COLORADO
Parks and Wildlife
Department of Natural Resources

Fort Collins Service Center
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April 16, 2025

Division of Reclamation, Mining and Safety
Attn: Patrick Lennberg
1313 Sherman St Room 215
Denver, CO 80203
patrick.lennberg@state.co.us

RE: CPW's Comments and Recommendations on the Proposed Section 25 Sand Mine, File No. M-2025-015

Dear Patrick,

Thank you for the opportunity for Colorado Parks and Wildlife (CPW) to comment on the proposed Section 25 Sand Mine Project. It is our understanding that the project is located in Section 25 of T5N, R63W. The proposed use of the site is sand mining resulting in topsoil being removed and stockpiled and sand being mined. The site will be reclaimed as developed water storage which will provide water to agriculture in the area as well as other uses.

The mission of CPW is to perpetuate the wildlife resources of the state, to provide a quality state parks system, and to provide enjoyable and sustainable outdoor recreation opportunities that educate and inspire current and future generations to serve as active stewards of Colorado's natural resources. CPW has a statutory responsibility to manage all wildlife species in Colorado, and to promote a variety of recreational opportunities throughout Colorado. One way we achieve this goal is by responding to referral comment requests, as is the case for this project.

After review of this project and location, CPW has the following recommendations:

Fencing
CPW recommends that if fencing (project perimeter or internal) is erected, either during or after construction of the project, it should be the type that would allow the free passage of wildlife. This will help to ensure the safety of mule deer, white-tailed deer, and pronghorn antelope in the project area. Fencing plans should avoid the use of woven wire-type fences that will trap or prevent the movement of wildlife. CPW recommends using three or four-strand smooth-wire fencing with a minimum bottom strand height of 17 inches above ground level and a maximum top strand height of 42 inches above ground level, along with the installation of double stays between posts.

Further information can be found in CPW's "Fencing with Wildlife in Mind" brochure.

Noxious Weeds and Native Re-seeding

Also of importance is the revegetation of disturbed soils and the control of noxious weed species through the development of a noxious weed management plan prior to initiating construction activities. The revegetation of disturbed areas and control of invasive weed species are important components of the project and it is critically important that the site be restored back to the native plant community that currently exists on site. It is preferable that native vegetation be retained on-site during the operational lifespan of the project, both as potential habitat for wildlife and to ensure successful reclamation of the project area, as noxious weeds could spread to adjacent habitats outside the project area. CPW recommends that the applicant consult with Weld County and the Natural Resource Conservation Service (NRCS) for current noxious weed best management practices.

Wildlife Escape Ramps

During open pit or open trench mining operations, CPW recommends placing temporary backfilling or other material as escape ramps in areas with steep slopes. Escape ramps will allow wildlife to exit an open pit or trench safely if they become entrapped.

Lighting

Nighttime artificial lighting has been documented to affect wildlife species of all sizes, from small macroinvertebrates to large mammals. These effects are often species-specific, and in some cases may be beneficial to one species within a local ecological community, but detrimental to another species within the same ecological community. These impacts could be expected year-round and can affect both local resident species and migrating wildlife, which may lead to collisions with other animals and structures, exhaustion, increased depredation, and direct mortality. Nighttime artificial lighting may also disrupt nocturnal species that are not accustomed to a significant increase in artificial light, leading to temporary blindness and disorientation, which may also increase the likelihood of collisions with infrastructure on site. CPW recommends that all outdoor lighting be down-shielded to minimize disturbance areas and dim the lights as much as practicable.

Per the U.S Fish and Wildlife Service recommendations[1], all outdoor lighting should be limited to warmer colors with "longer wavelengths (>560 nm) and lower correlated color temperatures (CCT<3000 Kelvin degrees)" ("Threats to Birds: Collisions - Nighttime Lighting | U.S. Fish & Wildlife Service"). Per the American Bird Conservancy, CCTs ranging from 2200 Kelvin Degrees to 2700 Kelvin Degrees is the preferred range of color. (Misguiding Light: The

[1] [4] "Threats to Birds: Collisions - Nighttime Lighting | U.S. Fish & Wildlife Service." *FWS.gov*, 4 May 2023, www.fws.gov/story/threats-birds-collisions-nighttime-lighting.

Role Artificial Light Plays in Bird Mortality from Collisions with Glass | Sheppard, PHD[2]) CPW recommends the latter range of lighting color options for implementation at the project site.

Retention Ponds

Ponds created by reclamation efforts could potentially have significant value to wildlife. To maximize this benefit, CPW recommends that ponds be designed to include irregular shorelines and one or more islands to provide cover, shelter, and nesting areas for migratory birds. Islands should be at least 15' x 25' in size for every two surface acres of water in the pond. Shoreline and island slopes should be graded to a ratio of 4 horizontal feet to every 1 vertical foot of distance, with some areas having slopes no steeper than 8 horizontal feet to every 1 vertical foot of distance. Such shallow areas will allow for the establishment of a variety of aquatic vegetation and invertebrate prey for waterfowl and shorebirds. Shorelines should be re-vegetated with native aquatic vegetation[3].

If the timing or scope of this project changes and/or if you have any questions, please contact CPW District Wildlife Manager for the North Greely district, Jackson Davis, at 970-342-0461 or jackson.davis@state.co.us.

Sincerely,

Brandon Muller

Brandon Muller
Acting Area 4 Area Wildlife Manager

Cc: Jackson Davis, Greeley North District Wildlife Manager
Lexi Hamous, Northeast Region Land Use Coordinator

[2] Sheppard, PHD, Christine. *Misguiding Light: The Role Artificial Light Plays in Bird Mortality from Collisions with Glass*. American Bird Conservancy, 11 May 2022, chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/abcbirds.org/wp-content/uploads/2022/05/ABC-lighting-collisions-position-statement-2022.pdf.

[3] USDA Natural Resources Conservation Service. Conservation Practice Standard – Access Control, Code 580. January 2021.