

GRAPE CREEK ELK HERD MANAGEMENT PLAN DATA ANALYSIS UNIT E-28

GAME MANAGEMENT UNITS

69, 84

PREPARED FOR

COLORADO PARKS AND WILDLIFE



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EXECUTIVE SUMMARY

Grape Creek Elk Herd (DAU E-28)	GMUs: 69, 84
Posthunt Population: Previous Objective: 1,400-1,600 elk; Estimate for 2018: 2,100.	
Preferred Alternative: <u>Increase population objective to 2,400-2,800</u>	
Posthunt Sex Ratio (Bulls:100 Cows): Previous Objective: 35-40;	
Posthunt 2018 observed: 42; modeled: 38. Preferred Alternative: <u>Status Quo 35-40</u>	

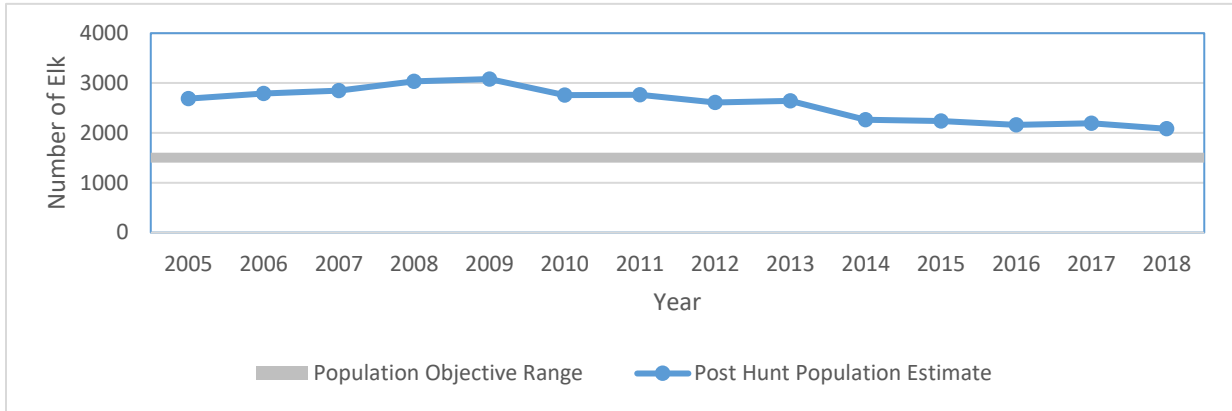


Figure 1. Elk DAU E-28 DAU modeled posthunt population and objective range, 2005-2018.

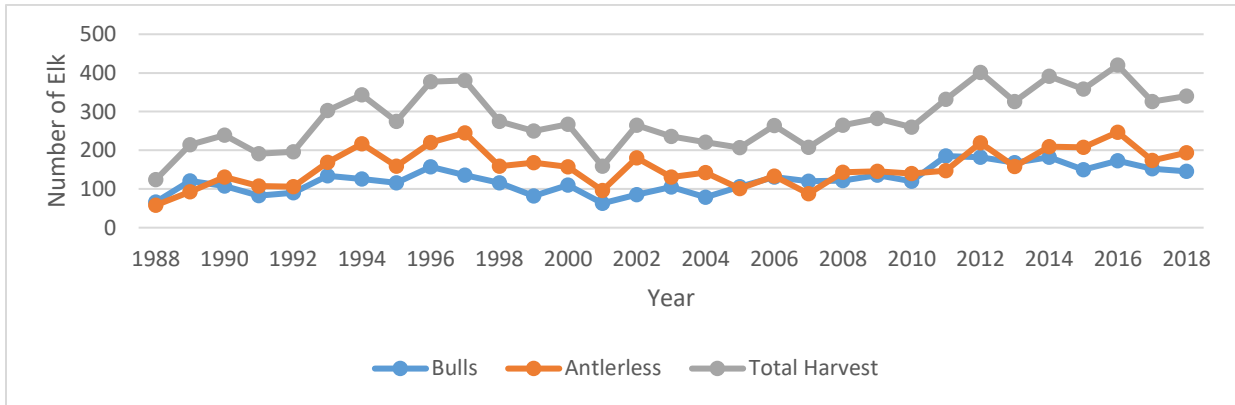


Figure 2. Elk harvest estimates in E-28, 1988-2018.

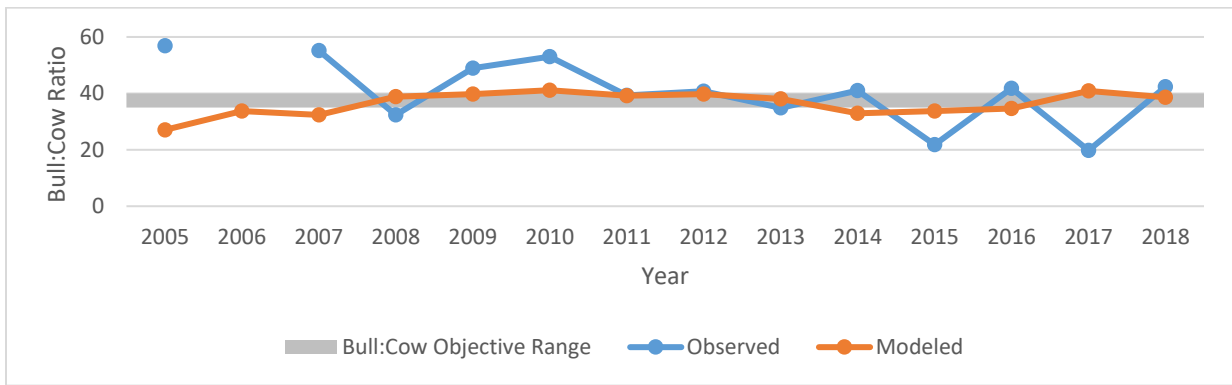


Figure 3. Elk DAU E-28 observed and modeled posthunt sex ratio (Bulls:100 Cows), 2005-2018.

Background Information

The Grape Creek elk Data Analysis Unit (DAU E-28), located in southcentral Colorado, covers 1,571 mi² ranging in elevation from 4,640 ft. to 12,349 ft. Elk generally occupy the area from grassland/shrub winter range adjacent to the foothills to alpine summer range in the Greenhorn Mountains. Over 70% (1,104 mi²) of the DAU is private ownership, including low-density housing developments, agricultural properties, and large ranches. Hay is the primary crop produced on farmlands and cattle grazing occurs throughout the DAU.

Elk harvest management in the unit is two pronged. First, the unit is managed with totally limited licenses for all manners of take. Second, elk harvest is used to mitigate human-elk conflicts, including game damage on agricultural fields. This is achieved with antlerless licenses in extended private-land-only (PLO) seasons and dispersal permits.

In developing this Herd Management Plan (HMP), Colorado Parks and Wildlife (CPW) sought input from stakeholders and staff on the desired population and sex ratio objectives along with identifying significant management issues. Despite game damage concerns on hay fields, landowners supported an increase in the population objective for the unit. This aligned with hunter feedback. Other issues identified included: 1) Elk taking refuge on private lands, 2) loss of habitat due to development, 3) restricted hunter access, 4) elk damage to fences, 5) noxious weeds and habitat changes due to lack of forest management, and 6) declining calf/cow ratios.

Recommendation to the Colorado Parks and Wildlife Commission

Alternatives for Population Objective

- 1) (Status quo) 1,400-1,600 elk
- 2) Increase the population objective to 1,800-2,200 elk
- 3) Increase the population objective to 2,400-2,800 elk (**Preferred Alternative**)

Alternatives Herd Composition (sex ratio) Objective

- 1) (Status quo) 35-40 bulls:100 cows (**Preferred Alternative**)
- 2) 30-35 bulls:100 cows

Strategies for Addressing Management Issues and Achieving Objectives

CPW has limited ability to affect many of the issues identified through the plan's public outreach process. However, CPW will seek opportunities to conserve land through fee title purchase or conservation easements, especially ones with hunting access. We will maintain the extended PLO hunting season to disperse elk from private property and will offer dispersal licenses for landowners with elk conflicts. We will look for opportunities, working with land management agencies and private landowners, to improve habitat and increase hunter access.

The current elk population size (2,082 elk) and sex ratio (38 bulls per 100 cows) are within the ranges for the respective three alternatives, so we would expect to maintain current or slightly lower license levels depending on which alternative is selected. To manage for Population Alternative 1, additional antlerless harvest would be necessary, which has been unobtainable with current seasons. Population Alternative 3 would necessitate a reduction in antlerless licenses. At higher population sizes, elk damage might increase. To manage for a lower bull/cow ratio, bull licenses would need to be increased, resulting in additional opportunity. However, the age-class and size of bulls might decrease under Composition Alternative 2.