

Data Analysis Units:
E-01, E-02, E-03, E-06, E-07, E-08, E-10,
E-12, E-13, E-14, E-15, E-16, E-19, E-21, E-47



This plan was approved by the Colorado Parks and Wildlife Commission on XX.XX.XXXX

Executive Summary

The 2023 post-hunt population estimate for Rocky Mountain elk (*Cervus elaphus*) in the Northwest Region of Colorado totaled 115,390, which represented almost 38% of the elk in all of Colorado. The elk populations in NW Colorado have been relatively stable over the last 10 years, however, the winter of 2022-23 severely impacted populations in the NW part of the NW Region to the point that some of the historically largest herds in Colorado are now below objective. There are 15 elk data analysis units (DAUs) across northwest Colorado, with 2 herd management plans (HMPs) that are up-to-date with approved population and sex ratio objectives in the last 4 years. The other thirteen HMPs are either out-of-date or have never had official plans approved.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 final objectives for all 15 northwest elk DAUs, including the new proposed and recently approved objectives. Table 1, below lists the 13 DAUs with objectives to be updated and the 2 DAUs that have been approved in the last 4 years that we propose extending. The plan also describes the significant management issues for elk 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 elk herds.

While elk populations are down from recent historic high numbers around 170,000 in the early 2000's, populations in northwest Colorado are still some of the largest in the state and North America. Concerted efforts to increase license quotas were implemented across the state in the early 2000's to attempt to bring down elk populations to objective and minimize conflict with agricultural producers, especially during the severe drought years. Since then populations have been closer to objective ranges, with some populations dropping below objectives causing managers to change licensing strategies to attempt to grow elk populations. Severe droughts and above average winter snow depths and cold temperatures on elk winter ranges have also impacted populations through direct mortality as well as impacting available forage quantity and quality.

Through all of the monitoring efforts, research, and public input, we have identified a list of issues that impact elk populations and herd health in northwest Colorado. Calf survival and recruitment is one of the biggest factors to monitor when managing elk populations. Habitat quality and quantity is the biggest factor affecting the potential for elk 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 elk populations through direct loss of habitat and indirectly by affecting behavior and use of quality habitat. There's also competition with free-roaming horses and livestock. Chronic Wasting Disease (CWD) prevalence has been increasing in northwest Colorado and has become one of the greatest issues affecting deer survival. While CWD prevalence isn't as high in elk, it is still a factor to consider for elk management. Highway fencing and crossing structures have become a greater focus on elk and deer management, as fencing is being used to minimize vehicle collisions, but those fences create barriers to migration and suitable habitat. Ensuring sufficient crossing opportunities is essential to providing access to suitable habitat and avoid creating barriers to migration. Finally, predation is always a factor for elk

management with lions and bears on the landscape, as well as wolves following the passing of Proposition 114 and natural migration.

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 elk DAUs from year to year since these questions will be asked every year. In addition, the draft plan will be 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 elk across the landscape, but also recognize the challenges of habitat conditions, habitat loss, predators, competition for forage, and game damage conflict. The plan will be presented this July to the Colorado Parks and Wildlife Commission in a two-step process to approve the plan and adopt new population and sex ratio objectives.

Based on habitat conditions with variable drought and above average winter conditions, public input, competition for forage, disturbance on important seasonal habitats, chronic wasting disease, and changes to population models, most proposed population objectives are going to be the same or just slightly different from historic objectives (Table 1). Additionally, some sex ratio objectives have increased in range as they are expected ratios in DAUs with Over-the-Counter (OTC) licensing where it is difficult to manage for specific male harvest (Table 1).

Table 1. Population and management status of 15 elk herds occurring in NW Colorado. There are thirteen herds in the table with plans greater than 10 years old (clear rows), while objectives for the other 2 plans completed since 2020 are proposed for extension (shaded rows). (*DAUs E-1, E-21, and E-47 are minimum count observations for population estimates and objectives.)

DAU	Elk Herd	Current DAU Plan Approved	Current Population Objective	2023 Post-hunt Population Estimate	Current Sex Ratio Objective	3-Yr Avg Observed Sex Ratio	Male CWD Prevalence	Proposed Population Objective	Proposed Observed Sex Ratio Objective
E-1	Cold Springs	2013	700-1700	1,130*	40	41	Not detected	1000-2000	>40
E-2	Bears Ears	2008	15,000-18,000	10,567	20-25	14	2%	Status quo	15-25
E-3	North Park	2008	4,000-4,500	5,794	20-23	15	2%	Status quo	20-25
E-6	White River	2005	32,000-39,000	30,376	22-27	21	5%	Status quo	15-25
E-7	Gore Pass	2020	4,000-5,000	3,759	24-28	25	4%	Extension	Extension
E-8	Troublesome Creek	2010	3,600-4,300	3,611	21-26	30	0%	3,400-4,400	23-29
E-10	Yellow Creek	2022	8,500-10,500	16,114	18-25	26	0%	Extension	Extension
E-12	Piney River	2013	3,000-4,600	3,852	22-44	20	Not detected	3,000-5,000	15-43
E-13	Williams Fork River	2010	4,700-5,500	2,887	24-31	27	0%	4,000-5,500	23-29
E-14	Grand Mesa	2010	15,000-19,000	15,406	20-25	22	0%	Status quo	18-25
E-15	Avalanche Creek	2013	3,600-5,400	4,237	17-27	22	Not detected	Status quo	19-30
E-16	Frying Pan River	2013	5,500-8,500	9,823	18-30	22	Not detected	Status quo	17-29
E-19	Glade Park	2010	2,800-3,800	5,554	30-35	30	Not detected	Status quo	30-40
E-21	Rangely/Blue Mountain	None	1200	2623*	40	47	1%	1000-2000	>40
E-47	Green River	None	170	99*	30	140	Not detected	150-250	>40