

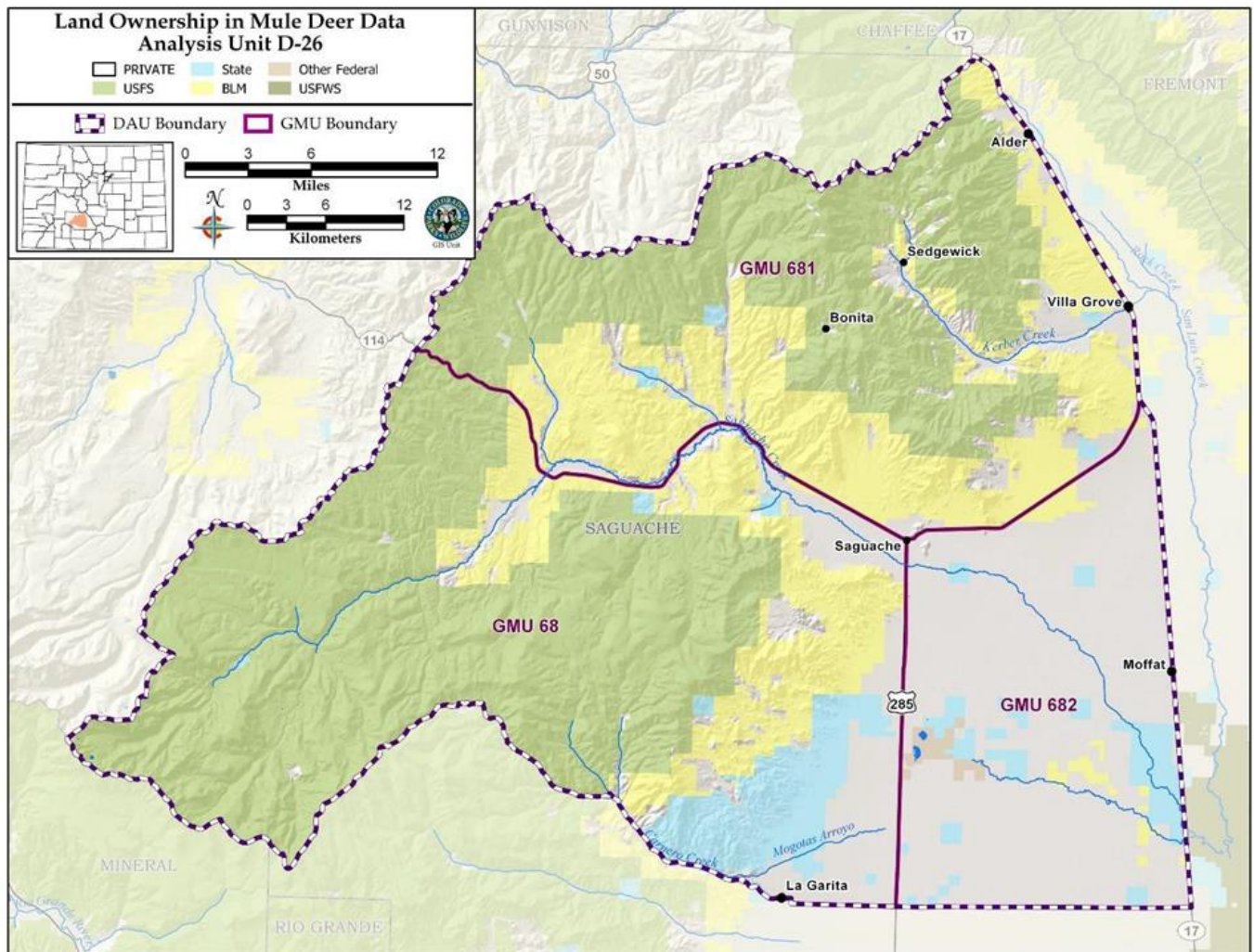
# SAGUACHE DEER HERD MANAGEMENT PLAN EXTENSION DATA ANALYSIS UNIT D-26

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**GMUs: 68, 681, and 682**  
**Last HMP Approved Year: 2019**

Post-hunt Population: Previous Objective: 5,500-6,500; 2022 Estimate: 5,500 deer.  
**Preferred Alternative: Maintain population objective at 5,500-6,500 deer.**

Post-hunt Sex Ratio (bucks:100 does): Previous Objective: 26-29;  
2022 observed: 29; 3-yr average modeled: 29.  
**Preferred Alternative: Status Quo at 26-29 bucks:100 does.**



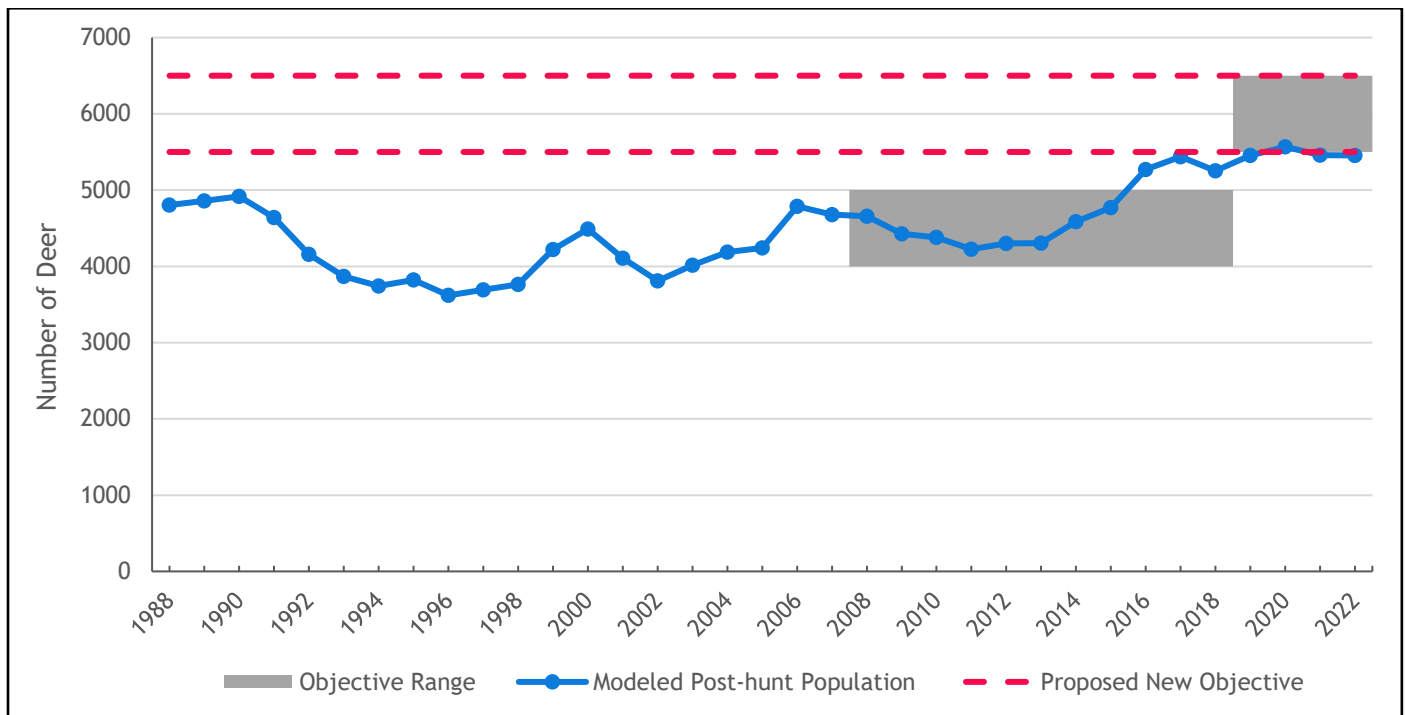


Figure D26-1. Deer DAU D-26 modeled post-hunt population and objective range, 1988-2022.

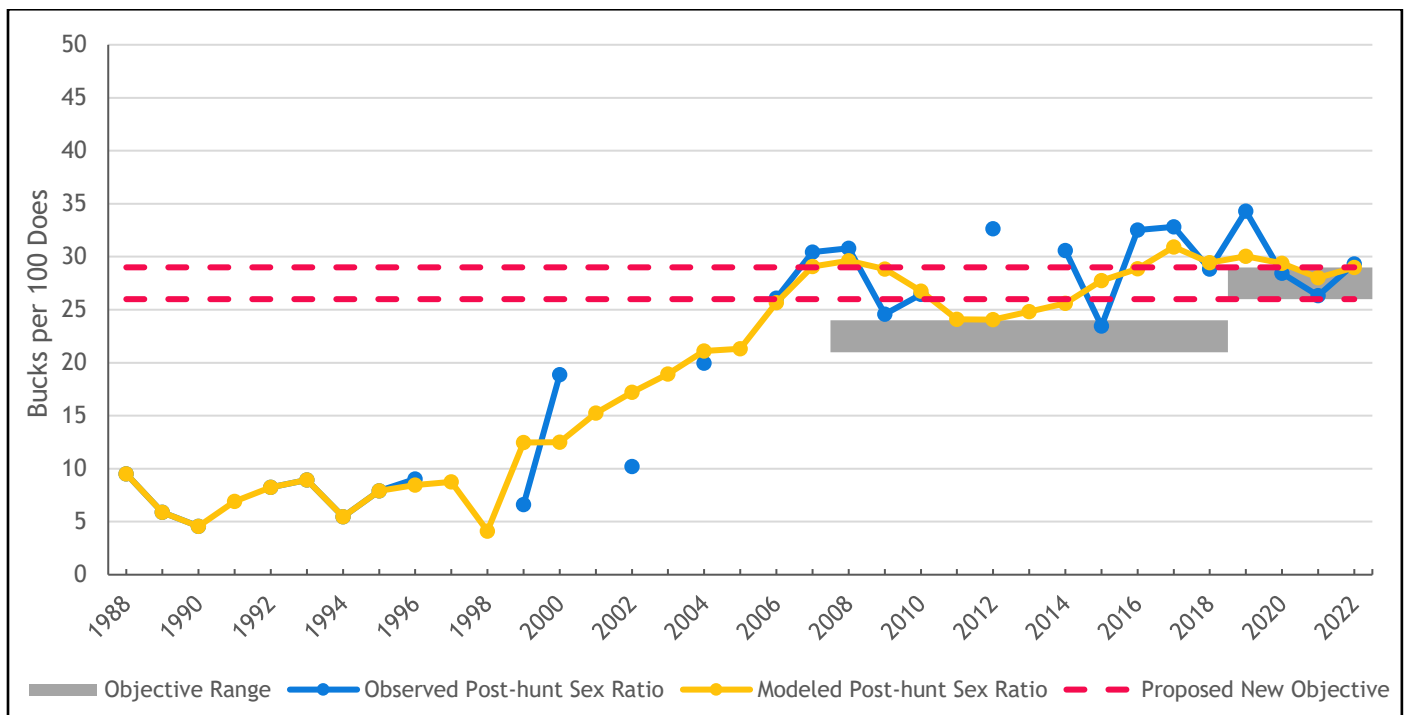


Figure D26-2. Deer DAU D-26 observed and modeled post-hunt sex ratio (bucks:100 does), 1988-2022.

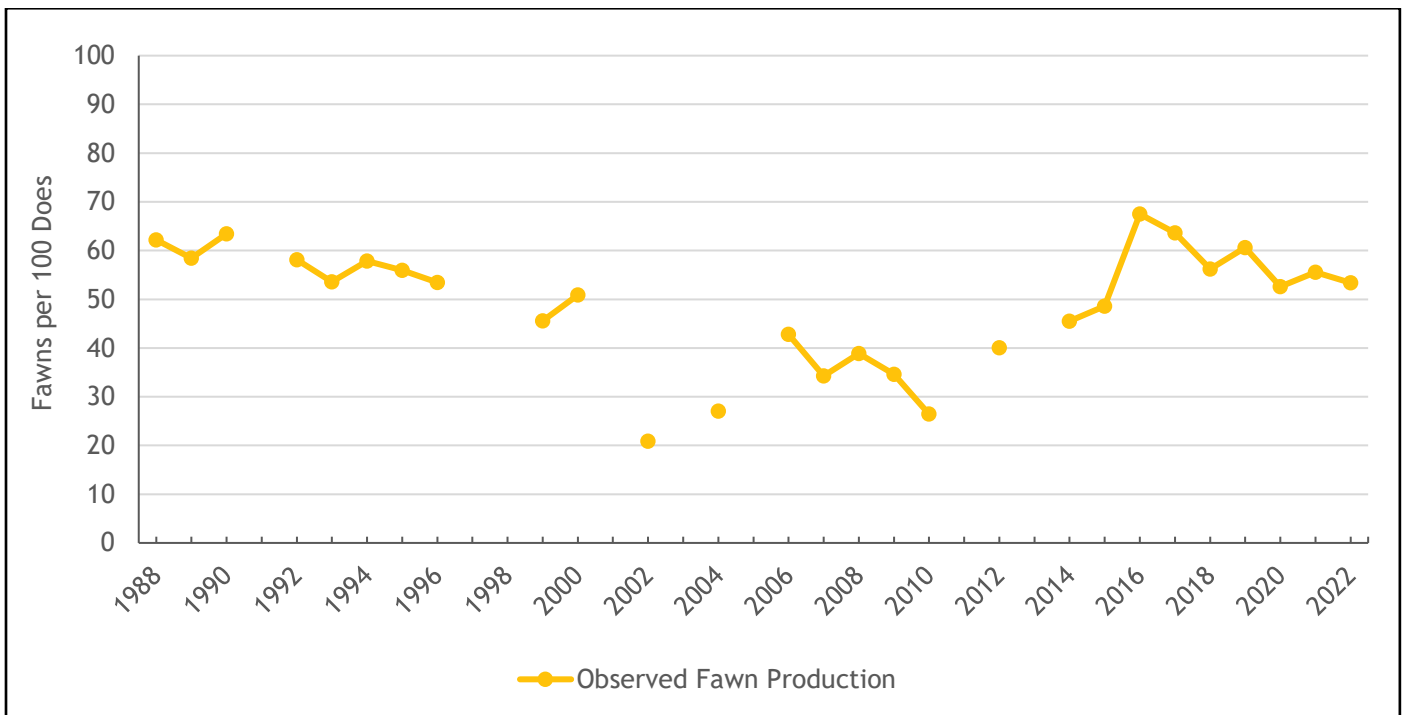


Figure D26-3. Deer DAU D-26 fawn production (observed post-hunt fawns:100 does ratio, 1988-2022).

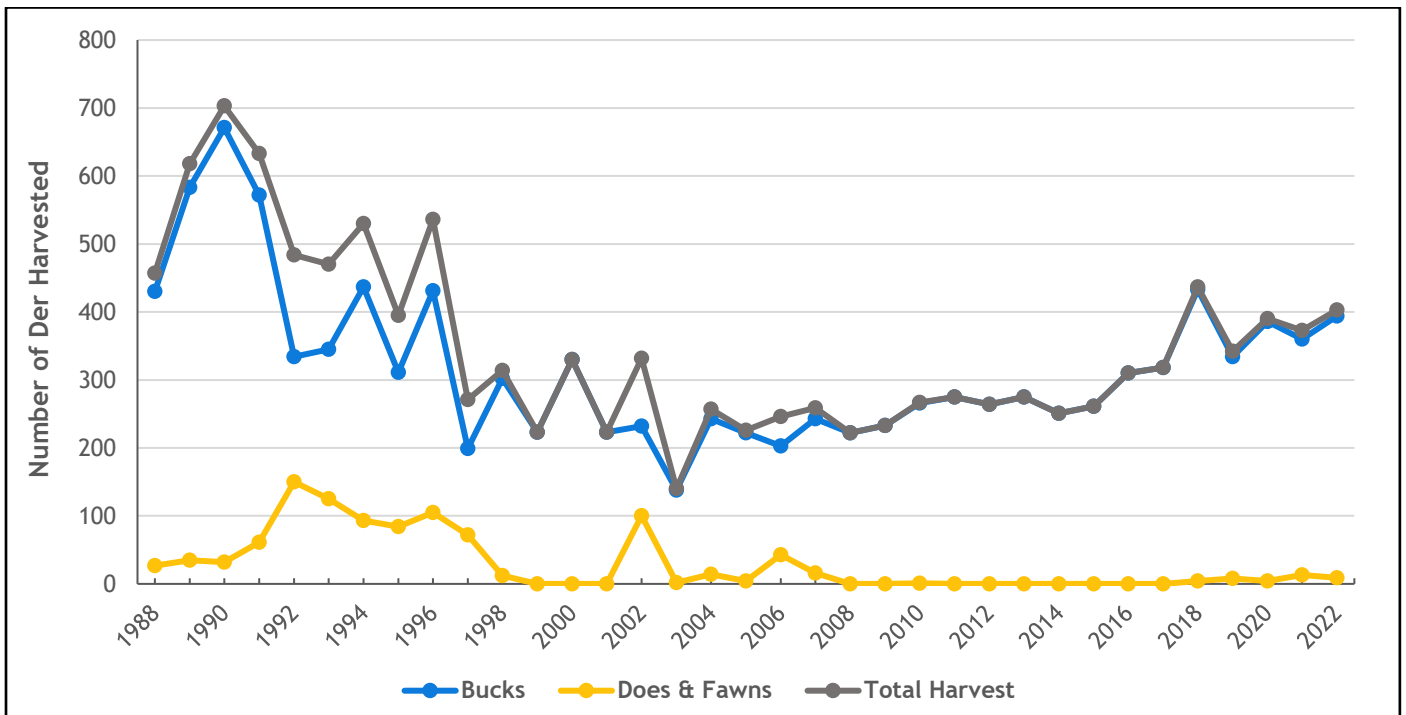


Figure D26-4. Deer harvest estimates in D-26, 1988-2022.

## Background Information

The D-26 mule deer herd is in the western region of the San Luis Valley. The DAU (geographic area) comprises Game Management Units (GMUs) 68, 681, and 682, approximately 1,302 square miles. The mule deer winter range within the DAU includes roughly 483 square miles, whereas the summer range encompasses about 963 square miles. The DAU is entirely within Saguache County. Public land constitutes about seventy-four percent of the DAU, while the private sector owns more than twenty-six percent.

The D-26 population began to decrease steadily in the late 1980s. To address the decrease, CPW eliminated doe licenses, and buck licenses, which had been unlimited, became limited in 1999. The herd dropped to less than 3,500 animals in 2002 and has gained traction since then, increasing in numbers to within the boundaries of the 2008 objectives of 4,000 to 5,000 animals. The population remained within the 2008 objectives until 2015. Since then, the population estimate increased above the upper end of the 2008 population objectives. In 2019, CPW updated the population objectives to 5,500 to 6,500 deer to manage the deer herd more accurately within biological and social constraints.

The D-26 observed post-hunt sex ratios have increased since CPW limited antlered licenses in 1999. Before the implementation of limited licenses, the observed sex ratio averaged less than ten bucks per 100 does. From 1999 to 2008, the average observed sex ratio rose to 20 bucks per 100 does; since 2008, it has increased to 29 bucks per 100 does. Alternatively, the modeled sex ratio has been trending relatively close to the observed sex ratio, and it has been hovering around the upper end of the 2019 objective range since 2018.

Before CPW limited buck licenses in 1999, the annual buck harvest averaged approximately 420 animals in the DAU. Since the limitation, the average buck harvest has been almost 277 animals, which has increased to 332 animals over the past ten years. With the rising observed sex ratio, CPW increased buck licenses in 2017 and 2018 and provided minor increases in 2020 and 2021 throughout the DAU to curb the upward trend and reduce it to the upper end of the objective range. Harvest from the additional licenses has leveled further sex ratio increases.

Doe harvest fluctuated from 1988 to 2007, averaging roughly 47 animals annually. Thereafter, the doe harvest was negligible until 2017. From 2018 to the present, the doe harvest has occurred at a minor scale, averaging approximately seven animals, many of which were in the Saguache town. Most of the doe harvest resulted from depredation licenses. CPW will continue to provide the depredation licenses as needed.

Over the past ten years, the combined hunting-season success rates have averaged approximately forty-five percent. However, harvest success rates are skewed between the archery, muzzleloader, and rifle seasons. The average archery success since 2013 is around twenty-eight percent. Comparatively, the second and third rifle seasons have averaged roughly fifty-six to fifty-eight percent, and the fourth rifle season's success has averaged about eighty-four percent over the past ten years. Since 2013, the muzzleloader season's success has fallen between the rifle and archery seasons, averaging almost forty-one percent.

## Management Concerns

Significant factors that may limit the D-26 population are the quantity and quality of winter range habitat. The winter range continues to diminish slowly, with increased development on private land and competition with domestic livestock. Similarly, summer recreational activities continue to expand throughout the DAU. The various anthropogenic impacts may affect distribution, reproduction, and fawning efforts restricting population growth. Deer numbers decreased beginning in the mid-1990s. The cause of the decline is unknown, but CPW attributed the cause to one or more of the following: 1) interspecific competition with an increasing elk herd for limited resources, 2) habitat succession limiting the amount of quality habitat and forage available, 3) record droughts from 1999 through 2004. Nonetheless, this population rose during the early 2000s and mid-2010s and is currently relatively stable.

Mule deer are not a significant problem on agricultural land in the DAU, and depredation concerns are minimal. CPW continues to provide game damage and dispersal licenses to private landowners to address issues. Localized problems may result from restricted mule deer distribution during the winter months. Private landowners who experience mule deer depredation issues can access various management tools CPW offers.

## Management Alternatives

In 2019, CPW considered three alternatives for the post-hunt population size and post-hunt sex ratio objectives in Data Analysis Unit D-26:

**Table D26-1.** Proposed population objective ranges for the 2024 D-26 HMP.

Post-hunt Population Objective Alternatives:	
3,500 to 4,500	(1) Approximately 10% decrease in objectives
4,500 to 5,500	(2) Approximately 10% increase in objectives
5,500 to 6,500	(3) Approximately 20% increase in objectives - APPROVED

**Table D26-2.** Proposed buck ratio objective ranges for the 2024 D-26 HMP.

Post-hunt Buck Ratio Objective Alternatives:	
21 to 24 Bucks per 100 does	(1) Status Quo
24 to 26 Bucks per 100 does	(2) Increase buck ratio objective by approximately 3 bucks per 100 does
26 to 29 Bucks per 100 does	(3) Increase buck ratio objective by approximately 5 bucks per 100 does - APPROVED

## Public Involvement

In the summer of 2018, CPW held a local public meeting in Saguache, CO. Local constituents representing different community stakeholder groups attended the meeting. The overall view from the attendees was that they were somewhat pleased with deer management in the DAU. At the time, the deer population estimate was above the objective range, and most participants supported keeping it at its current level, which entailed managing towards a 20% increased deer population objective. CPW also provided a draft document online to the public for 30 days, and the agency sent the draft to the BLM, local county commissioners, the local Habitat Partnership Program (HPP) committee, and the U.S. Forest Service for commentary and feedback. The draft allowed all constituents to participate in the public process, including non-consumptive recreationists, hunters, landowners, local stores, or business owners. CPW has re-

examined and considered biological herd capabilities and social-political tolerance for this updated HMP. CPW will provide a draft of this HMP online for 30 days for public comment but proposes no changes to the objectives.

### **Preferred Management Objectives:**

#### *Post-hunt Population*

The preferred management objective for D-26 is a post-hunt **population of 5,500 to 6,500 mule deer**, aiming to maintain management and sustain the herd at its current estimated population level, allowing for a slight increase. This objective range provides the best balance for managing the deer herd, hunting recreational opportunities, minimizing agricultural conflicts, and maintaining acceptable habitat carrying capacity.

#### *Post-hunt Sex Ratio*

The preferred post-hunt sex ratio objective range for the D-26 mule deer herd is increasing the objective to **26-29 bucks per 100 does**. The range supports most stakeholder desires, preferring a slightly higher sex ratio objective in the DAU. A higher objective would reduce the need for additional harvest from what CPW has observed. However, the higher sex ratios could potentially increase CWD risk. Nonetheless, the preferred range allows for the best balance between satisfactory hunting experiences and the desired hunting opportunities.

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

*Post-hunt Population* - CPW will continue collecting annual inventory data and managing to the preferred mule deer population objectives. The population should persist as long as fawn recruitment remains strong without public land doe hunting licenses. Tools to control private land depredation issues will remain in place. CPW will consider doe harvest opportunities once the population estimate reaches the upper region of the preferred objective range or a significant deterioration in habitat conditions occurs.

*Post-hunt Sex Ratio* - CPW will maintain current buck-hunting opportunities until the observed sex ratio falls comfortably within the preferred objective range. After that, CPW will monitor the herd to balance buck-hunting opportunities and the mature buck level relevant to the objective range. Expected harvest from the buck licenses should sustain an acceptable adult buck population and stakeholder satisfaction. The preferred objective would reduce the risk of CWD from the sex ratio levels CPW has observed in recent years.

### **CPW Commission Approved Objectives:**

*Post-hunt Population: Pending*

*Post-hunt buck ratio: Pending*