

APPENDIX B

SENSITIVE SPECIES HABITAT REQUIREMENTS

Based on a query of the Nevada Natural Heritage Database¹, eight sensitive species were noted as having potential to occur within the vicinity of the NEPP Project Area. The following presents habitat requirements for each of these species and the likelihood of them being present in the NEPP Project area.

Vinyard's Pyrg

Vinyard's pyrg is a species of spring snail found in northern Nevada, specifically springs feeding Willow Creek and Hot Creek where they were first identified. They are associated with shallow but broad springs which emerge from the ground as flowing streams or flow out of steep hillsides. *Pyrgulopsis* spp. often decline dramatically in density down gradient from spring sources, which may reflect requirements for stable temperature, chemistry, and flow-regime associated with headsprings². A species of snail was found in Bell Creek in proximity to the NEPP proposed action alignment. Surveys by experts in spring snail identification did not find spring snails in the project area in the past. BLM experts believe it is unlikely that any spring snails would be in the Project Area.

Lahontan Cutthroat Trout

Lahontan cutthroat trout generally occur in cool flowing water with available cover of well-vegetated and stable stream banks, in areas where there are stream velocity breaks, and in relatively silt free, rocky riffle-run areas³ (USFWS 2010). These habitat requirements are not present in the NEPP project area.

Small-footed Myotis

Small-footed myotis are a cliff-dwelling or cave/historic mine-roosting species. No historic mine workings or caves are located within the NEPP Project Area. The species' habitat includes a variety of areas such as desert scrub, sagebrush steppe, and grasslands⁴. No bat species or their roosting habitat was observed during the wildlife surveys conducted in 2011 for the NEPP⁵. It is unlikely that the species would occur given that these habitat preferences are not present in the Project Area.

Long-legged Myotis

The long-legged myotis occupies piñon-juniper and montane coniferous forest habitats from approximately 3,000 to 11,200 feet in elevation in Nevada⁶. Individuals typically day roost singly or in small groups in buildings, rock crevices, caves, abandoned mines, or in hollow trees, particularly large diameter snags or live trees with lightning scars. Foraging typically occurs in open areas, often at canopy height. It is unlikely that the species would occur given that these habitat preferences are not present in the Project Area.

¹ NNHP (Nevada Natural Heritage Program). 2011. Data Base Query Results.

² Hershler, Robert. 1998. A Systematic Review of the Hydrobiid Snails (Gastropoda: Risssooidea) of the Great Basin, Western United States. Part 1. Genus Pyrgulopsis

³ USFWS. 2010. http://fws.gov/nevada/protected_species/fish/species/lct.html

⁴ Bradley, P. V., M. J. O'Farrell, J. A. Williams, and J. E. Newmark. Editors. 2006. The Revised Nevada Bat Conservation Plan. Nevada Bat Working Group. Reno, Nevada. 216 pp.

⁵ SRK (SRK Consulting (US) Inc). 2011. EOM NEPP Biological Baseline Survey Report

⁶ Bradley, P. V., M. J. O'Farrell, J. A. Williams, and J. E. Newmark. Editors. 2006. The Revised Nevada Bat Conservation Plan. Nevada Bat Working Group. Reno, Nevada. 216 pp.

Big Brown Bat

The big brown bat is a year-round resident in Nevada. This species is found from low to high elevations (1,000 to 9,800 feet) and occupies a variety of habitats including piñon-juniper, blackbrush, creosote, sagebrush, and salt desert scrub⁷. This species gleans insects over water and open landscapes, as well as in both forested and edge settings. Roost sites include caves, mines, buildings, bridges, and trees. This species is known to be more tolerant of human habitation than other bat species. It is unlikely that the species would occur given that these habitat preferences are not present in the Project Area.

Pygmy Rabbit

The pygmy rabbit is distributed throughout the northern Great Basin, primarily in rocky habitats dominated by dense stands of big sagebrush and rabbitbrush, particularly in floodplain habitats. Pygmy rabbits usually remain near dense cover, where rabbits excavate burrows and create trail systems in the understory. Sagebrush is important forage for this rabbit and is consumed year-round. The NEPP Project area has suitable habitat and the 2011 wildlife survey documented occurrences of active pygmy rabbit burrows, therefore, the potential for this species to occur within the study area is considered high⁸.

Greater Sage-Grouse (sage-grouse)

The Greater Sage-Grouse is found throughout Nevada in sagebrush-dominated habitats⁹. Sagebrush is a key component of sage-grouse habitat on a year-long basis. Sagebrush provides forage and nesting, security, and thermal cover for this species. Moist areas that provide succulent herbaceous vegetation during the summer months are used extensively as brood rearing habitat. Open, often elevated areas within sagebrush habitats usually serve as breeding areas (strutting grounds or lek sites). During winter, sage-grouse often occupy wind exposed areas where sagebrush is available (e.g., drainages, southern or western slopes, or exposed ridges). Considering that the Project Area is located within 75% Breeding Density Habit, PPH and PGH and sage-grouse sign has been observed in the Project Area⁸, the potential for this species to occur within the study area is high.

Burrowing Owl

The burrowing owl is known to breed throughout Nevada. The majority of the breeding population is known to migrate from northern Nevada during the winter months. However, observations of this owl have been recorded throughout Nevada during all months of the year¹⁰ (Herron et al. 1985). Breeding by burrowing owls is strongly dependent on the presence of burrows constructed by other fur bearing animals (squirrels, badgers). Prime burrowing owl

habitat must be open, have short vegetation, and contain an abundance of burrows. Burrowing owls begin nesting in April, and young typically fledge by August. This species has been observed nesting in the NEPP Project Area⁸, and suitable foraging habitat exists within the study area. The potential for this species to occur within the study area is considered high.

⁷ Bradley, P. V., M. J. O'Farrell, J. A. Williams, and J. E. Newmark. Editors. 2006. The Revised Nevada Bat Conservation Plan. Nevada Bat Working Group. Reno, Nevada. 216 pp.

⁸ SRK (SRK Consulting (U.S.), Inc.). 2011. EOM NEPP Biological Baseline Survey Report.

⁹ Northern Nevada Stewardship Group. 2004. Elko County Sagebrush Ecosystem Conservation Strategy

¹⁰ USFWS. (US Fish and Wildlife Service). 2003. Status Assessment and Conservation Plan for the Western Burrowing Owl in the United States Biological Technical Publication BTP-R6001-