Penstemon bracteatus</i>	USFS-Dixie NF	Range: Endemic to Garfield, Iron, Kane counties, Utah. Habitat: Ponderosa pine, limber pine, bristlecone pine/manzanita communities in stone slides and calcareous gravels of the Pink and White limestone members of the Claron Formation. Elevation range 6,900 to 8,500 feet amsl. Flowering May to July.	Low.	Yes. Based on the lack of suitable elevation range and vegetation cover type requirements, it is unlikely that potential habitat would be present within the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006.
Cache beardtongue	<i>Penstemon compactus</i>	USFS-Uinta-Wasatch-Cache NF	Range: Known within Cache County, Utah; and also Franklin County, Idaho. Habitat: Openings in coniferous communities, associated with <i>Monardella</i> , clematis, columbine, and other penstemon species, on limestone and dolomite parent material. Elevation range 7,000 to 9,800 feet amsl. Flowering June to August.	None.	Yes The species has been documented within Cache County, Utah, which is not crossed by the 2-mile transmission line corridors.	UNPS 2006.
Tunnel Springs beardtongue	<i>Penstemon concinnus</i>	BLM-NV	Range: Endemic to the Great Basin within Beaver, Iron and Millard counties, Utah. Barely entering Nevada, the species is known from a few extant occurrences within White Pine and Lincoln counties. Habitat: Alluvial slopes within pinyon, juniper, or sagebrush communities. Elevation range between 6,200 to 6,600 feet amsl. Flowering May to June.	<u>Region III</u> : Low. Based on the presence of suitable vegetation cover types, soil substrates, and elevation range, potential habitat for the species may be present within the 2-mile transmission line corridors in Lincoln County, Nevada.	No.	NNHP 2001; Protect Snake Valley 2010.
Parachute beardtongue	<i>Penstemon debilis</i>	FP (CO)	Range: Endemic to Garfield County, Colorado. Habitat: Sparsely vegetated, south-facing, steep, white shale talus of the Parachute Creek Member of the Green River Formation. Soils are a mixture of thin shale fragments and clay. Elevation range 8,000 to 9,000 feet amsl. Flowering mid June to mid July.	Low.	Yes. The species has been documented approx. 40 miles east of the 2-mile transmission line corridor in Garfield County, Colorado; however, based on suitable habitat and agency consultation, it is unlikely that this species would occur within the 2-mile transmission line corridors given the species-specific associated vegetation communities.	CNHP 2002; USFWS 2012a,b, 2011c.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Franklin penstemon	<i>Penstemon franklinii</i>	BLM-UT	Range: Endemic to Cedar Valley within Iron County, Utah. Habitat: Associated with three-awn, needlegrass, matchweed, and black sagebrush communities. Elevation range 5,400 to 5,900 feet amsl. Flowering May to June.	<u>Region III</u> : Low. Based on agency consultation, known populations have been documented adjacent to the 2-mile transmission line corridor in Iron County, Utah. Although unlikely, potential habitat may be present both within the 2-mile transmission line corridor and the analysis area in Iron County, Utah.	No.	BLM 2012b; UNPS 2006.
Death Valley beardtongue	<i>Penstemon fruticiformis</i> ssp. <i>amargosae</i>	BLM-NV	Range: Clark and Nye counties, Nevada; and also in California. Habitat: Gravely washes, canyon floors and juniper-pine woodlands. Elevation 3,100 to 6,330 feet amsl. Flowering April to June.	Low.	Yes. Although potential habitat may be present based on the presence of suitable soil substrates and elevation range, it is unlikely the species would occur within the 2-mile transmission line corridors given the species-species vegetation cover type requirements.	CPC 2010; NNHP 2001.
Gibbens penstemon (Gibbens beardtongue)	<i>Penstemon gibbensii</i>	BLM-WY, BLM-CO, BLM-UT	Range: Known within Daggett County, Utah; Moffat and Rio Blanco counties, Colorado; and Carbon and Sweetwater counties, Wyoming. Habitat: Sandy or shaly (often Green River Shale) bluffs and slopes with juniper, thistle, <i>Eriogonnum</i> , <i>Elymus</i> , serviceberry, rabbitbrush, and <i>Thermopsis</i> . Elevation range 5,500 to 7,700 feet amsl. Flowering June to September.	<u>Region I</u> : Wyoming - High. The species has been documented within the 2-mile transmission line corridor in Sweetwater and Carbon counties, Wyoming. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Sweetwater and Carbon counties, Wyoming. <u>Region I</u> : Colorado – Moderate. The species has been documented on the Sweetwater County, Wyoming/Moffat County, Colorado, border. Potential habitat for the species may be present within the 2-mile transmission line corridor in Moffat County, Colorado.	No.	BLM 2010; NatureServe 2012; UNPS 2006; WYNDD 2009.
Goodrich penstemon	<i>Penstemon goodrichii</i>	BLM-UT	Range: Endemic to the Uinta Basin at the Lapoint-Tridell-Whiterocks area, Utah. Habitat: Blue gray to reddish clay badlands of the Duchesne River Formation in shadscale and juniper-mountain mahogany communities. Elevation range 5,600 to 6,200 feet amsl. Flowering late May to June.	<u>Region II</u> : Moderate. The species has been documented approx. 3 miles north of the 2-mile transmission line corridor in Duchesne County, Utah; and 9 miles north of the 2-mile transmission line corridor in Uintah County, Utah. Based on agency consultation and the presence of suitable vegetation cover types, elevation range, and soil substrate, potential habitat for the species may be present within the 2-mile transmission line corridors in Duchesne and Uintah counties, Utah.	No.	BLM 2010; UNPS 2006.
Graham's penstemon	<i>Penstemon grahamii</i>	FP, BLM-CO, BLM-UT	Range: Restricted to the Uinta Basin in Uintah, Carbon, and Duchesne counties, Utah; and adjacent Rio Blanco County, Colorado. Habitat: Sparsely vegetated shadscale, <i>Eriogonum</i> , horsebrush, ryegrass, and pinyon-juniper communities on shale ledges and talus on the Green River Formation. Elevation range 4,600 to 7,600 feet amsl. Flowering late May to mid-June.	<u>Region II</u> : High. The species has been documented within, and adjacent to, the 2-mile transmission line corridor in Rio Blanco County, Colorado; and Uintah and Duchesne counties, Utah. Potential habitat may be present within the 2-mile transmission line corridors in Uintah and Duchesne counties, Utah; and Rio Blanco County, Colorado.	No.	BLM 2010; NatureServe 2012; USFWS 2012a; UNPS 2006.
Blowout penstemon	<i>Penstemon haydenii</i>	FE (WY)	Range: Known within the Sandhills region of Nebraska and the northeastern Great Divide Basin in Carbon County, Wyoming. Habitat: Substrate of eroding and shifting sand with low vegetation cover, typically found in "blowouts" (i.e., depressions in the topography caused by wind erosion) with less than 10 percent basal ground cover. Elevation range unknown. Flowering mid May to late June.	None.	Yes. Although populations are present approx. 29 miles north of the 2-mile transmission line corridor; it is unlikely the species would be present within the 2-mile transmission line corridors in Carbon County, Wyoming based on the lack of potential habitat.	Heidel 2012; Stubbendieck, et al. 1989; USFWS 2012a, 2011d, 1992a.
Pennell beardtongue	<i>Penstemon leiophyllus</i> var. <i>francisci-pennellii</i>	BLM-NV	Range: Known from the Snake, Wilson Creek, southern Schell Creek, Egan, and Grant ranges in Lincoln, Nye, and White Pine counties, Nevada; also in Utah. Habitat: Rocky calcareous slopes on shaded banks. Elevation range 7,000 to 11,500 feet amsl. Flowering period unknown; most common survey months: July to August.	None.	Yes. The 2-mile transmission line corridors do not intersect Nye or White Pine counties, Nevada. The species-specific elevation range parameters are not crossed by the 2-mile transmission line corridors in Lincoln County, Nevada.	NatureServe 2012; NNHP 2001.
Pahute Mesa beardtongue	<i>Penstemon pahutensis</i>	BLM-NV	Range: Known within Esmeralda and Nye counties, Nevada; and also in California. Habitat: In loose soil and rock crevices among boulders in pinyon-juniper woodlands and sagebrush shrublands. Elevation range 5,360 to 8,240 feet amsl. Flowering June to mid July.	None.	Yes. The species is known only within Nye and Esmeralda counties, Nevada, which are not crossed by the 2-mile transmission line corridors.	NNHP 2001.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Little penstemon	<i>Penstemon parvus</i>	USFS-Dixie NF, USFS-Fishlake NF	Range: Endemic to Garfield, Piute, and Sevier counties, Utah. Habitat: Black sagebrush, silver sagebrush, and grass/forb communities on sandy gravelly loam and Tertiary volcanic gravels. Elevation range 8,500 to 10,500 feet amsl. Flowering late June to August.	Low.	Yes. Although populations are present approx. 6 miles south of the 2-mile transmission line corridor, it is unlikely the species would be present within the 2-mile transmission line corridors in Sevier County, Utah based on the lack of potential habitat.	NatureServe 2012; UNPS 2006.
Pinyon penstemon	<i>Penstemon pinorum</i>	USFS-Dixie NF, BLM-UT	Range: Endemic to the Pine Valley Mountains within Iron and Washington counties, Utah. Habitat: Pinyon-juniper, mountain mahogany, ephedra, oak, sagebrush, and less commonly greasewood communities, often on Claron Limestone or gravels. Elevation range 5,600 to 6,700 feet amsl. Flowering May to June.	<u>Region III</u> : High. The species has been documented within the 2-mile transmission line corridor in Iron and Washington counties, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Iron and Washington counties, Utah.	No.	NatureServe 2012; UNPS 2006.
White River beardtongue (White River penstemon)	<i>Penstemon scariosus</i> (<i>Penstemon scariosus</i> var. <i>albifluvis</i>)	BLM-UT, FC (CO, UT)	Range: Known within Uintah County, Utah; and Rio Blanco County, Colorado. Habitat: Mixed desert shrub and pinyon-juniper communities dominated by shadscale, rabbitbrush, ricegrass, ryegrass, sagebrush, and Barneby's thistle on sparsely vegetated tan shale slopes of the Green River Formation. Elevation range 5,000 to 6,880 feet amsl. Flowering late May to June.	<u>Region II</u> : Moderate. The species has been documented approx. 6 miles west of the 2-mile transmission line corridor in Rio Blanco County, Colorado; and approx. 8 miles southeast of the 2-mile transmission line corridor in Uintah County, Utah. Based on agency consultation and the presence of suitable habitat requirements, the species may be present within the 2-mile transmission line corridors in Uintah County, Utah and Rio Blanco County, Colorado.	No.	BLM 2010; CNHP 2002; USFWS 2012a, 2011e,f; UNPS 2006.
Jaeger beardtongue	<i>Penstemon thompsoniae</i> ssp. <i>jaegeri</i>	BLM-NV	Range: Known within the Spring Mountains, east to the Sheep Range, in Clark County, Nevada. Habitat: Gravelly limestone soils on knolls and slopes, in drainages, and under conifers, from the pinyon-juniper to the subalpine conifer zones. Elevation range 5,577 to 11,060 feet amsl. Flowering late-spring to summer.	None.	Yes. The species is endemic to the Spring Mountains, which are not crossed by the 2-mile transmission line corridors.	NNHP 2001.
Ward beardtongue	<i>Penstemon wardii</i>	BLM-UT, USFS-Fishlake NF	Range: Endemic to Millard, Sanpete, and Sevier counties, Utah. Habitat: Arapien Shale Formation associated with ephedra, rabbitbrush, shadscale, mountain mahogany, sagebrush, and pinyon-juniper communities on semi-barren, white to gray, fine-textured, often calcareous or gypsiferous substrates. Elevation range 5,500 to 6,800 feet amsl. Flowering period unknown.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor in Sevier County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Sevier, Sanpete, and Millard counties, Utah.	No.	NatureServe 2012; UNPS 2006.
Alcove rock-daisy	<i>Perityle specuicola</i>	BLM-UT	Range: Regional endemic to canyons along the Colorado and San Juan Rivers in southeast Utah; also along the Colorado River Canyon near Moab, within the Glen Canyon National Recreation Area; and along the main canyon of the San Juan River within Garfield, Grand, and San Juan counties, Utah. Total population estimated at approx. 660 individuals. Habitat: Desert shrub and hanging garden communities in narrow, protected canyons, alcoves, and at cliff bases where it receives minimal to no direct sunlight on the Navajo Sandstone and the Cedar Mesa Formation. Elevation range 3,700 to 4,200 feet amsl. Flowering mid July to late September.	None.	Yes. Potential habitat for the species is not crossed by the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006.
Parry petalonyx	<i>Petalonyx parryii</i>	BLM-UT	Range: Known within Washington County, Utah; western Coconino and northern Mohave counties, Arizona; and Clark County, Nevada. Habitat: Dry, desert washes, and canyons, often on gypsum and micaceous shales with <i>Phacelia</i> , <i>Psoralea</i> , and <i>Atriplex</i> species on Chinle and Moenkopi outcrops. Elevation range and flowering period unknown.	<u>Region III</u> : Low. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area within Washington County, Utah.	No.	NatureServe 2012; UNPS 2006.
Clay phacelia	<i>Phacelia argillacea</i>	FE (UT)	Range: Known only within the Spanish Fork Canyon of Utah County, Utah. Total population estimated at approx. 200 individuals. Habitat: Steep slopes in sparsely populated juniper-pinyon and mountain brush communities on shaley clay colluviums of the Green River Formation. Elevation range 6,000 to 7,000 feet amsl. Flowering late May to early June.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor in Utah County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Utah County, Utah.	No.	Atwood 1975; Tilley et al. 2010; USFWS 2012a, 1982; UDWR 2012.

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Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Argyle Canyon phacelia	<i>Phacelia argylensis</i>	BLM-UT	Range: Endemic to Argyle Canyon, adjacent to West Tavaputs Plateau in Duchesne County, Utah. Habitat: Pinyon-juniper, serviceberry, and Douglas Fir communities. Elevation range and flowering period unknown.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor in Utah County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Utah County, Utah.	No.	BLM 2011.
Beatley scorpion plant	<i>Phacelia beatleyae</i>	BLM-NV	Range: Endemic to Lincoln and Nye counties, Nevada. Habitat: Dry, open, nearly barren scree and loose gravelly soils on slopes and bases of white to brownish volcanic tuff outcrops on all slopes and aspects, and in adjacent drainages, in the mixed-shrub, blackbrush, shadscale, and upper creosote-bursage zones. Elevation range 3,540 to 5,500 feet amsl. Flowering April to May.	Low.	Yes. Although potential habitat may be present, it is unlikely the species would occur within the 2-mile transmission line corridors based on the location of the associated geologic formations and known occurrence populations.	NNHP 2001.
Parish phacelia	<i>Phacelia parishii</i>	BLM-NV	Range: Known within Clark, Lincoln, Nye, and White Pine counties, Nevada. Habitat: An aquatic or wetland-dependent species in Nevada occupying moist to superficially dry, open, flat to hummocky, mostly barren, often salt-crust silty-clay soils on valley bottom flats, lake deposits, and playa edges, often near seepage areas, sometimes on gypsum deposits, surrounded by saltbush scrub vegetation but with few immediate associates such as <i>Atriplex confertifolia</i> , <i>A. canescens</i> , <i>A. argentea</i> , <i>Poa secunda</i> , <i>Monolepis nuttalliana</i> , <i>Phacelia fremontii</i> , <i>Lepidium flavum</i> , and <i>Sarcobatus vermiculatus</i> . Elevation range 2,190 to 5,920 feet amsl. Flowering late spring.	<u>Regions III and IV</u> : Low. Potential habitat for the species may be present both within the 2-mile transmission line corridors and the analysis area in Clark and Lincoln counties, Nevada.	No.	NNHP 2001.
Debeque phacelia	<i>Phacelia submutica</i>	FT (CO)	Range: Endemic to the Piceance Basin within Mesa and Garfield counties, Colorado. Total population estimated at approx. 3,594 to 34,504 individuals within 28 populations. Habitat: Exposures of dark gray and brown clay soils derived from the Atwell Gulch and Shire members of the Wasatch Formation on moderately steep slopes, barren or semi-barren hillsides, benches, and ridge tops adjacent to valley floors. Flowering late April to late June.	None.	Yes. The species is endemic to the Piceance Basin which is not crossed by the 2-mile transmission line corridors.	CNHP 2002; Lyon et al. 2001; USFWS 2012a,b, 2011c.
Utah phacelia	<i>Phacelia utahensis</i>	BLM-UT	Range: Known within Sanpete and Sevier counties, Utah; possibly also found in Carbon County, Utah. Habitat: Salt desert shrub communities on clay hills and banks in the Arapien Shale Formation (and possibly the Mancos Shale Formation). Elevation range 5,500 to 6,200 feet amsl. Flowering April to June.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor in Sevier County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Sevier County, Utah.	No.	BLM 2010; UNPS 2006.
Beaver Rim phlox	<i>Phlox pungens</i>	BLM-WY	Range: Endemic to the Wind River and Green River basins and southeastern foothills of the Wind River Range in Fremont, Lincoln, and Sublette counties, Wyoming. Habitat: Sparsely vegetated slopes on sandstone, siltstone, or limestone (in the Wind River Basin) and on clays and shales (in the Green River Basin). Elevation range 6,000 to 7,400 feet amsl.	<u>Region I</u> : Low. Although species presence has not been documented within the 2-mile transmission line corridors, a WYNDD model-detailed analysis indicates the potential for occurrence within Sweetwater and Carbon counties, Wyoming.	No.	BLM 2012a; NatureServe 2012; WYNDD 2000.
Tufted twinpod	<i>Physaria condensata</i>	BLM-WY	Range: Endemic to southwestern Wyoming within Lincoln, Sublette, and Uinta counties. Habitat: Sparsely vegetated shale slopes and ridges. Elevation range 6,500 to 7,000 feet amsl. Flowering May/June to June/July.	<u>Region I</u> : Low. Although species presence has not been documented within the 2-mile transmission line corridors, a WYNDD model-detailed analysis indicates the potential for occurrence within Sweetwater and Carbon counties, Wyoming.	No.	BLM 2012a; NatureServe 2012; WYNDD No Date.
Dudley Bluffs twinpod	<i>Physaria obcordata</i>	FT (CO)	Range: Endemic to the Piceance Basin in Rio Blanco County, Colorado. Habitat: Barren white outcrops and steep slopes exposed by creek downcutting associated with the Green River Formation. Elevation range 5,900 to 7,500 feet amsl. Flowering May/June to June/August.	None.	Yes. The species is endemic to the Piceance Basin which is not crossed by the 2-mile transmission line corridors.	CNHP 2002; USFWS 2012a.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Limber pine	<i>Pinus flexilis</i>	BLM-WY	Range: Widespread across the northern and central Rocky Mountains, and the Great Basin regions in Canada. It is patchily distributed across Oregon, Idaho, Montana, Wyoming, Nevada, Utah, Colorado, and New Mexico. In the Dakotas, Nebraska, Arizona, and California, isolated populations occur. Habitat: Dry, rocky sites in forested regions on mesic sites in low density, open area. In Wyoming, it is typically found with Rocky Mountain lodgepole pine, Engelmann spruce, whitebark pine, Rocky Mountain Douglas-fir, subalpine fir, Rocky Mountain juniper, and common juniper. General elevation range 4,000 to 12,500 feet amsl; specific elevation ranges for Wyoming are not available. Buds burst late April to late June, while pine cones ripen from August to September, and seeds are dispersed from September to October	None.	Yes. Based on the deletion of Segment 10 (former Aelous Design Option), potentially suitable habitat for this species is no longer present within the 2-mile transmission line corridor in Carbon County, Wyoming.	BLM 2012a; Johnson 2001; NatureServe 2012; USGS 1999.
Angell cinquefoil	<i>Potentilla angelliae</i>	USFS-Dixie NF	Range: Endemic to the Aquarius Plateau in Garfield and Wayne counties, Utah. Habitat: Rocky, subalpine meadows. Elevation at approx. 11,000 feet amsl. Flowering July.	None.	Yes. The species is endemic to the Aquarius Plateau in Garfield and Wayne counties, Utah, which is not crossed by the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006.
Cottam cinquefoil	<i>Potentilla cottamii</i>	USFS-Uinta-Wasatch-Cache NF, BLM-UT	Range: Known only from the Pilot Range within Elko County, Nevada; and Box Elder, Juab, and Tooele counties, Utah. Habitat: Crevices or narrow ledges on outcrops of quartzite or other siliceous metamorphic or granitoid rocks on all aspects in the upper subalpine conifer zone with <i>Pinus flexilis</i> , <i>Abies lasiocarpa</i> , <i>Ribes montigenum</i> , and <i>Achillea millefolium</i> . In Nevada, elevation range 9,400 to 10,600 feet amsl; in Utah, 7,500 to 10,400 feet amsl. Flowering late July to early August.	None.	Yes. Based on the species limited distribution geographic range, it is unlikely the species would be found within the 2-mile transmission line corridors.	NNHP 2001; UNPS 2006.
House Range primrose	<i>Primula cusickiana</i> var. <i>domensis</i>	BLM-UT	Range: Endemic to the House Ridge within the Notch Peak area in Millard County, Utah. Habitat: Limestone crevices. Elevation range and flowering period unknown.	None.	Yes. The species is endemic to the Notch Peak area which is not crossed by the 2-mile transmission line corridors.	BLM 2011; UNPS 2006.
Jones indigo-bush	<i>Psoralea polydenius</i> var. <i>jonesii</i> (<i>Psoralea nummularius</i>)	BLM-UT	Range: Endemic to Emery and Grand counties, Utah. Habitat: Shadscale, mat-saltbush, ephedra, and galleta communities on the Blue Gate and Tununk members of the Mancos Shale Formation on sandy terrace gravels. Elevation range 4,200 to 4,900 feet amsl. Flowering late May to mid July.	<u>Region II</u> : High. The species has a documented within the 2-mile transmission line corridor in Emery County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Emery and Grand counties, Utah.	No.	BLM 2010; UNPS 2006.
Smokethorn	<i>Psoralea spinosa</i>	NPS-Lake Mead NRA	Range: Known within the Sonoran Desert, within the southern part of California, Arizona, and Baja California. Habitat: Desert washes. Elevation range less than 1,300 feet amsl. Flowering June to July.	None.	Yes. Based on agency consultation and lack of suitable habitat parameters, it is unlikely this species would occur within the 2-mile transmission line corridors.	Jepson Flora Project 2012; NPS 2012.
Persistent sepal yellowcress	<i>Rorippa calycina</i>	BLM-WY	Range: Restricted to the North Platte River drainage, and the Bighorn, Great Divide, Green River, and Wind River basins within Albany, Big Horn, Carbon, Fremont, Park, Sweetwater, and Washakie counties. Total population estimated at approx. 15,000 to 25,000 individuals. Habitat: Moist sandy to muddy banks of streams, stock ponds, and man-made reservoirs near the high water line, high plain swales that evaporate, and along creeks. Elevation range 3,660 to 6,800 feet amsl. Flowering late May to August (extending into October).	None.	Yes. Based on the deletion of Segment 10 (former Aelous Design Option), potentially suitable habitat for this species is no longer present within the 2-mile transmission line corridor in Carbon County, Wyoming.	WYNDD 2009.
Arizona willow	<i>Salix arizonica</i>	USFS-Dixie NF, USFS-Fishlake NF, USFS-Manti-LaSal NF	Range: Known within Iron, Kane, Sanpete, and Sevier counties, Utah; and also in Arizona, New Mexico, and possibly Colorado. Habitat: Riparian areas and wet meadows. Elevation at approx. 8,200 feet amsl. Flowering period unknown.	<u>Region II</u> : Moderate. The species has been documented approx. 15 miles north and south of the 2-mile transmission line corridor in Sanpete and Sevier counties, Utah. Based on the presence of suitable vegetation cover types, elevation range, and presence of riparian areas, potential habitat for the species may be present within the 2-mile transmission line corridors within USFS Fishlake NF in Sevier County, Utah.	No.	NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Death Valley sage	<i>Salvia funerea</i>	BLM-NV	Range: Known within Nye County, Nevada; and also in California. Habitat: Dry limestone cliffs, crevices, and adjacent wash gravels in deep sheltered canyons or on north-facing exposures, surrounded by zonal shadscale and creosote bush vegetation. Elevation range 2,600 to 3,500 feet amsl. Flowering in spring.	None.	Yes. The species is known within Nye County, Nevada, which is not crossed by the 2-mile transmission line corridors.	NNHP 2001.
Clay reed-mustard	<i>Schoenocrambe argillacea</i>	FT (UT)	Range: Endemic to the Bookcliffs in Uintah County, Utah. Known populations are present from the west side of the Green River to the east side of Willow Creek. Habitat: Mixed desert shrub communities on generally north-facing slopes composed of clay soils rich with gypsum overlain with sandstone talus on shale substrates at the contact zone between the lower Uinta and upper Green River formations. Typically found in mixed desert shrub communities of shadscale, Indian ricegrass, and pygmy sagebrush. Elevation range 4,800 to 5,600 feet amsl. Flowering April to May.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor in Uintah County, Utah. Potential habitat may be present both within the 2-mile transmission line corridor and the analysis area in Uintah County, Utah.	No.	BLM 2010; USFWS 2012a, 1994a, 1992b; UDWR 2012; UNPS 2006.
Barneby reed-mustard	<i>Schoenocrambe barnebyi</i>	FE (UT)	Range: Endemic to Keesle Country of the San Rafael Swell and Capitol Reef National Park within Emery and Wayne counties, Utah. Total population estimated at approx. 2,000 individuals among 2 populations. Habitat: Sparsely vegetated mixed desert shrub communities, generally on north-facing slopes composed of red clay soils rich in selenium and gypsum, overlain with sandstone talus, which is derived primarily from the Moenkopi and sometimes from the Chinle and Carmel formations. Elevation range 5,400 to 6,889 feet amsl. Flowering April to May.	None.	Yes. The species is endemic to the Capitol Reef National Park and the San Rafael Swell which are not crossed by the 2-mile transmission line corridors.	BLM 2010; CPC 2010; USFWS 2012a, 2004, 1994a, 1992b; UDWR 2012; UNPS 2006.
Shrubby reed-mustard	<i>Schoenocrambe suffrutescens</i>	FE (UT)	Range: Endemic within the Hill Creek drainage, Willow Creek drainage, and Badland Cliffs within Duchesne and Uintah counties, Utah. Habitat: Shadscale, pygmy sagebrush, mountain mahogany, juniper, and other mixed desert shrub communities in calcareous shale of the Evacuation Creek member of the Green River Shale Formation. Elevation range 5,400 to 6,000 feet amsl. Flowering late May to June or July.	<u>Region II</u> : Moderate. The species has been documented approx. 1 mile south of the 2-mile transmission line corridor in Duchesne County, Utah, and approx. 5 miles south of the 2-mile transmission line corridor in Uintah County, Utah. Based on the proximity to endemic habitat and presence of potential habitat parameters, the species may be present within the 2-mile transmission line corridors in Duchesne and Uintah counties, Utah.	No.	BLM 2010; USFWS 2012a, 1994; UNPS 2006.
Blaine pincushion	<i>Sclerocactus blainei</i>	BLM-NV	Range: Possible or probably Nevada endemic known within Nye County, Nevada. Habitat: Alkaline calcareous and volcanic gravelly-clay soils in open valley bottom areas in the shadscale and lower sagebrush zones. Elevation range 5,100 to 5,300 feet amsl. Flowering in late-spring.	<u>Region III</u> : Low. The species has been documented approx. 10 miles north of the 2-mile transmission line corridor in Lincoln County, Nevada. Potential habitat may be present both within the 2-mile transmission line corridor and the analysis area in Lincoln County, Nevada.	No.	NatureServe 2012; NNHP 2001.
Pariette cactus	<i>Sclerocactus brevispinus</i>	FT (UT)	Range: Known only from the Pariette Draw region along the Duchesne/Uintah County border, Utah. Habitat: Saline and alkaline soils in clay badlands. Elevation range 4,590 to 4,920 feet amsl. Flowering late April to May.	Low.	Yes. The species has been documented approx. 5 miles south of the 2-mile transmission line corridor on the Duchesne-Uintah counties, Utah border. However, based on the species limited distribution geographic range, it is unlikely the species would be found within the 2-mile transmission line corridors.	BLM 2010; FNA 1994; NatureServe 2012; USFWS 2012a, 2010c; UNPS 2006.
Colorado hookless cactus	<i>Sclerocactus glaucus</i>	FT (CO)	Range: Known within Delta, Garfield, Mesa, and Montrose counties, Colorado. Habitat: Rocky hills, mesa slopes, and alluvial benches in desert shrub communities. Elevation range 4,500 to 6,000 feet amsl. Flowering April to May.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor in Mesa County, Colorado. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Mesa and Garfield counties, Colorado.	No.	CNHP 2002; USFWS 2012a, 2010d.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Great Basin fishhook cactus	<i>Sclerocactus pubispinus</i>	BLM-NV; NV State CY	Range: Known within Nevada along the easternmost edges of Elko and White Pine counties; Lincoln County (northeast of Panaca, Nevada); and also in northwest Utah between Box Elder and Beaver counties. Habitat: Rocky hillsides of woodland and upper desert mountains. Elevation range and flowering period unknown.	Low.	Yes. Based on the species limited geographic distribution, it is unlikely that the species would be present within the 2-mile transmission line corridors.	NatureServe 2012; Styles 2010.
Schlesser pincushion	<i>Sclerocactus schlesseri</i>	BLM-NV	Range: Possibly endemic within Lincoln County, Nevada (specifically known within Dry Lake Valley); and also in Utah. Habitat: Open, stable or stabilized, gravelly, sandy silt or silty clay soils derived from somewhat ashy and/or gypsiferous lacustrine sediments, on mesic microsites created and/or maintained by gentle north to east aspects, dense shrub and/or grass canopies, high clay and silt content of the soil, and/or cryptobiotic soil crusts, usually associated with such soil crusts in the shadscale zone with <i>Atriplex confertifolia</i> , <i>Gutierrezia sarothrae</i> , <i>Ericameria viscidiflora</i> var. <i>puberula</i> , <i>Krascheninnikovia lanata</i> , <i>Pleuraphis jamesii</i> , <i>Mentzelia albicaulis</i> , and <i>Mimulus parryi</i> . Elevation range 4,760 to 5,145 feet amsl. Flowering late spring.	<u>Region III</u> : Moderate. Although element record occurrences were not provided for this species, it is likely that this species and/or its associated habitat would be present within the 2-mile transmission line corridor or the analysis area in Clark County, Nevada based on the proximity to Dry Lake Valley.	No.	NNHP 2010; Styles 2010.
Uinta Basin hookless cactus	<i>Sclerocactus wetlandicus</i>	FT (UT)	Range: Known within Carbon, Duchesne, and Uintah counties, Utah. Habitat: Rocky hills, mesa slopes, and alluvial benches in desert shrub and pinyon-juniper communities on river benches, valley slopes, and rolling hills, of the Duchesne River, Green River, and Uintah formations in dry, fine-textures soils overlain with cobbles and pebbles. Elevation range 4,500 to 6,600 feet amsl. Flowering April to late May.	<u>Region II</u> : High. The species has been documented within and adjacent to the 2-mile transmission line corridors in Duchesne and Uintah counties, Utah. Based on the presence of suitable vegetation cover types, elevation range, and soil substrate, potential habitat for the species may be present within the 2-mile transmission line corridors in Duchesne and Uintah counties, Utah.	No.	BLM 2010; USFWS 2012a, 2010e; UNPS 2006.
Wright fishhook cactus	<i>Sclerocactus wrightiae</i>	FE (UT)	Range: Endemic to Emery, Sevier, and Wayne counties, Utah. Habitat: Salt desert shrub and shrub/grass to juniper communities on the Mancos Shale, Curtis, Dakota, Morrison, Summerville, and Entrada formations, often associated with well-developed biological soil crusts. On the Mancos Shale associated with the Bluegate, Tununk, Emery, and Ferron members. Substrate typically gypsiferous or saline soil that range in texture from clays to sandy silts to fine sands. Elevation range 4,260 to 5,900 feet amsl. Flowering April to May.	<u>Region II</u> : Moderate. The species has been documented approx. 3.5 miles southeast of the 2-mile transmission line corridor in Emery County; and approx 4 miles south of the 2-mile transmission line corridor in Sevier County, Utah. Based on the presence of suitable vegetation cover types, elevation range, and soil substrate, potential habitat for the species may be present within the 2-mile transmission line corridors in Sevier and Emery counties, Utah.	No.	BLM 2010; USFWS 2012a, 1985b; UDWR 2012; UNPS 2006.
Beaver Mountain groundsel	<i>Senecio castoreus</i>	USFS-Fishlake NF	Range: Endemic to the Tushar Mountains in Beaver and Piute counties, Utah. Habitat: Associated with <i>Polemonium</i> , <i>Trisetum</i> , <i>Festuca</i> , and <i>Arenaria</i> communities, often on windswept ridges or less commonly downward to the spruce-fir community on Tertiary igneous outcrops and gravel. Elevation range 11,000 to 12,700 feet amsl. Flowering July to September.	None.	Yes. The species occurs at a higher elevation and in very limited geographic range than that crossed by the 2-mile transmission line corridors within Beaver County, Utah.	UNPS 2006.
Podunk groundsel	<i>Senecio malmstenii</i>	USFS-Dixie NF	Range: Endemic to the Sevier-Markagunt and Paunsaugunt plateaus in Garfield, Iron, and Kane counties, Utah. Habitat: Western bristlecone pine, spruce-fir, and mixed conifer woodlands on steep talus slopes of the Claron Limestone Formation. Elevation range 9,500 to 10,500 feet amsl. Flowering June to August.	None.	Yes. The species occurs at a higher elevation than that crossed by the 2-mile transmission line corridors within Iron County, Utah.	UNPS 2006.
Musinea groundsel	<i>Senecio musiniensis</i>	USFS-Manti LaSal NF	Range: Endemic to the Wasatch Plateau in Sanpete County, Utah. Habitat: Ridgetops on white Flagstaff Limestone barrens and talus slopes on Musinea Peak, and margins of the Wasatch Plateau. Elevation range 9,400 to 10,800 feet amsl. Flowering July to September.	Low.	Yes. The species has been documented approx. 23 miles southwest of the 2-mile transmission line corridor in Sanpete County, Utah; however, habitat model results indicate lack of potential habitat within the 2-mile transmission line corridors in Sanpete County, Utah.	NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Nachlinger catchfly	<i>Silene nachlingerae</i>	BLM-NV	Range: Known within Elko, Nye, and White Pine counties, Nevada. Habitat: Generally dry, exposed or somewhat sheltered carbonate (rarely quartzite) crevices in ridgeline outcrops, talus, or very rocky soils on or at the bases of steep slopes or cliffs, on all aspects but predominantly on northwesterly to northeasterly exposures, mainly in the subalpine conifer zone with sparse <i>Petrophytum aespitosum</i> , <i>Erigeron simplex</i> , <i>Pinus flexilis</i> , <i>P. longaeva</i> , <i>Artemisia arbuscula</i> , <i>Cercocarpus betuloides</i> , <i>Ericameria watsonii</i> , <i>Symphoricarpos oreophila</i> , <i>Leucopoa nevadensis</i> , <i>Jamesia tetrapetala</i> , and <i>Primula nevadensis</i> . Elevation range 7,160 to 11,250 feet amsl. Flowering August to September.	Low.	Yes. The species occurs at a higher elevation than that crossed by the 2-mile transmission line corridors on the border of Lincoln and White Pine counties, Nevada.	NNHP 2001.
Maguire campion	<i>Silene petersonii</i>	USFS-Dixie NF, USFS-Fishlake NF, USFS-Manti-LaSal NF	Range: Endemic to Iron, Kane, Garfield, Sanpete, and Sevier counties, Utah. Habitat: Ponderosa pine, aspen, and spruce-fir communities on Flagstaff Limestone and the Claron Formation. Elevation 7,000 to 11,300 feet amsl. Flowering July to August.	<u>Region II</u> : Moderate. The species has been documented approx. 9 miles south of the 2-mile transmission line corridor in Sanpete County, Utah. Based on the presence of suitable vegetation cover types, elevation range, and geologic formation, potential habitat for the species may be present within the 2-mile transmission line corridors in Sanpete and Sevier counties, Utah.	No.	NatureServe 2012; UNPS 2006.
St. George blue-eyed grass	<i>Sisyrinchium radicum</i>	BLM-NV	Range: Known from southern Nevada; and southwestern Utah, apparently restricted to the St. George-Las Vegas region. Habitat: Moist meadows or on streambanks associated with bluegrass, rush, and sea milkwort. Elevation range 1,970 to 4,265 feet amsl. Flowering late-spring to mid-summer.	<u>Regions III and IV</u> : Low. Although the species has not been documented within the study area, potential habitat may be present within the 2-mile transmission line corridors in Clark County, NV.	No.	NatureServe 2012; FNA 1901.
Jones' globemallow	<i>Sphaeralcea caespitosa</i> var. <i>caespitosa</i>	BLM-UT	Range: Known within Beaver and Millard counties, Utah. Habitat: Mixed desert shrub and grass communities including shadscale, matchweed, rabbitbrush, winterfat, Indian ricegrass and galleta communities on the Sevy Dolomite Formation and on calcareous gravels. Elevation range 4,500 to 6,400 feet amsl. Flowering May to June and again in September.	<u>Region III</u> : High. The species has been documented within the 2-mile transmission line corridor in Millard County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Beaver County, Utah.	No.	UNPS 2006.
Railroad Valley globemallow	<i>Sphaeralcea caespitosa</i> var. <i>williamsiae</i>	BLM-NV	Range: Known within the Hot Creek-Railroad valleys watershed in Nye County, Nevada. Habitat: Mixed shrub, pinyon-juniper, and grass community on Sevy Dolomite rock calcareous soil. Elevation range 5,000-6,505 feet amsl. Flowering May.	None.	Yes. The species is only known within Nye County, Nevada, which is not crossed by the 2-mile transmission line corridors.	NatureServe 2012; NNHP 2001.
Gierisch mallow	<i>Sphaeralcea gierischii</i>	FE (UT), BLM-UT	Range: Endemic to Washington County, Utah; and also in Mohave County, Arizona. Habitat: Warm desert shrub communities, mainly on gypsiferous outcrops of the Harrisburg Member of the Kaibab Formation. Elevation range 2,475 to 2,760 feet amsl. Flowering mid April to early May.	Low.	Yes. Although the species has been documented approx. 20 miles southeast of the 2-mile transmission line corridor, it is unlikely this species would occur within the 2-mile transmission line corridor based on the lack of species-specific associated geologic formations and elevation range within Washington County, Utah.	Federal Register 2012; USFWS 2012a; UNPS 2006.
Jane globemallow	<i>Sphaeralcea janeae</i>	BLM-UT	Range: Endemic to the Canyonlands section of Utah along the Colorado and Green rivers in Grand, Wayne, and San Juan counties, Utah. Habitat: Warm and salt desert shrub communities on the Shinarump and Moenkopi formations and the White Rim and Organ Rock members of the Cutler Formation. Elevation range 4,000 to 4,600 feet amsl. Flowering May to June.	None.	Yes. The species is only known to occur in association with the Shinarump, Moenkopi, and Cutler formations which are not crossed by the 2-mile transmission line corridors in Grand County, Utah.	NatureServe 2012; UNPS 2006.
Psoralea globemallow	<i>Sphaeralcea psoraloides</i>	BLM-UT	Range: Endemic to the Colorado Plateau within Emery and Wayne counties, Utah. Habitat: Zuckia-ephedra, shadscale, <i>Eriogonum</i> , <i>Lepidium</i> , and pinyon-juniper communities on saline and gypsiferous Mancos Shale, Buckhorn conglomerate, Curtis sandstone, Entrada siltstone, Carmel, and Kaibab Limestone. Elevation range 4,000 to 6,300 feet amsl. Flowering mid May to June.	<u>Region II</u> : Moderate. The species has been documented approx. 4 miles west of the 2-mile transmission line corridor in Emery County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Emery County, Utah.	No.	BLM 2010; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Rocktansy	<i>Sphaeromeria capitata</i>	BLM-CO, USFS-Dixie NF	Range: Known within Moffat County, Colorado; disjunct onto the Utah Plateaus in Garfield County, Utah; and also in Wyoming and Montana. Habitat: Western bristlecone pine, ponderosa pine, and pinyon-juniper communities on Cedar Breaks Limestone. General elevation range 4,920 to 7,875 feet amsl; Utah elevation range 7,700 to 7,800 feet amsl; and Colorado elevation range 7,500 to 7,900 feet amsl. Flowering May thru July (depending on state).	Low.	Yes. The species has been documented approx. 3.5 miles west of the 2-mile transmission line corridor in Moffat County, Colorado; however, it is unlikely this species would occur within the 2-mile transmission line corridors based on the lack of suitable elevation range and soil substrates within Moffat County, Colorado.	NatureServe 2012; UNPS 2006.
Laramie false sagebrush	<i>Sphaeromeria simplex</i>	BLM-WY	Range: Regional endemic to the western foothills of the Laramie Range, Shirley Basin, and Shirley Mountains in Albany, Carbon, Converse, and Natrona counties, Wyoming. Total population estimated at approx. 860,000 individuals. Habitat: In cushion plant communities on rocky limestone soils on gentle slopes or rims of dry, rocky limestone-sandstone "pebble plains" in wind scoured openings. Surrounding vegetation communities typically are densely vegetated forest or shrubland communities. Elevation range 7,200 to 8,760 feet amsl. Flowering May to August.	None.	Yes. Based on the deletion of Segment 10 (former Aelous Design Option), potentially suitable habitat for this species is no longer present within the 2-mile transmission line corridor in Carbon County, Wyoming.	Handley and Heidel 2010; NatureServe 2012; WYNDD 2009.
Ute ladies'-tresses orchid ⁶	<i>Spiranthes diluvialis</i>	FT (CO, UT, WY), BLM-NV; NV State CE	Range: Known within Lincoln and possibly White Pine counties, Nevada; and also in Colorado, Idaho, Montana, Nebraska, Utah, and Wyoming. Habitat: An aquatic or wetland-dependent occupying moist to very wet, somewhat alkaline or calcareous native meadows near streams, springs, seeps, lake shores, or in abandoned stream meanders that still retain ample ground water. Elevation range 4,200 to 6,100 feet amsl. Flowering July to August.	<u>Regions I, II, III</u> : High. The species has been documented within the 2-mile transmission line corridor in Wasatch, Duchesne, and Uintah counties, Utah. Based on the results of the modeled habitat assessment, potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Moffat County, Colorado; Duchesne, Juab, Uintah, Utah, and Wasatch counties, Utah; and Carbon County, Wyoming.	No.	BLM 2010; NatureServe 2012; NNHP 2001; USFWS 2012a, 1992c; WYNDD 2009.
White River swertia	<i>Swertia gypsicola</i>	BLM-UT	Range: Endemic to the Great Basin in western Millard County, Utah; and also in Nevada. Habitat: Greasewood and shadscale dominated valley bottoms. Elevation at approx. 5,000 feet amsl. Flowering mid June to July.	Low.	Yes. Although potential habitat may be present based on the presence of suitable vegetation cover types, elevation range, and soil substrate, it is unlikely this species would occur within the 2-mile transmission line corridors.	UNPS 2006.
Thompson talinum	<i>Talinum thompsonii</i>	BLM-UT	Range: Endemic to the Colorado Plateau in Emery County, Utah. Habitat: Pinyon-juniper and ponderosa pine communities in siliceous conglomeratic gravels. Elevation range at approx. 7,500 feet. Flowering mid July to August.	<u>Region II</u> : Moderate. The species has been documented approx. 0.25 mile north of the 2-mile transmission line corridor in Emery County, Utah. Based on the presence of suitable elevation range, vegetation cover types, and soil substrate, potential habitat for the species may be present within the 2-mile transmission line corridors in Emery County, Utah.	No.	BLM 2010; UNPS 2006.
Cathedral Bluff meadow-rue	<i>Thalictrum heliophilum</i>	BLM-CO	Range: Limited to the Colorado River drainage in Garfield, Rio Blanco, and Mesa counties, Colorado. Habitat: Sparsely vegetated steep talus slopes and ridges of the Parachute Creek Member of the Green River Formation. Elevation range approx. 6,300-8,800 feet amsl. Flowering June to August.	Low.	Yes. Although the species has been documented approx. 21 miles east of the 2-mile transmission line corridor in Rio Blanco County, Colorado; and approx. 44 miles east of the 2-mile transmission line corridor in Garfield County, Colorado, it is unlikely that this species would occur within the 2-mile transmission line corridors based on agency consultation and the lack of suitable habitat parameters.	FNA 1983; NatureServe 2012.
Duchesne greenthread (Caespitose greenthread)	<i>Thelesperma caespitosum</i> (<i>Thelesperma caespitosa</i>)	USFS-Ashley NF, BLM-UT, BLM-WY	Range: Endemic to Duchesne County, Utah; and Sweetwater County, Wyoming. Habitat: White shale slopes and ridges of the Green River Formation or in mountain shrub/pinyon-juniper communities of the Uinta Formation. Elevation range 5,900 to 8,860 feet amsl. Flowering May to June.	<u>Region II</u> : Utah – High. The species has been documented within and adjacent to the USFS Ashley NF within the 2-mile transmission line corridor in Duchesne County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Duchesne County, Utah. Wyoming – Low.	Utah - No. Wyoming – Yes. Potential habitat for the species is not crossed by the 2-mile transmission line corridors in Sweetwater County, Wyoming.	BLM 2010; NatureServe 2012; UNPS 2006.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Uinta greenthread	<i>Thelesperma pubescens</i>	BLM-WY, USFS-Uinta-Wasatch-Cache NF	Range: Endemic to the foothills of the southern Green River Basin and northern Uinta Range in Uinta and Sweetwater counties, Wyoming; and also in northeast Utah. Habitat: Sparsely vegetated cushion plant and sagebrush grasslands communities on cobbly soils along the summit edges of relict surfaces that are now isolated mountains forming mesa-like mountains capped with Bishop Conglomerate. Elevation range 8,100 to 8,900 feet amsl. Flowering July to August.	None.	Yes. Potential habitat for the species is not crossed by the 2-mile transmission line corridors.	NatureServe 2012; UNPS 2006; WYNDD 2009.
Bicknell thelesperma	<i>Thelesperma subnudum</i> var. <i>alpinum</i> (<i>Thelesperma pubescens</i>)	USFS-Dixie NF, USFS-Fishlake	Range: Endemic to Wayne County, Utah. Total population estimated at approx. 8,300 to 21,200 individuals. Habitat: Pinyon-juniper, bristlecone pine, mountain brush communities in the Navajo Sandstone and Carmel limestone formations. Elevation range 7,300 to 9,000 feet amsl. Flowering June to July.	None.	Yes. The species is endemic to Wayne County, Utah, which is not crossed by the 2-mile transmission line corridors.	USFS 1999.
Last Chance townsendia	<i>Townsendia aprica</i>	FT (UT)	Range: Endemic to Emery, Sevier, and Wayne counties, Utah. Habitat: Salt desert shrub and pinyon-juniper communities on clay or clay silt soils of the Blue Gate member of the Mancos Shale. Elevation range 6,100 to 8,000 feet amsl. Flowering April to May.	<u>Region II</u> : Moderate. The species has been documented approx. 0.25 mile north of the 2-mile transmission line corridor in Sevier County, Utah; and approx. 4 miles south of the 2-mile transmission line corridor in Emery County, Utah. Based on the presence of suitable vegetation cover types, elevation range, and geographic formations, potential habitat for the species may be present within the 2-mile transmission line corridors in Emery and Sevier counties, Utah.	No.	BLM 2010; USFWS 2012a, 1993b; UNPS 2006.
Sigurd townsendia (Sevier townsendia)	<i>Townsendia jonesii</i> var. <i>lutea</i>	BLM-UT, USFS-Fishlake NF	Range: Known within Juab, Piute, Sanpete, and Sevier counties, Utah. Habitat: Salt desert and mixed desert shrub and juniper sagebrush communities on Arapien shale and clays in volcanic rubble. Elevation range 5,500 to 6,300 feet amsl. Flowering May to June.	<u>Region II</u> : High. The species has been documented within the 2-mile transmission line corridor in Sevier County, Utah; and adjacent to the 2-mile transmission line corridor in Juab County, Utah. Potential habitat for the species may be present both within the 2-mile transmission line corridor and the analysis area in Juab and Sevier counties, Utah. Based on detailed species-specific habitat modeling, potential may also be present within the USFS-Fishlake NF with Juab and Sevier counties, Utah.	No.	NatureServe 2012; UNPS 2010.
Cedar Mountain easter daisy	<i>Townsendia microcephala</i>	BLM-WY	Range: Endemic to the northern foothills of the Uinta Range within Sweetwater and Uinta counties, Wyoming. Habitat: Restricted to the Bishop Conglomerate on exposed, west facing upper slopes and ridges on shallow, sandy soils. Elevation range 8,200 to 8,500 feet amsl. Flowering May to July.	None.	Yes. The species is endemic to the northern foothills of the Uinta Range, which is not crossed by the 2-mile transmission line corridors.	WYNDD 2009.
Strigose easter daisy	<i>Townsendia strigosa</i>	BLM-CO	Range: Known within Moffat County, Colorado; Daggett, Duchesne, and Uintah counties, Utah; and central western, southwestern, and south-central portions of Wyoming. Habitat: Habitat information is not available for this species.	<u>Region I and II</u> : Low. No known populations have been identified within or adjacent to the 2-mile transmission line corridors. Since habitat characteristics are unavailable for this species, it is unknown if potential habitat may be present within the 2-mile transmission line corridor or the analysis area. A conservative estimate was applied, assuming the presence of potential habitat within Moffat County, Colorado.	No.	NatureServe 2012.
Strigose townsendia	<i>Townsendia strigosa</i> var. <i>prolixa</i>	BLM-UT	Range: Known within the Chipeta Wells and Duchesne Valley area (also Evacuation Creek) in Uintah County, Utah. May also occur in Grand County, Utah and Sweetwater County, Wyoming. Habitat: Barren, rocky clay knolls. Elevation range and flowering period unknown.	<u>Region II</u> : Low. No known populations have been identified within or adjacent to the 2-mile transmission line corridor. Since habitat characteristics are unavailable for this species, it is unknown if potential habitat may be present within 2-mile transmission line corridor or the analysis area. A conservative estimate was applied, assuming the presence of potential habitat within Uintah County, Utah.	No.	BLM 2010.
Mountain clover	<i>Trifolium andinum</i>	BLM-CO	Range: Known from Wyoming and Utah to northern Arizona; Moffat County, Colorado; and Nye and Lincoln counties, Nevada. Habitat: Dry, sandy loam washes and exposed ridges in ponderosa pine or mixed shrub communities. Elevation range 5,700 to 7,300 feet amsl. Flowering mid May to July.	Low.	Yes. Although potential habitat may be present based on the presence of suitable vegetation cover types, elevation range, and soil substrate, it is unlikely this species would occur within the 2-mile transmission line corridors.	CNHP 2002; NatureServe 2012.

Table G-1 Special Status Plant Species Identified for the TransWest Express Transmission Project¹

Common Name	Scientific Name	Status ²	Range and Habitat Requirements	Potential for Occurrence Within the Project Area ³	Eliminated from Detailed Analysis	References
Currant Summit clover	<i>Trifolium andinum</i> var. <i>podocephalum</i>	BLM-NV	Range: Endemic to the White Pine and Egan ranges within Lincoln and Nye counties, Nevada. Habitat: Crevices of volcanic or carbonate rock in the pinyon-juniper zone. Elevation range 6,900 to 7,400 feet amsl. Flowering late May through early July.	None.	Yes. The species is endemic to the White Pine and Egan ranges which are not crossed by the 2-mile transmission line corridors.	NNHP 2001.
Frisco clover	<i>Trifolium friscanum</i>	FC (UT); BLM-UT	Range: Known within the San Francisco and Beaver Lake mountains in Beaver County; and within the Tunnel Springs Range in Millard County, Utah. Habitat: Calcareous and volcanic gravels and limestone on relatively steep slopes in pinyon-juniper woods often associated with mountain mahogany. Elevation range 6,900 to 7,300 feet amsl. Flowering June.	Low.	Yes. The species has been documented approx. 5 miles west of the 2-mile transmission line corridors in Beaver County, Utah; however, habitat model results indicate lack of potential habitat within the 2-mile transmission line corridors in Beaver County, Utah.	NatureServe 2012; USFWS 2012a, 2011b; UNPS 2006.
Smith violet	<i>Viola franksmithii</i>	USFS-UNK	Range: Endemic to Logan Canyon in Cache County, Utah. Habitat: Cracks, crevices, and holes in outcrops of limestone and dolomite, in humid, shady places. Elevation range 5,300 to 5,900 feet amsl. Flowering mid May to August.	None.	Yes. The species has been documented within Cache County, Utah, which is not crossed by the 2-mile transmission line corridors.	UNPS 2006.
Rock violet	<i>Viola lithion</i>	BLM-NV	Range: In Nevada, known only from the White Pine and Pilot Ranges within Elko, Nye, and White Pine counties. Habitat: Seasonally wet crevices in steep carbonate or quartzite outcrops in shaded northeast-facing avalanche chutes and cirque headwalls in the subalpine conifer zone with <i>Symphoricarpos oreophilus</i> , <i>Ribes montigenum</i> , <i>Heuchera rubescens</i> , <i>Aquilegia scopulorum</i> , <i>Thalictrum fendleri</i> , <i>Pinus flexilis</i> , and <i>Populus tremuloides</i> . Elevation range 7,840 to 10,480 feet amsl. Flowering June to August.	None.	Yes. The species is endemic to the White Pine and Pilot ranges which are not crossed by the 2-mile transmission line corridors.	NNHP 2001.
Sterile yucca	<i>Yucca sterilis</i> (<i>Yucca harrimaniae</i> var. <i>sterilis</i>)	BLM-UT	Range: Endemic of the Uinta Basin restricted to Uintah and Duchesne counties, Utah. Habitat: Salt desert shrub, juniper, sagebrush, shadscale communities in sandy soils. Elevation range 4,790 to 5,800 feet amsl. Flowering period unknown.	<u>Region II</u> : Moderate. The species has been documented approx. 3 miles north of the 2-mile transmission line corridor in Uintah County, Utah; and approx. 7.5 miles north of the 2-mile transmission line corridor in Duchesne County, Utah. Based on the presence of associated vegetation cover types, soil substrate, and elevational range, potential habitat may be present within the 2-mile transmission line corridors in Uintah and Duchesne counties, Utah.	No.	BLM 2010; UNPS 2006.

¹ Based on county level range and distribution, only those Nevada BLM Sensitive Species with potential for occurrence within the counties crossed by the proposed project were included as part of this analysis table.

² Status: FE-Federally Endangered Species; FT-Federally Threatened Species; FC-Federal Candidate Species; FP-Federal Proposed Species; BLM-BLM Sensitive Species; USFS-USFS Sensitive Species; NV State CE-NV State Critically Endangered; NV State CE#-NV State Recommended for Listing a Critically Endangered; NV State CY – NV State Protected as a Cacti, Yucca, or Christmas Tree

³ Potential for Occurrence Within the Project Area: High-Documented occurrences and suitable habitat within the 2-mile-wide corridors; Moderate-Documented occurrences adjacent to the 2-mile-wide corridors and potential habitat parameters identified within the 2-mile-wide corridors; Low-No documented occurrences; however, one or more potential habitat parameters identified within the 2-mile-wide corridors; None-No documented occurrences, nor potential habitat parameters identified within the 2-mile-wide corridors.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
INVERTEBRATES						
Aegialian scarab beetle	<i>Aegialia knighti</i>	BLM	Range: The Aegialian scarab beetle occurs only near the Big Dune in Clark County, Nevada. Habitat: The species occurs in typical Mojave desert habitat in low, red sand hills and sand blow-out areas.	<u>None</u> . The geographic range for this species is outside the 2-mile transmission line corridor.	Yes.	NatureServe Explorer 2010.
Eureka mountainsnail	<i>Oreohelix eurekaensis</i>	BLM; UT-SS	Range: The Eureka mountainsnail is endemic to Utah and occurs in six isolated localities, representing four widely separated populations in Juab, Utah, Duchesne, Tooele and Grand counties, Utah. Habitat: The species inhabits relatively open, 45-degree, south/southwest-facing slopes on broken limestone and loam substrate.	<u>Region II</u> : Low. The species is known to occur in Duchesne, Juab, Grand, and Utah counties, Utah. It has been documented on the Juab/Utah county line, and in eastern Duchesne County, Utah.	No.	NatureServe Explorer 2010; UDWR 2010-2012.
Great Basin silverspot (Nokomis fritillary) butterfly	<i>Speyeria nokomis nokomis</i>	BLM	Range: The Great Basin silverspot butterfly is extirpated from most of its former range in Colorado, Arizona, New Mexico, and Utah. It is currently known to occur in Duchesne County, Utah and Moffat County, Colorado. Habitat: The subspecies inhabits streamside meadows and open seepage areas with an abundance of violets in desert landscapes. Colonies of this butterfly are often isolated.	<u>Regions I and II</u> : Low. The subspecies is known to occur in Duchesne County, Utah. In Moffat County, Colorado, it has been documented along the Green River in Dinosaur National Monument.	No.	NatureServe Explorer 2010; Opler et al. 2009; Selby 2007.
Great Basin small blue (Small blue) butterfly	<i>Philotiella speciosa septentrionalis</i>	BLM	Range: The Great Basin small blue butterfly is endemic to Nevada. Habitat: The species inhabits deserts, edges of dry desert lakes, and stream edges in foothills.	<u>Regions III and IV</u> : Low. The subspecies is known to occur in southern Nevada.	No.	NatureServe 2012; Opler et al. 2009.
Grey's silverspot (Grey's fritillary) butterfly	<i>Speyeria hesperis greyi</i>	BLM	Range: The Grey's silverspot butterfly is endemic to Nevada. Habitat: The species inhabits forest openings, meadows, and open hillsides.	<u>Region III</u> : Low. The subspecies is known to occur in southern Nevada.	No.	NatureServe 2012; Opler et al. 2009.
Honey Lake blue butterfly	<i>Euphilotes pallescens calneva</i>	BLM	Range: The Honey Lake blue butterfly is endemic to Nevada and California. Habitat: The species inhabits arid areas such as desert flats and edges of sand dunes.	<u>Regions III and IV</u> : Low. The subspecies is known to occur in southern Nevada.	No.	NatureServe 2012; Opler et al. 2009.
MacNeill sooty wing skipper (MacNeill saltbush sootywing) butterfly	<i>Hesperopsis graciellae</i>	BLM	Range: The MacNeill sooty wing skipper occurs in California, Nevada, Arizona, Utah, and Mexico. The species is endemic to a section of the Colorado River from the Arizona-Nevada-Utah border, south into adjacent Baja California, and Mexico. It also occurs east along the Salt River in Arizona. Habitat: The species inhabits saltbush flats adjacent to rivers.	<u>Region III</u> : High. The species is known to occur within the 2-mile transmission line corridor in isolated colonies along the Muddy River in Clark County, Nevada.	No.	Hiatt and Boone 2003; NatureServe Explorer 2010.
Mojave gypsum bee	<i>Andrena balsamorhizae</i>	BLM	Range: The Mojave gypsum bee occurs in Clark County, Nevada. Habitat: The species occurs in the Mojave desert and is a silverleaf sunray obligate.	<u>Regions III and IV</u> : High. The species is known to occur within the 2-mile transmission line corridor in gypsum soil areas of the Las Vegas Basin in Clark County, Nevada. Its obligate, silverleaf sunray, has also been documented within the 2-mile transmission line corridor in Clark County, Nevada.	No.	Hiatt and Boone 2003; NatureServe Explorer 2010.
Mojave poppy bee	<i>Perdita meconis</i>	BLM	Range: The Mojave poppy bee occurs in southeastern California, southern Nevada, southwestern Utah, and northwestern Arizona. Habitat: The species occurs in the Mojave desert and is a poppy plant obligate.	<u>Regions III and IV</u> : High. The species is known to occur within the 2-mile transmission line corridor in Clark County, Nevada. One of the obligate poppy species has been documented within the 2-mile transmission line corridor in Clark County, Nevada. Another obligate poppy species has been documented within 5 miles of the reference line in Clark County, Nevada.	No.	Hiatt and Boone 2003; NatureServe Explorer 2010.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
Mono Basin Skipper (Railroad Valley skipper) butterfly	<i>Hesperia uncas giulianii</i>	BLM	Range: The Mono Basin (Railroad Valley) skipper subspecies is endemic to Nevada. Habitat: The species inhabits grasslands, sagebrush, and open woodlands.	<u>Regions III and IV</u> : Low. The subspecies is known to occur in southern Nevada.	No.	NatureServe Explorer 2010; Opler et al. 2009.
Northern Mojave blue (Mojave blue) butterfly	<i>Euphilotes mojave virginensis</i>	BLM	Range: The northern Mojave blue butterfly occurs in Arizona, Nevada, and Utah. Habitat: The species inhabits Mojave desert habitat in washes and sandy areas.	<u>Regions III and IV</u> : Low. The subspecies is known to occur in southern Nevada.	No.	NatureServe Explorer 2010; Opler et al. 2009.
Rice's blue butterfly	<i>Euphilotes pallescens ricei</i>	BLM	Range: The Rice's blue butterfly is endemic to Nevada. Habitat: The species inhabits arid areas such as desert flats and the edges of sand dunes.	<u>Regions III and IV</u> : Low. The subspecies is known to occur in southern Nevada.	No.	NatureServe Explorer 2010; Opler et al. 2009.
White River wood nymph butterfly	<i>Cercyonis pegala pluvialis</i>	BLM	Range: The White River wood nymph butterfly occurs in Lincoln, Nye, and White Pine counties, Nevada. Habitat: The species inhabits large, sunny, grassy areas including open meadows, bogs, and fallow fields.	<u>Region III</u> : Moderate. The subspecies is known to occur within 5 miles of the reference line in Lincoln County, Nevada.	No.	NatureServe Explorer 2010; NNHP 2001; Opler et al. 2009.
REPTILES						
Banded Gila monster	<i>Heloderma suspectum cinctum</i>	NV-P	Range: The banded Gila monster occurs in Clark, Nye, and Lincoln counties, Nevada. Habitat: The subspecies occurs in rocky desert habitats. Primary vegetation types include desert grassland, Mojave and Sonoran desert scrub, and thorn scrub. It is sometimes found in oak or pine-oak woodlands.	<u>Regions III and IV</u> : High. The subspecies has been documented within the 2-mile transmission line corridor in Clark and Lincoln Counties, Nevada. It is also known to occur in Clark and Lincoln counties, Nevada.	No.	NatureServe Explorer 2010; Nevada Diversity Database 2007; NDOW 2012.
Chuckwalla	<i>Sauromalus ater</i>	BLM; UT-SS Tier II	Range: The chuckwalla occurs throughout the Mojave Desert region of Nevada, in southern Washington County, east Kane and Garfield counties, and southeast San Juan County, Utah. Habitat: The species occurs in rocky desert habitats.	<u>Regions III and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark County, Nevada. It has been documented within 5 miles of the reference line in Washington County, Utah. It is also known to occur in Lincoln County, Nevada.	No.	Nevada Diversity Database 2007; NDOW 2012; UDWR 2005; UNHP 2003.
Corn snake	<i>Elaphe guttata</i>	BLM; UT-SS Tier II	Range: The corn snake is primarily found east of the continental divide in North America. Isolated populations occur in Utah. Habitat: The species occurs in riparian habitat and mixed woodlands, with a permanent source of water.	<u>Regions I, II and III</u> : Moderate. The species has been documented within 5 miles of the reference line in Grand County, Utah. It is also known to occur along the Colorado and Green rivers, from Moab, in Grand County, Utah, north to Dinosaur National Monument in Uintah County, Utah.	No.	Stebbins 2003; UDWR 2005; UNHP 2003.
Desert glossy snake	<i>Arizona elegans eburnata</i>	BLM	Range: The desert glossy snake occurs from southern Nevada, northwest Arizona and extreme southwest Utah south through eastern California into northeastern Baja California. Habitat: The subspecies inhabits barren sandy desert, arid scrub, and rocky washes.	<u>Region IV</u> : Moderate. Suitable habitat occurs within the 2-mile transmission line corridor in Nevada.	No.	California Herps 2012.
Mojave shovel-nosed snake	<i>Chionactis occipitalis occipitalis</i>	BLM; NV-P	Range: The Mojave shovel-nosed snake is found within the Mojave Desert of southern Nevada. Habitat: The subspecies occurs within sparsely vegetated desert habitat consisting of mesquite-creosote bush, desert grasses, and cactus. Habitat components also include rocky slopes, dunes, washes, and sandy flats; but preferred habitat is flat areas with sandy soils.	<u>Region IV</u> : Moderate. Suitable habitat occurs within the 2-mile transmission line corridor in Nevada.	No.	NDOW 2012.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
Desert iguana	<i>Dipsosaurus dorsalis</i>	BLM; UT-SS Tier II	Range: The desert iguana occurs in the Mojave desert of California and Nevada, and the Great Basin desert in Utah and Arizona, south to the deserts of Baja California and Mexico. Habitat: The species inhabits creosote desert with loose sands interspersed with firm ground and scattered rocks.	<u>Regions III and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark and Lincoln counties, Nevada. It has been documented within 5 miles of the reference line in Washington County, Utah.	No.	NDOW 2012; Nevada Diversity Database 2007; SDNHM 2009; UDWR 2005.
Desert night lizard	<i>Xantusia vigilis</i>	BLM; UT-SS Tier II	Range: The desert night lizard occurs in the Mojave desert. Habitat: The species inhabits arid and semiarid granite outcrops and rocky areas. Habitat typically consists of yucca, agave, Joshua trees, pinyon-juniper, and desert shrub.	<u>Regions III and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Washington County, Utah, and Clark and Lincoln counties, Nevada.	No.	NDOW 2012; UNHP 2003; UDWR 2005.
Desert tortoise	<i>Gopherus agassizii</i>	FT; BLM; UT-SS Tier I; NV-P	Range: The desert tortoise occurs in the Mojave and Sonoran deserts of North America. Habitat: The species occurs in a variety of habitats, from sandy flats to rocky foothills, including alluvial fans, washes and canyons with suitable soils for burrows. Habitat typically consists of creosote bush and white bursage.	<u>Regions III and IV</u> : High. The species is known to occur within the 2-mile transmission line corridor in Washington County, Utah and Lincoln and Clark counties, Nevada. The project crosses USFWS critical habitat in Washington County, Utah and Clark and Lincoln counties, Nevada.	No.	59 FR 5820 5866; Germano 1994; NatureServe Explorer 2010; UDWR 2005; USFWS 2008a.
Long-nosed leopard lizard	<i>Gambelia wislizenii</i>	BLM	Range: The long-nosed leopard lizard occurs in the western United States from Oregon and Idaho south to northern Mexico. Habitat: This species inhabits a variety of sparsely distributed vegetation in desert flats and lower foothills.	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark and Lincoln counties, Nevada. It is also known to occur in western Colorado and western Utah.	No.	Colorado Herpetological Society No Date; NDOW 2012; SDNHM 2009.
Midget faded rattlesnake	<i>Crotalus viridis concolor</i>	BLM	Range: The midget faded rattlesnake occurs in southwest Wyoming, northeastern Utah, and northwestern Colorado. Habitat: This subspecies inhabits rock outcrops in sagebrush desert, pinyon-juniper, greasewood, saltbush, and desert shrub communities.	<u>Regions I and II</u> : Moderate. The subspecies has been documented within 5 miles of the reference line in Sweetwater County, Wyoming. It is also known to occur in the lower Green River valley from Green River and Rock Springs, Wyoming, to the Utah-Wyoming border. It is also known to occur in northeastern Utah and northwestern Colorado.	No.	WGFD 2005.
Utah milk snake	<i>Lampropeltis triangulum taylori</i>	BLM	Range: The Utah milk snake occurs in Utah, from the southwestern part of the state, north to the southern part of the Wasatch Mountains and east through the Uinta Mountains and the Uinta Basin. Habitat: The subspecies occurs in a variety of habitats including open forests, shrubland, and sagebrush, with a grass understory.	<u>Region II</u> : High. The subspecies is known to occur within the 2-mile transmission line corridor in Duchesne, Grand, Sanpete, and Sevier counties, Utah.	No.	UNHP 2003.
Mojave rattlesnake	<i>Crotalus scutulatus</i>	BLM; UT-SS Tier II	Range: The Mojave rattlesnake occurs in Clark, southern Nye, and southern Lincoln counties, Nevada. In Utah, the species occurs only in the Mojave desert region of southwestern Washington County. Habitat: The species inhabits areas with Joshua trees, creosote bush, burrow brush, and cholla cactus, with a rocky substrate.	<u>Regions III and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark County, Nevada. It has been documented within 5 miles of the reference line in Washington County, Utah.	No.	Heindl No Date; NDOW 2012; UDWR 2005; UNHP 2003.
Sidewinder	<i>Crotalus cerastes</i>	BLM; UT-SS Tier II	Range: The sidewinder occurs in the Mojave and Sonoran deserts of North America. Habitat: The species occurs in open sandy desert terrain with fine windblown sand, desert flats with sandy washes, or sand dunes sparsely vegetated with creosote bush or mesquite.	<u>Regions III and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Lincoln and Clark counties, Nevada. It has been documented within 5 miles of the reference line in Washington County, Utah.	No.	AGFD 2006; NatureServe Explorer 2010; NDOW 2012; SDNHM 2009; UDWR 2005.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
Smooth greensnake	<i>Opheodrys vernalis</i>	BLM; UT-SS Tier II	Range: The smooth greensnake occurs in southwest and south-central Wyoming, and into Utah, Idaho, and New Mexico. Habitat: The species inhabits the foothills and montane zones, in riparian communities in coniferous, deciduous, and subalpine forests. Meadows, grasslands, and wetlands may also be utilized.	<u>Regions I and II</u> : High. The species has been documented within the 2-mile transmission line corridor in Utah County, Utah. It has been documented in isolated locations in the mountains of central and eastern Utah, including the Wasatch, Uintah, Abajo, and La Sal mountains, and the East Tavaputs Plateau. It is also known to occur in Carbon County, Wyoming.	No.	Colorado Herpetological Society No Date; UDWR 2005; UNHP 2003; WGFD 2005.
Speckled rattlesnake	<i>Crotalus mitchellii</i>	BLM; UT-SS Tier II	Range: The speckled rattlesnake occurs in the Mojave and Sonoran deserts of North America. Habitat: The species inhabits rocky desert terrain and desert scrub communities, including creosote bush and bursage.	<u>Regions III and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark County, Nevada. It has been documented within 5 miles of the reference line in Washington County, Utah. It is also known to occur in extreme southern Lincoln County, Nevada.	No.	NatureServe Explorer 2010; NDOW 2012; SDNHM 2009; UDWR 2005; UNHP 2003.
Western banded gecko	<i>Coleonyx variegates</i>	BLM; UT-SS Tier II	Range: The western banded gecko occurs in the Mojave and Sonoran deserts of North America. Habitat: The species inhabits open areas, often near rocks, in creosote scrub and desert scrub communities.	<u>Regions III and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark County, Nevada. It has also been documented within 5 miles of the reference line in Washington County, Utah.	No.	NatureServe Explorer 2010; NDOW 2012; Nevada Diversity Database 2007; SDNHM 2009; UDWR 2005; UNHP 2003.
Western red-tailed skink	<i>Eumeces gilberti rubicaudatus</i>	BLM	Range: The western red-tailed skink occurs in Clark County, and parts of Lincoln and Nye counties, Nevada. Habitat: The subspecies is found in rocky, riparian habitat.	<u>Regions III and IV</u> : Low. The subspecies is known to occur in Clark and Lincoln counties, Nevada.	No.	BLM 2007; NatureServe Explorer 2010.
Western threadsnake (blindsnake)	<i>Leptotyphlops humilis</i>	BLM; UT-SS Tier II	Range: The western threadsnake occurs from southwestern Utah and southern Nevada through southern California, Arizona, New Mexico, Texas, and parts of Mexico. Habitat: The species occurs in a variety of habitats, including deserts, desert-grasslands, shrub covered mountain slopes including rocky terrain, washes near stream channels, riparian, and spring areas.	<u>Regions III and IV</u> : Low. The species is known to occur in southwestern Washington County, Utah, and in Clark and Lincoln counties, Nevada.	No.	BLM 2007; NatureServe Explorer 2010; UDWR 2005; UNHP 2003.
Zebra-tailed lizard	<i>Callisaurus draconoides</i>	BLM; UT-SS Tier II	Range: The zebra-tailed lizard occurs throughout the desert southwest of North America in Arizona, California, Nevada, New Mexico, and Utah. Habitat: The species inhabits open desert areas on firm soil, with sparse creosote bush and blackrush vegetation. It sometimes occurs on rocky, shady, leaf-litter substrates.	<u>Regions III and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark County, Nevada. It has been documented within 1 mile of the reference line in Washington County, Utah. It is also known to occur in Lincoln County, Nevada.	No.	BLM 2007; NatureServe Explorer 2010; Nevada Diversity Database 2007; UDWR 2005; UNHP 2003.
BIRDS						
American white pelican	<i>Pelecanus erythrorhynchos</i>	BLM; UT-SS Tier II	Range: The American white pelican breeds in widely distributed island colonies from Canada to northeastern California, Utah, Nevada, Wyoming, and Colorado. Habitat: The species breeds on islands in large bodies of water. It forages in marshes, lakes, and rivers. It constructs a scrape nest on flat, open ground, near water. It is a colonial nester.	<u>Regions I and II</u> : High. The species has been documented within the 2-mile transmission line corridor in Millard County, Utah. It has also been documented within 5 miles of the reference line in Iron, Juab, Millard, Sevier, Uintah, and Washington counties, Utah. No suitable habitat for the American white pelican is crossed by the project alternatives in Region III. A breeding colony has been documented within 5 miles of the reference line in Carbon County, Wyoming.	No.	Floyd et al. 2007; Kingery 1998; NDOW 2012; UDWR 2005; UNHP 2003; WGFD 2005.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
Least bittern	<i>Ixobrychus exilis</i>	BLM; NV-P	Range: The least bittern nests throughout the eastern United States and in select areas of Oregon, California, Colorado, Arizona, New Mexico, Texas, Utah, Nebraska, Nevada, Mexico, and South America. Habitat: The species breeds and forages in freshwater marshes. It nests on a platform of marsh vegetation with a canopy.	<u>Regions I, III, and IV</u> : Moderate. The species has been documented within 5 miles of the reference line in Clark County, Nevada. Probable breeding records exist for the Pahrangat National Wildlife Refuge in Lincoln County, Nevada.	No.	Floyd et al. 2007; Gibbs et al. 1992.
White-faced ibis	<i>Plegadis chihi</i>	BLM	Range: The white-faced ibis nests from central Mexico to coastal Texas and Louisiana and through the Great Basin. Isolated colonies exist in Alberta, New Mexico, California, Montana, North Dakota, Iowa, Kansas, and South America. Habitat: The species breeds in tall emergent vegetation growing as "islands", surrounded by water (at least 18 inches deep). It forages in wet hay meadows and flooded agricultural croplands, marshes, shallow ponds, lakes, and reservoirs. It constructs a nest of emergent vegetation in bulrushes, cattails, or reeds; on floating mats; or in low trees.	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Carbon County, Wyoming. It has also been documented within 5 miles of the reference line in Sweetwater County, Wyoming. Possible breeding colonies exist in northwestern Colorado and in Clark County, Nevada.	No.	Floyd et al. 2007; Kingery 1998; NDOW 2012; Ryder and Manry 1994; WGFD 2005.
Barrow's goldeneye	<i>Bucephala islandica</i>	BLM	Range: The Barrow's goldeneye breeds in the western mountains of North America, from Alaska to central California. Habitat: The species breeds near densely vegetated water bodies with abundant aquatic vegetation. It forages in water bodies. It nests in cavities, usually in dead trees close to cold-water lakes, pools, or rivers. The species exhibits high nest fidelity.	<u>Region I</u> : Low. The species is a confirmed breeder in Sweetwater and Carbon counties, Wyoming.	No.	Ehrlich et al. 1988; Kingery 1998; WGFD 2005.
Trumpeter swan	<i>Cygnus buccinator</i>	BLM	Range: The trumpeter swan was once distributed across most of North America and currently occurs locally from Alaska south to Oregon and east to Michigan. Habitat: The species breeds in areas with stable, quiet, and shallow waters where small islands, muskrat houses, or dense emergent vegetation provide nesting and loafing habitat. It forages in shallow marshes, ponds, lakes, and river oxbows with nutrient-rich waters, and dense aquatic plants and invertebrates. It constructs a nest of aquatic and emergent vegetation, often on a muskrat house surrounded by water.	<u>Region I</u> : High. The species has been documented within the 2-mile transmission line corridor in Sweetwater County, Wyoming.	No.	Ehrlich et al. 1988; Floyd et al. 2005; WGFD 2005.
Bald eagle	<i>Haliaeetus leucocephalus</i>	BLM USFS; CO-ST; UT-SS Tier I; NV-P	Range: The bald eagle occurs throughout the United States and Canada, south into central Mexico. Habitat: The species breeds near large lakes and rivers, in forested habitat where adequate prey and large, old cottonwood or conifer trees are available for nesting. It constructs a large stick nest, and exhibits high nest fidelity.	<u>Regions I, II, III, and IV</u> : High. This species has been documented throughout Wyoming, Colorado, Utah, and Nevada. Bald eagles nest and winter along major waterbodies in mature riparian woodlands.	No.	Floyd et al. 2007; Kingery 1998; NDOW 2012; UDWR 2005; UNHP 2003; WGFD 2005.
California condor	<i>Gymnogyps californianus</i>	FE; BLM; EXP/NE-UT; UT-SS Tier I	Range: The California condor is found in California, Arizona, and southern Utah. Habitat: The species breeds and forages in rugged mountains, with brushy or rocky outcrops for nesting. It nests on cliffs, in caves, or in cavities in giant sequoias. It constructs a nest of coarse gravel, with a small amount of leaves and twigs.	<u>Region III</u> : High. The species has been documented within the 2-mile transmission line corridor in Iron County, Utah. The re-introduced population in northern Arizona occurs outside the 2-mile transmission line corridor. However, condors regularly forage, roost, and may nest in southern Utah, therefore may occur within the 2-mile transmission line corridor.	No.	AGFD 2008; Ehrlich et al. 1988; Snyder and Rea 1998; UDWR 2005; UNHP 2003.
Ferruginous hawk	<i>Buteo regalis</i>	BLM; UT-SS Tier II; NV-P	Range: The ferruginous hawk occurs in Canada, eighteen western and central states, and Mexico. Habitat: The species breeds in semiarid open country, primarily grasslands, basin prairie shrublands, and badlands, typically near prairie dog colonies. It requires large tracts of relatively undisturbed rangeland for foraging habitat. It constructs a large stick nest on rock outcrops, knolls, cutbanks, cliff ledges, or trees, and exhibits high nest fidelity.	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Carbon and Sweetwater counties, Wyoming; in Beaver, Duchesne, Emery, Grand, Iron, Juab, Millard, Uintah, and Washington counties, Utah; and in Lincoln County, Nevada. Suitable habitat also occurs within the study area in Clark County, Nevada.	No.	Floyd et al. 2007; Kingery 1998; NatureServe Explorer 2010; NDOW 2012; UDWR 2005; UNHP 2003; WGFD 2005.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
Golden eagle	<i>Aquila chrysaetos</i>	BLM	Range: The golden eagle occurs throughout North America, from Alaska to central Mexico. Habitat: The species breeds and forages in a variety of habitats, including large expanses of grasslands, sagebrush, agricultural lands, and tundra. It constructs a large stick nest on cliffs and in large trees, and exhibits high nest fidelity.	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Carbon and Sweetwater counties, Wyoming, and in White Pine and Lincoln counties, Nevada. Suitable habitat also occurs within the 2-mile transmission line corridor in Colorado, Utah, and Nevada.	No.	Floyd et al. 2007; Kingery 1998; Kochert 2002.
Northern goshawk	<i>Accipiter gentilis</i>	BLM; USFS; UT-SS Tier I; NV-P	Range: The northern goshawk occurs in Alaska, Canada, and south through the southern Rocky Mountains and Mexico. Habitat: The species breeds and forages in mixed coniferous forest and mature aspen stands with tall trees, intermediate canopy coverage for nesting, and small open areas for foraging. It constructs a stick and twig nest on a large horizontal limb, usually against or near the trunk.	<u>Regions I and II</u> : High. The species is known to occur within the 2-mile transmission line corridor in Sweetwater County, Wyoming and in Emery and Millard counties, Utah. It has also been documented within 5 miles of the reference line in Carbon County, Wyoming; Garfield and Rio Blanco counties, Colorado; in Daggett, Duchesne, Emery, Millard, Sanpete, Sevier, Uintah, Utah, and Wasatch counties, Utah; and in Lincoln County, Nevada. No suitable habitat for the northern goshawk is crossed by the project alternatives in Region III.	No.	Floyd et al. 2007; Johnsgard 1990; Kingery 1998; NDOW 2012; UDWR 2005; WGFD 2005.
Peregrine falcon	<i>Falco peregrinus</i>	BLM; USFS; NV-P	Range: The peregrine falcon occurs throughout most of North America. Habitat: The species breeds and forages in a variety of open habitats, including woodlands, forests, shrub-steppe, grasslands, marshes, and riparian habitats. It nests on cliffs and rarely on tall buildings near habitats with abundant prey. It constructs a well-rounded scrape nest of accumulated debris on a ledge.	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Sweetwater County, Wyoming, Uintah County, Utah, and Clark County, Nevada. It has also been documented within 5 miles of the reference line in Carbon County, Wyoming, and in Utah (Daggett, Duchesne, Emery, Sevier, and Washington counties).	No.	Ehrlich et al. 1988; Floyd et al. 2007; Johnsgard 1990; Kingery 1998; Nevada Diversity Database 2007; UNHP 2003; WGFD 2005.
Prairie falcon	<i>Falco mexicanus</i>	BLM	Range: The prairie falcon occurs throughout western North America from Canada to Mexico. Habitat: The species breeds and forages in open terrain, including sagebrush, grasslands, and other arid habitats. It nests on cliff ledges facing open habitat.	<u>Regions I, II, III, and IV</u> : High. Potential habitat for this species occurs in the 2-mile transmission line corridor. It has been documented within 5 miles of the 2-mile transmission line corridor in Lincoln County, Nevada, and in Colorado.	No.	Ehrlich et al. 1988; Floyd et al. 2007; Johnsgard 1990; Kingery 1998; NDOW 2012; WGFD 2009.
Swainson's hawk	<i>Buteo swainsoni</i>	BLM	Range: The Swainson's hawk breeds in western North America, from Alaska south into northern Mexico, and east to Oklahoma and Iowa. The species range includes Wyoming, Colorado, Utah, and Nevada. Habitat: The species breeds and forages in arid grasslands, desert, and agricultural areas with scattered trees and shrubs. It constructs a modest nest in trees and exhibits moderate nest fidelity.	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Utah. Suitable habitat is present along the 2-mile transmission line corridor in Wyoming, Colorado, Utah, and Nevada.	No.	Ehrlich et al. 1988; Floyd et al. 2007; Johnsgard 1990; Kingery 1998; UNHP 2003; WGFD 2005.
Columbian sharp-tailed grouse	<i>Tympanuchus phasianellus columbianus</i>	BLM; USFS; UT-SS Tier II	Range: The Columbian sharp-tailed grouse occurs locally from Canada, south to Nevada and east to Colorado. It has been extirpated from Oregon, California, and Nevada. Habitat: The subspecies inhabits mountain-foothill shrub communities, sagebrush, grassland, and riparian habitats. Lek areas are located in flat areas with low, sparse vegetation. Nests occur within 0.6 mile of the lek area.	<u>Regions I and II</u> : Low. The subspecies occurs in suitable habitat in isolated locations in south-central Wyoming, and northwestern Colorado.	No.	Kingery 1998; UDWR 2005; WGFD 2005.
Greater sage-grouse	<i>Centrocercus urophasianus</i>	FC; BLM; USFS; UT-SS Tier II;	Range: The greater sage-grouse is found throughout the western United States. Habitat: The species breeds and forages in sagebrush grasslands. Lek areas are located in open areas (e.g., ridges, knolls, dry lake beds, burned areas) in close proximity to taller sagebrush which is used as escape cover. Most nests are located under sagebrush plants, typically within 4 miles of the lek. Brooding habitat consists of grassy areas near sagebrush. Winter habitat consists of south and east facing slopes with minimal snow cover.	<u>Regions I, II, and III</u> : High. Active leks occur within the 2-mile transmission line corridor in Wyoming, Colorado, and Utah. Suitable nesting, brooding, and wintering habitat also occurs within the 2-mile transmission line corridor in these states. The 2-mile transmission line corridor includes greater sage-grouse core habitat areas in Wyoming.	No.	Connelly et al. 2004, 2000; Floyd et al. 2007; Kingery 1998; UDWR 2005.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
Gunnison sage-grouse	<i>Centrocercus minimus</i>	FC; BLM; UT-SS	Range: Gunnison sage-grouse occurs in isolated locations in southwestern Colorado and southeastern Utah. Habitat: The subspecies breeds and forages in sagebrush grasslands. Leks are located in open areas (e.g., ridges, knolls, dry lake beds, burned areas) in close proximity to tall sagebrush. Nests are generally located under sagebrush plants within 4 miles of the lek. Brooding habitat consists of grassy areas near sagebrush. Winter habitat consists of south and east facing slopes with minimal snow cover.	None.	Yes. The study area occurs outside the known geographic range of this species.	Connelly et al. 2004, 2000; Floyd et al. 2007; UNHP 2003.
Whooping crane	<i>Grus americana</i>	FE; CO-SE; UT-SS Tier I	Range: Wild populations of whooping cranes migrate from their wintering habitat in southern Texas, north through Oklahoma, Nebraska, South Dakota, North Dakota and Montana to their nesting habitat in Canada. A non-migratory population also occurs in Florida. Habitat: The species does not breed in the project region. Migrants forage in mudflats around reservoirs and in agricultural areas. Migrating whooping cranes roost on submerged river sandbars.	None. The occurrence of this species within the 2-mile transmission line corridor would be limited to accidental migrants from the Aransas-Wood Buffalo population. The Rocky Mountain experimental population is extinct.	No. The species is included in analyses because of the water depletion evaluation requirement in the Platte River Basin.	CDO 2009a; Ehrlich et al. 1988; UDWR 2005; USDOS 2008; USFWS 2004b.
Yuma clapper rail	<i>Rallus longirostris yumanensis</i>	FE; NV-P	Range: The Yuma clapper rail was formerly restricted to an area near Yuma, Arizona, but has since expanded its range. Over 70 percent of the breeding population winters along the lower Colorado River. Habitat: The subspecies breeds and forages in freshwater marshes with dense vegetation exceeding 16 inches in height, and water depth of 12 inches or less. Important habitat components include pond openings, flowing channels, and emergent soils. It constructs a nest of reeds, aquatic vegetation, and grass in a tussock or clumped vegetation.	<u>Regions III and IV</u> : High. The subspecies has been documented within the 2-mile transmission line corridor in Clark County, Nevada.	No.	Ehrlich et al. 1988; Floyd et al. 2007; NatureServe Explorer 2010; Rosenberg et al. 1991; Todd 1986.
Black tern	<i>Chlidonias niger</i>	BLM	Range: The black tern occurs locally in Canada and the northern two-thirds of the United States. Habitat: The species breeds in large marshes, usually greater than 50 acres and forages in marshes and aquatic areas. It nests in small, loose colonies, in still water. It constructs a floating nest of dead rushes in marshes, or on grass tufts in wetlands	<u>Regions I and II</u> : High. Breeding colonies of this species have been documented within the 2-mile transmission line corridor in Carbon County, Wyoming and within 5 miles of the 2-mile transmission line corridor in Sweetwater County, Wyoming. The species has been documented within 5 miles of the reference line in Uintah County, Utah. Suitable habitat occurs at Pelican Lake, and on sandbars in the Green River, Utah.	No.	Kingery 1998; UNHP 2003.
Interior least tern	<i>Sternula antillarum</i>	FE; CO-SE	Range: The interior least tern occurs along rivers and lake shores throughout the interior U.S. from Montana to Texas and New Mexico to Louisiana. Habitat: The species breeds and forages on barren or sparsely vegetated sandbars adjacent to waterbodies. It nests in variable size colonies on sandy or pebbly, sparsely vegetated islands or shorelines.	None. It is unlikely that nesting interior least terns will be present within the 2-mile transmission line corridor.	No. The species is included in analyses because of the water depletion evaluation requirement in the Platte River Basin.	CDO 2009b; USDOS 2008; USFWS 2009.
Long-billed curlew	<i>Numenius americanus</i>	BLM; UT-SS Tier II	Range: The long-billed curlew occurs from southern Canada into most of the western United States. Habitat: The species breeds and forages in a variety of grassland habitats, including moist meadow grasslands, agricultural areas, and dry prairie uplands, usually near water. It nests in grass less than 12 inches tall, with bare ground, shade, abundant invertebrate prey.	<u>Regions I, II, and III</u> : High. This species has been documented within the 2-mile transmission line corridor in Carbon County, Wyoming and Juab, Millard, and Uintah counties, Utah. It has also been documented within 5 miles of the reference line in Beaver, Grand, and Iron counties, Utah.	No.	Floyd et al. 2007; Kingery 1998; NatureServe Explorer 2010; UDWR 2005; UNHP 2003; WGFD 2005.

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Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	BLM; NV-LD	Range: The western snowy plover occurs primarily along the western coast of the U.S. The subspecies breeds in Churchill, Elko, Eureka, Humboldt, Lyon, Mineral, Nye, Pershing, Washoe, and White Pine Counties, Nevada. It is considered a migrant throughout the state. Habitat: The subspecies breeds and forages on alkali playas near large standing pools of shallow water. Artesian wells and springs that spill water onto the dry playas are also used in times of drought. Nests are located on recently exposed alkaline flats.	<u>Region IV</u> : Moderate. Suitable playa habitat is crossed by the project.	No.	NDOW 2012.
Mountain plover	<i>Chardrius montanus</i>	BLM; USFS; UT-SS;	Range: The mountain plover occurs in dry short-grass prairies from south-central Canada to Texas. Habitat: The species breeds and forages in flat, short-grass prairie habitat and fallow agricultural fields with sparse vegetation. It constructs a ground nest of cow manure chips, grass, and roots.	<u>Regions I and II</u> : High. The species has been documented within the 2-mile transmission line corridor in Carbon and Sweetwater counties, Wyoming. It has been documented within 5 miles of the reference line in Grand County, Utah. Historic records also exist for mountain plovers in Duchesne and Uintah counties, Utah.	No.	Ehrlich et al. 1988; NatureServe Explorer 2010; UNHP 2003; WGFD 2005; WYNDD 2010.
Piping plover	<i>Charadrius melodus</i>	FT; CO-ST	Range: The Northern Great Plains population of the piping plover occurs from Canada, south along major prairie rivers, including the Platte River system, and on lake shores to Colorado. Habitat: The species breeds and forages on (sparsely vegetated) sandy lakeshore beaches, and sandbars within riverbeds, and on lake shores. It constructs a scrape nest in sand or gravel.	None. It is unlikely that nesting piping plovers will be present along the 2-mile transmission line corridor.	No. The species is included because of the water depletion evaluation requirement in the Platte River Basin.	COW 2010a; USDOS 2008; USFWS 2004a.
Yellow-billed cuckoo (western)	<i>Coccyzus americanus</i>	FC; BLM; UT-SS Tier I; NV-P	Range: The western yellow-billed cuckoo occurs west of the continental divide in North America. Habitat: The species breeds and forages in dense woodlands along riparian corridors in otherwise arid areas. It requires a multi-storied canopy, and dense, shrubby vegetation, adequate invertebrate prey, cover, and water. It constructs twig nests, in shrubs.	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Utah county, Utah. It has also been documented within 5 miles of the reference line in Emery, Grand, Uintah, and Washington counties, Utah. The species is documented in Meadow Valley Wash in Lincoln County, Nevada. It is also a confirmed breeder along the Muddy River in Nevada.	No.	47 CFR 51; Floyd et al. 2007; Hughes 1999; NDOW 2012; UDWR 2005; UNHP 2003.
Boreal owl	<i>Aegolius funereus</i>	USFS	Range: The boreal owl occurs from Alaska, south through the Rocky Mountains to northern New Mexico. Habitat: The species breeds and forages in mature, high elevation (above 9,000 feet amsl) coniferous forests, interspersed with mature aspen stands for nesting cavities. It requires large areas of forested habitat. It nests in large woodpecker holes or natural cavities in trees.	<u>Regions I and II</u> : Moderate. The species is documented within 5 miles of the reference line in Carbon County, Wyoming.	No.	Johnsgard 1988; Kingery 1998; WGFD 2005.
Burrowing owl	<i>Athene cunicularia</i>	BLM; CO-ST; UT-SS Tier II	Range: The burrowing owl occurs from Canada, south through most of the western United States to central Mexico. Habitat: The species breeds and forages in a wide variety of arid and semiarid environments, including grassland, desert, and shrub-steppe habitats, and agricultural areas. It generally nests in burrows excavated by small mammals, particularly prairie dogs and ground squirrels.	<u>Regions I, II, III, and IV</u> : High. The species is documented within the 2-mile transmission line corridor in Carbon and Sweetwater counties, Wyoming, Moffat County, Colorado, throughout Utah, and in Clark and Lincoln counties, Nevada.	No.	Floyd et al. 2007; Johnsgard 1988; Kingery 1998; NDOW 2012; Nevada Diversity Database 2007; NatureServe Explorer 2010; UDWR 2005; UNHP 2003; WGFD 2005.
Flammulated owl	<i>Otus flammeolus</i>	BLM; USFS	Range: The flammulated owl breeds from Canada, south through Washington, Oregon, California, Nevada, Utah, Wyoming, Colorado, Arizona, New Mexico, western Texas, and Mexico. Habitat: The species breeds and forages in montane forests, especially ponderosa pine where it feeds on moths. It nests in cavities, especially abandoned woodpecker holes.	<u>Regions I and II</u> : Moderate. The species is known to occur in Colorado, Utah, and Nevada. Suitable habitat occurs in Rio Blanco County, Colorado, Daggett, Sevier, and Uintah counties, Utah, and Carbon County, Wyoming. It has been documented within 1 mile of the reference line. No suitable habitat for the flammulated owl is crossed by the project alternatives in Region III.	No.	Floyd et al. 2007; Johnsgard 1988; Kingery 1998; NDOW 2012; WGFD 2005.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
Long-eared owl	<i>Asio otus</i>	BLM	Range: The long-eared owl occurs from southern Canada through most of the United States, except in the southeast. Habitat: The species breeds and forages in dense, woody vegetation for roosting, and open country for hunting. It nests in abandoned corvid nests in trees or brush.	<u>Regions I, II, III, and IV</u> : Low. The species is known to occur in Wyoming, Colorado, Utah, and Nevada. Suitable habitat occurs along the 2-mile transmission line corridor.	No.	Floyd et al. 2007; Johnsgard 1988; Kingery 1998; WGFD 2005.
Mexican spotted owl	<i>Strix occidentalis lucida</i>	FT; BLM; CO-ST; UT-SS	Range: The Mexican spotted owl occurs in the interior mountain ranges of western North America, including portions of Utah, Colorado, Arizona, New Mexico, Texas, and Mexico. Habitat: The subspecies breeds and forages in mixed coniferous forests and hardwood forests in rocky steep-walled canyons. It uses a simple depression as a nest in a cave, pothole, or rock fissure in narrow, steep-wall canyons. It exhibits high nest fidelity.	<u>Regions II and III</u> : Moderate. The species is known to occur in several counties in eastern Utah. Suitable habitat exists along the Utah/Colorado border in eastern Uintah County and southern Duchesne County, Utah.	No.	50 CFR 17; CDOW 2008; Johnson 1997; UCDC 2008; UDWR 2005.
Short-eared owl	<i>Asio flammeus</i>	BLM; UT-SS Tier II	Range: The short-eared owl occurs from Alaska and Canada, south to central California and east to Maryland. Habitat: The species breeds and forages in broad expanses of open habitat, with dense, low vegetation, including grasslands, meadows, marshes, and open sagebrush shrublands. It is strongly associated with ungrazed and undisturbed native grasslands and wetlands that support dense small mammal populations. It constructs a grass nest in low vegetation.	<u>Regions I, II, and III</u> : High. The species is documented within the 2-mile transmission line corridor in Millard County, Utah and Carbon and Sweetwater counties, Wyoming. It has also been documented within 5 miles of the reference line in Beaver, Juab, and Uintah counties, Utah.	No.	Floyd et al. 2007; Johnsgard 1988; Kingery 1998; UDWR 2005; UNHP 2003; WGFD 2005.
Black swift	<i>Cypseloides niger</i>	BLM; UT-SS Tier II	Range: The black swift occurs in scattered colonies throughout western North America, from southeast Alaska to central Mexico. Habitat: The species breeds and forages in a variety of habitats, foraging far from nesting areas. It nests on vertical rock faces, near waterfalls, or in dripping caves. Nests are constructed of ferns and algae in small colonies.	<u>Regions I and II</u> : High. Nesting colonies are known to occur in Utah County, Utah. The species has been documented within the 2-mile transmission line corridor in Duchesne County, Utah. It has also been documented within 5 miles of the reference line in Uintah County, Utah.	No.	Ehrlich et al. 1988; Kingery 1998; UDWR 2005; UNHP 2003.
Lewis's woodpecker	<i>Melanerpes lewis</i>	BLM; UT-SS Tier II	Range: The Lewis's woodpecker occurs from southern Canada, to south-central California and New Mexico. Habitat: The species breeds and forages in open country with scattered trees, usually below 9,000 feet amsl. Habitat includes open ponderosa pine forests, burned-out coniferous stands, riparian and oak woodlands, and deciduous forests. It excavates cavities for nests in trees.	<u>Regions I, II and III</u> : High. The species has been documented within the 2-mile transmission line corridor area in Juab and Utah counties, Utah. It has also been documented within the 2-mile transmission line corridor in Millard and Uintah counties, Utah.	No.	Floyd et al. 2007; Kingery 1998; UDWR 2005; UNHP 2003; WGFD 2005.
Red-naped sapsucker	<i>Sphyrapicus nuchalis</i>	BLM	Range: The red-naped sapsucker occurs from the Rocky Mountains, west to eastern California and Oregon, and from southern Canada to Arizona and New Mexico. Habitat: The species breeds and forages in aspen, cottonwood riparian stands, and mixed aspen/coniferous forests from 5,000 to 9,000 feet amsl. It nests in tree cavities and exhibits some nest fidelity.	<u>Regions I, II, III, and IV</u> : Low. The species is known to occur in Wyoming, Colorado, Utah, and Nevada.	No.	Floyd et al. 2007; Kingery 1998; NatureServe Explorer 2010; NDOW 2012; WGFD 2009.
American three-toed woodpecker	<i>Picoides dorsalis</i>	BLM; USFS; UT-SS Tier II	Range: The American three-toed woodpecker occurs from Canada and Alaska, south through the Rocky Mountains to New Mexico. Habitat: The species is a high elevation spruce-fir forest obligate. It breeds and forages in coniferous forests, particularly in burned and beetle killed areas where it scales off bark in search of prey. It nests in tree cavities.	<u>Regions I and II</u> : Moderate. The species has been documented within 5 miles of the reference line in Emery and Sevier counties, Utah. Suitable habitat is present within the 2-mile transmission line corridor in Wyoming, Colorado, and Utah. No suitable habitat for the American three-toed woodpecker is crossed by the project alternatives in Region III.	No.	Floyd et al. 2007; Kingery 1998; NatureServe Explorer 2010; UDWR 2005; UNHP 2003.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
Bendire's thrasher	<i>Toxostoma bendirei</i>	NV-P	Range: The Bendire's thrasher occurs in the deserts of the southwestern United States and northwestern Mexico. Habitat: The species breeds and forages in desert habitat, especially areas of tall vegetation, cholla, creosote bush, yucca, and in juniper woodlands. It constructs a stick cup nest in shrubs, cacti, or trees.	<u>Regions II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Lincoln County, Nevada. It is known to occur in Utah County, Utah, and Clark and Lincoln counties, Nevada. Nesting is suspected to occur in Washington, Iron, and Grand counties, Utah.	No.	England 1993; Floyd et al. 2007; UNHP 2003.
Bobolink	<i>Dolichonyx oryzivorus</i>	BLM; UT-SS Tier II	Range: The bobolink occurs from Canada, south to eastern Oregon, central Colorado, central Illinois, and western North Carolina. Habitat: The species breeds and forages in large grassland expanses. It constructs a grass nest in a depression in wet meadows, flooded pastures, and fields.	<u>Regions I, II, and III</u> : Moderate. The species has been documented within 5 miles of the reference line in Carbon County, Wyoming; Uintah County, Utah; and Moffat County, Colorado. Suitable habitat occurs within the 2-mile transmission line corridor in Wyoming, Colorado, and Utah.	No.	Ehrlich et al. 1988; Floyd et al. 2007; Kingery 1998; UDWR 2005; UNHP 2003; WGFD 2005.
Baird's sparrow	<i>Ammodramus bairdii</i>	BLM	Range: Baird's sparrow occurs from Canada south through the northern Great Plains. Habitat: The species breeds and forages in shortgrass prairie. It constructs a ground nest in a depression.	<u>Region I</u> : Low. This species may be found in grasslands and weedy fields in the Rawlins Field Office, but likely outside of the Special Status Bird Analysis Area.	Yes.	NatureServe Explorer 2010; WGFD 2005.
Brewer's sparrow	<i>Spizella breweri</i>	BLM	Range: The Brewer's sparrow occurs from southeastern Alaska south to southern California and southwestern Kansas. Habitat: The species is a sagebrush obligate. It breeds and forages in sagebrush shrublands with abundant, scattered shrubs and short grasses. It constructs a nest of grass, forbs, and roots in a shrub or low tree.	<u>Regions I, II, and III</u> : High. The species has been documented within the 2-mile transmission line corridor in Lincoln County, Nevada. It has been documented within 5 miles of the reference line in Carbon and Sweetwater counties, Wyoming. Suitable habitat occurs throughout the 2-mile transmission line corridor in Wyoming, Colorado, Utah, and Nevada. No suitable habitat for the Brewer's sparrow is crossed by the project alternatives in Region IV.	No.	Ehrlich et al. 1988; Floyd et al. 2007; Kingery 1998; NatureServe Explorer 2010; WGFD 2005.
Crissal thrasher	<i>Toxostoma crissale</i>	BLM	Range: The Crissal thrasher occurs from the desert southwest of the United States and central Mexico. Habitat: The species breeds and forages in desert washes and riparian thickets. It constructs a grass nest in dense willows, mesquite, or sagebrush.	<u>Regions III and IV</u> : Moderate. The species has been documented within 5 miles of the reference line in Washington County, Utah. Suitable habitat occurs within the 2-mile transmission line corridor in Clark and Lincoln counties, Nevada and Washington County, Utah.	No.	Cody 1999; Ehrlich et al. 1988; Floyd et al. 2007; UNHP 2003.
Grasshopper sparrow	<i>Ammodramus savannarum</i>	BLM; UT-SS Tier II	Range: The grasshopper sparrow occurs from Canada east to southern Maine, and south to southern California and central Georgia. The main population occurs in the Great Plains. Habitat: The species breeds and forages in mid- and long-grass prairie, mixed grasslands, meadows, and open sagebrush-grasslands. It constructs a grass nest in a depression.	<u>Region I</u> : High. The species has been documented within the 2-mile transmission line corridor in Carbon and Sweetwater counties, Wyoming.	No.	Ehrlich et al. 1988; Floyd et al. 2007; Kingery 1998; UDWR 2005; UNHP 2003; WGFD 2005.
Gray vireo	<i>Vireo vicinior</i>	BLM	Range: The gray vireo occurs in Arizona, New Mexico, Colorado, Utah, Nevada, and southern California. Habitat: The species breeds and forages in hot, arid mountains, in desert scrub, pinyon-juniper, pine-oak scrub, and high plains scrubland. It constructs a deep, rounded grass nest, suspended in a forked twig in a shrub.	<u>Regions I, II, III, and IV</u> : High. This species has been documented within the 2-mile transmission line corridor in Lincoln County, Nevada. It has been documented within 5 miles of the reference line in Moffat, and Rio Blanco counties, Colorado. Suitable habitat occurs throughout the 2-mile transmission line corridor in Utah and Nevada.	No.	Barlow, 1999; Ehrlich et al. 1988; Floyd et al. 2007; Kingery 1998.
Juniper titmouse	<i>Baeolophus griseus</i>	BLM	Range: The juniper titmouse occurs in western North America, from southern Oregon west to Wyoming, and south to Arizona, western Texas, and Mexico. Habitat: The species breeds and forages in juniper woodlands interspersed with sagebrush and other shrubs. It nests in a natural cavity or in an abandoned woodpecker hole.	<u>Region I and II</u> : High. The species has been documented within the 2-mile transmission line corridor in Carbon and Sweetwater counties, Wyoming, and Lincoln County, Nevada. Suitable habitat occurs throughout the 2-mile transmission line corridor in Colorado, Utah, and Nevada. No suitable habitat for the juniper titmouse is crossed by the project alternatives in Regions III and IV.	No.	Floyd et al. 2007; Kingery 1998; WGFD 2005.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
Le Conte's thrasher	<i>Toxostoma lecontei</i>	BLM; NV-P;	Range: The Le Conte's thrasher occurs in the desert southwest of Nevada, California, Arizona, and northwestern Mexico. Habitat: The species breeds and forages in desert shrub, mesquite, and tall riparian shrub. It constructs a deep, bulky nest of thorny twigs and sticks in cholla, palo verde, or creosote bush.	<u>Regions III and IV</u> : Low. The species is known to occur in Clark and Lincoln counties, Nevada.	No.	Ehrlich et al. 1988; Floyd et al. 2007; Sheppard 1996.
Loggerhead shrike	<i>Lanius ludovicianus</i>	BLM	Range: The loggerhead shrike occurs from south-central Canada, throughout the United States, and Mexico. Habitat: In the western U.S., the species breeds and forages in arid, open country with scattered small trees and shrubs or hedgerows. It constructs a twig nest in a thorny tree or shrub.	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Carbon and Sweetwater counties, Wyoming, and Lincoln County, Nevada. Suitable habitat occurs throughout the 2-mile transmission line corridor in Wyoming, Colorado, Utah, and Nevada.	No.	Ehrlich et al. 1988; Floyd et al. 2007; Kingery 1998; Yosef 1996.
Lucy's warbler	<i>Vermivora luciae</i>	BLM	Range: The Lucy's warbler occurs in the Sonoran desert of the southwestern United States and west coastal Mexico. Habitat: The species breeds and forages in riparian mesquite woodlands. It constructs a nest of weeds, bark, and mesquite in an abandoned verdin or woodpecker hole, or under loose bark.	<u>Regions III and IV</u> : Low. The species is known to occur in Lincoln and Clark counties, Nevada.	No.	Ehrlich et al. 1988; Floyd et al. 2007.
Phainopepla	<i>Phainopepla nitens</i>	BLM; NV-P	Range: The phainopepla occurs in the southwestern United States and Mexico. Habitat: The species breeds and forages in desert, riparian woodlands, and desert shrub. It constructs a shallow, twig nest, often in mistletoe.	<u>Regions III and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark and Lincoln counties, Nevada.	No.	Chu 1999; Ehrlich et al. 1988; Floyd et al. 2007; Nevada Diversity Database 2007.
Pinyon jay	<i>Gymnorhinus cyanocephalus</i>	BLM	Range: The pinyon jay occurs from central Oregon, Montana, and South Dakota, south to Baja California, Arizona, and New Mexico. Habitat: The species breeds and forages in ponderosa pine savannah, pinyon-juniper, and montane shrublands. It constructs a bulky twig nest in a juniper or pine tree.	<u>Regions I, II, and III</u> : High. The species has been documented within the 2-mile transmission line corridor in Lincoln County, Nevada. It is known to occur in Wyoming, Colorado, Utah, and Nevada. No suitable habitat for the pinyon jay is crossed by the project alternatives in Region IV.	No.	Balda 2002; Ehrlich et al. 1988; Floyd et al. 2007; Kingery 1998; WGFD 2005.
Sage sparrow	<i>Amphispiza belli</i>	BLM	Range: The sage sparrow occurs from central Washington, east to northwestern Colorado and south to Baja California and northwestern New Mexico. Habitat: The species is a sagebrush obligate. It breeds and forages in habitat with tall shrubs (3 to 6 feet tall) and low grass cover, and requires large blocks of unfragmented habitat. It constructs a twig nest in sagebrush.	<u>Regions I, II, and III</u> : High. The species has been documented within the 2-mile transmission line corridor in Carbon and Sweetwater counties, Wyoming, Moffat County, Colorado, and Lincoln County, Nevada. It has also been recorded within 5 miles of the reference line in Rio Blanco County, Colorado. Suitable habitat occurs throughout the 2-mile transmission line corridor in Wyoming, Colorado, Utah, and in Lincoln County, Nevada.	No.	Ehrlich et al. 1988; Floyd et al. 2007; Kingery 1998; WGFD 2005.
Sage thrasher	<i>Oreoscoptes montanus</i>	BLM	Range: The sage thrasher occurs from Canada, south through the Great Basin, to Arizona and New Mexico. Habitat: The species is a sagebrush obligate. It breeds and forages in habitat with tall shrubs (3 to 6 feet tall) and low grass cover. It constructs a bulky, twig nest in sagebrush.	<u>Regions I, II, and III</u> : High. The species has been documented within the 2-mile transmission line corridor in Carbon and Sweetwater counties, Wyoming, and Lincoln County, Nevada. Suitable habitat occurs in Wyoming, Colorado, Utah, and in Lincoln County, Nevada.	No.	Ehrlich et al. 1988; Floyd et al. 2007; Kingery 1998; NDOW 2012; WGFD 2005.
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE; BLM; CO-SE; UT-SS Tier I; NV-P	Range: The southwestern willow flycatcher occurs throughout the southwestern United States. Habitat: The subspecies breeds and forages in dense riparian habitats with saturated soils, standing water, or nearby streams, or pools. It constructs a grass nest in a deciduous shrub.	<u>Regions III and IV</u> : High. The species has been documented within 5 miles of the reference line in Washington County, Utah. Suitable habitat occurs in Emery, Grand, Iron, and Uintah counties, Utah, and in Clark and Lincoln counties, Nevada. Designated Critical Habitat exists in Clark County, Nevada and in Washington County, Utah. Additional Critical Habitat is proposed in Clark and Lincoln counties, Nevada, and Washington County, Utah.	No.	Ehrlich et al. 1988; USFWS 2003; WGFD 2009; UDWR 2005; USFWS 2009; USFWS 2010b.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
Vesper sparrow	<i>Poocetes gramineus</i>	BLM	Range: The vesper sparrow occurs from southern Canada to the Appalachian Mountains, along the Ohio River, and in much of the western United States. Habitat: The species breeds and forages in a variety of open, grass habitats, including sagebrush steppe, meadows, pastures, and roadsides. It constructs a grass nest in a depression.	<u>Regions I, II, and III</u> : Low. The species is known to occur in Wyoming, Colorado, Utah, and in Lincoln County, Nevada.	No.	Ehrlich et al. 1988; Floyd et al. 2007; Jones and Cornely 2002; Kingery 1998; WGFD 2005.
Yellow-breasted chat	<i>Icteria virens</i>	BLM	Range: The yellow-breasted chat occurs throughout the United States and northern Mexico. Habitat: The species breeds and forages in riparian shrub and marshes below 7,000 feet amsl. It constructs a large leaf and weed nest in a deciduous shrub.	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Lincoln County, Nevada. It is known to occur in Wyoming, Colorado, Utah, and Nevada.	No.	Ehrlich et al. 1988; Floyd et al. 2007; Kingery 1998; WGFD 2005.
MAMMALS						
Allen's big-eared bat	<i>Idionycteris phyllotis</i>	BLM; UT-SS Tier II; NV-P	Range: The Allen's big-eared bat occurs in the southwestern United States and Mexico. Habitat: The species breeds and forages in lowland riparian, desert shrub, mountain shrub, and mixed forest habitats, between 1,675 to 6,000 feet amsl. It roosts in trees (large dead snags), mines, and caves, and forages over open water.	<u>Regions III and IV</u> : Moderate. The species has been documented within 5 miles of the reference line in Washington County, Utah, and Clark County, Nevada, primarily in the Spring Mountains. It may also be present in Lincoln County, Nevada.	No.	Bradley et al. 2006; Fitzgerald et al. 1994; Oliver 2000; UDWR 2005.
Big brown bat	<i>Eptesicus fuscus</i>	BLM	Range: The big brown bat occurs from Alaska and northern Canada to northern South America. Habitat: The species breeds and forages in a variety of habitats, including deciduous forests, shrublands, agricultural, and urban areas between 725 to over 9,850 feet amsl. It roosts in a variety of structures including mines, caves, buildings, and trees, and forages over open water or in tree foliage.	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark and Lincoln counties, Nevada. It has a widespread distribution in Wyoming and Colorado.	No.	Bradley et al. 2006; Fitzgerald et al. 1994; Hester and Grenier 2005; NDOW 2012; Nevada Diversity Database 2007.
Big free-tailed bat	<i>Nyctinomops macrotis</i>	BLM; UT-SS Tier II	Range: The big free-tailed bat occurs from South America north to Mexico, Arizona, New Mexico, parts of Texas, California, Nevada, Utah, and Colorado. Habitat: The species breeds and forages at lower elevations (2,700 ft to 9,200 feet amsl) in a variety of habitats, including rugged, rocky areas in arid landscapes, lowland riparian, canyons, desert scrub, floodplains, montane forest, and woodlands. It roosts in crevices in cliff faces and occasionally in buildings and caves, and forages over open water.	<u>Region II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Lincoln county, Nevada. It has been documented within 5 miles of the reference line in Sevier County, Utah, and Clark County, Nevada, in the Las Vegas area and the Muddy River drainage. Suitable habitat also occurs in the southern half of Utah.	No.	Bradley et al. 2006; Ellison et al. 2003; Hester and Grenier 2005; NDOW 2012; Oliver 2000; UDWR 2005.
Brazilian free-tailed bat	<i>Tadarida brasiliensis</i>	BLM	Range: The Brazilian free-tailed bat occurs from central North America, south through Mexico and Cuba, to northern South America. Habitat: The species breeds and forages in a wide variety of habitats, from desert scrub to coniferous forests, between 725 to over 11,500 feet amsl. It roosts in caves, mines, trees, bridges, and buildings. Colonies often number in the thousands.	<u>Regions II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark and Lincoln counties, Nevada. It has also been recorded within 5 miles of the reference line in Duchesne, Juab, Sevier, Utah, and Washington counties, Utah.	No.	Bradley et al. 2006; Hester and Grenier 2005; NDOW 2012; Oliver 2000.
California leaf-nosed bat	<i>Macrotus californicus</i>	NV-P	Range: The California leaf-nosed bat occurs from southern California and Nevada, south to Mexico. Habitat: The species breeds and forages in low elevation (690 to 2,265 feet amsl) creosote, Mojave scrub, and riparian habitat. It roosts in caves, mines, buildings, bridges, and rock shelters.	<u>Regions III and IV</u> : High. The species is known to occur in the extreme southern portion of Nevada. It also may forage along the Virgin River in Clark County, Nevada. Maternity roosts are believed to exist in the Muddy River drainage in Clark County, Nevada.	No.	AGFD 1993; Bradley et al. 2006.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
California myotis	<i>Myotis californicus</i>	BLM	Range: The California myotis occurs throughout much of western North America. Habitat: The species breeds and forages in a variety of habitats from desert scrub to forests, including grassland and riparian areas between 690 and 8,960 feet amsl. It roosts in a variety of structures including mines, caves, buildings, and trees, and forages over open water.	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark and Lincoln counties, Nevada. It is known to occur throughout the 2-mile transmission line corridor in Wyoming, Colorado, Utah, and Nevada.	No.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al. 1994; Hester and Grenier 2005; NDOW 2012; Nevada Diversity Database 2007; Oliver 2000.
Cave myotis	<i>Myotis velifer</i>	BLM	Range: The cave myotis occurs from Kansas, Oklahoma, and western Texas, to southern Nevada, southeastern California, south through Mexico and Honduras. Habitat: The species breeds and forages in lower elevations in desert shrub, grassland, mixed forest, cactus, and desert riparian habitats. It roosts in caves, mines, buildings, and bridges.	<u>Regions III and IV</u> : Low. The species is known to occur in Clark County, Nevada. It has also been documented in a mine in the southern portion of the Lake Mead National Recreation Area, in Nevada.	No.	Bradley et al. 2006
Fringed myotis	<i>Myotis thysanodes</i>	BLM; UT-SS; NV-P	Range: The fringed myotis occurs in most of western North America, from Canada to Mexico, and east to the front range of the Rocky Mountains. Habitat: The species breeds and forages in a wide variety of habitats, including lowland riparian, grassland, desert shrub, pinyon-juniper forests, and meadows, between 1,380 and 7,080 feet amsl. It roosts in mines, caves, trees, and buildings.	<u>Regions II, III, and IV</u> : High. The species been documented within the 2-mile transmission line corridor in Clark and Lincoln counties, Nevada. It has also been recorded within 5 miles of the 2-mile transmission line corridor in Grand County, Utah.	No.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al. 1994; Hester and Grenier 2005; NDOW 2012; Oliver 2000.
Greater western mastiff bat	<i>Eumops perotis californicus</i>	BLM; NV-P	Range: The greater western mastiff bat occurs in California, Nevada, Arizona, Texas, and Mexico. Habitat: The species breeds and forages in a variety of habitats, including desert shrub, cliff/canyon, and montane coniferous forest, in a broad elevation range. It is known to roost on large rock formations.	<u>Region IV</u> : Low. The species is known to occur in Clark County, Nevada, in the Spring Mountains, the Las Vegas Valley Wash, and along the Colorado River near Laughlin, Nevada.	No.	AGFD 1993; Bradley et al. 2006.
Hoary bat	<i>Lasiurus cinereus</i>	BLM	Range: The hoary bat occurs from Canada throughout the United States, south to Argentina and Chile. Habitat: The species breeds and forages in forested upland habitats, forest riparian zones, and agricultural habitats, between 1,870 and 8,270 feet amsl. It may occur in park and garden settings in urban areas. It roosts in trees, within foliage 10 to 40 feet above the ground.	<u>Regions I, II, III, and IV</u> : Moderate. The species has been documented within 5 miles of the reference line in Carbon County, Wyoming. Suitable habitat also occurs within the 2-mile transmission line corridor in Wyoming, Colorado, Utah, and Nevada.	No.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al. 1994; Hester and Grenier 2005; Oliver 2000.
Long-eared myotis	<i>Myotis evotis</i>	BLM	Range: The long-eared myotis occurs across western North America, from southwestern Canada to Baja California, and east to the Great Plains. Habitat: The species breeds and forages in a wide variety of habitats, including lowland riparian, sagebrush, shrubland, rock outcroppings, cliffs, and forests, between 2,265 and 10,140 feet amsl. It roosts in hollow trees, under bark, in crevices in rock outcrops, in mines, caves, and buildings, and forages over open water.	<u>Regions I, II, III, and IV</u> : Moderate. The species has been documented within 5 miles of the 2-mile transmission line corridor in Lincoln County, Nevada. It is known to occur in Wyoming, Colorado, Utah, and Nevada.	No.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al. 1994; Hester and Grenier 2005; NDOW 2012; Oliver 2000.
Long-legged myotis	<i>Myotis volans</i>	BLM	Range: The long-legged myotis occurs across western North America, from southeastern Alaska to Baja California, east to the western Great Plains and central Texas. Habitat: The species breeds and forages in pinyon-juniper and other higher elevation forests between 3,050 to 11,220 feet amsl. It occasionally utilizes riparian, and Mojave and salt desert scrub habitats. It roosts in hollow trees, rock crevices, caves, mines, and buildings, and forages over open water.	<u>Regions I, II, III, and IV</u> : Moderate. The species has been documented within 5 miles of the reference line in Clark and Lincoln counties, Nevada. Suitable habitat occurs throughout the 2-mile transmission line corridor in Wyoming, Colorado, Utah, and Nevada.	No.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al. 1994; Hester and Grenier 2005; Oliver 2000.

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Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
Pallid bat	<i>Antrozous pallidus</i>	BLM	Range: The pallid bat occurs from southern Canada to Mexico, and east to Texas, Oklahoma, and Kansas. Habitat: The species breeds and forages in a variety of habitats including desert scrub, grasslands, forests, cottonwood riparian areas, cliff/canyon, and urban areas, at low and middle elevations (5,900 feet amsl). It roosts in mines, caves, hollow trees, buildings, bridges, and on rock outcrops. The species forages on the ground.	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark and Lincoln counties, Nevada. Suitable habitat occurs within the 2-mile transmission line corridor throughout Wyoming, Utah, and Nevada. In Colorado the species is known to occur along the Colorado/Utah border.	No.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al. 1994; Hester and Grenier 2005; Nevada Diversity Database 2007; Oliver 2000.
Silver-haired bat	<i>Lasionycteris noctivagans</i>	BLM	Range: The silver-haired bat occurs from southern Alaska through most of the United States to northeastern Mexico. Habitat: The species breeds and forages in forests, but can also occur in lowland riparian areas, desert shrub, and towns, between 1,575 and 8,270 feet amsl. It roosts exclusively in trees in the summer. In the winter it utilizes trees, rock crevices, mines, caves, and buildings, and forages over open water.	<u>Regions I, II, III, and IV</u> : Moderate. The species has been documented within 5 miles of the reference line in Carbon County, Wyoming, and Clark County, Nevada. Suitable habitat occurs throughout the 2-mile transmission line corridor in Wyoming, Colorado, Utah, and Nevada.	No.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al. 1994; Hester and Grenier 2005; Oliver 2000.
Spotted bat	<i>Euderma maculatum</i>	BLM; USFS; UT-SS Tier II; NV-P	Range: The spotted bat occurs from southern Canada, through the western United States (except Washington), to Mexico. Habitat: The species breeds and forages in a variety of habitats, including lowland riparian, desert shrub, forest, grassland, and towns, from 1,770 to 6,980 feet amsl. It is closely associated with rocky cliffs in Nevada. It roosts primarily in crevices on cliff faces.	<u>Regions I, II, III, and IV</u> : Moderate. The spotted bat has been documented within 5 miles of the reference line in Clark County, Nevada, and in Utah. It has also been documented in the Muddy River drainage and in Lincoln County, Nevada. In Colorado, it has only been reported in the extreme northwestern corner of the state, but could occur in western and south-central Colorado.	No.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al. 1994; Hester and Grenier 2005; Oliver 2000; UDWR 2005.
Townsend's (Western) big-eared bat	<i>Corynorhinus townsendi</i>	BLM; USFS; UT-SS Tier II; NV-P	Range: The Townsend's (western) big-eared bat occurs from Canada, south across the western United States, and most of Mexico. Habitat: The species breeds and forages in semi-desert shrublands, pinyon-juniper woodlands, cliff/canyon habitat, and open montane forests, from 690 to 11,480 feet amsl. It is highly associated with caves and mines. It roosts in mines, caves, trees, and buildings.	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark County, Nevada. It has been documented within 5 miles of the reference line in Beaver, Emery, Grand, Juab, Uintah, and Washington counties, Utah. Suitable habitat occurs throughout the 2-mile transmission line corridor in Wyoming, Colorado, Utah, and Nevada.	No.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al. 1994; Hester and Grenier 2005; Nevada Diversity Database 2007; Oliver 2000; UDWR 2005.
Western pipistrelle	<i>Pipistrellus hesperus</i>	BLM	Range: The western pipistrelle occurs from southern Washington, through the desert southwest, into Mexico. Habitat: The species breeds and forages in low and middle elevation (5,900 feet amsl) Sonoran desert habitats, ponderosa pine, and pinyon-juniper forests, usually in association with rock features. It roosts in rock crevices, mines, caves, buildings, and vegetation.	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark and Lincoln counties, Nevada. It is also known to occur throughout Nevada, most of Utah, and in the western half of Colorado.	No.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al. 1994; NDOW 2005; Nevada Diversity Database 2007; Oliver 2000.
Western red bat	<i>Lasiurus blossevillii</i>	BLM; UT-SS Tier II; NV-P	Range: The western red bat occurs from southern Canada, through the western United States, south to Panama and South America. Habitat: The species breeds and forages in towns and lowland riparian cottonwood/willow groves in Utah. In Nevada, the species inhabits mesquite bosque. It is distributed from 1,375 to 6,595 feet amsl. It roosts in trees and leaf litter.	<u>Regions I, II, III, and IV</u> : Low. The species is known to occur in Lincoln and Clark counties, Nevada, and throughout the 2-mile transmission line corridor in Utah.	No.	AGFD 1993; Bradley et al. 2006; Oliver 2000; UDWR 2005.
Western small-footed myotis	<i>Myotis ciliolabrum</i>	BLM	Range: This western small-footed myotis occurs in the western half of North America, from Canada to central Mexico. Habitat: The species breeds and forages in arid, rocky terrain in a variety of habitats, including desert scrub, lowland riparian, pine-fir forests, and short-grass prairie. It occurs primarily at middle and higher elevations (above 5,900 feet amsl), although occasionally occurs in valley bottoms (3,450 to 5,900 feet amsl). It roosts in caves, mines, and trees.	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Lincoln County, Nevada. It has been documented within 5 miles of the reference line in Carbon County, Wyoming. Suitable habitat occurs throughout the 2-mile transmission line corridor in Wyoming, Colorado, Utah, and Nevada.	No.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al. 1994; Hester and Grenier 2005; NDOW 2012; Oliver 2000.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
Yuma myotis	<i>Myotis yumanensis</i>	BLM	<p>Range: The Yuma myotis occurs in the western third of North America, from southwestern Canada, to Mexico.</p> <p>Habitat: The species breeds and forages in a wide variety of habitats, including sagebrush, salt desert scrub, agricultural, playa, forests, and riparian communities, between 1,475 and 7,675 feet amsl. It roosts in buildings, trees, mines, caves, bridges, and rock crevices, and forages over open water.</p>	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Clark County, Nevada. The species is known to occur throughout the 2-mile transmission line corridor in Wyoming, Colorado, Utah, and Nevada.	No.	Bradley et al. 2006; Ellison et al. 2003; Fitzgerald et al. 1994; Hester and Grenier 2005; Nevada Diversity Database 2007; Oliver 2000.
Black-footed ferret	<i>Mustela nigripes</i>	EXP/NE BLM; CO-SE; UT-SS	<p>Range: The black-footed ferret formerly occurred throughout the Great Plains and Intermountain West of North America. Reintroduced populations occur in Wyoming, South Dakota, Arizona, Kansas, Montana, New Mexico, Utah, Colorado, and Mexico.</p> <p>Habitat: The species is a prairie dog-obligate. It inhabits prairie dog colonies within grasslands and semi-desert shrublands.</p>	<u>Regions I and II</u> : High. A non-essential Experimental Population Area (EXPA) is located in northwestern Colorado, southwestern Wyoming, and northeastern Utah. The EXPA is crossed by the 2-mile transmission line corridor in Moffat and Rio Blanco counties, Colorado, and Duchesne and Uintah counties, Utah. The only non-experimental ferret populations that may occur in the 2-mile transmission line corridor are in Grand, Emery, or Carbon counties, UT, and portions of Sweetwater and Carbon counties, Wyoming.	No.	50 CFR 17; BLM 2005; Clark 1989; UNHP 2009; USFWS 2008b; WYNDD 2009.
Canada lynx	<i>Lynx canadensis</i>	FT; BLM; CO-SE; UT-SS Tier I	<p>Range: The Canada lynx occurs in Colorado, Idaho, Maine, Michigan, Minnesota, Montana, New Hampshire, New York, Oregon, Utah, Wyoming, Vermont, Washington, and Wisconsin.</p> <p>Habitat: The species occurs in boreal forests. It utilizes early succession habitats with high tree densities for foraging. It utilizes mature forests with large, woody debris for denning.</p>	<u>Regions I and II</u> : Moderate. The species has been documented within 1 mile of the reference line in Uintah County, Utah, and Carbon County, Wyoming.	No.	65 FR 16051; Ruediger et al. 2000; UDWR 2005; USFWS 2005; UNHP 2009.
Fisher	<i>Martes pennanti</i>	USFS	<p>Range: The fisher occurs across much of northern North America, south along the western half of Washington, Oregon, and northern California. The range also extends south along the Rocky Mountains into western Wyoming.</p> <p>Habitat: The species inhabits dense mixed deciduous-coniferous forests.</p>	<u>Regions I and II</u> : Low. The species is known to occur in the extreme southwestern corner of Wyoming, and the northeastern corner of Utah. Suitable habitat occurs throughout the 2-mile transmission line corridor in Wyoming, Colorado, and Utah. No suitable habitat for the fisher is crossed by the project alternatives in Region III.	No.	Fitzgerald et al. 1994
Gray wolf	<i>Canis lupus</i>	FT-UT, CO; BLM; UT-SS Tier I	<p>Range: The gray wolf formerly occupied most of North America. Remnant populations exist in Minnesota, Wisconsin, Michigan, Idaho, Montana, Wyoming, and Washington.</p> <p>Habitat: The species formerly occupied a variety of habitats such as temperate forests, mountains, tundra, taiga, and grasslands, with plentiful large prey. It and requires a large (25 to 1,500 square miles) home range. Current wolf populations are typically found in remote montane forests.</p>	<u>Region I and II</u> : Low. The species has been documented within 5 miles of the reference line in Carbon and Sweetwater counties, Wyoming. Suitable habitat occurs within the 2-mile transmission line corridor in Wyoming, Colorado, and Utah.	No.	Fitzgerald et al. 1994; UDWR 2005; UNHP 2003; USFWS 2012b.
Kit fox	<i>Vulpes macrotis</i>	BLM; CO-SE; UT-SS Tier II	<p>Range: The kit fox occurs in the southwestern United States and northern Mexico.</p> <p>Habitat: The species inhabits desert and semi-desert shrubland and grasslands.</p>	<u>Regions II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Beaver, Emery, Grand, Millard, and Washington counties, Utah, and Clark County, Nevada. It has also been documented within 5 miles of the reference line in Iron, Juab, and Sevier counties, Utah.	No.	Fitzgerald et al. 1994; Nevada Diversity Database 2007.
River otter	<i>Lontra canadensis</i>	BLM; CO-ST	<p>Range: The river otter occurs throughout most of North America, north of Mexico, except in the extreme southwestern United States. It is extirpated or rare in large areas of the interior United States.</p> <p>Habitat: The species occurs in a variety of permanent riverine, aquatic, and riparian habitats, with slow-moving water, deep pools, abundant riparian vegetation, and plentiful fish. It utilizes dens in hollow logs, beaver lodges, burrows dug by other animals, log or rock piles, or dense thickets near water.</p>	<u>Regions I and II</u> : Moderate. The species has been documented within 5 miles of the reference line in Carbon County, Wyoming and Daggett, Duchesne, Grand, and Uintah counties, Utah. In Colorado, it has been re-introduced in several river drainages and is known to occur throughout the western half of the state.	No.	Fitzgerald et al. 2006; UDWR 2005; WGFD 2005.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
Swift fox	<i>Vulpes velox</i>	BLM	Range: The swift fox occurs over most of the Great Plains of North America, from southern Canada to northern Texas. Habitat: The species inhabits short grass and mixed-grass prairies. It is closely associated with prairie dog colonies.	<u>Region I</u> : Moderate. The species has been documented within 5 miles of the reference line in Carbon County, Wyoming. Suitable habitat occurs throughout the 2-mile transmission line corridor in Wyoming.	No.	Fitzgerald et al. 1994; WGFD 2005.
Wolverine	<i>Gulo gulo</i>	USFS; CO-SE	Range: The wolverine occurs in northern North America. Historically, it was present in suitable habitat at high elevations, south into the United States along the Rocky Mountains. Habitat: The species inhabits boreal forests and tundra, and utilizes riparian habitat.	<u>Regions I and II</u> : Moderate. The status of the wolverine in Colorado, Utah, and Wyoming is uncertain. It has been documented within 5 miles of the reference line in Uintah County, Utah. The species has been documented in Daggett and Sanpete counties, Utah.	No.	Fitzgerald et al. 1994; UNHP 2003; WGFD 2012.
Desert bighorn sheep	<i>Ovis canadensis nelsoni</i>	BLM; USFS	Range: The desert bighorn sheep occurs in mountain ranges throughout the southwestern United States. Habitat: The subspecies inhabits steep desert mountains with abundant grass and low shrubs.	<u>Regions II, III, and IV</u> : Low. The subspecies is known to occur in western Colorado near the Colorado/Utah border, the extreme southwestern corner of Utah, Grand and Emery counties, Utah, and in southern Nevada.	No.	Armstrong 2010; NDOW 2010; UDWR 2008.
Rocky Mountain bighorn sheep	<i>Ovis canadensis</i>	USFS	Range: Bighorn sheep occur throughout the Rocky Mountains, from Canada to Mexico. Rocky Mountain bighorn sheep occur in the northern portion of this range in Wyoming, northern Utah and western Colorado. Habitat: The species inhabits steep, high mountain terrain. Summer habitat is primarily alpine tundra. Winter habitat is lower elevation open, grass areas and slopes, with low shrubs.	<u>Regions I, II, and III</u> : Moderate. The species is known to occur in isolated areas in northwestern Colorado and northeastern and east-central Utah.	No.	Armstrong 2010; UDWR 2008; WGFD 2005.
Dark kangaroo mouse	<i>Microdipodops megacephalus</i>	BLM; UT-SS Tier II	Range: The dark kangaroo mouse occurs from southeastern Oregon, through eastern California, southwestern Idaho, and west-central Utah. Habitat: The species inhabits desert shrub and sagebrush communities with fine, gravel soils.	<u>Regions I, II, III, and IV</u> : High. The species has been documented within the 2-mile transmission line corridor in Lincoln County, Nevada. It has been documented within 5 miles of the reference line in Beaver, Iron, and Millard counties, Utah. Suitable habitat occurs through the 2-mile transmission line corridor in Wyoming, Colorado, Utah, and Nevada.	No.	NDOW 2012; UDWR 2005; UNHP 2003.
Pale kangaroo mouse	<i>Microdipodops pallidus</i>	BLM; NV-P	Range: The pale kangaroo mouse occurs in western and west-central Nevada and in extreme eastern California. Habitat: The species is considered a sand obligate and is restricted to fine, loose, sandy soils (with little or no gravel overlay) in valley bottoms dominated by saltbush and greasewood. It may also be found near sagebrush at its higher elevation range. The elevational range for this species is from between 3,900 and 6,000 feet amsl.	<u>Region IV</u> : Moderate. Suitable habitat occurs throughout the 2-mile transmission line corridor in Nevada.	No.	NDOW 2012.
Desert Valley kangaroo mouse	<i>Microdipodops megacephalus albiventer</i>	BLM; NV-P	Range: The Desert Valley kangaroo mouse occurs in the Desert Valley, in central Lincoln County, Nevada. Habitat: The subspecies inhabits loose sands and gravel. It is found in shadscale scrub, sagebrush scrub, and alkali sink plant communities. It may also occur in sand dunes near the margins its range.	<u>Region III</u> : High. The subspecies has been documented within the 2-mile transmission line corridor in Lincoln County, Nevada.	No.	NDOW 2012.
Preble's meadow jumping mouse	<i>Zapus hudsonius preblei</i>	FT; BLM	Range: The Preble's meadow jumping mouse occurs in the foothills of southeastern Wyoming south to Colorado Springs along the eastern edge of the Front Range of Colorado. Habitat: The subspecies inhabits marshy areas and moist meadow grasslands near streams in grasslands, coniferous and deciduous forests, mixed shrublands, and riparian shrub, above 8,000 feet.	None. The subspecies is known to occur within the BLM Rawlins Field Office boundaries in Wyoming, outside of the 2-mile transmission line corridor.	Yes.	NatureServe Explorer 2010; USFWS 2010b; WGFD 2009.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
Preble's shrew	<i>Sorex preblei</i>	UT-SS Tier II	Range: The Preble's shrew occurs over much of western North America. Habitat: The species inhabits wetland areas.	None. The species is only known to occur from two localities in Tooele County, Utah at the southern shore of the Great Salt Lake.	Yes.	UDWR 2010, 2005.
Silky pocket mouse	<i>Perognathus flavus</i>	UT-SS Tier II	Range: The silky pocket mouse occurs in the Southwestern and west-central Great Plains and intermountain plateaus from South Dakota to central Mexico. Habitat: The species inhabits sandy, sometimes rocky, soils in arid grasslands, shrublands, and pinyon-juniper woodland, in valley bottoms, hillsides, and mesas.	None. The species is known to occur in San Juan County, Utah, outside the 2-mile transmission line corridor.	Yes.	NatureServe Explorer 2010; UDWR 2005.
Mexican vole	<i>Microtus mexicanus</i>	UT-SS Tier II	Range: The race of Mexican vole that occurs in Utah is nearly endemic to the state. Habitat: The species inhabits mixed aspen/ponderosa pine forests.	None. The species is known to occur only on one mountain in extreme southwestern San Juan county, outside of the 2-mile transmission line corridor.	Yes.	UDWR 2005.
Idaho pocket gopher	<i>Thomomys idahoensis</i>	BLM	Range: The Idaho pocket gopher occurs in eastern Idaho, southwestern Montana, western Wyoming, and northeastern Utah. Habitat: The species inhabits areas of shallow rocky soils at medium to high elevations in open sagebrush, grassland plains, and subalpine mountain meadows.	<u>Region I</u> : Low. The species is known to occur in Daggett County, Utah. In Wyoming, it is known to occur within the Rock Springs Field Office boundaries, outside the 2-mile transmission line corridor.	No.	NatureServe Explorer 2010; UDWR 2005.
Gunnison's prairie dog	<i>Cynomys gunnisoni</i>	BLM; UT-SS Tier II	Range: The Gunnison's prairie dog occurs in the southwestern quarter of Colorado, the southeastern corner of Utah, the northeastern quarter of Arizona and the northwestern quarter of New Mexico. Habitat: The species inhabits grasslands, semi-desert, and montane shrublands.	None.	Yes. The geographic range for this species is outside the 2-mile transmission line corridor.	Fitzgerald et al. 1994; UDWR 2005; UNHP 2003.
Utah prairie dog	<i>Cynomys parvidens</i>	FT; BLM; UT-SS Tier I	Range: The Utah prairie dog occurs in the southwestern quarter of Utah. Habitat: The species inhabits prairies, including swale formations with moist vegetation even in drought, and well-drained soils that allow deep (3 feet) burrows. Vegetation must be low enough to permit a standing Utah prairie dog to scan their environment for predators.	<u>Regions II and III</u> : High. The species has been documented within the 2-mile transmission line corridor in Iron, Millard, and Sevier counties, Utah. The greatest concentrations occur in eastern Iron and southern Sevier counties.	No.	Hoogland 2006; UDWR 2005; UNHP 2003; USFWS 1991.
White-tailed prairie dog	<i>Cynomys leucurus</i>	BLM; UT-SS Tier II	Range: The white-tailed prairie dog occurs in western and southern Wyoming, northwestern Colorado, and east-central Utah. Habitat: The species inhabits open shrublands, semi-desert grasslands, and mountain valleys.	<u>Regions I and II</u> : High. The species has been documented within the 2-mile transmission line corridor in Carbon and Sweetwater counties, Wyoming, and Daggett, Duchesne, Emery, Grand, and Uintah counties, Utah. It is also known to occur in northwestern Colorado.	No.	Fitzgerald et al. 1994; UDWR 2005; UNHP 2003; WGFD 2009.
Black-tailed prairie dog	<i>Cynomys ludovicianus</i>	BLM	Range: The black-tailed prairie dog occurs throughout the Great Plains of North America, from Canada to Mexico. Habitat: The species inhabits grasslands.	None. The species is known to occur in eastern Colorado and eastern Wyoming, outside of the 2-mile transmission line corridor.	Yes.	CDOW 2010a; NatureServe Explorer 2010.
Wyoming pocket gopher	<i>Thomomys clusius</i>	BLM	Range: The Wyoming pocket gopher occurs in southeastern Sweetwater County and southwestern Carbon County, Wyoming. Habitat: The species inhabits greasewood communities on dry, gravelly, shallow-soil ridge tops, on the edges of eroding washes.	<u>Region I</u> : High. The species has been documented within the 2-mile transmission line corridor in Sweetwater County, Wyoming. It has also been documented within 5 miles of the reference line in Carbon County, Wyoming.	No.	Keinath and Beauvais 2006; WGFD 2005.

Table G-2 Special Status Wildlife Species Identified for the TransWest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence ²	Eliminated from Detailed Analysis	References
Pygmy rabbit	<i>Brachylagus idahoensis</i>	BLM; USFS; UT-SS Tier II	<p>Range: The pygmy rabbit occurs throughout the Great Basin, from Washington, south to east-central California and east to Utah and Wyoming.</p> <p>Habitat: The species is a sagebrush obligate and inhabits dense, tall stands of big sagebrush, usually along intermittent streams or riparian areas in sagebrush-grasslands. It excavates its own burrows in soft, deep soil.</p>	<u>Regions I, II, and III</u> : High. The species has been documented within the 2-mile transmission line corridor in Carbon and Sweetwater counties, Wyoming. It has also been documented within 5 miles of the reference line in Iron, Millard, and Washington counties, Utah, and Lincoln County, Nevada. In Utah, the species occurs primarily in the Bonneville Basin. Suitable habitat also occurs in Lincoln and northeastern Clark counties, Nevada.	No.	Fitzgerald et al. 1994; NDOW 2012; UDWR 2005; UNHP 2003; WGFD 2005.

¹ Status:
 FE = Federally Endangered
 FT = Federally Threatened
 FC = Federal Candidate
 FP = Federal Proposed
 EXP/NE = Experimental Non-essential population
 BLM = BLM Sensitive
 USFS = USFS Sensitive
 CO-E = Colorado State Endangered
 CO-T = Colorado State Threatened
 NV-P = Nevada State Protected
 UT-SS = Utah Sensitive Species (Tier I and Tier II species are defined in Utah's Comprehensive Wildlife Strategy)

² Potential for Occurrence
 High = The species is known to occur within suitable habitat within the 2-mile transmission line corridor.
 Moderate = The species is known to occur within 5 miles of the study area and suitable habitat for the species occurs within the 2-mile transmission line corridor.
 Low = The known geographic range of the species is within the 2-mile transmission line corridor.
 None = The geographic range of the species is outside the 2-mile transmission line corridor.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Eliminated from Detailed Analysis	References
AMPHIBIANS						
Arizona toad	<i>Bufo microscaphus</i>	BLM; UTSC	Range: Historically, this species was widespread in Las Vegas Valley, but it is no longer present. Habitat: Species uses spring, washes, and ephemeral waterbodies.	Low. Historic records exist in Duck, Stevens Springs, Vegas Wash, Flamingo Wash, and Tropicana Wash, with the closest location being 270 feet to the west of a project corridor. Records also exist near corridor in Clover Creek and Meadow Valley Wash in Nevada.	No.	Bradford 2002.
Boreal toad	<i>Bufo boreas boreas</i>	CO-E; USFS; UT-CAS	Range: Present distribution includes southeastern Alaska south to northern California, and east to Montana, Wyoming, and Colorado. Habitat: Species non-breeding habitat consists of forested areas and upland vegetation. Breeding habitat includes low-gradient streams, marshes, beaver ponds, small lakes and reservoirs, stock ponds, wet meadows, and seeps.	High. Project corridor crosses habitat near Birch Creek in Juab County, Utah.	No.	Hogrete et al. 2005; Orabona et al. 2009; UDWR 2010e.
Columbia spotted frog	<i>Rana luteiventris</i>	FS; NV-P; UTSC; UT-CAS	Range: Distribution includes Alaska, British Columbia, south through Washington and Oregon to Nevada and north to Montana, Wyoming, and Utah. Habitat: Species occurs in streams, wet meadows, springs and springbrooks, marshes, lakes, and reservoirs. It is highly aquatic, since it is rarely found far from permanent waterbodies. It may traverse upland areas during wet periods or to reach wintering sites.	High. Project corridors cross the following waterbodies inhabited by this species: San Pitch River, Orson's Pond, Mt. Pleasant Canal, and Currant Creek and wetland complex in Utah.	No.	Orabona et al. 2009; eNature 2010.
Great Basin spadefoot toad	<i>Spea intermontana</i>	WY-N	Range: This species distribution extends throughout all of Nevada and into most of Utah; they are also present in small areas in California, Arizona, Colorado, and Wyoming. Habitat: Species occurs in sagebrush habitats below 6,000 feet amsl, west of the Continental Divide.	Moderate. Potential habitat exists in Region I analysis area, although there are no occurrences within the 2-mile transmission line corridor.	No.	Orabona et al. 2009.
Northern leopard frog	<i>Rana pipiens</i>	BLM; NV-P	Range: Distribution of species includes portions of Nevada, Utah, Colorado, and Wyoming. Habitat: Species occurs in marshes, beaver ponds, streams, rivers, and lakes up to an elevation of 9,000 feet amsl.	High. Project corridors cross the following waterbodies inhabited by this species: Muddy and Antelope creeks, and possibly Soap Wash in Wyoming; the White and Yampa rivers in Colorado; and Soldier Creek in Utah County, Utah..	No.	Orabona et al. 2009.
Relict leopard frog	<i>Rana onca</i>	NV-SP; FC	Range: A 2.3-mile linear stretch of the Overton Arm of Lake Mead and a 3.2 mile stretch of Black Canyon below Lake Mead. Species has been reintroduced in Red Spring, Quali Spring, and Perkins Pond in Clark County, Nevada. Habitat: Spring systems with largely unadulterated hydrology, devoid of introduced bullfrogs (<i>R. catesbiana</i>) or game fishes.	Low. The entire population is within the Lake Mead National Recreation Area.	Yes. This species does not occur within waterbodies within the Lake Mead National Recreation Area.	Bradford et al. 2004.
FISH						
Big Spring spinedace	<i>Lepidomeda mollispinis pratensis</i>	FT; NV-P	Range: Species is restricted to a 4-mile section of Upper Meadow Valley Wash (Condor Canyon) in Panaca and Dry valleys, Nevada. Habitat: Characteristics of stream habitat includes depths of 1 to 3 feet with moderate flow and silt, sand or gravel substrates.	None.	Yes. Condor Canyon section is located 10 miles north of the closest project corridor.	USFWS 1985c.
Bluehead sucker	<i>Catostomus discobolus</i>	BLM; UT-CAS	Range: This species is found in the rivers and tributary streams within the Colorado River Basin. Current distribution includes the Colorado, Dolores, Duchesne, Escalante, Fremont, Green, Gunnison, Price, San Juan, San Rafael, White, and Yampa rivers and numerous smaller tributaries. It also occurs in the Lower Colorado River Basin. Habitat: The species inhabits various stream habitats ranging from small tributaries to large mainstem rivers. Habitat typically consists of runs or riffles with rock or gravel substrates. Juveniles also utilize riffles, eddies, and backwaters.	High. Project corridors cross the following streams inhabited by this species in Utah: Duchesne County (Cottonwood, Currant, Dry Gulch, and Lake Fork creeks); Uintah County (Dry Gulch and Montes creeks and the Uinta River); Wasatch County (Currant Creek and Strawberry River).	No.	Ptacek et al. 2005.
Bonneville cutthroat trout	<i>Oncorhynchus clarki utah</i>	BLM; FS; UT-SC; UT-CAS	Range: This species occurs in a variety of habitats within the Bonneville Basin. Habitat: Species prefers small headwater streams with pool and riffle habitat and slow, deep water with vegetated streambanks.	High. Project corridors cross streams inhabited by this species in the following Utah counties: Carbon, Duchesne, Sanpete, Utah, and Wasatch.	No.	Lentsch et al. 2000; Sigler and Sigler 1996

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Eliminated from Detailed Analysis	References
Bonytail	<i>Gila elegans</i>	FE; BLM	Range: Captures of wild adult bonytail have occurred in Lakes Powell, Mohave, and Havasu, and rivers (Colorado, Green, and Yampa) in the Upper Colorado River Basin. Habitat: This species is considered to be adapted to mainstem rivers in pools and eddies and reservoirs. Bonytail probably spawn in the spring over rocky substrates.	High. Project corridors cross the following streams inhabited by this species: Green River in Utah.	No.	USFWS 2002a.
Colorado pikeminnow	<i>Ptychocheilus lucius</i>	FE; BLM	Range: Species occurs within three subbasins and includes the following rivers: Green River Subbasin (Green, Yampa, Little Snake, White, Price, and Duchesne), Upper Colorado Subbasin (Upper Colorado, Gunnison, and Dolores), and San Juan (San Juan). Habitat: Adults require pools, deep runs, and eddy habitats maintained by high spring flows. Side-channels are considered to be spawning sites in the spring. Young fish use backwater areas for development.	High. Project corridors cross the following streams inhabited by this species: White and Yampa rivers in Colorado; Little Snake River in Wyoming; and Green River in Utah.	No.	USFWS 2002b.
Colorado River cutthroat trout	<i>Oncorhynchus clarkii pleuriticus</i>	BLM; FS; UT-CAS	Range: The species is native to the upper Colorado Basin in parts of Wyoming, Colorado, and Utah. Habitat: This species is typically associated with isolated headwater streams with cool temperatures and clear conditions.	High. Project corridors cross streams inhabited by this species in the following counties: Wyoming (Carbon and Sweetwater); Colorado (Moffatt, Rio Blanco, and Routt); and Utah (Daggett, Emery, Grand, Uintah, Utah, and Wasatch).	No.	Behnke 1981.
Devil's Hole pupfish	<i>Cyprinodon diabolis</i>	NV-P	Range: Species occurs in Devil's Hole located in Ash Meadows National Wildlife Refuge in Nevada. Habitat: A deep cavern in Devil's Hole.	None.	Yes. This species occurs at the Hoover Dam refugium located below Hoover Dam. This site is located approximately 2.3 miles to the east of the closest project corridor.	USFWS 2010c.
Flannelmouth sucker	<i>Catostomus latipinnis</i>	BLM; UT-CAS	Range: This species is widely distributed in medium and large-sized streams in the Upper Colorado Basin including Colorado and Wyoming. It is less abundant or absent from its historical range in Nevada, Utah, Arizona, and California. Habitat: Species is typically found in slower, warmer rivers in plateau regions. They prefer pools and deep runs but also occur in the mouths of tributaries, riffles, and backwaters. Juveniles utilize backwaters and shoreline areas.	High. Project corridors cross the following streams inhabited by this species: Muddy Creek and Little Snake River in Wyoming and Cottonwood, Carrant, Dry Gulch, Montes, and Strawberry creeks and Lake Fork and Strawberry rivers in Utah.	No.	Rees et al. 2005a.
Greenback cutthroat trout	<i>Oncorhynchus clarkii stomias</i>	FT	Range: This species currently occurs in upper tributaries of the South Platte and Arkansas river drainages in eastern Colorado and portions of the Colorado River tributaries in western Colorado. Habitat: Species occurs in single stream segments or small lake habitats.	None.	Yes. Lakes and streams inhabited by this species are not crossed by project corridors.	USFWS 1998a; Williams 2006.
Hiko White River springfish	<i>Crenichthys baileyi grandis</i>	FE; NV-P	Range: This species occupies Hiko and Crystal springs in Paharanagat Valley, Nevada. Habitat: Species occurs in pool areas of two springs.	None.	Yes. Hiko and Crystal springs are located 20 to 21 miles west of the closest project corridor.	USFWS 1998b.
Humpback chub	<i>Gila cypha</i>	FE; BLM	Range: Species occurs in deep canyon portions of the Colorado River system such as Desolation-Gray, Black Rocks and Westwater canyons and Yampa Canyon inside Dinosaur National Monument in the Upper Colorado Basin. Populations also exist in the Lower Colorado Basin in the Grand Canyon and Little Colorado River. Habitat: Species prefers deep, fast-moving, turbid waters with large boulder substrates and steep cliffs.	Low to moderate. Species occurs in areas located downstream of stream crossings in Wyoming, Colorado, and Utah	No.	CDOW 2010b; UDWR 2010a.
June sucker	<i>Chasmistes liorus</i>	FE; BLM; UTSC	Range: Distribution is limited to Utah Lake and the Provo River in Utah. Habitat: Adults and juveniles occur in lake habitat. Adults use the Provo River for spawning and early development of young June sucker.	None.	No. This species is not known to occur in streams crossed by project corridors. However, it was included in the analysis to evaluate potential effects of water use.	USFWS 1999.
Lahontan cutthroat trout	<i>Oncorhynchus clarkii henshawi</i>	FT	Range: Distribution of this species includes isolated drainages of the Lahontan Basin in Nevada. Habitat: Species occurs in terminal lakes and isolated headwater streams in the Lahontan basin.	None.	Yes. Lakes and streams inhabited by this species are not crossed by project corridors.	Neville 2010.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Eliminated from Detailed Analysis	References
Least chub	<i>Notemigonus crysoleucas</i>	C; BLM; UT-SC; UT-CAS	Range: This species is native to the Bonneville Basin in Utah. Habitat: Species occurs in slow-moving rivers, creeks, ponds, and marshes. Typically, this species is associated with moderate to dense vegetation.	Low to moderate. Species occurs in areas located downstream of stream and wetland areas in Utah. The closest location to a project corridor is 1.5 miles.	No.	USFWS 2012c.
Meadow Valley Wash desert sucker	<i>Catostomus clarkii</i> spp.	BLM; NV-P	Range: Species inhabits the Meadow Valley Wash drainage in Nevada. Habitat: Typically they occur in small to moderately large streams with pools and riffles with gravel, rubble, and sandy substrates.	High. Species known to occur in Meadow Valley Wash and the Muddy River in Nevada.	No.	NDOW 2009.
Meadow Valley Wash speckled dace	<i>Rhinichthys osculus subsp. n.</i>	BLM	Range: Species inhabits the Meadow Valley Wash drainage in Nevada. Habitat: Species occurs in a variety of habitats including riffles, runs, and pools in streams and rivers; ponds and lakes; and spring outflows.	High. Species occurs in Meadow Valley Wash and the Muddy River in Nevada.	No.	NDOW 2009.
Moapa dace	<i>Moapa coriacea</i>	FE	Range: Species is endemic to the Upper Muddy River and tributary thermal spring systems within the Warm Springs area in Nevada. Habitat: Species utilizes spring pools, spring outflows, and the mainstem portion of the Muddy River.	None	Yes. This species occurs in the Muddy River, which is located approximately 0.5 mile northeast of the closest project corridor.	USFWS 1996.
Moapa speckled dace	<i>Rhinichthys osculus moapae</i>	NV-P	Range: This subspecies is endemic to the Muddy River Basin in Nevada. Habitat: Species utilizes a variety of habitats in streams and spring sources.	High. Species known to occur in the Muddy River, Nevada just north of a project corridor. Species likely occurs in portion of river crossed by a corridor.	No.	Wildlife Action Plan Team 2006; USFWS 1996.
Moapa White River springfish	<i>Crenichthys baileyi moapae</i>	NV-P	Range: Species occurs in the Muddy River Basin in Nevada. Habitat: Species occurs in vegetated warm springs and their outflows.	High. Species known to occur in the Muddy River, Nevada just north of a project corridor. Species likely occurs in portion of river crossed by a corridor.	No.	Wildlife Action Plan Team 2006; USFWS 1996.
Mountain sucker	<i>Catostomus platyrhynchus</i>	BLM	Range: Species is widely distributed in the western U.S. including Wyoming and Colorado streams. Habitat: Species occurs in smaller streams and rivers in areas with eddies, small pools, and undercut banks and moderate current.	High. Species has been collected in Colorado River tributaries crossed by project corridors, including Utah streams such as Currant Creek, San Pitch River, and Thistle Creek.	No.	Woodling 1985.
Northern leatherside chub	<i>Lepidomeda copei</i>	FS; UT-CAS	Range: Species is native to the southeastern portion of the Bonneville Basin in Utah. Habitat: Species occurs in streams and rivers with relatively low water velocity, intermediate depths (9 to 26 inches), fine substrates.	None.	Yes. This species is not known to occur in streams crossed by project corridors.	UDWR 2010a; Idaho Fish and Game 2005.
Pahrump poolfish	<i>Empetrichthys latos</i>	FE; NV-P	Range: This species occurs in Shoshone Ponds in White Pine County and Corn Creek in Clark County, Nevada. Habitat: Species occurs in shallow springs and their outflow areas.	None.	Yes. Distances of occupied habitat from the closest project corridor include 17 miles for Shoshone Ponds and 6 miles for Corn Creek Refugium.	USFWS 1980.
Pahranagat roundtail chub	<i>Gila robusta jordani</i>	FE; NV-P	Range: This species presently occurs in a small section of Pahranagat Creek in Pahranagat Valley, Nevada. Habitat: Adults and juveniles typically inhabit pools below riffle areas.	None.	Yes. The closest occupied habitat is located approximately 5 miles west of the closest project corridor.	USFWS 1998b.
Pallid sturgeon	<i>Scaphirhynchus antillarum</i>	FE	Range: Species occurs in the Lower Platte River (downstream of Elk River confluence) in Nebraska. Habitat: Species in areas with strong current and firm sandy bottoms in the main channel of large turbid rivers.	None. However, the potential use of water for dust control in the North Platte subbasin would require impact analysis for this species.	No.	National Research Council 2004.
Plains topminnow	<i>Fundulus sciadicus</i>	BLM	Range: This species has a disjunct distribution in several plains states including Colorado. Habitat: Colorado populations are typically associated with quiet portions of streams with abundant filamentous algae.	None.	Yes.	Woodling 1985.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Eliminated from Detailed Analysis	References
Razorback sucker	<i>Xyrauchen texanus</i>	FE; BLM	Range: Species occurs within five subbasins and includes the following rivers or lakes: Green River Subbasin (Green, Yampa, White, and Duchesne); Upper Colorado Subbasin (Upper Colorado and Gunnison); San Juan (San Juan); Lower Colorado River Subbasin (Lake Mohave, Lake Mead, and Lower Colorado River); and Gila River Subbasin (Verde and Salt). Habitat: Adults prefer deep runs, eddies, backwaters, and flooded off-channel habitats in the spring, runs and pools in the summer, low-velocity runs, pools, and eddies in the winter. Spawning occurs in the spring over cobble, gravel, and sand substrates. Young develop in backwaters, tributary mouths, and floodplain areas.	High. Project corridors cross the following streams inhabited by this species: Plateau Creek, Colorado River, and White River in Colorado; Green River in Utah; and Las Vegas Wash near Lake Mead in Nevada.	No.	USFWS 2002c.
Relict dace	<i>Relictus solitarius</i>	BLM; NV-P	Range: Species is endemic to eastern Nevada. Refugia and introduced populations occur in Spring Valley. Habitat: Species occurs spring, spring-fed streams, ponds, intermittent lakes and marshes with mud or gravel substrates. Preferred habitat is well-vegetated pools.	None.	Yes. This species is not known to occur in streams crossed by project corridors in Nevada where this species is protected.	NDOW 2009.
Roundtail chub	<i>Gila robusta robusta</i>	BLM; UT-CAS	Range: This chub is an endemic species to the Colorado River Basin in Colorado and Wyoming. Habitat: This species usually is found in stream reaches with a mixture of pool and riffle habitats. Adults and juveniles are typically found in relatively deep, low-velocity habitats that contain woody debris or other types of cover.	High. Project corridors cross the following streams inhabited by this species: Colorado, White, and Yampa rivers in Colorado; Little Snake River and Muddy Creek in Wyoming; and San Rafael River in Utah.	No.	Rees et al. 2005b.
Southern leatherside chub	<i>Lepidomeda aliciae</i>	BLM; FS; UT-CAS	Range: Species is present in the Utah Lake and Sevier River drainages. Habitat: Species is associated with a variety of habitat conditions involving stream flow, gradient, elevation, and pH, but is usually found near coarse substrates.	High. Project corridors cross the following streams inhabited by this species: Lost Creek, Sevier River, San Pitch River, Thistle Creek, Soldier Creek, and Seely Pond in Utah.	No.	UDWR 2010b.
Utah chub	<i>Gila atraria</i>	NV-LD	Range: Species is native in the upper Snake River and throughout the Lake Bonneville Basin in Wyoming, Utah, Idaho, and Nevada. Habitat: It utilizes a variety of habitats including irrigation ditches, ponds, streams, and lakes.	None.	Yes. Species occurs in Big Springs Creek in Nevada, with the closest location being 0.7 mile north of the closest project corridor.	Sigler and Sigler 1996.
Virgin River chub	<i>Gila robusta seminuda</i>	FE; BLM	Range: This species occurs within the Muddy River in Nevada and the mainstem portion of the Virgin River from La Verkin Springs, Utah downstream to the confluence with Lake Mead. Habitat: Species uses spring pools, spring outflows, and the mainstem portion of the Muddy River.	Moderate. This species occurs in the Muddy River, with the closest known downstream location to a project corridor being 2 miles. The species likely occurs in the corridor based on general distribution information.	No.	USFWS 1996.
Virgin River spinedace	<i>Lepidomeda mollispinis mollispinis</i>	BLM, NV-P	Range: This species currently exists in the mainstem Virgin River and 11 tributaries in Utah, Arizona, and Nevada. Habitat: Species prefers clear, slow-moving small streams with abundant cover.	High. Project corridors cross the following streams inhabited by this species: Moody Wash in Utah.	No.	Lentsch et al. 1995; Sigler and Sigler 1996; UDWR 2010d.
White River desert sucker	<i>Catostomus clarkii intermedius</i>	NV-P	Range: Species occurs in White River Valley in Nevada. Habitat: Species occupies isolated stream, spring, and spring outflow systems.	None.	Yes. This species is not known to occur in streams crossed by project corridors.	NDOW 2009.
White River speckled dace	<i>Rhinichthys osculus subspecies</i>	BLM	Range: Species occurs in White River Valley in Nevada. Habitat: The types of habitats are expected to be similar to Meadow Valley Wash speckled dace.	None.	Yes. This species is not known to occur in streams crossed by project corridors.	NDOW 2009.
White River spinedace	<i>Lepidomeda albivallis</i>	FE	Range: The present distribution is limited to Flag Springs and the upper portion of Sunnyside Creek in White River Valley, Nevada. The species also has been introduced into Indian Spring. Habitat: Characteristics of springs inhabited by this species clear, cool temperatures, and open pools with aquatic vegetation.	None.	Yes. This species is not known to occur in waterbodies crossed by project corridors.	USFWS 1994b.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Eliminated from Detailed Analysis	References
White River springfish	<i>Crenichthys baileyi baileyi</i>	FE	Range: The present distribution of this species is Ash Springs in Pahrnagat Valley, Nevada. Habitat: This species utilizes pool and spring outflow habitats.	None.	Yes. This species is not known to occur in waterbodies crossed by project corridors.	Tuttle et al. 1990.
Woundfin	<i>Plagopterus argentissimus</i>	FE; BLM	Range: Species is currently found in the Virgin River system in Utah. Habitat: Species prefers swift flows and sandy substrates in the Virgin River.	None.	Yes. This species occurs in the Muddy River, with the closest location being 0.5 mile north of the closest project corridor in Nevada.	UDWR 2010c.
INVERTEBRATES						
Bifid duct pyrg	<i>Pyrgulopsis peculiaris</i>	FP; BLM; UT-SC	Range: This species occurs in a spring near Big Springs in Snake Valley and Rock, Turnley, and Woodsman springs in Spring Valley, Nevada. Habitat: Occupied waterbodies are springbrooks at elevations from 6,000 to 7,400 feet with moderate to high conductivity and aquatic vegetation.	None.	Yes. This species occurs in a spring near Big Springs, which is located approximately 1.8 miles north of the closest project corridor.	Center for Biological Diversity 2009; Hershler 1998.
California floater	<i>Anodonta californiensis</i>	BLM	Range: Historic records exist for Utah County. Current populations exist in Juab County, Utah. Habitat: Species has been collected in pond and stream habitats in Utah.	Currant Creek and Mona Springs in Juab County, Utah.	No.	Oliver and Bosworth 1999.
Devil's Hole Warm Spring riffle beetle	<i>Stenelmis calida calida</i>	BLM	Range: Species occurs in Devil's Hole located in Ash Meadows National Wildlife Refuge in Nevada. Habitat: A deep cavern in Devil's Hole.	None.	Yes. Devil's Hole is located greater than 5 miles from a project corridor.	USFWS 2012d.
Grated tryonia	<i>Tryonia clathrata</i>	FP; BLM; NV-P	Range: Species occurs in the Muddy River system in Nevada. Habitat: Species occurs in springs.	None.	Yes. Species occurs in Cardy Lamb and Oasis springs and the Moapa NWR, which are located at least 1 mile from a project corridor.	USFWS 1996.
Lake Valley pyrg	<i>Pyrgulopsis sublata</i>	FP	Range: This species is endemic to Wambolt Spring in Lake Valley. Habitat: This species occurs in a shallow spring with vegetation.	None.	Yes. This species occurs in Wambolt Spring, which is located approximately 2.1 miles northwest of the closest project corridor.	Center for Biological Diversity 2009; Hershler 1998.
Longitudinal gland pyrg	<i>Pyrgulopsis anguina</i>	FP	Range: Species is known from Big Springs and an unnamed spring near Big Springs in Snake Valley, Nevada and from Clay Spring in Snake Valley, Utah. Habitat: Occupied waterbodies include warm, flowing springs with aquatic vegetation.	None.	Yes. This species occurs in Big Springs, which is located approximately 0.4 mile north of the closest project corridor.	Center for Biological Diversity 2009; Hershler 1998.
Moapa pebblesnail	<i>Pyrgulopsis avernalis</i>	FP	Range: Species occurs in the Muddy River system in Nevada. Habitat: Species occurs in springs.	None.	Yes. Species occurs in Cardy Lamb Spring and the Moapa NWR, which are located at least 1 mile from a project corridor.	USFWS 1996.
Moapa Warm Spring riffle beetle	<i>Stenelmis moapa</i>	BLM	Range: Species occurs in the Muddy River system in Nevada. Habitat: Species typically is found in outflow streams immediately downstream of spring sources in swift, shallow water.	High. Species known to occur in the Muddy River, Nevada just north of a project corridor. Species likely occurs in portion of river crossed by a corridor.	No.	USFWS 1996.
Nearctic riffle beetle	<i>Stenelmis occidentalis</i>	BLM	Range: This beetle occurs in the Muddy River corridor, Moapa NWR/Warm Springs, and Ash Spring, and the Pahrnagat River in Nevada. Habitat: Species occurs in wetland, spring, and river habitat. In Ash Springs, riffle beetles were present only in the spring source areas and not in the outflow.	None.	Yes. This species occurs in the Muddy River, with the closest known collection site being 0.5 mile northeast of a project corridor.	Nevada Natural Heritage Program Scorecard 2006; USFWS 1996.
Spring Mountains pyrg	<i>Pyrgulopsis deaconi</i>	FP; BLM; NV-P	Range: This species is endemic to the drainages of Las Vegas and Pahrump valleys in Nevada. It is present in Red, Willow, and Kiup springs. Habitat: The species occurs in permanent, artesian springbrooks that have high mineral content, unpolluted, and highly oxygenated.	None.	Yes. This species occurs in Red Spring in the Red Rock Canyon Recreation Area, which is located approximately 1.2 miles west of the closest project corridor.	Center for Biological Diversity 2009; Hershler 1998.

Table G-3 Special Status Aquatic Species Identified for the Transwest Express Transmission Project

Common Name	Scientific Name	Status ¹	Range and Habitat Requirements	Potential for Occurrence Within the Project Area	Eliminated from Detailed Analysis	References
Southern Bonneville pyrg	<i>Pyrgulopsis transversa</i>	UT-SC	Range: Species historically was present in Utah Lake. Fossil records exist for Bear Lake in Utah. The species is now extirpated in Utah. Habitat: Species occurs in relatively small, mineralized springs at elevations between approximately 5,830 and 6,740 feet elevation.	High. This species occurs in Thistle Creek, which is crossed by a project corridor.	No.	Oliver and Bosworth 1999.
Utah or desert valvata snail	<i>Valvata utahensis</i>	FE	Range: Species historically was present in Utah Lake. Fossil records exist for Bear Lake in Utah. The species is now extirpated in Utah. Habitat: Species occurred in large, shallow, slightly alkaline waters such as Utah Lake.	None.	Yes. This species is extinct.	Oliver and Bosworth 1999.

¹ Status:
 FE = Federally Endangered.
 FT = Federally Threatened.
 FC = Federal Candidate.
 FP = Federal Petitioned.
 BLM = BLM Sensitive.
 FS = USFS Sensitive.
 CO-E = Colorado State Endangered.
 CO-T = Colorado State Threatened.
 NV-P = Nevada State Protected.
 NV-LD = Species is not protected but it considered unique in Nevada (category to be discussed with NDOW).
 WY N = Wyoming Native (category to be discussed with WGFD).
 UT-CAS = Utah Conservation Agreement Species.
 UT-SC = Utah special concern (category to be discussed with UDWR).

² Potential for Occurrence Within Project Area
 High = The species is known to occur within suitable habitat within Project corridors.
 Low to moderate = The species is known to occur within 2 miles of the Project corridors in a downstream direction from the boundary of a corridor.
 None = Project corridors do not occur within the geographic range of the species.

Table G-4 Game Fish and Special Status Aquatic Species Occurrence in Streams, Region I Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Alternatives				ROW Crossings	Variation or Connector
					A	B	C	D		
Muddy Creek	Carbon, Wyoming	Brook trout	Bluehead sucker, flannelmouth sucker, mountain sucker, northern leopard frog, roundtail chub	116					1	Fivemile Point North Alternative Connector
Muddy Creek	Carbon, Wyoming	Brook trout	Bluehead sucker, flannelmouth sucker, mountain sucker, northern leopard frog, roundtail chub	130			X		1	
Muddy Creek	Carbon, Wyoming	Brook trout	Bluehead sucker, flannelmouth sucker, mountain sucker, northern leopard frog, roundtail chub	140			X		2	
Wild Cow Creek	Carbon, Wyoming	None	None	140			X			
Muddy Creek	Carbon, Wyoming	Brook trout	Bluehead sucker, flannelmouth sucker, mountain sucker, northern leopard frog, roundtail chub	140.05			X			
Muddy Creek	Carbon, Wyoming	Brook trout	Bluehead sucker, flannelmouth sucker, mountain sucker, northern leopard frog, roundtail chub	150.05					1	Mexican Flats Alternative Connector
Muddy Creek	Carbon, Wyoming	Brook trout	Bluehead sucker, flannelmouth sucker, mountain sucker, northern leopard frog, roundtail chub	170					1	Baggs Alternative Connector
Little Snake River	Carbon, Wyoming	Mountain whitefish, rainbow trout	Bluehead sucker, flannelmouth sucker, razorback sucker ¹ , roundtail chub	170.05						Baggs Alternative Connector
Yampa River	Moffat, Colorado	Black bullhead, brook trout, black crappie, brown trout, channel catfish, Colorado River cutthroat trout, mountain whitefish, northern pike, rainbow trout, walleye	Bluehead sucker, Colorado pikeminnow, Colorado River cutthroat trout, flannelmouth sucker, roundtail chub	180.2	X				1	
Little Snake River	Moffat, Colorado	Bluegill, black crappie, channel catfish, northern pike, rainbow trout, smallmouth bass	Bluehead sucker, Colorado pikeminnow, Colorado River cutthroat trout, flannelmouth sucker, northern leopard frog, roundtail chub	180.2	X				1	

Table G-4 Game Fish and Special Status Aquatic Species Occurrence in Streams, Region I Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Alternatives				ROW Crossings	Variation or Connector
					A	B	C	D		
Yampa River	Moffat, Colorado	Black bullhead, brook trout, black crappie, brown trout, channel catfish, Colorado River cutthroat trout, mountain whitefish, northern pike, rainbow trout, walleye	Bluehead sucker, Colorado pikeminnow, Colorado River cutthroat trout, flannelmouth sucker, roundtail chub	186		X		X	1	
Little Snake River	Moffat, Colorado	Bluegill, black crappie, channel catfish, northern pike, rainbow trout, smallmouth bass	Bluehead sucker, Colorado pikeminnow, Colorado River cutthroat trout, flannelmouth sucker, northern leopard frog, roundtail chub	186		X		X	1	
Yampa River	Moffat, Colorado	Black bullhead, brook trout, black crappie, brown trout, channel catfish, Colorado River cutthroat trout, mountain whitefish, northern pike, rainbow trout, walleye	Bluehead sucker, Colorado pikeminnow, Colorado River cutthroat trout, flannelmouth sucker, roundtail chub	190			X		3	
Yampa River	Routt, Colorado	Black bullhead, brook trout, black crappie, brown trout, channel catfish, Colorado River cutthroat trout, mountain whitefish, northern pike, rainbow trout, walleye	Bluehead sucker, Colorado pikeminnow, Colorado River cutthroat trout, flannelmouth sucker, roundtail chub	190			X		3	
Willow Creek	Carbon, Wyoming	Brook trout, Colorado River cutthroat trout	Colorado River cutthroat trout, mountain sucker	190			X			
Willow Creek	Moffat, Colorado	Brook trout, Colorado River cutthroat trout	Colorado River cutthroat trout, mountain sucker	190			X			
Little Bear Creek	Moffat, Colorado	Brook trout	None	190			X		1	
Dry Fork Little Bear Creek	Moffat, Colorado	None	None	190			X			
Little Cottonwood Creek	Moffat, Colorado	Colorado River cutthroat trout	Colorado River cutthroat trout	190			X		1	
Fortification Creek	Moffat, Colorado	Rainbow trout	Bluehead sucker, flannelmouth sucker, mountain sucker, roundtail chub	190			X		1	

Table G-4 Game Fish and Special Status Aquatic Species Occurrence in Streams, Region I Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Alternatives				ROW Crossings	Variation or Connector
					A	B	C	D		
Elkhead Creek	Moffat, Colorado	Black crappie, bluegill, smallmouth bass	Flannelmouth sucker	190			X		1	
Elkhead Creek	Routt, Colorado	Black crappie, bluegill, smallmouth bass	Flannelmouth sucker	190			X		1	
Little Snake River	Carbon, Wyoming	Mountain whitefish, rainbow trout	Bluehead sucker, flannelmouth sucker, razorback sucker ¹ , roundtail chub	190			X		1	
Fourmile Creek	Moffat, Colorado	Colorado River cutthroat trout	Colorado River cutthroat trout, mountain sucker	190			X		1	
Muddy Creek	Carbon, Wyoming	None	Bluehead sucker, flannelmouth sucker, northern leopard frog, roundtail chub	190			X			
O-Wi-Yu-Kuts Creek	Daggett, Utah	None	None	200						Western Wyoming Alternative Variation
Brush Creek	Uintah, Utah	Brown trout, rainbow trout	None	200					1	Western Wyoming Alternative Variation
Crouse Creek	Daggett, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout trout	200						Western Wyoming Alternative Variation
Jones Hole Creek	Uintah, Utah	Brown trout, rainbow trout	None	200					1	Western Wyoming Alternative Variation
Willow Creek	Daggett, Utah	None	None	200						Western Wyoming Alternative Variation
Clay Basin Creek	Daggett, Utah	None	None	200					1	Western Wyoming Alternative Variation
Ashley Creek	Uintah, Utah	None	None	200					2	Western Wyoming Alternative Variation
Red Creek	Daggett, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	200					1	Western Wyoming Alternative Variation
Red Creek	Sweetwater, Wyoming	Colorado River cutthroat trout	Colorado River cutthroat trout	200					1	Western Wyoming Alternative Variation

Table G-4 Game Fish and Special Status Aquatic Species Occurrence in Streams, Region I Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Alternatives				ROW Crossings	Variation or Connector
					A	B	C	D		
Beans Spring Creek	Sweetwater, Wyoming	None	Flannelmouth sucker, mountain sucker	200						Western Wyoming Alternative Variation
Bitter Creek	Sweetwater, Wyoming	None	Flannelmouth sucker, mountain sucker	200					3	Western Wyoming Alternative Variation
Camp Creek	Sweetwater, Wyoming	Brook trout, brown trout	None	200						Western Wyoming Alternative Variation
Castello Creek	Sweetwater, Wyoming	None	None	200					1	Western Wyoming Alternative Variation
Ely Creek	Sweetwater, Wyoming	None	None	200					1	Western Wyoming Alternative Variation
Gap Creek	Sweetwater, Wyoming	Brown trout	None	200						Western Wyoming Alternative Variation
Little Basin Creek	Sweetwater, Wyoming	None	None	200					1	Western Wyoming Alternative Variation
Greenhough Creek	Sweetwater, Wyoming	None	None	200					1	Western Wyoming Alternative Variation
Sage Creek	Sweetwater, Wyoming	None	Flannelmouth sucker, mountain sucker	200					1	Western Wyoming Alternative Variation
Green River	Daggett, Utah	Brown trout, Colorado River cutthroat trout, rainbow trout	Bluehead sucker, bonytail ¹ , Colorado River cutthroat trout, Colorado pikeminnow, flannelmouth sucker, humpback chub ¹ , roundtail chub, razorback sucker ¹	200					1	Western Wyoming Alternative Variation
Pot Creek	Uintah, Utah	Brook trout	None	200					1	Western Wyoming Alternative Variation

¹Species occurs greater than 5 miles downstream of the crossing. It is included in the analysis due to potential effects of water use during construction.

Table G-5 Game Fish and Special Status Aquatic Species Occurrence in Waterbodies, Region I Corridors

Surface Water Feature	County, State	Game Fish	Special Status	Segment ID	Alternatives				ROW Crossings	Variation or Connector
					A	B	C	D		
Buck Spring	Carbon, Wyoming			10						Aeolus Design Option
Standpipe Spring	Carbon, Wyoming			10						Aeolus Design Option
Echo Springs	Carbon, Wyoming			40	X	X		X		
Cherokee Reservoir	Sweetwater, Wyoming	Brown trout, largemouth bass, rainbow trout	None	70		X				
Spring Draw Reservoir	Sweetwater, Wyoming	Brown trout, largemouth bass, rainbow trout	None	70		X				
Lower Willow Creek Spring	Sweetwater, Wyoming			70		X				
Baking Powder Reservoir	Moffat, Colorado			100	X	X	X	X		
Coal Bank Lake	Carbon, Wyoming	Bluegill, largemouth bass, rainbow trout	None	110	X			X		
Duck Lake	Carbon, Wyoming			115				X		
Detention Dam 1592 Number 1	Carbon, Wyoming			115.05				X		
Little Robber Detention Dam	Carbon, Wyoming			115.05				X		
McPherson Springs	Sweetwater, Wyoming			115.07				X		
Alkali Reservoir	Sweetwater, Wyoming			120	X					
Flat Draw Reservoir	Sweetwater, Wyoming	Brown trout, largemouth bass, rainbow trout	None	120	X					
Mexican Flats Reservoir Number 1	Carbon, Wyoming			120	X					
Coal Bank Spring	Carbon, Wyoming			130			X			
Gamblers Reservoir	Carbon, Wyoming	Largemouth bass, rainbow trout	None	170.05						Baggs Alternative Connector
River Bottom Reservoir	Carbon, Wyoming			170.05						Baggs Alternative Connector
Spence Spring	Moffat, Colorado			180.2	X					
Dresher Reservoir	Moffat, Colorado			190			X			
Biskup Reservoir	Moffat, Colorado			190			X			
Shiner Reservoir	Uintah, Utah	Bluegill, largemouth bass, rainbow trout	None	200					X	
Crouse Reservoir	Uintah, Utah	Rainbow trout, tiger trout	None	200						Western Wyoming Alternative Variation

Table G-5 Game Fish and Special Status Aquatic Species Occurrence in Waterbodies, Region I Corridors

Surface Water Feature	County, State	Game Fish	Special Status	Segment ID	Alternatives				ROW Crossings	Variation or Connector
					A	B	C	D		
Zelph Calder Reservoir	Uintah, Utah	Brown trout, cutthroat trout, rainbow trout	None	200					Western Wyoming Alternative Variation	
Blair Spring	Uintah, Utah			200					Western Wyoming Alternative Variation	
Bowrey Spring	Uintah, Utah			200					Western Wyoming Alternative Variation	
Chokecherry Spring	Daggett, Utah			200					Western Wyoming Alternative Variation	
Cottonwood Spring	Daggett, Utah			200					Western Wyoming Alternative Variation	
Fighting Spring	Daggett, Utah			200					Western Wyoming Alternative Variation	
Whisky Springs	Daggett, Utah			200					Western Wyoming Alternative Variation	
Beans Spring	Sweetwater, Wyoming			200					Western Wyoming Alternative Variation	
Beef Steer Spring	Sweetwater, Wyoming			200					Western Wyoming Alternative Variation	
Brown Spring	Sweetwater, Wyoming			200					Western Wyoming Alternative Variation	
Camp Creek Springs	Sweetwater, Wyoming			200					Western Wyoming Alternative Variation	
Castello Spring	Sweetwater, Wyoming			200					Western Wyoming Alternative Variation	
Ely Spring	Sweetwater, Wyoming			200					Western Wyoming Alternative Variation	
Gap Spring	Sweetwater, Wyoming			200					Western Wyoming Alternative Variation	
Iron Spring	Sweetwater, Wyoming			200					Western Wyoming Alternative Variation	
Jones Springs	Sweetwater, Wyoming			200					Western Wyoming Alternative Variation	
Poison Spring	Sweetwater, Wyoming			200					Western Wyoming Alternative Variation	
Titsworth Spring	Sweetwater, Wyoming			200					Western Wyoming Alternative Variation	
Diamond Spring	Uintah, Utah			200					Western Wyoming Alternative Variation	

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Alternatives						ROW Crossings	Variation or Connector
					A	B	C	D	E	F		
Stinking Water Creek	Moffat, Colorado	None	None	210	X			X	X	X	1	
Stinking Water Creek	Rio Blanco, Colorado	None	None	210	X			X	X	X	1	
Green River	Uintah, Utah	Brown trout, Colorado River cutthroat trout, mountain whitefish, rainbow trout, smallmouth bass	Bluehead sucker, bonytail ¹ , Colorado River cutthroat trout, Colorado pikeminnow, flannelmouth sucker, humpback chub ¹ , roundtail chub, razorback sucker ¹	213	X				X		1	
White River (tributary to Green River)	Uintah, Utah	Channel catfish, rainbow trout, northern pike	Bluehead sucker, bonytail ¹ , Colorado River cutthroat trout, Colorado pikeminnow, flannelmouth sucker, humpback chub ¹ , northern leopard frog, roundtail chub, razorback sucker ¹	217.01				X		X	1	
Coal Creek	Carbon, Utah	None	None	217.01				X		X		
Green River	Uintah, Utah	Brown trout, Colorado River cutthroat trout, mountain whitefish, rainbow trout, smallmouth bass	Bluehead sucker, bonytail ¹ , Colorado River cutthroat trout, Colorado pikeminnow, flannelmouth sucker, humpback chub ¹ , roundtail chub, razorback sucker ¹	217.01				X		X	1	
Minnie Maud Creek	Carbon, Utah	Cutthroat trout	None	217.02				X			1	
Minnie Maud Creek	Carbon, Utah	Cutthroat trout	None	218						X		
Minnie Maud Creek	Duchesne, Utah	None	None	217.02				X				
Soldier Creek	Carbon, Utah	Cutthroat trout	None	217.02				X		X		
Willow Creek	Uintah, Utah	Brook trout, Colorado River cutthroat trout (restoration area), rainbow trout	Colorado River cutthroat trout	217.01				X		X	1	
Argyle Creek	Duchesne, Utah	Cutthroat trout	None	217.01				X		X	1	
Horse Creek	Utah, Utah	Not surveyed	Not surveyed	219.5							1	Emma Park
Argle Creek	Duchesne, Utah	Cutthroat trout	None	219.2						X	1	
Summit Creek	Carbon, Utah	None	None	217.02				X		X		
Beaver Creek	Utah, Utah	Brown trout, cutthroat trout, rainbow trout	None	217.051					X		1	

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Alternatives						ROW Crossings	Variation or Connector
					A	B	C	D	E	F		
Clear Creek	Utah, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout	217.052					X	X		
Dairy Fork	Utah, Utah	None	None	217.052					X	X		
Horse Creek	Utah, Utah	Not surveyed	Not surveyed	217.051					X		1	
Indian Creek	Utah, Utah	Not surveyed	Not surveyed	217.052					X	X	1	
Kyune Creek	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	217.052					X			
Kyune Creek	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	219.2						X		
Kyune Creek	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	219.5							3	Emma Park
Mill Fork	Utah, Utah	None	None	217.051					X	X		
Price River	Utah, Utah	Brown trout, cutthroat trout, rainbow trout	Mountain sucker	217.051					X		2	
Sheep Creek	Utah, Utah	None	None	217.052					X	X	1	
Soldier Creek	Utah, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout, mountain sucker, northern leopard frog, southern leatherside chub	217.052					X	X	5	
Tabbyune Creek	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	217.051					X		1	
Tabbyune Creek	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	219.2						X	1	
Tabbyune Creek	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	219.5							1	Emma Park
Tie Fork	Utah, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	217.052					X	X	1	
West Fork Willow Creek	Duchesne, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	217.052					X	X		
White River (tributary to Price River)	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	217.052					X			
White River (tributary to Price River)	Wasatch, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	217.052					X			
Willow Creek	Carbon, Utah	Brown trout	None	217.051					X		1	
Willow Creek	Duchesne, Utah	Brown trout	None	217.051					X		1	
North Fork Gordon Creek	Carbon, Utah	Cutthroat trout	None	217.1				X			1	
Price River	Carbon, Utah	Brown trout	Mountain sucker	217.1				X			1	
Summit Creek	Carbon, Utah	None	None	217.1				X			1	

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Alternatives						ROW Crossings	Variation or Connector
					A	B	C	D	E	F		
Willow Creek	Carbon, Utah	Brown trout	None	217.1				X				
Willow Creek	Carbon, Utah	Brown trout	None	219.2						X		
Willow Creek	Carbon, Utah	Brown trout	None	219.4							1	Emma Park
Willow Creek	Carbon, Utah	Brown trout	None	219.6							1	Highway 191 Connector
Dry Creek	Sanpete, Utah	None	None	217.15				X			1	
Gooseberry Creek	Sanpete, Utah	Cutthroat trout	None	217.15				X			1	
Huntington Creek	Emery, Utah	Brown trout, Colorado cutthroat trout (to be restocked)	Colorado River cutthroat trout	217.15				X				
Maple Fork	Sanpete, Utah	Not surveyed	Not surveyed	217.15				X			1	
Mud Creek	Carbon, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout, mountain sucker	217.15				X			1	
Oak Creek	Sanpete, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout	217.15				X			1	
San Pitch River	Sanpete, Utah	Brown trout	Columbia spotted frog, mountain sucker, southern leatherside chub	217.15				X			1	
Upper Huntington Creek	Emery, Utah	Brown trout	None	217.15				X			1	
White Pine Fork	Sanpete, Utah	Not surveyed	Not surveyed	217.15				X			1	
Cottonwood Creek	Sanpete, Utah	Bonneville cutthroat trout, rainbow trout	Bonneville cutthroat trout	217.15				X			1	
Bear Creek	Utah, Utah	Not surveyed	Not surveyed	219.2						X		
Bear Creek	Utah, Utah	Not surveyed	Not surveyed	219.5								Emma Park
Kyune Creek Right Fork	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	219.2						X		
Kyune Creek Right Fork	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	219.5							1	Emma Park
White River Right Fork	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout, mountain sucker	219.2						X		
White River (tributary to Price River)	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	219.3						X	1	
White River (tributary to Price River)	Utah, Utah	Colorado River cutthroat trout	Colorado River cutthroat trout	219.5								Emma Park

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Alternatives						ROW Crossings	Variation or Connector
					A	B	C	D	E	F		
Spring Creek	Rio Blanco, Colorado	None	None	220.1		X	X					
Douglas Creek	Rio Blanco, Colorado	None	Northern leopard frog	220.1		X	X				1	
Little Water	Garfield, Colorado	None	None	220.1		X	X					
West Salt Creek	Garfield, Colorado	None	None	220.1		X	X				37	
White River	Rio Blanco, Colorado	Channel catfish, rainbow trout, northern pike	Bluehead sucker, bonytail ¹ , Colorado River cutthroat trout, Colorado pikeminnow, flannelmouth sucker, humpback chub ¹ , northern leopard frog, roundtail chub, razorback sucker ¹	220.1		X	X				1	
Bitter Creek	Garfield, Colorado	Brook trout, Colorado River cutthroat trout	Colorado River cutthroat trout	220.1		X	X					
Evacuation Creek	Rio Blanco, Colorado	None	None	220.1		X	X				1	
Green River	Emery, Utah	Brown trout, Colorado River cutthroat trout, mountain whitefish, rainbow trout, smallmouth bass	Bluehead sucker, bonytail ¹ , Colorado River cutthroat trout, Colorado pikeminnow, flannelmouth sucker, humpback chub ¹ , roundtail chub, razorback sucker ¹	220.1		X	X				1	
Green River	Grand, Utah	Brown trout, Colorado River cutthroat trout, mountain whitefish, rainbow trout, smallmouth bass	Bluehead sucker, bonytail ¹ , Colorado River cutthroat trout, Colorado pikeminnow, flannelmouth sucker, humpback chub ¹ , roundtail chub, razorback sucker ¹	220.1		X	X				1	
Price River	Emery, Utah	Brown trout	Bluehead sucker, Colorado pikeminnow, flannelmouth sucker	222.05		X					2	
Cedar Creek	Emery, Utah	None	None	222.3		X					1	
Huntington Creek	Emery, Utah	Brown trout, Colorado River cutthroat trout (to be restocked)	Bluehead sucker, Colorado River cutthroat trout	222.3		X					1	
Miller Creek	Carbon, Utah	None	None	223							1	Price Alternative Connector

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Alternatives						ROW Crossings	Variation or Connector
					A	B	C	D	E	F		
South Fork Gordon Creek	Carbon, Utah	None	None	223								Price Alternative Connector
Huntington Creek	Emery, Utah	Brown trout, Colorado River cutthroat trout (to be restocked)	Bluehead sucker, Colorado River cutthroat trout	310		X						
Indian Creek	Emery, Utah	Not surveyed	Not surveyed	310		X					1	
Lowry River	Emery, Utah	Colorado River cutthroat trout, tiger trout	Bluehead sucker, Colorado River cutthroat trout	310		X						
North Fork Coal Fork	Sanpete, Utah	None	None	310		X						
San Pitch River	Sanpete, Utah	Brown trout	Columbia spotted frog, mountain sucker, southern leatherside chub	310		X					1	
South Fork Coal Fork	Sanpete, Utah	None	None	310		X						
Blue Slide Fork	Sanpete, Utah	None	None	310		X						
Coal Fork	Sanpete, Utah	None	None	310		X					1	
Cove Creek	Sanpete, Utah	None	None	310		X						
Dry Pole Fork	Sanpete, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout	310		X						
North Creek	Sanpete, Utah	None	None	310		X					1	
North Fork Pleasant Creek	Sanpete, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout	310		X						
Pleasant Creek	Sanpete, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout	310		X					3	
Straight Fork	Sanpete, Utah	None	None	310		X					3	
Deer Creek	Emery, Utah	Not surveyed	Not surveyed	310		X					1	
Cottonwood Creek	Duchesne, Utah	None	Bluehead sucker, flannelmouth sucker, roundtail chub	320.05	X				X			
Montes Creek	Uintah, Utah	None	Bluehead sucker, flannelmouth sucker, roundtail chub	320.05	X				X		1	
Dry Gulch Creek	Duchesne, Utah	None	Bluehead sucker, flannelmouth sucker, roundtail chub	320.05	X				X		1	
Dry Gulch Creek	Uintah, Utah	None	Bluehead sucker, flannelmouth sucker, roundtail chub	320.05	X				X		1	

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Alternatives						ROW Crossings	Variation or Connector	
					A	B	C	D	E	F			
Uinta River	Uintah, Utah	None	Bluehead sucker, flannelmouth sucker, roundtail chub	320.05	X					X		1	
Currant Creek	Duchesne, Utah	Brown trout, Bonneville cutthroat trout	Bonneville cutthroat trout, bluehead sucker, flannelmouth sucker	320.1	X							1	
Currant Creek	Wasatch, Utah	Brown trout, Bonneville cutthroat trout	Bonneville cutthroat trout, bluehead sucker, flannelmouth sucker	320.1	X							1	
Dry Gulch Creek	Duchesne, Utah	None	Bluehead sucker, flannelmouth sucker, roundtail chub	320.1	X								
Duchesne River	Duchesne, Utah	Brown trout	Bluehead sucker, flannelmouth sucker, roundtail chub	320.1	X							1	
Lake Fork River	Duchesne, Utah	None	Bluehead sucker, flannelmouth sucker, roundtail chub	320.1	X							1	
Red Creek	Duchesne, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	320.1	X							1	
Sheep Creek	Utah, Utah	None	None	320.1	X							2	
Soldier Creek	Utah, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout, mountain sucker, Columbia spotted frog, northern leopard frog, southern leatherside chub	320.1	X							1	
Strawberry River	Duchesne, Utah	Brook trout, brown trout, Colorado River cutthroat trout	Bluehead sucker, Colorado River cutthroat trout	320.1	X							1	
Strawberry River	Wasatch, Utah	Brook trout, brown trout, Colorado River cutthroat trout	Bluehead sucker, Colorado River cutthroat trout	320.1	X							1	
Tie Fork	Utah, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	320.1	X							1	
Willow Creek	Wasatch, Utah	Colorado River cutthroat trout	Boreal toad, Columbia spotted frog, Colorado River cutthroat trout	320.1	X								
Bennie Creek	Utah, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	320.15	X					X	X		
Crab Creek	Utah, Utah	None	None	320.15	X					X	X		
Hop Creek	Juab, Utah	Brown trout	Southern leatherside chub	320.15	X					X	X		
Lake Fork	Utah, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout	320.15	X					X	X	1	

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Alternatives						ROW Crossings	Variation or Connector
					A	B	C	D	E	F		
Nebo Creek	Utah, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout	320.15	X				X	X		
Soldier Creek	Utah, Utah	Bonneville cutthroat trout	Bonneville cutthroat trout, northern leopard frog, southern leatherside chub	320.15	X				X	X		
Thistle Creek	Utah, Utah	Bonneville cutthroat trout, brown trout, rainbow trout	Bonneville cutthroat trout, mountain sucker, southern leatherside chub, southern Bonneville pyrg (spring)	320.15	X				X	X	1	
Hop Creek	Juab, Utah	Brown trout	Southern leatherside chub	320.2	X			X	X	X	1	
Salt Creek	Juab, Utah	Brown trout	None	320.2	X			X	X	X		
Antelope Creek	Duchesne, Utah	None	None	325.1					X			
Argyle Creek	Duchesne, Utah	Cutthroat trout	None	325.1					X		3	
Duchesne River	Duchesne, Utah	Brown trout, mountain whitefish, Rainbow trout	Bluehead sucker, flannelmouth sucker, roundtail chub	325.1					X		1	
Lake Fork River	Duchesne, Utah	Brook trout, brown trout, cutthroat trout, grayling, rainbow trout	Bluehead sucker, flannelmouth sucker, roundtail chub	325.1					X		1	
Sowers Creek	Duchesne, Utah	None	Boreal toad	325.1					X		15	
Minnie Maud Creek	Duchesne, Utah	Cutthroat trout	None	325.2					X			
Muddy Creek	Emery, Utah	None	Bluehead sucker, flannelmouth sucker, mountain sucker, southern leatherside chub	330.1			X				1	
Blackham Creek	Sevier, Utah	Cutthroat trout, rainbow trout	None	330.1			X				1	
Cottonwood Creek	Emery, Utah	None	Bluehead sucker	330.1			X				1	
Ferron Creek	Emery, Utah	None	Bluehead sucker, flannelmouth sucker	330.1			X				1	
Gooseberry Creek	Sevier, Utah	Brown trout, rainbow trout	Southern leatherside chub	330.1			X				1	
Ivie Creek	Millard, Utah	Brown trout, rainbow trout	None	330.1			X				1	
Little Creek	Sevier, Utah	Brown trout, rainbow trout	Southern leatherside chub	330.1			X					
Lost Creek	Sevier, Utah	Brown trout, rainbow trout	Southern leatherside chub	330.1			X				1	
Meadow Creek	Sevier, Utah	Brown trout, cutthroat trout, rainbow trout	None	330.1			X				1	
Niotche Creek	Sevier, Utah	Cutthroat trout	None	330.1			X				1	

Table G-6 Game Fish and Special Status Species Occurrence in Streams, Region II Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Alternatives						ROW Crossings	Variation or Connector
					A	B	C	D	E	F		
Pharo Creek	Millard, Utah	None	None	330.1			X					
Quitcupah Creek	Emery, Utah	None	Flannelmouth sucker, mountain sucker, southern leatherside chub	330.1			X				1	
Quitcupah Creek	Sevier, Utah	None	Flannelmouth sucker, mountain sucker, southern leatherside chub	330.1			X				1	
Saleratus Creek	Sevier, Utah	None	None	330.1			X				1	
Sevier River	Sevier, Utah	Brown trout, channel catfish	Southern leatherside chub	330.1			X				1	
Spring Creek	Sevier, Utah	None	None	330.1			X					
Willow Creek	Millard, Utah	Cutthroat/rainbow trout hybrid, rainbow trout	None	330.1			X				1	
Yogo Creek	Sevier, Utah	Cutthroat trout, rainbow trout	None	330.1			X				1	
Trough Hollow Creek	Sevier, Utah	None	None	330.1			X					
West Creek	Juab, Utah	None	None	340	X						1	
Currant Creek	Juab, Utah	Brown trout	California floater, Columbia spotted frog, least chub, northern leopard frog	340	X							
Unnamed tributary to Currant Creek	Juab, Utah	None	Columbia spotted frog	340	X							
Birch Creek drainage	Juab, Utah	None	Boreal toad	340	X							
Salt Creek	Juab, Utah	Brown trout	None	340	X						1	
Sevier River	Juab, Utah	Black bullhead, channel catfish, green sunfish, smallmouth bass, walleye, yellow perch	Mountain sucker, southern leatherside chub	370		X				X	1	
Sevier River	Millard, Utah	Black bullhead, channel catfish, green sunfish, smallmouth bass, walleye, yellow perch	Mountain sucker, southern leatherside chub	380		X				X	1	
Sevier River	Millard, Utah	Black bullhead, channel catfish, green sunfish, largemouth bass, smallmouth bass, walleye, white bass, white crappie, yellow perch	Mountain sucker, southern leatherside chub	410			X				1	

¹Species occurs greater than 5 miles downstream of the crossing. It is included in the analysis due to potential effects of water use during construction.

Table G-7 Game Fish and Special Status Aquatic Species Occurrence in Waterbodies, Region II Corridors

Surface Water Feature	County, State	Game Fish	Special Status	Segment ID	Alternatives						ROW Crossings	Variation or Connector
					A	B	C	D	E	F		
Box Elder Reservoir Number 3	Moffat, Colorado	Bluegill, largemouth bass, rainbow trout	None	210	X			X	X	X		
Box Elder Reservoir Number 2	Moffat, Colorado	Bluegill, largemouth bass, rainbow trout	None	210	X			X	X	X		
Box Elder Reservoir	Moffat, Colorado	Bluegill, largemouth bass, rainbow trout	None	210	X			X	X	X		
Boulger Reservoir	Sanpete, Utah	Rainbow trout, Yellowstone cutthroat trout	None	217.15				X				
Electric Lake	Emery, Utah	Tiger trout, Yellowstone cutthroat trout	None	217.15				X				
Horse Ridge Spring	Emery, Utah	None	None	219.2						X		
Pipe Spring	Emery, Utah	None	None	219.6						X		
Cactus Reservoir	Rio Blanco, Colorado	Bluegill, largemouth bass, rainbow trout	None	220.1		X	X					
Coon Spring	Emery, Utah			222.05		X					X	
Good Water Spring	Emery, Utah			222.05		X						
Cottonwood Spring	Emery, Utah			222.3		X						
Coyote Spring	Emery, Utah			222.3		X					X	
Millerton Reservoir	Carbon, Utah	Brown trout, cutthroat trout, rainbow trout	None	223								Price Alternative Connector
Goat Ranch Spring	Carbon, Utah			223								Price Alternative Connector
Huntington Reservoir	Emery, Utah	Brown trout, cutthroat trout, tiger trout	None	310		X						
Potters Ponds	Emery, Utah	Rainbow trout	None	310		X						
Apple Tree Spring	Sanpete, Utah			310		X						
Elk Spring	Emery, Utah			310		X						
Pine Spring	Emery, Utah			310		X						
Starvation Reservoir	Duchesne, Utah	Rainbow trout, smallmouth bass, walleye, yellow perch	None	320.1	X							
Long Hollow Spring	Utah, Utah			320.15	X				X	X		
Lookout Spring	Utah, Utah			320.15	X				X	X		
Sky High Spring	Utah, Utah			320.15	X				X	X		
Cottonwood Spring	Utah, Utah			320.15	X				X	X		
Bradley Springs	Juab, Utah			320.2	X			X	X	X	X	
Boreham Lake	Duchesne, Utah			325					X			
Saleratus Reservoir	Sevier, Utah	Largemouth bass	None	330.1			X					

Table G-7 Game Fish and Special Status Aquatic Species Occurrence in Waterbodies, Region II Corridors

Surface Water Feature	County, State	Game Fish	Special Status	Segment ID	Alternatives						ROW Crossings	Variation or Connector
					A	B	C	D	E	F		
Scipio Lake	Millard, Utah	Bluegill, catfish spp., crappies, largemouth bass, smallmouth bass, walleye	None	330.1			X					
Creepy Spring	Sevier, Utah			330.1			X					
Josiah Springs	Sevier, Utah			330.1			X					
Mud Spring	Sevier, Utah			330.1			X					
Mud Spring	Sevier, Utah			330.1			X					
Prowse Spring	Sevier, Utah			330.1			X					
Tidwell Spring	Juab, Utah			360	X			X	X			
Dog Valley Reservoir	Juab, Utah			370		X						
Fishers Spring	Millard, Utah			400						X		Lynndyl Alternative Connector
D M A D Reservoir	Millard, Utah	Channel catfish, white bass	None	410			X				X	

Table G-8 Game Fish and Special Status Aquatic Species Occurrence in Streams, Region III Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Alternatives			ROW Crossings	Variation or Connector
					A	B	C		
Magotsu Creek	Washington, Utah	None	Arizona toad, bluehead sucker, flannelmouth sucker, roundtail chub, Virgin spinedace	501	X			1	
Moody Wash	Washington, Utah	None	Arizona toad, Virgin spinedace	502	X			1	
Spring Creek	Washington, Utah	None	Virgin spinedace	501	X			1	
Shinbone Creek	Washington, Utah	None	None	503					Ox Valley East Alternative Variation
Spring Creek	Washington, Utah	None	Virgin spinedace	503				1	Ox Valley East Alternative Variation
Spring Creek	Washington, Utah	None	Virgin spinedace	504				1	Ox Valley West Alternative Variation
Shinbone Creek	Washington, Utah	None	None	505					Ox Valley East & West Alternative Variation
South Fork Pinto Creek	Washington, Utah	Rainbow trout	None	506					Pinto Alternative Variation
Little Pinto Creek	Iron, Utah	None	None	506				1	Pinto Alternative Variation
Magotsu Creek	Washington, Utah	None	Bluehead sucker, flannelmouth sucker, roundtail chub, Virgin spinedace	506				1	Pinto Alternative Variation
Pinto Creek	Iron, Utah	Rainbow trout	None	506				4	Pinto Alternative Variation
Pinto Creek	Washington, Utah	Rainbow trout	None	506				4	Pinto Alternative Variation
Santa Clara River	Washington, Utah	Brook trout, brown trout, green sunfish, rainbow trout	Arizona toad	506				2	Pinto Alternative Variation
Clover Creek	Lincoln, Nevada	Rainbow trout	Meadow Valley Wash desert sucker, Meadow Valley speckled dace	510		X		1	
Meadow Valley Wash	Lincoln, Nevada	Rainbow trout	Meadow Valley Wash desert sucker, Meadow Valley speckled dace, Arizona toad	520			X	1	
Muddy River	Clark, Nevada	None	Meadow Valley Wash desert sucker, Meadow Valley speckled dace, Moapa speckled dace, Moapa White River springfish, Virgin River chub	540		X		1	
Meadow Valley Wash	Clark, Nevada	None	Meadow Valley Wash desert sucker, Meadow Valley speckled dace, Arizona toad	540		X		1	
Muddy River	Clark, Nevada	None	Meadow Valley Wash desert sucker, Meadow Valley speckled dace, Moapa speckled dace, Moapa White River springfish, Virgin River chub	550	X			1	

Table G-9 Game Fish and Special Status Aquatic Species Occurrence in Waterbodies, Region III Corridors

Surface Water Feature	County, State	Game Fish	Special Status	Segment ID	Alternatives			ROW Crossings	Variation or Connector
					A	B	C		
Smelter Knolls Reservoir	Millard, Utah			450	X	X	X		
West Clay Knoll Reservoir	Millard, Utah			460			X		
West Marshall Tract Reservoir	Millard, Utah			460			X		
Little Drum Spring	Millard, Utah			470	X	X			
Lower Big Wash Reservoir	Beaver, Utah			480	X	X	X	X	
Thermo Hot Springs	Beaver, Utah			480	X	X	X		
Rock Spring	Iron, Utah			500.02	X				
Sand Spring	Iron, Utah			500.02	X				
Newcastle Reservoir	Iron, Utah	Rainbow trout, smallmouth bass, wiper	None	500.05	X				
Abe Spring	Washington, Utah			501	X				
Hamblin Spring	Washington, Utah			501	X				
Hiway Spring	Washington, Utah			501	X				
Hyatt Spring	Washington, Utah			501	X				
Lone Spring	Washington, Utah			501	X				
Oak Spring	Washington, Utah			501	X				
Yellow Spring	Washington, Utah			501	X				
Cole Spring	Washington, Utah			502	X				
Eightmile Spring	Washington, Utah			502	X				
Jackson Spring	Washington, Utah			502	X				
Rods Spring	Washington, Utah			502	X				
Cliff Spring	Washington, Utah			503					Ox Valley East Alternative Variation
Cottonwood Spring	Washington, Utah			503					Ox Valley East Alternative Variation
Mud Spring	Washington, Utah			503					Ox Valley East Alternative Variation
Rose Spring	Washington, Utah			503					Ox Valley East Alternative Variation
Twin Spring	Washington, Utah			503					Ox Valley East Alternative Variation
Willow Spring	Washington, Utah			503					Ox Valley East Alternative Variation
Bullrush Spring	Washington, Utah			505					Ox Valley East & West Alternative Variation

Table G-9 Game Fish and Special Status Aquatic Species Occurrence in Waterbodies, Region III Corridors

Surface Water Feature	County, State	Game Fish	Special Status	Segment ID	Alternatives			ROW Crossings	Variation or Connector
					A	B	C		
Joe Spring	Washington, Utah			505				Ox Valley East & West Alternative Variation	
Tom Spring	Washington, Utah			505				Ox Valley East & West Alternative Variation	
Baker Reservoir	Washington, Utah	Brown trout, green sunfish, rainbow trout	None	506				Pinto Alternative Variation	
Newcastle Reservoir	Iron, Utah	Rainbow trout, smallmouth bass, wiper	None	506				Pinto Alternative Variation	
Cove Spring	Washington, Utah			506				Pinto Alternative Variation	
Fourmile Spring	Washington, Utah			506				Pinto Alternative Variation	
Mud Spring	Washington, Utah			506				Pinto Alternative Variation	
Platt Spring	Washington, Utah			506				Pinto Alternative Variation	
Nervine Spring	Washington, Utah			506				Pinto Alternative Variation	
Rolling Hills Reservoir	Lincoln, Nevada			510		X			
Jacks Canyon Reservoir	Lincoln, Nevada			510		X			
Lafes Reservoir	Lincoln, Nevada			510		X			
Abe Spring	Lincoln, Nevada			510		X			
Acoma Spring	Lincoln, Nevada			510		X			
Tule Spring	Lincoln, Nevada			510		X			
Shoemake Spring	Lincoln, Nevada			510		X			
Summit Spring	Lincoln, Nevada			510		X			
Mud Springs	Lincoln, Nevada			510		X			
Sams Camp Spring	Lincoln, Nevada			510		X			
Topah Spring	Lincoln, Nevada			510		X			
Buckboard Spring	Lincoln, Nevada			520			X		
Chokecherry Spring	Lincoln, Nevada			520			X		
Coyote Spring	Lincoln, Nevada			520			X		
Keel Spring	Lincoln, Nevada			520			X		
Miller Spring	Lincoln, Nevada			520			X		
Miser Spring	Lincoln, Nevada			520			X		
Nelson Spring	Lincoln, Nevada			520			X		
Oak Spring	Lincoln, Nevada			520			X		

Table G-9 Game Fish and Special Status Aquatic Species Occurrence in Waterbodies, Region III Corridors

Surface Water Feature	County, State	Game Fish	Special Status	Segment ID	Alternatives			ROW Crossings	Variation or Connector
					A	B	C		
West Oak Spring	Lincoln, Nevada			520			X		
Gypsum Spring	Clark, Nevada			630	X				

Table G-10 Game Fish and Special Status Aquatic Species Occurrence in Streams, Region IV Corridors

Stream Name	County, State	Game Fish	Special Status	Segment ID	Alternatives			ROW Crossings	Variation or Connector
					A	B	C		
Las Vegas Wash	Clark, Nevada	Largemouth bass	Razorback sucker (near confluence with Lake Mead)	660	X			1	
Las Vegas Wash	Clark, Nevada	Largemouth bass	Razorback sucker (near confluence with Lake Mead)	670		X	X		
Hemenway Wash	Clark, Nevada	None	None	710		X	X	1	
Hemenway Wash	Clark, Nevada	None	None	730				1	River Mountain Alternative Connector
Hemenway Wash	Clark, Nevada	None	None	750		X	X		
Hemenway Wash	Clark, Nevada	None	None	760		X		1	

Table G-11 Game Fish and Special Status Aquatic Species Occurrence in Waterbodies, Region IV Corridors

Surface Water Feature	County, State	Game Fish	Special Status	Segment ID	Alternatives			Intersects ROW	Variation or Connector
					A	B	C		
Gypsum Spring	Clark, Nevada			630	X				
Lake Mead	Clark, Nevada	Bluegill, channel catfish, crappies, largemouth bass, striped bass	Razorback sucker	670		X	X		
Lake Mead	Clark, Nevada	Bluegill, channel catfish, crappies, largemouth bass, striped bass	Razorback sucker	710		X	X		
C C C Reservoir	Clark, Nevada			770			X		
Dry Lake Reservoir	Clark, Nevada			770			X		

Table G-12 U.S. Forest Service Species Considered in the TransWest Express Transmission Project Technical Report

Common Name	Scientific Name	Status	Regional Forester’s Sensitive Species and MIS by National Forest ¹					Species Excluded from Further Analysis due to Lack of Potential Habitat within Project Corridors ^{1,2}	Reason Species was Excluded from Further Analysis
			Utah						
			A	D	FL	ML	U		
AMPHIBIANS									
Boreal (western) toad	<i>Bufo boreas boreas</i>	FS	X	X	X	X	X	D: Yes FL: Yes ML: Yes U: No (Strawberry Reservoir)	No suitable habitat is present within Project corridors on the Dixie, Fishlake, and Manti-La Sal national forests.
Columbia spotted frog	<i>Rana luteiventris</i>	FS	?			X	X	No.	N/A
FISH									
Bonneville cutthroat trout	<i>Oncorhynchus clarki utah</i>	FS, MIS		X	X	X	X	D: Yes FL: Yes ML: No (Dry Pole Creek) U: No (Soldier Creek)	No suitable habitat is present within the Project corridors on the Dixie and Fishlake national forests.
Bonytail	<i>Gila elegans</i>	FE	₃	₃	₃	₃	₃	No. See footnote 3.	N/A
Colorado pikeminnow	<i>Ptychocheilus lucius</i>	FE	₃	₃	₃	₃	₃	No. See footnote 3.	N/A
Colorado River cutthroat trout	<i>Oncorhynchus clarki pleuriticus</i>	FS, MIS	X	X	X	X	X	D: Yes FL: Yes ML: No (Lowry Water) U: No (Willow Creek)	No suitable habitat is present within the Project corridors on the Dixie and Fishlake national forests.
Humpback chub	<i>Gila cypha</i>	FE	₃	₃	₃	₃	₃	No. See footnote 3.	N/A
June sucker	<i>Chasmistes liorus</i>	FE					₃	No. See footnote 3.	N/A
Razorback sucker	<i>Xyrauchen texanus</i>	FE	₃	₃	₃	₃	₃	No. See footnote 3.	N/A
Southern leatherside chub	<i>Gila robusta robusta</i>	FS, MIS		X	X	X	X	D: Yes FL: No (Little Creek) ML: Yes U: No (Soldier Creek)	No suitable habitat is present within the Project corridors on the Dixie and Manti-La Sal national forests.

Table G-12 U.S. Forest Service Species Considered in the TransWest Express Transmission Project Technical Report

Common Name	Scientific Name	Status	Regional Forester’s Sensitive Species and MIS by National Forest ¹					Species Excluded from Further Analysis due to Lack of Potential Habitat within Project Corridors ^{1,2}	Reason Species was Excluded from Further Analysis
			Utah						
			A	D	FL	ML	U		
Brook trout	<i>Salvelinus fontinalis</i>	MIS		X	X			No	No suitable habitat is present within Project corridors on the Dixie and Manti-La Sal national forests.
Brown trout	<i>Salmo trutta</i>	MIS		X	X			No	N/A
Cutthroat trout	<i>Oncorhynchus clarki</i>	MIS	X	X	X			No	N/A
Lake trout	<i>Salvelinus namaycush</i>	MIS			X			Yes	No suitable habitat is present within Project corridors on the Fishlake National Forest.
Rainbow trout	<i>Oncorhynchus mykiss</i>	MIS		X	X			No	N/A
Virgin spinedace	<i>Lepidometa mollispinus mollispinus</i>	MIS		X				No	N/A
Macroinvertebrates	No specific species	MIS	X			X		No	N/A

¹A = Ashley, D = Dixie, FL = Fishlake, ML = Manti-La Sal, and U = Uinta Planning Area of the Uinta-Wasatch-Cache. Shaded occurrence indicates that suitable habitat is present within the Project corridor on the National Forest.

² If a specific forest is not indicated, then the Yes or No decision applies to all the National Forests that have the species listed as sensitive.

³ Species does not occur within Forests crossed by Project corridors. However, the species is included in the analysis because potential water depletions in the Upper Colorado River Basin must be addressed.

Status: FE = Federally endangered, FS = Forest Sensitive, and MIS = Management Indicator Species.

Table G-13 Waterbodies and Associated Species Crossed by Project Alternatives on Forest Lands

Waterbody Name	Project Region	County, State	Forest ¹	Sensitive Species and MIS	Segment No.	Alternatives						ROW Crossings	Subwatersheds
						A	B	C	D	E	F		
Indian Creek	II	Utah, Utah	U	Not surveyed	217.05					X	X	1	Upper Soldier Creek
Sheep Creek	II	Utah, Utah	U	None	217.05					X	X	1	Lower Soldier Creek
Tie Fork	II	Utah, Utah	U	Bonneville cutthroat trout (FS & MIS)	217.05					X	X	1	Tie Fork
Dry Creek	II	Sanpete, Utah	ML	Macroinvertebrates (MIS)	217.15				X			1	Dry Creek – San Pitch River
Gooseberry Creek	II	Sanpete, Utah	ML	Macroinvertebrates (MIS)	217.15				X			1	Gooseberry Creek
Huntington Creek	II	Sanpete, Utah	ML	Colorado River cutthroat trout (FS & MIS), macroinvertebrates (MIS)	217.15				X			0	Right Fork Huntington Creek
Maple Fork	II	Sanpete, Utah	ML	Macroinvertebrates (MIS)	217.15				X			1	Cottonwood Canyon-San Pitch River
Upper Huntington Creek	II	Emery, Utah	ML	Macroinvertebrates (MIS)	217.15				X			1	Right Fork Huntington Creek
White Pine Fork	II	Sanpete, Utah	ML	Macroinvertebrates (MIS)	217.15				X			1	Cottonwood Canyon-San Pitch River
Cottonwood Creek	II	Sanpete, Utah	ML	Bonneville cutthroat trout (FS & MIS), macroinvertebrates (MIS)	217.15				X			1	Cottonwood Canyon-San Pitch River
Boulger Reservoir	II	Sanpete, Utah	ML	Macroinvertebrates (MIS)	217.15				X			0	Right Fork Huntington Creek
Electric Lake	II	Emery, Utah	ML	Macroinvertebrates (MIS)					X			0	Right Fork Huntington Creek
Deer Creek	II	Emery, Utah	ML	Macroinvertebrates (MIS)	310		X					0	Huntington Lake – Huntington Creek
Dry Pole Creek	II	Sanpete, Utah	ML	Bonneville cutthroat trout (FS & MIS), macroinvertebrates (MIS)	310		X					0	Pleasant Creek
Indian Creek	II	Emery, Utah	ML	Macroinvertebrates (MIS)	310		X					1	Indian Creek
Lowry River	II	Emery, Utah	ML	Colorado River cutthroat trout (FS & MIS), macroinvertebrates (MIS)	310		X					0	Lowry River
North Fork Coal Creek	II	Sanpete, Utah	ML	Macroinvertebrates (MIS)	310		X					0	Pleasant Creek
Straight Fork Creek	II	Sanpete, Utah	ML	Macroinvertebrates (MIS)	310		X					3	Pleasant Creek
Potters Pond	II	Emery, Utah	ML	Macroinvertebrates (MIS)	310		X					0	Lowry River

Table G-13 Waterbodies and Associated Species Crossed by Project Alternatives on Forest Lands

Waterbody Name	Project Region	County, State	Forest ¹	Sensitive Species and MIS	Segment No.	Alternatives						ROW Crossings	Subwatersheds
						A	B	C	D	E	F		
Pine Spring	II	Emery, Utah	ML	Macroinvertebrates (MIS)	310		X					0	Huntington Lake – Huntington Creek
Sheep Creek	II	Utah, Utah	U	None	320.10	X						3	Lower Soldier Creek
Soldier Creek	II	Utah, Utah	U	Bonneville cutthroat trout (FS & MIS), southern leatherside chub (FS), Columbia spotted frog (FS)	320.10	X						1	Lower Soldier Creek
Strawberry River	II	Wasatch, Utah	U	Colorado River cutthroat trout (FS & MIS)	320.10	X						1	Soldier Creek – Strawberry River
Tie Fork	II	Utah, Utah	U	Bonneville cutthroat trout (FS & MIS), southern leatherside chub (FS)	320.10	X						1	Tie Fork
Willow Creek	II	Wasatch, Utah	U	Boreal toad (FS), Columbia spotted frog (FS), Colorado River cutthroat trout (FS & MIS)	320.10	X						0	Willow Creek
Soldier Creek	II	Utah, Utah	U	Bonneville cutthroat trout (FS & MIS), southern leatherside chub (FS), Columbia spotted frog (FS)	320.15	X					X	0	Lower Soldier Creek
Long Hollow Spring	II	Utah, Utah	ML	None	320.15					X	X	0	Lake Fork
Lookout Spring	II	Utah, Utah	ML	None	320.15					X	X	0	Lower Soldier Creek
Sky High Spring	II	Utah, Utah	ML	None	320.15					X	X	0	Lower Soldier Creek
Salt Creek	II	Juab, Utah	U	None	320.20	X					X	0	Pole Creek – Salt Creek
Sowers Creek	II	Duchesne, Utah	A	Boreal toad (FS), macroinvertebrates (MIS)	330.10					X		1	Tabby Canyon – Sowers Canyon
Ivie Creek	II	Millard, Utah	FL	Brown trout (MIS), rainbow trout (MIS)	330.10			X				1	Pharo Creek – Ivie Creek
Little Creek	II	Millard, Utah	FL	Southern leatherside chub (FS), brown trout (MIS), rainbow trout (MIS)	330.10			X				0	Meadow Creek
Meadow Creek	II	Sevier, Utah	FL	Brown trout (MIS), cutthroat trout (MIS), rainbow trout (MIS)	330.10			X				1	Meadow Creek
Niotche Creek	II	Sevier, Utah	FL	Cutthroat trout (MIS)	330.10			X				0	Niotche Creek

Table G-13 Waterbodies and Associated Species Crossed by Project Alternatives on Forest Lands

Waterbody Name	Project Region	County, State	Forest ¹	Sensitive Species and MIS	Segment No.	Alternatives						ROW Crossings	Subwatersheds
						A	B	C	D	E	F		
Pharo Creek	II	Millard, Utah	FL	None	330.10			X				1	Pharo Creek – Ivie Creek
Saleratus Creek	II	Sevier, Utah	FL	None	330.10			X				0	Saleratus Creek
Saleratus Reservoir	II	Sevier, Utah	FL	None	330.10			X				0	Saleratus Creek
Creepy Spring	II	Sevier, Utah	FL	None	330.10			X				0	Water Hollow – Salina Creek
Josiah Spring	II	Sevier, Utah	FL	None	330.10			X				0	Soldier Canyon
Mud Spring	II	Sevier, Utah	FL	None	330.10			X				0	Soldier Canyon
Prowse Spring	II	Sevier, Utah	FL	None	330.10			X				0	Soldier Canyon
Magotsu Creek	III	Washington, Utah	D	Virgin spinedace (MIS)	501	X						1	Magotsu Creek
Spring Creek	III	Washington, Utah	D	Virgin spinedace (MIS)	501	X						1	Magotsu Creek
Abe Spring	III	Washington, Utah	D	None	501	X						0	Magotsu Creek
Hamblin Spring	III	Washington, Utah	D	None	501	X						0	Holt Canyon
Hiway Spring	III	Washington, Utah	D	None	501	X						0	Magotsu Creek
Oak Spring	III	Washington, Utah	D	None	501	X						0	Magotsu Creek
Yellow Spring	III	Washington, Utah	D	None	501	X						0	Holt Canyon
Rods Spring	III	Washington, Utah	D	None	502	X						0	Manganese Wash – Santa Clara River
Moody Wash	III	Washington, Utah	D	Virgin spinedace (MIS)	502	X							Magotsu Creek

¹ A = Ashley; D = Dixie National Forest; FL = Fishlake National Forest; ML = Manti-LaSal National Forest; and U = Uinta Planning Area of the Uinta-Wasatch-Cache National Forest.

FS = Forest Sensitive and MIS = Management Indicator Species

Table G-14 Waterbodies and Associated Species Crossed by Project Alternative Variations on Forest Lands

Waterbody Name	Project Region	County, State	Forest ¹	Sensitive Species and MIS	Segment No.	Variation or Connector Name	ROW Crossings	Subwatershed
Shinbone Creek	III	Washington, Utah	D	None	503	Ox Valley East Alternative Variation	0	Calf Springs Creek
Spring Creek	III	Washington, Utah	D	Virgin spinedace (MIS)	503	Ox Valley East Alternative Variation	1	Calf Springs Creek
Cliff Spring	III	Washington, Utah	D	None	503	Ox Valley East Alternative Variation	0	Lower Shoal Creek
Cottonwood Spring	III	Washington, Utah	D	None	503	Ox Valley East Alternative Variation	0	Lower Shoal Creek
Mud Spring	III	Washington, Utah	D	None	503	Ox Valley East Alternative Variation	0	Lower Shoal Creek
Rose Spring	III	Washington, Utah	D	None	503	Ox Valley East Alternative Variation	0	Lower Shoal Creek
Twin Spring	III	Washington, Utah	D	None	503	Ox Valley East Alternative Variation	0	Calf Springs Creek
Willow Spring	III	Washington, Utah	D	None	503	Ox Valley East Alternative Variation	0	Calf Springs Creek
Spring Creek	III	Washington, Utah	D	Virgin spinedace (MIS)	504	Ox Valley West Alternative Variation	1	Calf Springs Creek
Shinbone Creek	III	Washington, Utah	D	None	505	Ox Valley East and West Alternative Variation	0	Calf Springs Creek
Bullrush Spring	III	Washington, Utah	D	None	505	Ox Valley East and West Alternative Variation	0	Calf Springs Creek
Joe Spring	III	Washington, Utah	D	None	505	Ox Valley East and West Alternative Variation	0	Calf Springs Creek
Tom Spring	III	Washington, Utah	D	None	505	Ox Valley East and West Alternative Variation	0	Calf Springs Creek
Magotsu Creek	III	Washington, Utah	D	Virgin spinedace (MIS)	506	Pinto Alternative Variation	1	Magotsu Creek
South Fork Pinto Creek	III	Washington, Utah	D	Rainbow trout (MIS)	506	Pinto Alternative Variation	0	Pinto Creek
Pinto Creek	III	Washington, Utah	D	Rainbow trout (MIS)	506	Pinto Alternative Variation	4	Pinto Creek
Santa Clara River	III	Washington, Utah	D	Brook trout (MIS), brown trout (MIS), rainbow trout (MIS)	506	Pinto Alternative Variation	2	Mahogany Creek – Santa Clara River
Cove Spring	III	Washington, Utah	D	None	506	Pinto Alternative Variation	0	Pinto Creek
Fourmile Spring	III	Washington, Utah	D	None	506	Pinto Alternative Variation	0	Mahogany Creek – Santa Clara River
Mud Spring	III	Washington, Utah	D	None	506	Pinto Alternative Variation	0	Mahogany Creek – Santa Clara River
Nervine Spring	III	Washington, Utah	D	None	506	Pinto Alternative Variation	0	Mahogany Creek – Santa Clara River
Platt Spring	III	Washington, Utah	D	None	506	Pinto Alternative Variation	0	Pinto Creek

¹ A = Ashley; D = Dixie National Forest; FL = Fishlake National Forest; ML = Manti-LaSal National Forest; and U = Uinta Planning Area of the Uinta-Wasatch-Cache National Forest.

S = Forest Sensitive and MS = Management Indicator Species

Table G-15 Estimated Ground Disturbance of Riparian Habitat on Forest Lands

Forest Name	Alternatives											
	II-A		II-B		II-C		II-D		II-E		II-F	
	100 Feet	300 Feet	100 Feet	300 Feet	100 Feet	300 Feet	100 Feet	300 Feet	100 Feet	300 Feet	100 Feet	300 Feet
Uinta Planning Area of the Uinta-Wasatch-Cache												
Construction	7	16					<1	<1	4	10	5	16
Operation	2	5					<1	<1	1	4	2	5
Manti-LaSal												
Construction	1	2	6	20			4	19	1	2	1	2
Operation	<1	1	3	8			2	7	<1	1	<1	1
Ashley												
Construction									22	69	<1	<1
Operation									4	12	<1	<1
Fishlake												
Construction			<1	<1	8	28						
Operation			<1	<1	2	7						
Forest Name	Alternatives											
	III-A		III-B		III-C							
	100 feet	300 feet	100 feet	300 feet	100 feet	300 feet						
Dixie												
Construction	4	11										
Operation	1	3										

* Blanks indicate that the alternative does not cross the subwatershed.

Table G-16 State Designated Noxious Weeds

Common Name	Scientific Name	Nevada Noxious Weed List ¹	Utah Noxious Weed List ²	Wyoming Noxious Weed List ³	Colorado Noxious Weed List ⁴
Velvetleaf	<i>Abutilon theophrasti</i>	-	-	-	C
Russian knapweed/quackgrass	<i>Acroptilon repens</i>	B	X	X	B
Jointed goatgrass	<i>Aegilops cylindrica</i>	-	-	-	B
Camelthorn	<i>Alhagi camelorum</i>	A	-	-	A
Spurred anoda	<i>Anoda cristata</i>	-	-	-	B
Corn chamomile	<i>Anthemis arvensis</i>	-	-	-	B
Mayweed chamomile	<i>Anthemis cotula</i>	A	-	-	B
Common burdock	<i>Arctium minus</i>	-	-	X	C
Absinth wormwood	<i>Artemisia absinthium</i>	-	-	-	B
Giant reed	<i>Arundo donax</i>	A	-	-	-
Sahara mustard	<i>Brassica tournefortii</i>	B	-	-	-
Downy brome	<i>Bromus tectorum</i>	-	-	-	C
Hoary cress	<i>Cardaria draba/C. pubescens</i>	C	X	X	B
Plumeless thistle	<i>Carduus acanthoides</i>	-	-	X	B
Musk thistle	<i>Carduus nutans</i>	B	X	X	B
Wild caraway	<i>Carum carvi</i>	-	-	-	B
Purple Star thistle	<i>Centaurea calcitrapa</i>	A	-	-	-
Diffuse knapweed	<i>Centaurea diffusa</i>	B	X	X	B
Iberian starthistle	<i>Centaurea iberica</i>	A	-	-	-
Spotted knapweed	<i>Centaurea masculosa</i>	A	X	X	B
Malta star thistle	<i>Centaurea melitensis</i>	A	-	-	-
Meadow knapweed	<i>Centaurea pratensis</i>	-	-	-	A
Yellow starthistle	<i>Centaurea solstitialis</i>	A	X	-	A
Squarrose knapweed	<i>Centaurea squarrosa/C. virgata</i>	A	-	-	A

Table G-16 State Designated Noxious Weeds

Common Name	Scientific Name	Nevada Noxious Weed List ¹	Utah Noxious Weed List ²	Wyoming Noxious Weed List ³	Colorado Noxious Weed List ⁴
Rush skeletonweed	<i>Chondrilla juncea</i>	A	-	-	A
Ox-eye daisy	<i>Chrysanthemum leucanthemum</i>	-	X	X	B
Chicory	<i>Cichorium intybus</i>	-	-	-	C
Water hemlock	<i>Cicuta maculata</i>	C	-	-	-
Canada thistle	<i>Cirsium arvense</i>	C	X	X	B
Bull thistle	<i>Cirsium vulgare</i>	-	-	-	B
Chinese clematis	<i>Clematis orientalis</i>	-	-	-	B
Poison hemlock	<i>Conium maculatum</i>	C	X	-	C
Field bindweed	<i>Convolvulus arvensis</i>	-	X	X	C
Common crupina	<i>Crupina vulgaris</i>	A	-	-	A
Bermudagrass ⁵	<i>Cynodon dactylon</i>	-	X	-	-
Houndstongue	<i>Cynoglossum officinale</i>	A	X	X	B
Yellow nutsedge	<i>Cyperus esculentus</i>	-	-	-	B
Common teasel	<i>Dipsacus fullonum</i>	-	-	-	B
Cutleaf teasel	<i>Dipsacus laciniatus</i>	-	-	-	B
Russian olive	<i>Elaeagnus angustifolia</i>	-	-	X	B
Redstem filaree	<i>Erodium cicutarium</i>	-	-	-	C
Cypress spurge	<i>Euphorbia cyparissias</i>	-	-	-	A
Leafy spurge	<i>Euphorbia esula</i>	B	X	X	B
Myrtle spurge	<i>Euphorbia myrsinites</i>	-	-	-	A
Skeletonleaf bursage	<i>Franseria discolor</i>	-	-	X	-
Goats rue	<i>Galega officinalis</i>	A	-	-	-
Halogeton	<i>Halogeton glomeratus</i>	-	-	-	C
Dame's rocket	<i>Hesperis matronalis</i>	-	-	-	B

Table G-16 State Designated Noxious Weeds

Common Name	Scientific Name	Nevada Noxious Weed List ¹	Utah Noxious Weed List ²	Wyoming Noxious Weed List ³	Colorado Noxious Weed List ⁴
Venice mallow	<i>Hibiscus trionum</i>	-	-	-	B
Orange hawkweed	<i>Hieracium aurantiacum</i>	-	-	-	A
Hydrilla	<i>Hydrilla verticillata</i>	A	-	-	A
Black henbane	<i>Hyoscyamus niger</i>	A	X	-	B
Klamath weed/St. John's wort	<i>Hypericum perforatum</i>	A	X	X	C
Dyer's woad	<i>Isatis tinctoria</i>	A	X	X	A
Perennial pepperweed	<i>Lepidium latifolium</i>	C	X	X	B
Sericea lespedeza	<i>Lespedeza cuneata</i>	-	-	-	A
Dalmation toadflax, broad-leaved	<i>Linaria dalmatica</i>	A	X	X	B
Dalamation toadflax, narrow-leaved	<i>Linaria genistifolia</i>	-	-	-	B
Yellow toadflax	<i>Linaria vulgaris</i>	A	X	X	B
Purple loosestrife	<i>Lythrum salicaria</i> , <i>L. virgatum</i> and their cultivars	A	X	X	A
Scentless chamomile	<i>Matricaria perforata</i>	-	-	-	B
Eurasian water-milfoil	<i>Myriophyllum spicatum</i>	A	-	-	B
Scotch thistle	<i>Onopordum acanthium</i>	B	X	X	B
Wild proso millet	<i>Panicum miliaceum</i>	-	-	-	C
African rue	<i>Peganum harmala</i>	A	-	-	A
Green fountain grass	<i>Pennisetum setaceum</i>	A	-	-	-
Sulfur cinquefoil	<i>Potentilla recta</i>	A	X	-	B
Austrian fieldcress	<i>Rorippa austriaca</i>	A	-	-	-
Mediterranean sage	<i>Salvia aethiopsis</i>	A	-	-	A
Giant salvinia	<i>Salvinia molesta</i>	A	-	-	A
Bouncingbet	<i>Saponaria officinalis</i>	-	-	-	B

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Common Name	Scientific Name	Nevada Noxious Weed List ¹	Utah Noxious Weed List ²	Wyoming Noxious Weed List ³	Colorado Noxious Weed List ⁴
Tansy ragwort	<i>Senecio jacobaea</i>	-	-	-	A
Carolina horse-nettle	<i>Solanum carolinense</i>	B	-	-	-
White horse-nettle	<i>Solanum elaeagnifolium</i>	B	-	-	-
Sow thistle	<i>Sonchus arvensis</i>	A	-	X	C
Johnson grass	<i>Sorghum halepense/S. alnum</i>	C	X	-	C
Austrian peaweed	<i>Sphaerophysa salsula / Swainsona salsula</i>	A	-	-	-
Medusahead	<i>Taeniatherum caput-medusae</i>	B	X	-	A
Salt cedar (tamarisk)	<i>Tamarix spp</i>	C	X	X	B
Common tansy	<i>Tanacetum vulgare</i>	-	-	X	B
Puncture vine	<i>Tribulus terrestris</i>	C	-	-	C
Moth mullein	<i>Verbascum blatteria</i>	-	-	-	B
Common mullein	<i>Verbascum thapsus</i>	-	-	-	C
Syrian bean caper	<i>Zygophyllum fabago</i>	A	-	-	-

Sources: Colorado Department of Agriculture No Date; Nevada Department of Agriculture 2005; Utah Department of Agriculture and Food 2008; Wyoming Department of Agriculture No Date.

¹ The following weeds are officially designated and published as noxious by the State of Nevada. All noxious weed species are illustrated by associated categories A, B, or C.

² The following weeds are officially designated and published as noxious for the State of Utah, as per the authority vested in the Commissioner of Agriculture under Section 4-17-3, Utah Noxious Weed Act.

³ The following weeds are officially designated and published as noxious for the State of Wyoming, per the Wyoming Weed and Pest Control Act Designated List (Designated Noxious Weeds .S. 11-5-102 (a)(xi) and Prohibited Noxious Weeds W.S. 11-12-104).

⁴ The following weeds are officially designated by the Commissioner for the State of Colorado. Category A species are designated for eradication. Category B species are species for which the Commissioner, in consultation with the state noxious weed advisory committee, local governments, and other interested parties, develops and implements state noxious weed management plans designed to stop the continued spread of these species. Category C species are species for which the Commissioner, in consultation with the state noxious weed advisory committee, local governments, and other interested parties, will develop and implement state noxious weed management plans designed to support the efforts of local governing bodies to facilitate more effective integrated weed management on private and public lands. The goal of such plans will not be to stop the continued spread of these species but to provide additional education, research, and biological control resources to jurisdictions that choose to require management of List C species.

⁵ Bermudagrass shall not be a noxious weed in Washington County, Utah and shall not be subject to provisions of the Utah Noxious Weed Act within the boundaries of the county.