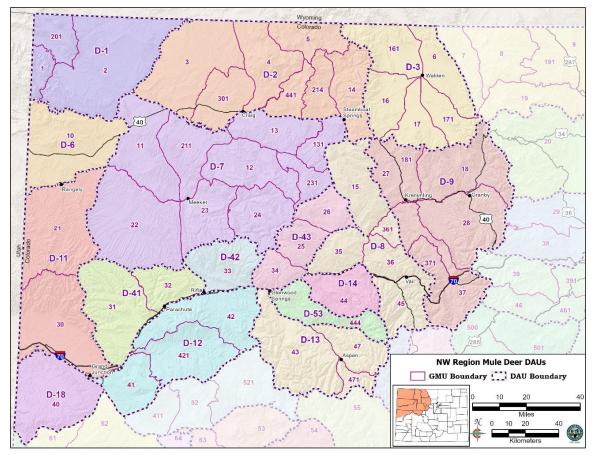
## Draft

## Northwest Colorado Mule

## Deer Herd Management Plans

Data Analysis Units: D-01, D-02, D-03, D-06, D-07, D-08, D-09, D-11, D-12, D-13, D-14, D-18, D-41, D-42, D-43, D-53



PREPARED FOR COLORADO PARKS AND WILDLIFE



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## **Executive Summary**

The 2021 post-hunt population estimate for mule deer in the Northwest Region of Colorado totaled 165,510, which represented almost 40% of the mule deer in all of Colorado. There are 16 mule deer data analysis units (DAUs) across northwest Colorado, with 7 herd management plans (HMPs) that are up-to-date with approved population and sex ratio objectives in the last 3 years. The other nine HMPs are either out-of-date or have never had official plans approved. Traditionally, Colorado Parks and Wildlife (CPW) staff have presented one HMP at a time for approval to the Parks and Wildlife Commission (PWC). In order to address the large numbers of HMPs that need to be updated, staff have taken a new approach to develop a Regional roll-up of all HMPs in a CPW region for a single big game species to update or establish new population and sex ratio objectives. This document presents the proposed objectives for all 16 northwest deer DAUs, including the new proposed and recently approved objectives. Table 1, below lists the 9 DAUs with objectives to be updated followed by the 7 DAUs that have been approved in the last 3 years that we want to extend. The plan also describes the significant management issues for mule deer herds in the northwest part of the state as well as what public input was used to develop proposed objectives and the individual HMPs for each of the deer herds.

While deer populations are down from historic high numbers in the 1960's to 1980's, populations in northwest Colorado are still some of the largest in the state and North America. Based on declining deer populations since the 1990's, CPW (then Colorado Division of Wildlife) has taken numerous measures over the years to attempt to slow down and understand population declines. Mule deer have been one of the most studied species in wildlife conservation, but there still is no single factor that has been identified to fix the decline and grow populations. We have implemented mule deer monitoring studies in 5 herds across the state including 2 in northwest Colorado (the White River, D-7, and Middle Park, D-9, herds) to monitor annual adult doe survival and over-winter fawn survival annually since the year 1998. The state has conducted numerous studies to understand the relationship of habitat and predators on mule deer populations. We have completed thousands of acres of conservation easements to protect private lands from development. The state also developed a West Slope Mule Deer Strategy in 2014, which incorporated public input, to guide the stabilization and recovery of deer populations that would in turn increase hunting and other wildlife-related recreation opportunities in the state. Following the guidance of the mule deer strategy, funds have also been made available and matched, to improve habitat across large parts of western Colorado. All of the efforts have contributed greatly to mule deer conservation and management and also to the benefit of other species using similar habitat types.

Through all of the monitoring efforts, research, and public input, we have identified a list of issues that impact deer populations and herd health in northwest Colorado. Chronic Wasting Disease has become one of the greatest issues affecting deer survival and has become a significant driver in establishing population and sex ratio objectives. Habitat quality and quantity are the other biggest factors affecting the potential for deer population size and growth based on carrying capacity, nutritional value, competition for forage with other grazers, and protection from disturbance, weather, and predators. Oil and gas development, renewable energy development, recreation, and residential development can impact deer populations through direct loss of habitat and indirectly by affecting behavior and use of quality habitat. There's also competition with free-roaming horses, elk, and livestock. Highway fencing and crossing structures have become a greater focus on deer management as

well, as fencing is being used to minimize vehicle collisions, but those fences also create barriers to migration and suitable habitat. Finally, predation is always a factor for deer management with coyotes, lions, and bears on the landscape, and following Proposition 114 wolves will be a factor as well in the future.

Public outreach and associated input have been conducted and evaluated to help establish proposed population objectives. Evaluation of newly available optional hunter satisfaction data from our annual hunter harvest surveys as well as public meetings held around the state have been invaluable to understanding hunter perspectives. The optional hunter satisfaction data will also be valuable information to gauge hunter satisfaction in the different deer DAUs from year to year since these questions will be asked every year. In addition, the draft plan was posted for 30 days for a public comment period to evaluate the proposed objectives. Ultimately, most hunters in public meetings and in the harvest data would like to see more deer across the landscape, but also recognize the challenges of habitat conditions, habitat loss, predators, competition for forage, and game damage conflict. The plan was presented to the Colorado Parks and Wildlife Commission meeting in Steamboat, CO on April 6<sup>th</sup>, 2023 and will be voted on for approval at the May Commission meeting.

Based on chronic wasting disease prevalence, habitat conditions with persistent drought conditions, public input, competition for forage, disturbance on important seasonal habitats, and changes to population models, most proposed population objectives are going to be the same or lower than historic objectives (Table 1). Additionally, some sex ratio objectives have increased in range breadth and lowered values to provide hunting opportunity and to manage CWD prevalence, which is highest in older age class bucks (Table 1).

**Table 1.** Population and management status of 16 deer herds occurring in NW Colorado. The first nine plans in the table are being updated with new proposed population and sex ratio objectives. Objectives from the plans completed since 2020 will be extended (shaded rows).

DAU	Mule Deer Herd	Current DAU Plan Approved	Current Population Objective	2021 Post- hunt Population Estimate	Current Sex Ratio Objective	3-Yr Avg Observed Sex Ratio	Male CWD Prevalence (Female 2021)	Proposed Population Objective	Proposed Observed Sex Ratio Objective
D-01	Little Snake	No plan	13,500	2,419	15	28.4	5%	1,500-3,500	15-25
D-02	Bear's Ears	1994	37,800	38,859	22	25.5	18% ( <mark>10%</mark> )	30,000-40,000	15-25
D-03	North Park	2002	5,400-6,400	5,747	30-40	47.4	<b>9</b> %	4,400 - 6,400	Status Quo
D-06	Rangely	No plan	7,000	957	20	44.5	4%	1,500-3,500	15-25
D-12	North Grand Mesa	2010	17,000-23,000	16,550	25-30	21.3	1%	Status Quo	Status Quo
D-13	Maroon Bells	2011	7,500-8,500	5,931	30-35	31.5	0%	7,000-9,000	27-32
D-18	Glade Park	2010	6,500-8,500	3,904	30-35	29.9	0%	4,300-6,500	30-40
D-41	Logan Mountain	2012	6,500-8,500	4,478	25-30	26.8	6%	Status Quo	Status Quo
D-43	Sweetwater Creek	2011	5,000-6,000	5,464	28-32	24.2	14%	4,000-6,000	18-25
D-07	White River	2020	25,000-35,000	32,279	18-25	25.8	15% ( <mark>9%</mark> )	Extension	Extension
D-08	State Bridge	2020	10,000-14,000	14,463	26-30	23.1	4%	Extension	Extension
D-09	Middle Park	2020	10,500-14,000	13,994	30-35	36.8	3% ( <mark>2%</mark> )	Extension	Extension
D-11	Bookcliffs	2022	5,000-8,000	8,662	27-32	31.2	3%	Extension	Extension
D-14	Brush Creek	2020	1,500-3,500	2,190	35-45	40.2	0%	Extension	Extension
D-42	Rifle Creek	2022	6,200-8,200	6,390	25-32	24.5	10%	Extension	Extension
D-53	Basalt	2020	4,000-6,000	4,262	32-40	30.5	1%	Extension	Extension