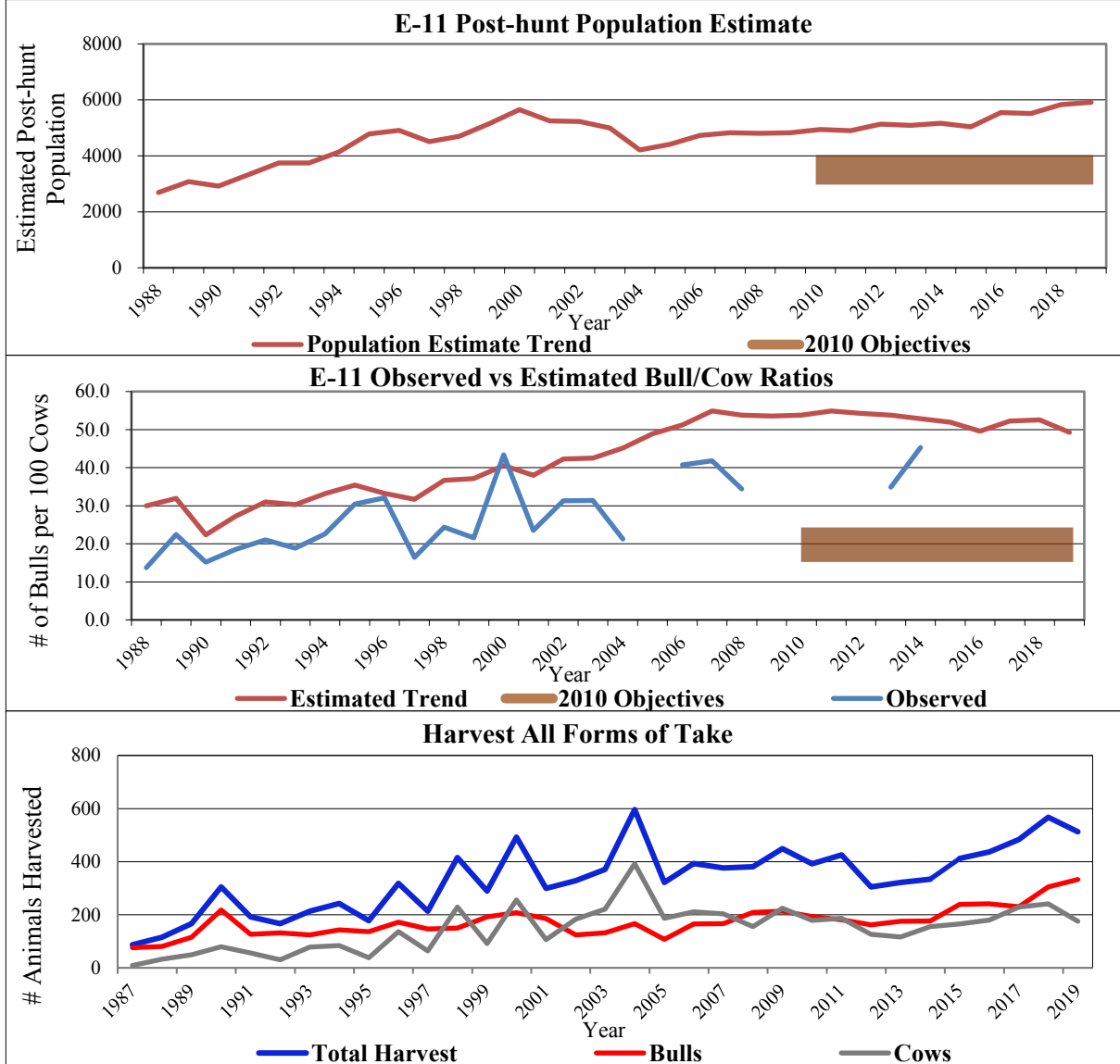


## Sand Dunes Elk E-11 HMP Extension Executive Summary

<b>GMU:</b> 82	<b>Land Ownership:</b> 10 % BLM, 20% GRSA, 19% USFS, 12% USFWS, 8% State Land Trust, 3% CO State, and 29% Private.
<b>2019 Post-hunt Population:</b> 5,900	<b>Post-hunt Sex Ratio (Bulls to 100 Cows):</b> 39 (observed 3-yr average)
<b>2010-2020 (Previous Herd Plan Objectives):</b>	3,000 to 4,000 elk; Expected 17-23 Bulls per 100 Cows.
<b>2020-2030 (Preferred Herd Plan Objectives):</b>	3,000 to 4,000 elk; Expected 17-23 Bulls per 100 Cows



The E-11 elk herd is in the northeastern section of the San Luis Valley. The DAU (geographical area) comprises a single Game Management Unit, GMU 82, approximately 1,088 square miles. Elk winter range within the DAU includes roughly 526 square miles, whereas summer range encompasses about 803 square miles of summer range. Portions of Alamosa and Saguache counties make up the entire area. Public land constitutes about 71% of the entire DAU, while the private sector owns almost 29% of the area.

The estimated post-hunt population size for E-11 reached its peak, about 5,900, in 2019. From 2000 to 2004, the population declined almost to the upper end of the current objective range. Reduced calf recruitment and drought conditions combined with high antlerless harvest may have been the cause. Thereafter, the population has been increasing slowly to the current estimated population size of roughly 5,900 animals.

The observed sex ratios in E-11 have steadily been increasing since the early 1990s. In 2016, the observed sex ratio reached its highest point at roughly 40 bulls per 100 cows since Colorado Parks and Wildlife (CPW) began collecting classification data for this herd in the late 1980s. In 2019, to increase management efforts towards reducing the E-11 population and sex ratio, CPW implemented an extended fall bull- and cow-hunt season, and the early summer bull-hunt, on private land in the DAU. The additional pressure ought to distribute elk to more accessible public land. Current sex ratio objectives remain a long way below the observed ratio level. Thus, managing towards the expected sex ratio should continue providing abundant hunting opportunities and a desirable mature bull population.

Elk harvest in E-11 depends on hunters getting access to the animals. Significant numbers of elk move to the US Fish and Wildlife Service (USFWS) property, also known as the Baca National Wildlife Refuge (BNWR) and the Great Sand Dunes National Park and Preserve (GRSA) when the hunting seasons begin, reducing hunter access. Substantial numbers of elk also move onto private agricultural lands. Bull harvest averaged approximately 152 animals from 1987 through 2009. In the last ten years, the average bull harvest has risen to about 224 animals. The majority of the antlerless harvest is limited, except during the archery either-sex season and on private land. Cow harvest rose significantly from 1987 through 2004, from nine animals to 392 animals. In 2005, cow harvest dropped to about 187 animals and has remained relatively stable since then. Over the previous ten years, cow harvest has averaged around 182 animals.

E-11 is an over-the-counter (OTC) unit during the archery season for either-sex and second and third rifle seasons for bulls on public land. Public-land success rates for all seasons in this DAU are relatively low (20%) and have remained the same since 1987. In contrast, rifle success on private land tends to be higher because of the availability of dispersal and private-land-only (PLO) licenses, with 68% and 84% success, respectively. These licenses allow hunters with landowner permission easier access to harvest animals on private land.

The E-11 elk herd continues to increase. Controlling the DAU population through harvest has been challenging because of the restricted or no hunting areas of the BNWR, the GRSA, and private land. CPW and local partner agencies are concerned about the herd's adverse impact on marginal and sensitive vegetation, particularly along riparian areas. The rising elk herd may have interspecific pressure on other ungulates, potentially exceeding carrying capacity. CPW would like to continue reducing the population and sex ratio and distribute the elk through the DAU. The GRSA has proposed implementing an elk management strategy – an Ungulate Management Plan. The Plan's goals would help reduce the number of elk utilizing the winter range within the Park and distribute the animals to more accessible public land.

Game damage issues continue to occur in the DAU. Beginning in 2019, CPW deals with most private land depredation issues through vouchers to harvest elk on private land. The harvest would come from an extension of the fall-bull and cow-hunt season, and early summer bull-hunt to facilitate the population and sex ratio reduction and distribute the animals from private land.

### **Preferred Objectives:**

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

The preferred management objective for E-11 is to remain at **3,000 to 4,000 elk**. This objective aims to decrease the current population. Management for the life of this HMP would use the strategies mentioned below.

#### ***Expected Three-year Average Observed Post-hunt Sex Ratio***

For an OTC unit, the expected post-hunt sex ratio would remain at **17-23 bulls per 100 cows**. This range continues to support the desires of the stakeholder community. It also allows for a satisfactory hunting experience with the desired hunting opportunities, reducing the potential risk of CWD disease.

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

***Post-hunt Population*** – To achieve the preferred elk population objective, CPW will collect annual inventory data for the models to function more accurately and conduct appropriate management. CPW will also continue pursuing different strategies and working with partner land management agencies to allow hunter access to the elk herds. Continued pressure on the entire herd is critical, particularly from partner agencies, to encourage increased distribution and harvest. CPW will continue aggressively addressing preventative measures to depredation issues. Hunter harvest success should increase by distributing the elk off the BNWR, GRSA, and private land to more accessible locations. Agricultural land depredation issues should also decrease with the reduced assembling of large groups.

***Expected Post-hunt Sex Ratio*** – CPW will pursue management towards reducing the observed sex ratio by providing abundant hunting opportunities. CPW will continue working closely with federal partner landowners to promote the harvest and distribution of elk concentrations. The agency will also attempt to manage the bull population minimizing dispersal to high depredation areas on private land. The additional pressure from the BNWR, GRSA, private landowners, and the Nature Conservancy should allow hunters access to the elk. Harvest from these licenses should reduce the sex ratio, distribute the animals, and maintain stakeholder satisfaction.