TR-30 Old Barn Staging Area

A memo, "Assessment of Soils and Vegetation on the Barn Staging Site for the East Alkali Gulch Low Cover Crossing Project", March 12, 2021, has been prepared by SME Environmental Consultants. This memo can be located in King II Appendix 6(4). Below are text excerpts from that memo. Additional maps and figures can be found within that mem.

Vegetation

SME reviewed the GCC soils and vegetation map along with vegetation data obtained from the USDA NRCS. Per the GCC soils and vegetation map (Appendix B), the barn staging site is located within mapped Pinyon-Juniper Woodland. According to NRCS, native vegetation for the Lazear-Rock outcrop complex, 12-65% slopes soils unit consists mainly of "western wheatgrass, Indian ricegrass, needleandthread, muttongrass/Mormon-tea, junegrass, pinyon, Rocky Mountain Juniper, and big sagebrush." It is also stated that "seeding and deferring grazing facilitate revegetation of areas depleted by heavy grazing and other disturbances" and that "seeding should be done by and broadcasting or aerial methods". This description matches the described Pinyon-Juniper Woodland description on the GCC soils and vegetation map.

In addition to the desktop research, SME also conducted a site visit of the referenced project on March 11, 2021 to assess the vegetative cover of the barn staging site. As stated in the soils section above, the barn staging area appears to have been disturbed in the past, which has encouraged the growth of weedy species and ruderal forbs. SME found that vegetation on site was dominated by smooth brome (*Bromus inermis*), tall hedge-mustard (*Sisymbrium altissimum*), and lamb's quarters (*Chenopodium album*). Other species observed include nodding plumeless-thistle/musk thistle (*Carduus nutans*), Mexican-fireweed (*Bassia scoparia*), red-root/red root pigweed (*Amaranthus retroflexus*), rubber rabbitbrush (*Ericameria nauseosa*), common stork's-bill (*Erodium cicutarium*), cheatgrass (*Bromus tectorum*), and western-wheat grass (*Pascopyrum smithii*). The site was surrounded by Rocky Mountain juniper (*Juniperus scopulorum*) and Utah juniper (*Juniperus osteosperma*) as well as pinyon pine (*Pinus edulis*). Overall, the site appears to be about 65 to 70 percent vegetated. The vegetation observed at this site is relatively consistent with the vegetation described by the NRCS for the designated soils unit and is characteristic for a disturbed area in this environment.

Summary

Per the request of CDRMS, vegetation and soils were assessed within the barn staging site as part of the East Alkali Gulch Low Cover Crossing Project. Based on SME's field observations, vegetation and soils that were seen on site are similar to what was found on both the GCC soils and vegetation maps and the USDA NRCS data. The barn staging site has been previously disturbed, and the soils and weedy vegetation found on site are consistent with a disturbed environment in this area. The only soils map unit present within the barn staging site was the *Lazear-Rock outcrop complex, 12-65% slopes*. Dominant vegetation included smooth brome (*Bromus inermis*), tall hedge-mustard (*Sisymbrium altissimum*), and lamb's quarters (*Chenopodium album*).

King II Mine March 19, 2021 (TR-30)