

The New Mexico Department of Game and Fish (Department) believes that recent changes in the Farmington Resource Area such as; (1) energy development trends in the San Juan Basin, (2) the withdrawal of over 300,000 acres from mineral entry around Chaco Culture National Historical Park, (3) preparation of BIA funded ethnographic studies for the region, (4) the establishment of the Honoring Chaco Initiative and (5) the significant increase in outdoor recreation activities that can adversely impact sensitive habitats in the region, warrants a Revision of the Farmington Mancos-Gallup, Resource Management Plan.

The Department is also submitting an update to the General Comments section on big game winter and migration corridors that was originally submitted to the BLM on 23 September 2020, for the Farmington Mancos-Gallup, Draft Resource Management Plan and Environmental Impact Statement (NMDGF No. NMERT-594):

General Comments

The landscapes necessary to maintain ungulate seasonal ranges and migration routes have been and are becoming increasingly fragmented. These conditions in the broader landscape may influence the sustainability of big-game populations. The San Juan Basin in northwestern New Mexico is facing threats from habitat fragmentation due to energy development and other anthropogenic influences and activities. This area has been identified by the Department as a high priority for big game species in the *2023 New Mexico State Action Plan, for Implementation of Department of the Interior Secretarial Order 3362: "Improving Habitat Quality in Western Big-Game Winter Range and Migration Corridors"*. The deer and elk that utilize the San Juan Basin are especially important to the citizens of New Mexico, Colorado, at least two tribal nations, and other stakeholders because of the recreational and cultural opportunities they provide. Parts of these herds are migratory with a portion of the animals remaining as year-round residents of the San Juan Basin while others seasonally use the basin as an important travel corridor and winter range. These herds provide year-round viewing opportunities for wildlife enthusiasts, and hunting licenses in this area are highly coveted. In particular, the mule deer herd offers some of the most highly sought-after hunting opportunities in the state of New Mexico; however, the Department's long-term annual mule deer surveys indicate that the resident portion of this deer population has been declining.

The planning area is very important for both resident and migratory mule deer even if some segments of the population have been more thoroughly studied than others. The Northwest area of the state has several documented migration corridors and important seasonal areas. NMDGF's GMU 2B is critical winter range for deer that cross many jurisdictional boundaries and GMU 2C also has both key winter range and year-round habitat for some resident deer (Kauffman et al. 2022a, 2022b). Additionally, Jicarilla Apache Nation has additional unpublished data indicating the area has many wildlife corridors and important seasonal ranges. We encourage the BLM to allow for flexible management based on the best available science and knowledge. A lack of data for a particular area should not be used to justify actions which reasonably could be expected to have negative impacts on wildlife or their habitats. Absent site-specific data, there is a large corpus of recent research from across big game species' ranges that should be used as the best available science when information for a particular area is lacking. For example, Sawyer et al. (2017) found that even after 15 years of natural gas development in western Wyoming, mule deer still did not habituate to disturbance and continued to avoid energy infrastructure. Even when most wells were in production and well pads were in some state of reclamation, they found no evidence of habituation. Rather, mule deer avoided well pads, staying an average of 913 m farther from well pads compared with use of the area before development. While this study was in Wyoming, there was no other dataset that

contradicts these findings, and this study represents a reasonable approximation for what might reasonably be predicted for impacts from development on migration pathways and stopovers. It represents a model to work from while additional information is gathered. We recommend the BLM plan for development based on evidence that mule deer may exhibit a 900 m avoidance distance from infrastructure. While 900 meters represents the long-term average distance of mule deer avoidance, in some cases indirect effects may require a greater distance from disturbance depending on local conditions like topography, vegetation, development density, and other factors. We encourage the committee to develop a recommendation to address both direct and indirect impacts and use the 900 m distance as a starting point for recommendations that will minimize or eliminate indirect effects on deer and other species from development. When applicable, surface disturbance should be minimized. Impact assessments should also recognize that impacts may be long term or even permanent based on the current state of knowledge on mule deer response to energy development. If solar development siting is considered, incentivize the development of utility-scale solar installations on previously disturbed lands and lands near existing transmission infrastructure. Utility-scale solar installations are likely to have effects on wildlife populations beyond their physical footprint on the landscape. Some species will avoid installations and decrease their use in the immediate surrounding area following construction (Sawyer et al. 2022). These impacts to species behavior have significant implications when, for example, attempting to avoid fragmentation of historic migration routes (Sawyer et al. 2017, 2022).

Minimizing disturbances in the planning area is important to maintaining migration routes, wintering grounds, other important seasonal use areas, and overall herd health. The RMPA/EIS does not address the protection of critical migration routes, this should be included in the final document. Restrictions on surface occupancy as well as timing restrictions that minimize disturbances during critical times of the year (i.e. overwintering periods and fawning/calving and associated rearing seasons) will help this population to persist. We recommend no future development within the primary mule deer travel corridor outlined by any previous or future volumes of the report: *Ungulate Migrations of the Western US*. We also recommend no development within a 900 m buffer zone around this corridor as described above (see Sawyer et al. 2017). The Department encourages prioritizing the habitat needs of native wildlife and plants, particularly in this important deer wintering area. Additionally, actions should be taken to reclaim disturbed habitat to native vegetation that is beneficial for deer and elk in this region.

Thank you for the opportunity to comment on the Termination of Preparation of the Environmental Impact Statement for the Farmington Mancos-Gallup Resource Management Plan Amendment.

Ron Kellermueller
Mining and Energy Habitat Specialist
Ecological and Environmental Planning Division
New Mexico Department of Game and Fish
1 Wildlife Way
Santa Fe, NM 87507
(505) 270-6612
Ronald.Kellermueller@dgf.nm.gov