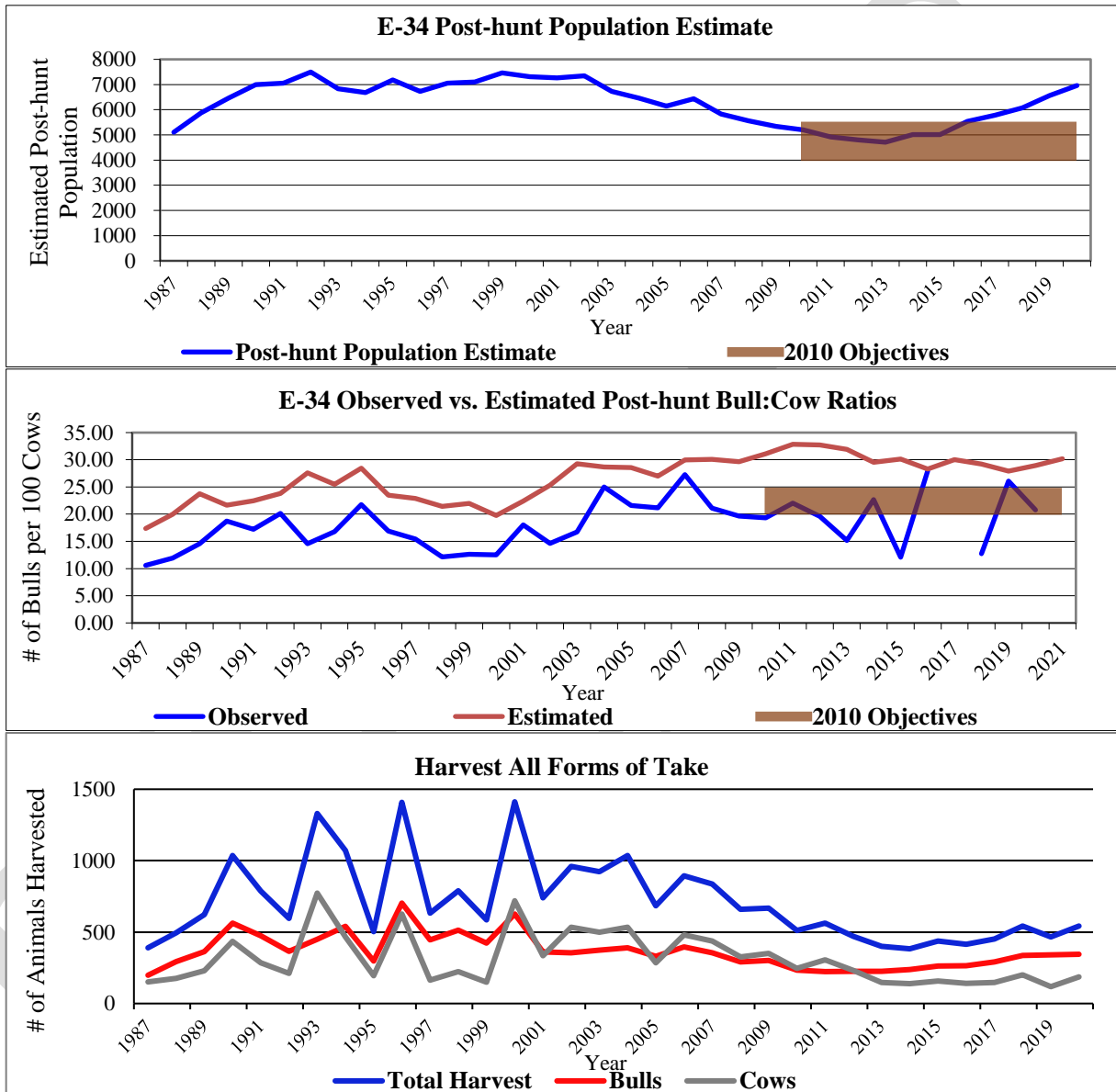


## Upper Rio Grande E-34 HMP Executive Summary

<b>GMUs:</b> 76 and 79	<b>Land Ownership:</b> 2% BLM, <1% CO State, 81% USFS, 0% USFWS, <1% State Land Board, and 17% Private.
<b>2020 Post-hunt Population Estimate:</b> 7,000 elk	<b>Post-hunt Sex Ratio (Bulls per 100 Cows):</b> 29 (Estimated 3-yr average)
<b>2010-2021 (Previous Herd Plan Objectives):</b>	4,000 to 5,500 elk; 20-25 Bulls per 100 Cows.
<b>2022-2032 (Preferred Herd Plan Objectives):</b>	5,800 to 7,800 elk; 20-25 Bulls per 100 Cows.



The E-34 elk herd is in the western region of the San Luis Valley. The DAU (geographic area) comprises Game Management Units (GMUs) 76 and 79, approximately 1,478 square miles. Elk winter range within the DAU includes roughly 569 square miles, whereas the summer range encompasses about 999 square miles. Portions of Hinsdale, Mineral, Rio Grande, Saguache, and San Juan counties make up the entire area. Public land constitutes about eighty-three percent of the DAU, while almost seventeen percent of the area is privately owned.

The average population size of E-34 remained relatively stable throughout the 1990s at just over 7,000 animals, continuing into the early 2000s. Subsequently, the population trend dropped to its lowest level in 2013 at approximately the mid-point of the objectives set in 2010. From 2013, the population has been on a gentle upward trend to its current (2020) estimated level of roughly 7,000 animals, above the high end of the current population objective range.

The E-34 observed sex ratios fluctuated considerably since the early 1990s, but they appear to be on a gentle upward trend. Most of the variation in this DAU has been due to locating bull groups within the limited flight time. In 2016, the observed sex ratio reached its highest point since Colorado Parks and Wildlife (CPW) first recorded classification data in the late 1980s (approximately 28 bulls per 100 cows). The model-estimated sex ratio has been relatively stable, averaging roughly 29 bulls per 100 cows over the previous five years. The current sex ratio objective range remains feasible for sustaining an acceptable mature-bull population while simultaneously allowing reasonable hunting opportunities. Hunters in GMU 76 reap the majority of the mature-bull population harvested; however, as the winter conditions progress, many of the mature bulls migrate over the Continental Divide to neighboring units or the higher elevations of GMU 79.

Bull harvest in E-34 averaged 409 animals from 1987 through 2009. Since 2010, the average bull harvest has dropped to 271 animals. Comparatively, cow harvest averaged 374 animals between 1987 and 2010. From 2006 to 2012, there were more cows harvested than bulls; CPW believes this contributed to the decline in population to approximately the mid-point of the current objective range. Currently, CPW limits all hunting seasons for bulls and cows in GMU 76. In GMU 79, all licenses are limited except during the archery either-sex over-the-counter (OTC) season and on private land east and south of Colorado Highway 112.

The OTC archery either-sex season in GMU 79 is unlimited in license numbers and, since 2015, has been associated with an increasing number of hunters. Archery success rates in GMU 76 have been on a gentle upward trend since 2005, averaging about thirty-nine percent since the development of the previous HMP. In contrast, GMU 79 has an average archery success rate of only four percent in the same timeframe. The increasing number of archery hunters, particularly in GMU 79, likely reduces harvest success rates. The earlier rifle seasons usually have higher success in GMU 76, with the Early Rifle season achieving almost an eighty percent success and the First Rifle season about fifty-one percent success. Conversely, the GMU 79 rifle and muzzleloader seasons have had less than ten percent average harvest success.

The E-34 population estimate has been above the current objective range since 2016 and is currently approaching 7,000 animals. CPW would need to render significant effort to reduce the population to the current objectives if they were to remain; this would likely entail providing additional cow licenses in GMUs 76 and 79 for all seasons. However, in the past, local stakeholders have not favored proposals to increase cow licenses. An increase in objectives would incorporate the current population estimate, although CPW may temporarily provide additional cow harvest opportunities to curtail the upward population trend.

The principal factors limiting the E-36 population are the availability of water resources affecting the quantity and quality of forage, essential in the winter range and production areas. The winter range continues to diminish with increased development on private land and competition with domestic livestock. Similarly, summer recreational activities continue to increase throughout the DAU. The various anthropogenic impacts on the summer and winter range could alter elk distribution, reproduction, calving efforts and ultimately restrict population growth. Alternatively, the increased forage availability resulting from the 2013 West Fork Complex Fires may support a more robust elk herd, affecting elk migration.

The E-34 sex ratio has been trending above the current objective range. In 2020, CPW detected a low prevalence of Chronic Wasting Disease (CWD) in the neighboring deer herd (D-30), which raises concerns for heightened sex ratios since males are more likely to contract CWD. Testing will continue, and if any mule deer or elk test positive for CWD, CPW may need to re-address future elk management.

Game damage issues continue to occur in the DAU, particularly along the Rio Grande in GMU 79. Since 2019, CPW has handled most depredation issues by providing vouchers to landowners permitting elk harvest east and south of Colorado Highway 112. The additional pressure should also help distribute the animals to hunter-accessible public land. Depredation concerns are minimal in GMU 76; however, CPW continues to evaluate and provide game damage licenses to private landowners in GMU 79 north and west of Colorado Highway 112 as needed.

### Management Alternatives

In Data Analysis Unit E-34, four alternatives were considered for the **post-hunt population size** and three alternatives for the **sex ratio** objectives:

Population Objective Alternatives:		Sex Ratio Objectives	
3,600 to 5,000	Approximately 10% decrease in objectives	18 to 23 Bulls per 100 Cows	
4,000 to 5,500	Remain the same	20 to 25 Bulls per 100 Cows	Preferred
5,100 to 7,000	Approximately 27% increase in objectives	23 to 28 Bulls per 100 Cows	
5,800 to 7,800	Approximately 44% increase in objectives	Preferred	

## **Preferred Objectives:**

### ***Post-hunt Population***

The preferred population management objective range for E-34 is **5,800 to 7,800 elk**, aiming to maintain management, stabilize the population, and sustain the herd at its current estimated population level. This objective range provides the best balance for managing the herd, hunting recreational opportunities, minimizing agricultural conflicts, and maintaining habitat carrying capacity.

### ***Post-hunt Sex Ratio***

The preferred sex ratio objective range is **20-25 bulls per 100 cows** for the E-34 elk herd. Most stakeholders have been relatively satisfied with their hunting experience and the level of bull maturity observed within the herd. Stakeholders are concerned about the risk of CWD with an increased bull population, especially above the levels that CPW has observed recently. The preferred range creates the best balance between the desired hunting experience and harvesting a mature bull elk in the DAU.

## **Strategies for Achieving the Preferred Objectives:**

***Post-hunt Population*** – Managing towards the preferred elk population objective, CPW will continue collecting annual inventory and harvest data and conduct appropriate management. Cow hunting opportunities may initially increase slightly to curb the upward trend in population growth. Once the estimated population is stabilized within the objective range, CPW may consider conservatively providing cow licenses to maintain the population within the preferred range. The herd's ability to be maintained within the preferred objective range during the next ten years is conceivable, as long as calf recruitment and forage availability remain strong. Tools to control private land depredation issues will remain in place. CPW may consider additional cow harvest opportunities if the population estimate increases towards the upper levels of the objective range or a significant deterioration in habitat conditions occurs.

***Post-hunt Sex Ratio*** – GMU 76 will remain a limited unit for all hunting seasons, whereas GMU 79 would maintain the limited muzzleloader and rifle seasons and continue the OTC archery season. Once the estimated sex ratio falls within the preferred objective range, CPW may restrict licenses based on the average sex ratio performance. Nonetheless, bull licenses would likely remain the same, allowing for the desired maturity and acceptable harvest opportunities. The preferred objective range would continue to help reduce the risk of CWD.