



COLORADO

Parks and Wildlife

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Colorado Parks and Wildlife State Trails Program- Non-Motorized Grant Cycle 2021-2022 Southwest Region Grant Application Review

There are eight (8) Non-Motorized grant applications within the Southwest Region requesting funding from the State Trails Program for the 2021-2022 process. These applications were sent to the CPW Area Field Staff (Area Wildlife Managers, District Wildlife Managers, and Biologists) for review and comment. In addition, the comments were reviewed and discussed by SW Region Staff including Regional Manager Cory Chick, Deputy Regional Manager Matt Thorpe, Regional Land Use Coordinator Brian Magee, and Regional Trails Coordinator Josh Stoudt.

The background information provided below is not intended to be comprehensive discussion on the best available science regarding trail development, trail use, and the subsequent impacts to wildlife. It is, rather, a brief overview of the wildlife management issues CPW Staff considers when evaluating the individual trail grant proposals with the intent to inform and educate the Statewide Trail Committee members and trail grant applicants. Additionally the newly released Planning Trails with Wildlife in Mind should be referenced and incorporated into trail planning and stewardship implementation. Finally, individual grant comments and CPW Staff recommendations are detailed below.

Background information on trail related impacts to wildlife

Overall, the public and trail users are poorly informed on the potential impacts of non-motorized trails on wildlife, and how those impacts can manifest themselves into complex management issues for CPW. A recent study found that approximately 50% of recreationists felt that recreation was not having a negative effect on wildlife. Furthermore, recreationists tend to blame other recreation groups for adverse impacts to wildlife rather than themselves (Taylor and Knight 2005).

Big Game winter habitats and migratory corridors are known to be limiting factors on big game populations in western Colorado and other high mountain areas of the western United States (Sawyer et al. 2009, Bishop et al. 2009, Bartman et al. 1992). The protection and conservation of mule deer and elk winter range habitat is one of the foremost management objectives for CPW. These habitats are important for a variety of reasons, including:

1. Deer and elk tend to concentrate at lower elevations during winter months as snow accumulates at higher elevations.
2. Mule deer and elk typically display strong site fidelity to winter range, preferring to use the same areas year-after-year. CPW maps these areas as winter range, severe winter range and winter concentration areas for elk and deer.
3. Winter habitats for big game provide essential forage and thermal cover to help mule deer and elk minimize energy expenditure. Mule deer and elk are in a nutritional negative energy



balance during the winter months, making energy conservation critical for calf and fawn survival and adult female reproductive fitness.

Trail Use Impacts

Outdoor recreation associated with trails influences a variety of wildlife species in multiple ways. Impacts to wildlife from trail use are often negative and are associated with increased direct disturbance and displacement from optimal habitat due to the avoidance of human activities (Larson et al 2016). Elk and deer increase their daily activity levels and movements in the presence of mountain biking and hiking which reduces the time spent feeding and resting (Naylor et al 2009, Wisdom et al. 2004). This increased energy demand occurs simultaneously with decreased forage intake and displacement to areas with poorer quality forage. The net result is a decrease in body condition, which affects individual health, survival and reproduction (Bender et al 2008). Higher energy demand effectively decreases the carrying capacity of an area (Taylor and Knight 2003) and increases stress on individual animals. Many wildlife species also avoid areas of human disturbance completely, which decreases the amount of available habitat (Taylor and Knight 2003). Elk and deer generally do not become habituated to hiking or mountain biking (Wisdom et al. 2004, Wisdom et al 2018, Taylor and Knight 2003). Cumulatively, this leads to both immediate and long-term effects on individual animals and populations by decreasing the available energy for winter survival, growth, and reproduction, reducing the fitness of wildlife, and by displacing wildlife into marginal habitats (Miller et al 2001, Anderson 1995).

There is a large body of evidence documenting displacement of big game from roads and trails (including non-motorized trails) and a decline in habitat effectiveness from big game as road and trail densities increase (Wisdom et al. 2018, Preisler et al. 2013, Sawyer et al., 2013, WAFWA 2013, Rogala et al. 2011, Wilber et al. 2008, Rowland et al. 2005, Rowland et al. 2000, Phillips and Alldredge 2000). The presence of a dog with a recreationist is likely to result in a greater area of negative influence from trail use, including amplified avoidance distances of mule deer movements (Miller et al 2001).

2021-2022 Non-Motorized Grant Comments: The following are grant specific comments received from CPW Wildlife staff.

No wildlife specific comments were received on the following applications:

4. Project Raghorn 2022 - United State Forest Service, Pagosa Ranger District
5. Expanding Outdoor Recreation Opportunities for Costilla County - Costilla County
9. Expanding Outdoor Recreation Opportunities for Rio Grande County - San Luis Valley Great Outdoors
33. The Wilder Bunch Stewardship Crews - The Nature Connection/Delta County School District
46. Peninsula Park on Lake San Cristobal - Hinsdale County

Wildlife specific comments on the following applications:

7. Electric Hills Trail System - Colorado Plateau Mountain Bike Trail Association: CPW appreciates the continued coordination with COPMOBA and the BLM to successfully plan and implement important conservation measures designed to avoid and minimize trail development and user impacts to critical winter ranges within the Electric Hills Trail System.

40: Partnership for Stewardship 2022-2024: The grant application is unclear specifically what actions/activities are included as part of this funding request for stewardship. In subsequent conversations with the applicant, we are of the understanding that the intent is to clear down

timber in the Wilderness Area of the Quartz Ridge Loop in the San Juan National Forest within the existing trail systems. We are supportive of this action. However, CPW has not had the opportunity to assess other types of activities considered 'stewardship' such as trail reroutes, rehabilitation, or new trail construction. If these types of stewardship activities are intended to be covered under this grant request, then we recommend further modifying the grant to detail these activities and reinitiating wildlife consultation with CPW.

43: Baker's Park Trail System: The application calls for constructing 30 miles of new single-track with immediate access from the Town of Silverton. CPW appreciates being involved through the Bureau of Land Management's (BLM) Silverton Travel Management Planning Process. With the application up for funding review, the Southwest Region has concerns with the application. The location of the proposed trail system lies in alpine and subalpine habitats and species anticipated to be present in the area include several species of greatest conservation need. The Tier 1 species include: brown-capped rosy finch, white-tailed ptarmigan, American pika, Townsend's big-eared bat, fringed myotis, little brown myotis, and lynx. Lynx use in the Cement Creek drainage within this development area is significant. Tier 2 species present within the project area include brewer's sparrow, northern goshawk, bighorn sheep, and snowshoe hare. Other important habitats for moose and elk including summer concentration area for elk are also present.

The Silverton area also sees high use among a variety of user groups. The area is well known for its off-highway vehicle access, serves as a hiking destination for popular spots such as Ice Lakes and Highland Mary Lakes, and is a cross-country, backcountry, and downhill skiing and snowmobiling destination. The cumulative effect of these activities are reducing habitat effectiveness by reducing wildlife use and displacing wildlife. It is anticipated that 30 miles of trail construction would serve as a contributing factor to the reduction of the overall health of wildlife populations as outlined in the Environmental Assessment.

The Silverton Travel Management Plan - Record of Decision (DOI-BLM-CO-F070-2019-0008-EA) chose to not designate trails within CPW-mapped elk production areas and summer concentration areas. We appreciate the Decision that helps to reduce project impacts on these mapped elk habitats.

We remain concerned however about the conditions-based criteria for when the trails would close. Condition-based closures are difficult to enforce, especially when general terms such as "sufficient snow accumulation" and "dry enough" serve as the metric and mechanized use is the standard for which to evaluate these conditions. Specific closure dates are easier to implement particularly when there limited access points and parking areas. Compliance with the closure is more effective and its easier for the public to understand. We recommend that the BLM and project proponent implement a specific date closure for all of the trails. This closure period could be informed by the lynx winter habitat use in the project area.

The BLM's involvement and enforcement in these closures and regulations is of high importance to its success. Signage and proper trailhead construction can be an important aspect this but there is no replacement for public/agency interaction.

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