Game Damage Prevention Report to the Colorado General Assembly per C.R.S 33-3-111

By statute (33-3-111), the Division of Wildlife (DOW) is required to report annually to the Senate Agriculture and Natural Resources Committee and the House of Representatives Agriculture, Livestock, and Natural Resources Committee on game damage and game damage prevention issues. Such report to include:

THE HERD MANAGEMENT OBJECTIVES SET BY THE DIVISION AND WHETHER THOSE OBJECTIVES ARE BEING MET. IN PROVIDING THIS INFORMATION, THE DIVISION SHALL SUPPLY THE ACTUAL NUMBER OF HERD ANIMALS BY GAME UNIT.

IF ANY OF THE HERD MANAGEMENT OBJECTIVES OF THE DIVISION ARE NOT BEING MET, THE DIVISION SHALL SET FORTH IN DETAIL ITS PLANS, STRATEGIES, AND EFFORTS THAT IT IS USING OR INTENDS TO USE IN ORDER TO ACHIEVE COMPLIANCE WITH THE OBJECTIVES.

THE NUMBER OF REQUESTS FOR GAME DAMAGE PREVENTION MATERIALS, THE TIMELINESS OF THE DIVISION IN RESPONDING TO SUCH REQUESTS, THE QUANTITY AND TYPES OF TEMPORARY AND PERMANENT MATERIALS ISSUED, THE NUMBER OF REQUESTS FOR MATERIALS DENIED, AND, TO THE EXTENT THAT SUCH INFORMATION IS AVAILABLE, THE ADEQUACY OF MATERIALS IN PREVENTING GAME DAMAGE;

THE NUMBER OF PERMITS TO TAKE WILDLIFE REQUESTED PURSUANT TO SECTION 33-3-106, THE NUMBER OF PERMITS ISSUED, THE AMOUNT OF WILDLIFE KILLED UNDER SUCH PERMITS, THE NUMBER OF PERMITS DENIED, AND THE REASONS FOR DENIAL;

THE NUMBER OF CLAIMS FOR DAMAGES SUBMITTED UNDER THIS SECTION, HOW MANY OF THOSE CLAIMS WERE SETTLED AND THE MONETARY AMOUNTS OF THE SETTLEMENTS, THE NUMBER OF CLAIMS PENDING AT THE TIME OF THE REPORT, THE NUMBER OF CLAIMS DENIED, AND THE REASONS FOR DENIAL;

ANY OTHER COSTS INCURRED BY THE DIVISION IN ADMINISTERING THIS ARTICLE.

STATUS OF BIG GAME POPULATIONS IN COLORADO

Colorado Division of Wildlife

BACKGROUND

5-Year Season Structure

The Colorado Wildlife Commission (CWC) and the Colorado Division of Wildlife (DOW) completed an 18-month-long public process to establish the big game season structure for 2010-2014. A major consideration in this process was the efficacy of the 5-year season structure to achieve big game population objectives through harvest management. The CWC adopted the new 5-year season structure in September 2009 with little opposition.

Population Estimation Timeline

Population estimates for deer, elk, and pronghorn are made in March after post-hunt aerial surveys and harvest surveys have been completed. Because of the statutory requirement to provide population estimates in January, population estimates from the previous year must be used.

DAU Plans and Objectives

Big game populations in Colorado are managed on the basis of Data Analysis Units (DAUs) that represent the annual ranges of relatively discrete subpopulations. DAUs are divided into Game Management Units (GMU) to better manage harvest and hunter numbers within each DAU.

DAU plans establish objectives for post-hunt population size and sex ratio, and are locally developed with public input. Draft plans are presented to the Wildlife Commission, with opportunities for public comment, revised if necessary, and then typically approved by the Commission the following month. License quotas approved by the Commission each year are used to move DAU populations toward objectives using hunter harvest. In recent years, DAU population objectives have been expressed as a range of values to provide greater management flexibility and more realistically reflect confidence in the estimates. Target population objectives are used to indicate the desired population within the objective range for a given year.

Approximately 80 percent of the 130 elk, deer, and pronghorn DAUs have approved DAU plans. DAUs that do not have approved DAU plans use provisional objectives established internally. Many of the DAUs with provisional objectives have relatively small numbers of animals and/or few conflicts making other DAU plans and updates a higher priority. The DOW is continually working on completing new plans and updating existing plans.

Hunters and Harvest

Elk hunters and elk harvest peaked in 2004 and have since steadily declined (Figs. 1 and 2). This decline has been the result of fewer over-the-counter (OTC) rifle hunters and fewer limited cow licenses. Declining interest in elk hunting has caused fewer hunters to purchase OTC licenses and fewer cow licenses have been offered because more DAUs such as E-2 (Bear's Ears) and E-6 (White River) are at or approaching objectives. It is anticipated that the number of elk hunters and elk harvest will continue to decline slowly the next few years as a result of an aging hunter population, low hunter recruitment, economic conditions and reduced elk populations. Adding additional licenses in DAUs that are over objective would likely do little to reverse this trend. DOW is attempting to increase hunter recruitment and retention through marketing, increasing education efforts, improving customer service and other strategies to offset this trend.

Deer hunters and deer harvest peaked in 1990. Since then, hunter numbers and harvest declined steadily until deer licenses became totally limited in 1999. The Wildlife Commission limited deer license availability significantly in response to hunter concerns about the size and quality (number of mature bucks) of deer populations. Since 1999, deer harvest and deer hunters have increased slightly but are still well below levels in the late 1980s and early 1990s. Doe licenses have become increasingly difficult to sell because limited buck licenses are readily available in many DAUs, even though license numbers have been greatly reduced. Deer harvest declined in 2008 partly because of mortality that occurred on the west slope during the 2007-2008 winter.

Pronghorn hunters and harvest approached record numbers in 2008 and set a new record in 2009. Because pronghorn licenses are relatively few in number compared to elk and deer licenses, demand is still fairly high.

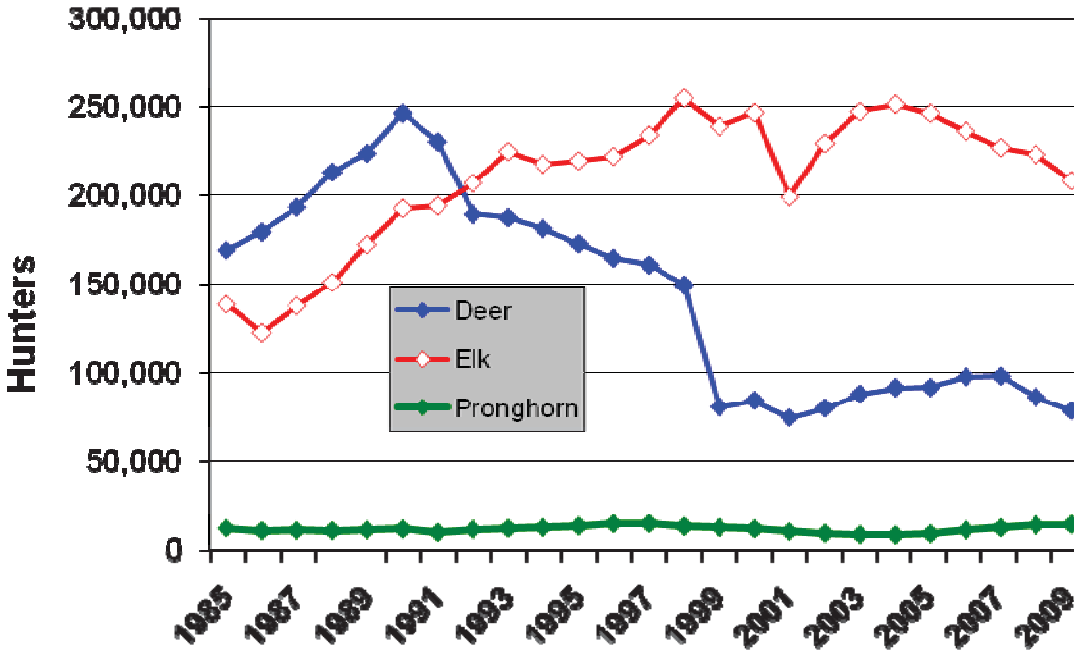


Figure 1. Number of deer, elk, and pronghorn hunters from 1985 to 2009.

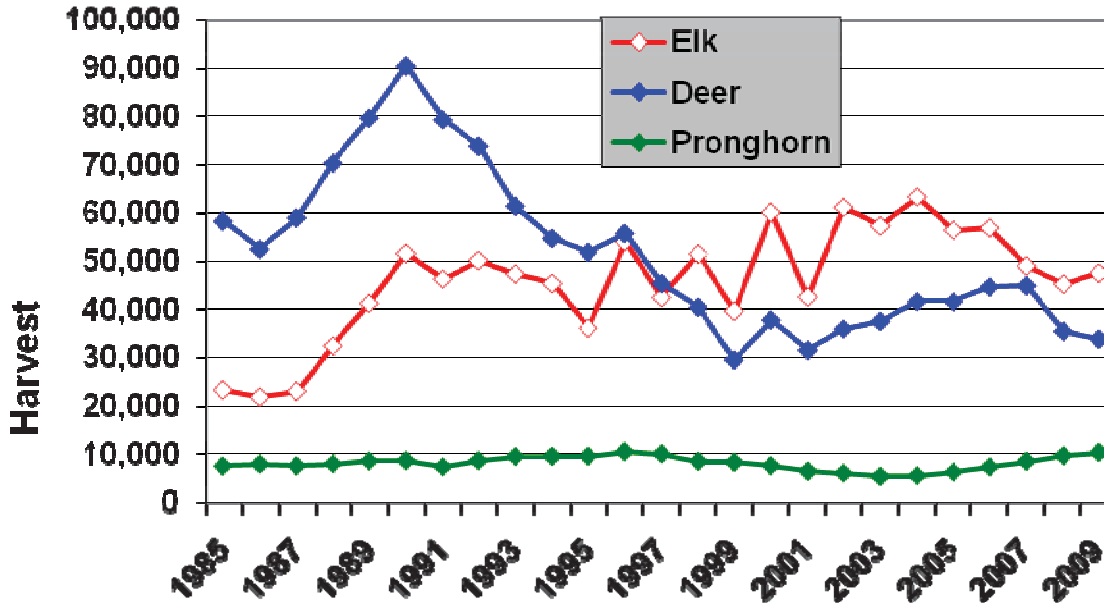


Figure 2. Deer, elk, and pronghorn harvest from 1985 to 2009

2009 Big Game Population Estimates in Relation to DAU Objectives

Statewide, estimated 2009 post-hunt elk populations were at 118 percent of the total DAU objectives, deer were at 81 percent, and pronghorn were at 118 percent (Tables 1-3).

ELK DAUS OVER OBJECTIVE

Twenty-three out of 46 elk DAUs (50 percent) exceeded their population objective by more than 10 percent in 2009 (Table 1). In several DAUs, such as E-2 (Bear's Ears), E-9 (St. Vrain), and E-25(Lake Fork), the DOW has effectively reduced elk populations to objective in recent years. Several other DAUs are steadily moving towards objective and are expected to be at or very close to objective by 2012.

Based on modeled population estimates, statewide elk numbers were reduced by approximately 35,000 between 2004 and 2009 (Figure 3). As populations are reduced to objective, license revenue drops because the numbers of cow licenses are reduced while complaints about a lack of elk usually increase.

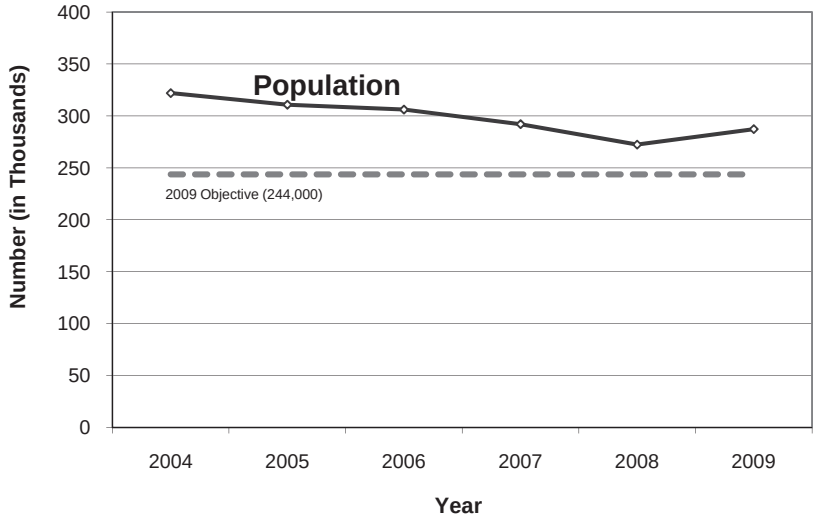


Figure 3. Estimated statewide post-hunt elk population versus total DAU population objectives from 2004 to 2009. Estimates based on 2009 models.

Approximately 12 elk DAUs, representing about 30 percent of the statewide elk population, are considered problematic for achieving population objectives. In these DAUs it is not possible to reduce elk numbers simply by increasing the number of licenses available due to access limitations and license demand that directly relate to hunter success rates. There is usually a saturation point for limited licenses above which demand drops off sharply and licenses go unsold. In 2009, approximately 11 percent of the 222,200 limited elk licenses available statewide did not sell. Because the majority of rifle bull licenses and archery either-sex licenses are sold OTC, limited license saturation primarily relates to antlerless rifle licenses.

Examples: E-3(North Park), E-10(Yellow Creek), E-11(Sand Dunes), E-33(Trinchera), E-41(Sapinero)

Effects of Access on Elk Harvest

Private Land

Lack of private-land access is the primary factor preventing elk populations from being reduced to objective in many DAUs. Achieving elk population objectives in DAUs with large amounts of private land can be difficult. Harvest in these units is largely determined by the extent landowners will provide access to hunters. Some landowners provide little if any public hunting access whereas others only allow access to bull elk hunters for a substantial fee. Cow elk hunters are seldom willing to pay the same access fees as bull elk hunters so cow harvest on private land can be disproportionately low. Hunting pressure on public land is often much greater than on private land, which can quickly push elk to private land where harvest is greatly reduced. Elk can also occur in more developed areas such as residential subdivisions where hunting can be controversial or prohibited.

Examples: E-33(Trinchera), E-51(Castle Rock)

Even in DAUs with a majority of public land, a high percentage of elk can avoid hunting pressure by congregating on private properties. In some cases, it only takes a few key landowners who restrict hunting to substantially reduce harvest. Elk movement from public to private land is hastened by a high degree of motorized vehicle access on public land.

Examples: E-54(Chacuaco), E-55(Northern San Luis Valley floor)

In some DAUs, the majority of elk winter on public land. Although late seasons can be effective in these DAUs, holding late-season hunts is sometimes resisted because they can force large numbers of elk onto adjacent private land where they are more likely to cause damage.

Examples: E-20(Uncompahgre), E-55(Northern San Luis Valley floor)

Government Refuges

Large refuge areas where hunting is prohibited exist in some DAUs. These areas include National Parks and Monuments, military installations, county parks and open space. Elk quickly learn where hunting is allowed and where it is not. In some cases such as E-9, deep snow can force elk out of refuge areas where they can be hunted. In such cases, seasons can be structured to take full advantage of such movements when they occur. In other cases, such as E-11, the refuge area is in winter range and elk can stay protected. The DOW works with federal and local governments to try and coordinate harvest efforts as much as possible, but the state has no authority to require hunting in these areas.

Examples: E-11(Sand Dunes), E-52 (Coal Creek/Fruitland)

Public Land Access

Even on public land, access can be an issue in some DAUs. Cow harvest can be low in DAUs with large federal wilderness areas or rough, roadless terrain where cow hunters are less likely to go into remote areas where the elk are. In some DAUs, snow will force elk to move into more accessible areas and harvest objectives can be achieved during late seasons. However, in other DAUs elk make the transition from remote wilderness to private land very quickly, making harvest problematic during regular and late seasons.

Examples: E-35(Cimarron), E-54(Chacuaco)

Interstate Movements

Elk in DAUs near state borders frequently cross into Wyoming, Utah and New Mexico, making management of these units uniquely challenging. Coordination with adjacent states and understanding movement patterns are necessary for effective management.

Examples: E-3(North Park), E-34(Upper Rio Grande)

Population Estimates & Objectives

DOW has put tremendous emphasis over the years on improving our inventory and modeling efforts for big game populations. Trials of different sampling methodologies are underway to improve the efficiency and precision of our elk inventory. These efforts will improve our elk population estimation in the future. The big game population models used by the DOW continue to evolve as better information and methods become available. The net effect of improved modeling during the last five years has been an increase in elk population estimates. As a result, some DAUs that were considered to be near objective are now well above objective. The DAU planning process will be used to better align existing objectives with the newer population estimates.

Strategies to Reduce Elk Populations to Objective

The CDOW will employ a variety of current strategies and will continue to evaluate potential new strategies to reduce elk populations to objective. Strategies to reduce elk populations to objective can be grouped into six categories.

1. Liberal regulations that apply to all or most elk units in the state
   - *Over- the- counter (OTC) archery either-sex licenses.*
   - *List B (which can be purchased in addition to a primary, list A license) archery cow licenses in DAUs that have List B rifle cow licenses.*
   - *OTC rifle bull licenses during 2nd and 3rd seasons.*
   - *Youth hunters with unfilled cow or either-sex licenses can hunt cows during any late elk season.*
   - *Cow licenses for nonresidents are discounted relative to bull license fees.*
   - *Multiple seasons.* Holding four rifle seasons with breaks in between allows time for elk to redistribute during the break periods. Each season brings in a new wave

of hunters and success rates are consistently highest at the beginning of each season.

2. Regulations commonly used to increase antlerless elk harvest.
   - *Increased rifle cow licenses during the regular seasons.* The most straightforward way to increase cow harvest is to increase the number of cow licenses during the regular seasons. Although this approach can be very effective in some DAUs, it can have little benefit or prove detrimental to harvest in others, particularly when access is the primary issue limiting harvest. Offering too many licenses can result in unsold licenses, hunter crowding, reduced success rates and dissatisfied.
   - *Change limited bull licenses to either-sex licenses.* Replacing limited bull licenses with either-sex licenses has proven to be an effective way to increase cow harvest in some DAUs.
   - *List B or List C regular and private land only (PLO) cow licenses.* A hunter can purchase a List B license in addition to a List A license (e.g., most bull and either-sex licenses are List A licenses) or another List B license. Hunters can purchase any number of List C licenses. In 2009, all cow licenses in 92 game management units were List B. These units correspond with most of the DAUs that are over objective. All PLO cow licenses statewide are List B or List C.
   - *Extended PLO cow seasons.* Keeping pressure on elk on private land even when regular hunting seasons are closed can be an effective way to keep more elk on public land and increase harvest. Extended PLO seasons can run from August 15th until the end of February and do not need to conform to regular season dates. Hunting is generally not allowed outside of this period because of concerns about late gestation and dependent young.
   - *Late cow elk seasons.* Late cow seasons that occur between the end of the 4th regular rifle season and the end of February can be very useful for achieving harvest objectives in many DAUs. Use of non-PLO late seasons must weigh the potential for increased harvest against the potential for pushing more elk to private land. In 2009, late cow seasons were added in Gunnison DAUs E-41 and E-43 to increase cow harvest to achieve population objectives.

3. Regulations used to reduce agricultural damage and conflicts
   - *Damage licenses and distribution hunts for cows.* Damage licenses are widely used to address elk damage issues on specific private properties. Distribution hunts are used to address elk damage on multiple properties and can include public land. Damage licenses can be approved by the local Area Manager.
   - *Kill permits for bulls and cows.* In some cases the DOW has issued kill permits to allow sharpshooters to kill elk outside of seasons and/or after legal hours. Kill permits are used to address special game damage situations where regular hunters would be ineffective.
   - *Summer bull seasons.* This strategy is currently being used in E-55(Northern San Luis Valley floor) to keep pressure on elk using irrigated croplands during the summer.

4. Landowner incentive programs
    - *Ranching for Wildlife (RFW).* The RFW program offers transferable bull licenses to enrolled landowners with large properties (>12,000 acres) in return for allowing some public hunting. Most public licenses are for cow hunting. RFW provides some opportunity for increasing cow harvest on large properties where little opportunity would otherwise exist. Currently, 23 ranches are enrolled in this program.
    - *Non-RFW license incentives.* Pursuant to statute, license incentives to provide public hunting access have also been offered to landowners with smaller properties that do not qualify for RFW (e.g., Wildlife Conservation Landowner Pilot Program- Units 1 and 10). License incentive programs can have potential benefits but do require increased administrative oversight.
    - *Private land hunt coordinators.* In some cases, the DOW via the Habitat Partnership Program (HPP) has provided hunt coordinators to schedule hunts and accompany hunters on private property. Hunt coordinators help minimize landowner-hunter interaction and provide increased assurance that rules specified by landowners are obeyed. Although this program can be expensive, it can be useful in certain situations.

5. Regulations occasionally used.
    - *Limited archery hunting.* Studies with radio-collared elk in some DAUs have shown substantial movements of elk from public to private land during the early archery and muzzleloader seasons. OTC archery either-sex licenses are available in most DAUs, and OTC List B archery cow license are available in some DAUs, but archery harvest usually makes up only a small portion of the overall cow harvest. Rifle hunters are much more efficient at harvesting cows than archery hunters. Whereas the number of rifle elk hunters has steadily declined over the last five years, the number of archery elk hunters has steadily increased. Limiting archery hunting pressure can potentially result in more elk being available to rifle hunters on public land and thereby increase cow harvest. However, limited archery hunting is strongly opposed by many archery hunters and may not be necessary in many DAUs.
      Gunnison archery licenses were limited in 2010 (DAUs E-41 and E-43) in an attempt to keep elk on public to achieve population objectives.
    - *Open state wildlife areas (SWA) to late-season hunting.* Some SWA are closed to late-season hunting to help keep elk off of private land. Allowing hunting on these SWA can increase harvest, but it can also push elk to private land where they are more likely to cause damage. The efficacy of opening SWA to late-season hunting often depends on sufficient hunting pressure on surrounding private lands.
    - *OTC rifle cow licenses*. OTC rifle cow licenses have been issued in some DAUs in the past. In many DAUs that are over objective, leftover cow licenses are often easy to obtain, making OTC licenses of little value for increasing harvest.
    - *Totally limited elk licenses.* Proponents of totally limited elk licenses often claim that harvest can be increased by making all elk licenses limited and reducing the number of hunters. The DOW has found little evidence to support this claim.

Most of the limited elk DAUs on the West Slope are over population objective. Although, most limited elk DAUs on the east slope are at or close to objective, these DAUs have relatively small numbers of elk and do not have a history of exceeding objectives. Recent attempts to create more totally limited elk units have been met with considerable and often times overwhelming opposition.

6. Potential new strategies and popular suggestions

Several ideas for reducing elk numbers are listed below. Some of these options have received consideration by the Colorado Wildlife Commission and the DOW in the past but were not implemented for a variety of reasons. Most of the options would be strongly opposed by some segments of the public, even though they might be effective at reducing elk numbers. Some options are presented only because they are often suggested by the public, not because the DOW considers them to be feasible.

- *Big game walk-in access.* This option would provide big game hunting access to private land similar to the highly successful small game walk-in access program (i.e., landowners are paid a per-acre fee by the DOW to allow public hunters on their property). The DOW has looked into this option but did not consider it tenable because of the large amount of money landowners with elk can charge for bull hunting and the fact that elk will likely quickly shift to properties not in the program. A possible alternative to this program could be to provide walk-in access during late seasons when only antlerless hunting is allowed. The Division does lease over 500,000 acres from the State Land Board for public hunting.
- *Earn-a-bull program.* Some mid-western and eastern states with overpopulations of white-tailed deer have used earn-a-buck programs to increase harvest of does. Because the demand for doe licenses is often much lower than the demand for buck licenses, earn-a-buck programs require a hunter to first shoot a doe and have it checked before the hunter can get a buck license. Resident elk hunters would likely object to such a program in Colorado, nonresident participation would likely decline sharply and considerable logistical demands for mandatory checks and law enforcement would be placed on the DOW. It is doubtful that this option would increase harvest much in some of the more problematic DAUs such as E-11(Sand Dunes) and E-33(Trinchera).
- *Cow points.* This option would give hunters a preference point for purchasing a cow license in a DAU that is over population objective. The CDOW and the Wildlife Commission has considered this option in the past but rejected it because of the high degree of preference point inflation that is already occurring and because it does little to address the issue of private land access.
- *Continued hunting opportunities.* Hunters often want to know why they can't continue hunting on an unfilled license during subsequent seasons if a DAU is over objective. This concept received considerable discussion during the 5-year season structure review. The primary drawback of this type of approach is that it is basically similar to having one long season and there would be little incentive for hunters to get licenses for later seasons if hunters from earlier seasons can continue hunting. Colorado went to multiple seasons for deer and elk over 30 years ago because of increasing complaints about hunter crowding. As a result of

multiple seasons, hunter satisfaction and success rates increased, while accidents decreased. Continued hunting opportunities would have the most potential application for PLO licenses where hunter crowding isn't usually an issue. However, in most units that are over objective, extended PLO licenses are already available which often provide even greater opportunity because hunting is allowed outside of regular seasons as well as across regular seasons.

- *Multiple hunting opportunities.* Along with continued hunting opportunities, hunters often question why there is a limit on cow licenses when a DAU is over objective. Given that many limited elk license go unsold and there is ample opportunity to purchase List B and List C licenses in most DAUs that are over objective, the value of expanding multiple hunting opportunities to increase harvest is questionable.
- *Cow-only regular seasons.* Making some regular rifle seasons cow-only in DAUs that are over objective would take bull hunting out of the access equation and give landowners more incentive to get to objective by providing access to cow hunters. This option would be extremely unpopular with landowners and hunters. Cow-only late seasons have been added in many areas over objective and proven successful in increasing cow harvest and reducing populations.
- *Early rifle cow seasons.* In DAUs where elk make early movements to private land, early rifle cow seasons could potentially increase harvest. Early rifle seasons would be opposed by many archers and muzzleloader hunters.
- *Culling.* Culling involves using agency personnel or contractors to shoot elk to reduce the population. Culling is occasionally used by the National Park Service to reduce elk numbers because sport harvest is prohibited in most national parks and monuments. The DOW has in the past culled elk to address concerns related to chronic wasting disease. Culling is seldom acceptable to the public unless there is a clear need and there is no other option. The need is usually either that habitat degradation due to overpopulation is obvious (such as the recent culling operation in Rocky Mountain National Park) or reducing animal numbers could alleviate a major threat to animal or human welfare. Culling hundreds of elk to get a DAU down to objective would be strongly opposed by the public and is not considered acceptable by the DOW.
- *Translocation.* Capturing and moving elk from high-density units to low-density units or out-of-state is commonly suggested by the public. On a DAU scale, translocation would be cost-prohibitive and would be a short-term solution at best. Furthermore, by Commission policy the DOW cannot move elk from CWD-positive units to areas where the disease has not been found. Most of the northern part of the state is positive for CWD, whereas CWD has not been found in most of southern Colorado. There is little if any demand for elk from other states.

ELK DAUS BELOW OBJECTIVE

Only two elk DAUs, E-9(St. Vrain) and E-46(Cedarwood), were more than 10 percent below objective in 2009 (Table 1).

Strategies to Increase Elk Populations to Objective

- *Decrease limited license numbers.*

DEER DAUS OVER OBJECTIVE

Six out of 55 deer DAUs (11 percent) exceeded their population objective by more than 10 percent in 2009 (Table 2). Five of the six DAUs were plains units in eastern Colorado that consist almost entirely of private land. Another DAU over objective is near Boulder, where developed areas and large amounts of open space closed to hunting make harvest management problematic.

Strategies to Reduce Deer Populations to Objective

- *Increased PLO and regular doe licenses during regular seasons.*
- *White-tailed deer only doe licenses.*
- *PLO season-choice doe licenses.*
- *Late doe seasons.*
- *Big Game Access Pilot Program.* This program offers deer and pronghorn hunting on enrolled private properties in southeast Colorado similar to the Small Game Walk-In Access Program.

DEER DAUS BELOW OBJECTIVE

Twenty-six out of 55 deer DAUs (47 percent) were more than 10 percent below their population objective in 2009 (Table 2). Although a few DAUs have increased to objective in recent years and some other DAUs are steadily moving toward objective, the majority of the deer DAUs below objective are static at best (Figure 4).

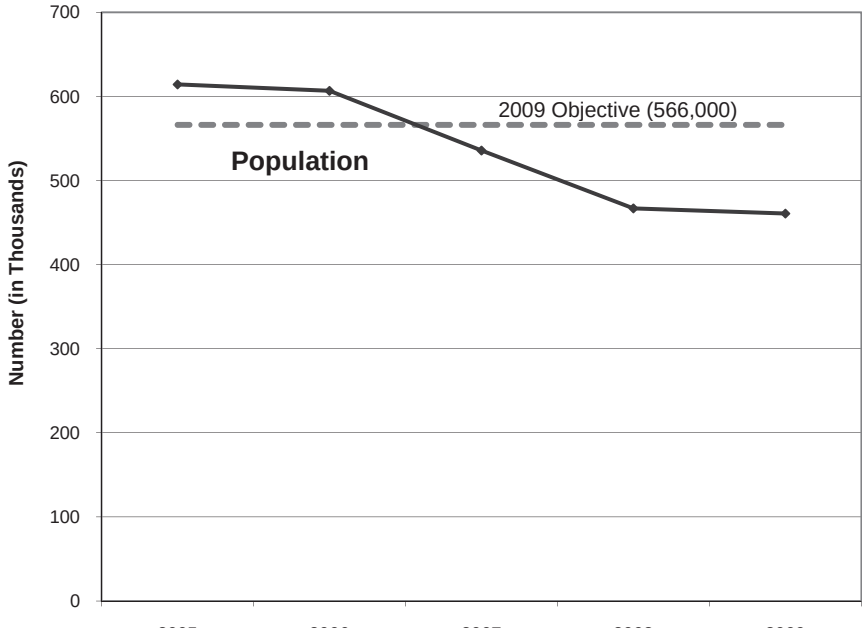


Figure 4. Estimated, statewide post-hunt deer population versus total DAU population objectives from 2005 to 2009.

Population Estimates & Objectives

Declines in population estimates in many deer DAUs are related to modeling changes that were made in 2007. The net effect of the modeling changes has been a decrease in deer population estimates. As a result, some DAUs that were considered to be near objective are now well below objective, even though the actual number of deer may not have changed. In these cases, changes in the DAU objectives should be considered because current objectives established based on prior deer population estimates are considered to be unrealistic.

Another reason for some of the low deer numbers was the winter of 2007-2008. High deer mortality occurred in parts of west slope during this winter and some DAUs have not fully recovered. In particular, the DAUs in the Gunnison basin (D-21, D-22, D-25), upper Colorado River basin (D-8, D-9, D-14, D-43), and White River (D-7) were significantly impacted.

Strategies to Increase Deer Populations to Objective

- *Reduce or eliminate regular doe licenses.*
- *Reduce PLO doe licenses to the extent practicable to still address game damage concerns.*
- *Habitat improvement projects.*
- *Reduce elk numbers to objective.*

STRATEGIES TO REDUCE URBAN DEER CONFLICTS

Year-round, non-migratory deer densities have increased in many communities. This is often independent of the population trend for the DAU. For 2011, DOW is attempting to minimize urban deer conflicts with early seasons that are set prior to the arrival of migratory deer. The first of such seasons will start in 2011 around the communities of Craig and Buena Vista.

PRONGHORN DAUS OVER OBJECTIVE

Thirteen out of 29 pronghorn DAUs (45 percent) exceeded their population objective by more than 10 percent in 2009 (Table 3).

Effects of Access on Harvest

Most pronghorn in Colorado occur on private land. Although harvest is often dependent on landowners providing hunting access, this usually has not been a major issue in most DAUs. Some landowners have requested relatively short pronghorn seasons, particularly late seasons, to minimize the amount of time hunters are on or requesting permission to hunt on their property. An increasing number of landowners are charging hunters for access to hunt pronghorn. If pronghorn hunting continues to become more of a commercial asset for landowners, similar to deer and elk hunting, it may become increasingly difficult to achieve harvest objectives because buck hunters are willing to pay higher fees than doe hunters.

Population Estimates & Objectives

In 2008, the DOW implemented an improved method for estimating pronghorn numbers. This method, known as distance sampling, provides a sample-based population estimate that can be incorporated into population models. The net effect of this change has been an increase in estimated pronghorn numbers particularly in the southeastern part of the state. As a result of the higher numbers, the DOW undertook measures to aggressively increase pronghorn harvest by issuing more doe licenses, creating late doe seasons and allowing youth hunters with unfilled licenses to continue hunting during late seasons.

Strategies to Reduce Pronghorn Populations to Objective

- *Increased doe licenses during regular seasons.*
- *Youth hunters with unfilled doe or either-sex pronghorn licenses can hunt does during some late pronghorn seasons.*
- *Create late doe seasons. Late doe seasons were added in pronghorn DAUs A-5(Haswell), A-6(Hugo), A-7(Thatcher), and A-8(Yoder) in 2010. For 2011, we are recommending lengthening those seasons and adding a late season in A-12(Cheyenne) and A-18(Two Buttes).*
- *Make pronghorn doe licenses List B so hunters can obtain two.*
- *Separate buck and doe seasons to allow for more doe licenses without impacting hunt quality for buck hunt, this is recommended in DAU A-10(Maybell) for 2011.*
- *Big Game Access Pilot Program.* This program offers deer and pronghorn hunting on enrolled private properties in southeast Colorado similar to the Small Game Walk-In Access Program.
- *Landowner incentive programs.*

PRONGHORN DAUS BELOW OBJECTIVE

Eight out of 29 pronghorn DAUs (28 percent) were more than 10 percent below their population objective in 2009 (Table 3). Four of these DAUs are on the West Slope. A-

23(Gunnison Basin) and A-37(Middle Park) declined below objective because of high mortality during the winter of 2007-2008. A-21(Dinosaur) and A-27(Delta) have small pronghorn populations in marginal habitat that have shown long, steady declines which cannot be reversed by harvest management alone. The provisional population objective for A-11(Sand Wash) is now considered unrealistic as current pronghorn numbers are in line with habitat quality and availability.

Strategies to Increase Pronghorn Populations to Objective

- *Reduce or eliminate regular doe licenses.*
- *Reduce PLO doe licenses to the extent practicable to still address game damage concerns.*
- *Close units to hunting*
- *Translocation.* Capture pronghorn in areas over objective and relocate them in areas such as the Gunnison Basin where populations have been greatly reduced by unusually high winter mortality.

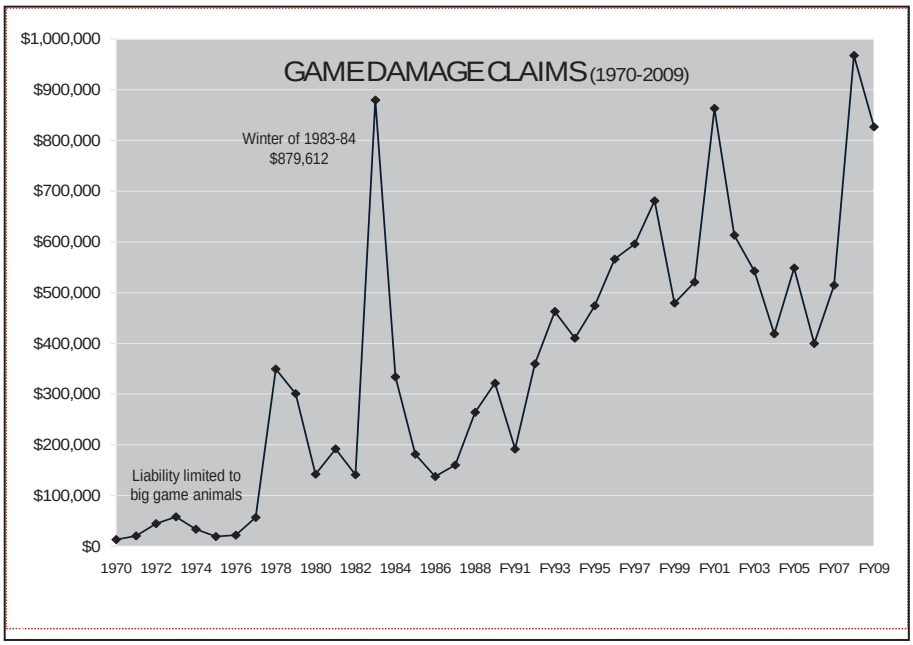
FY 09-10 GAME DAMAGE PROGRAM REPORT
Overview

Game Damage Program: Claims, Prevention, Operating, and Personnel
$1,837,026 in FY 09-10

TOTAL
Big game wildlife and big game hunting are integral to Colorado's economy. The State of Colorado compensates ranchers, farmers and landowners for damage by big game animals. The Game Damage Program is funded by the appropriation of sportsmen's dollars form the Game Cash Fund. Of the 10 states that address this issue, Colorado has the most liberal game damage laws in the nation. Most states have no legal responsibility to compensate for damage by wildlife.

Since the inception of the Game Damage Program in 1931, the original broad legal language has evolved to specify what is covered by game damage laws. Twenty years ago the Program expanded to include damage prevention. The Game Damage Prevention Program has significantly lessened the amount of damage and the amount paid out in game damage claims.

Game Damage Claims
$702,724 in FY09-10
Qualified ranchers, farmers and landowners may file a claim for compensation for their losses from big game animals. The claimants must meet certain legal qualifications. For example: a claimant cannot unreasonably restrict hunting, cannot charge more than $500/person in access fees, and the claimant has a duty to mitigate damage. The regulations describe the legal conditions in detail, and are available from Division offices. Averaged over the past 3 years, the Division has paid out $830,000 on 330 claims yearly. The State is not liable for damage from non-big game wildlife species, such as geese, coyotes, bobcats. The State does reimburse for damages caused by elk, deer, bear, mountain lion, pronghorn, moose, and bighorn sheep. Generally, damages to livestock, commercial orchards, nurseries, growing and harvested crops, forage, fences and apiaries are covered. Livestock losses are capped at $5000/animal. The state is liable for claims to personal property that is used in the production of raw agricultural products which includes apiaries.



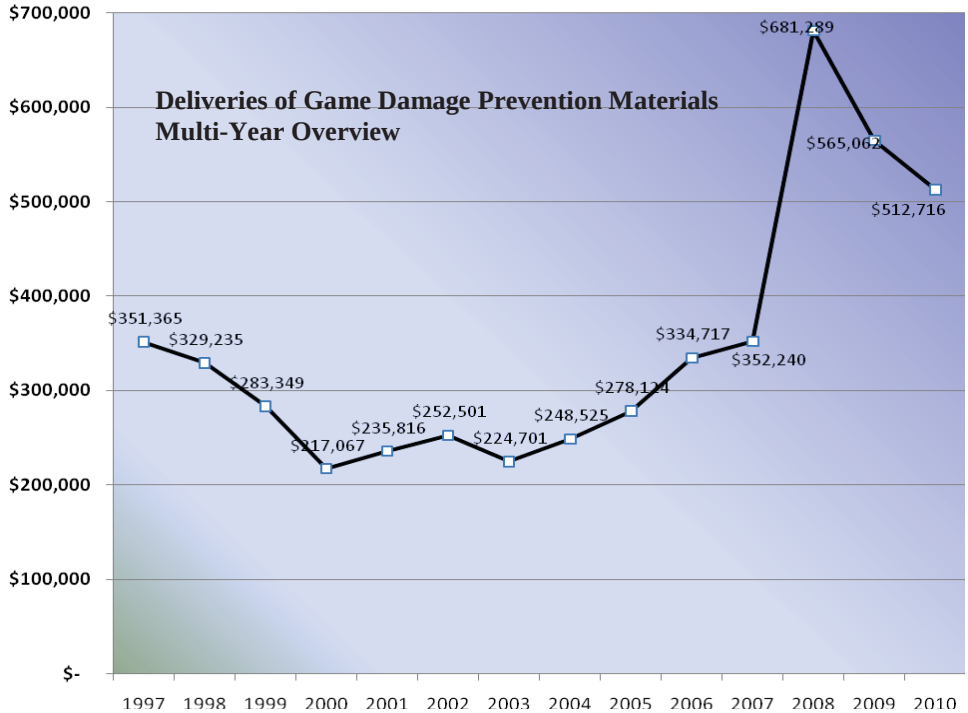
As of 2003, the State is no longer liable for hot tubs, tents, coolers or personal property not used in the production of raw agricultural products.

Filing a claim entails a series of steps and required paperwork and deadlines. It is imperative that the claimant contact DOW immediately upon discovery of damage. Through the process, the claimant is responsible for timely notifications, completion of forms, efforts to mitigate the damage and assisting Division personnel investigating the claim. The claimant must be able to prove that the damage was caused by big game. Some claims will not meet the necessary criteria.

Typically, 3% of claims are denied and most of these were because the claimant could not prove that big game caused the damage. Claims over $20,000 and all denied claims are reviewed by the Wildlife Commission. This provides an opportunity for the claimant to offer additional support for the claim.

Game Damage Prevention Materials
$512,716 in FY09-10

This aspect of the program shares the annual game damage appropriation, approved by the Joint Budget Committee, of from the Game Cash Fund. The annual appropriation is used to purchase bulk fencing materials and pyrotechnics through competitive bidding. The Division anticipates the fencing needs and warehouses fencing materials centrally in Delta CO. The Division distributes materials to qualified landowners for the protection of their crops and livestock. The Division travels an average of 60,000 miles throughout Colorado annually to deliver materials. Extensive fencing of commercial orchards, nurseries and stackyards throughout Colorado has significantly reduced the number of claims filed and hence, the amount of money paid out in game damage claims.



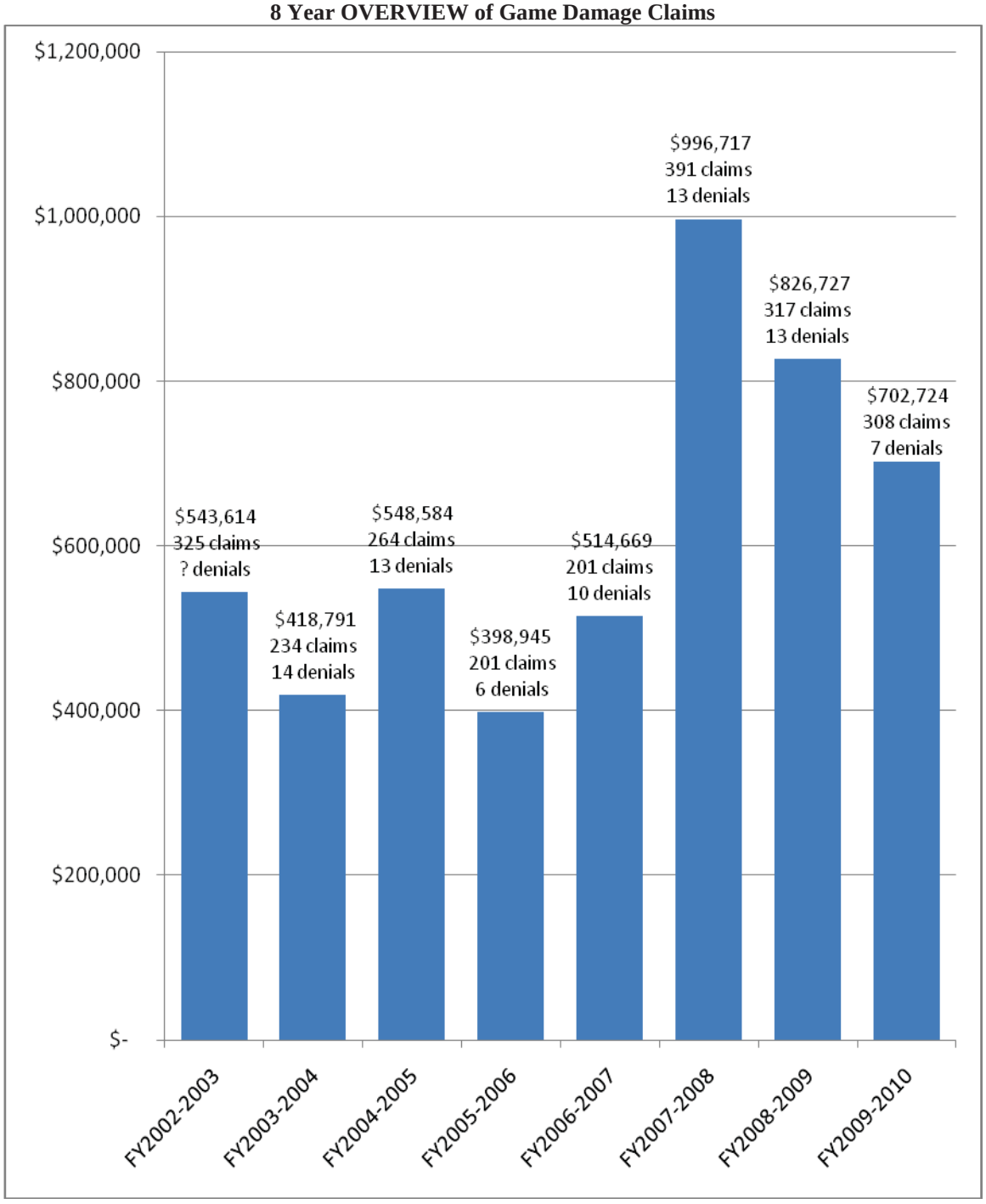
Game Damage Program Operating/Administrative Costs $621,586 in FY09-10

Each area office has associated costs with game damage, usually involved with claim investigations. This is reflected in the proportional amount of time spent in each area for investigations and landowner contacts under Salaries/Benefits. The DOW spent 13,877 hours contacting landowners about game damage, investigating game damage claims, and administering the program. In addition, the DOW contracted with APHIS - Wildlife Services for predator removal related to game damage in the amount of $74,836.

FY 09-10 Game Damage Claims REPORT

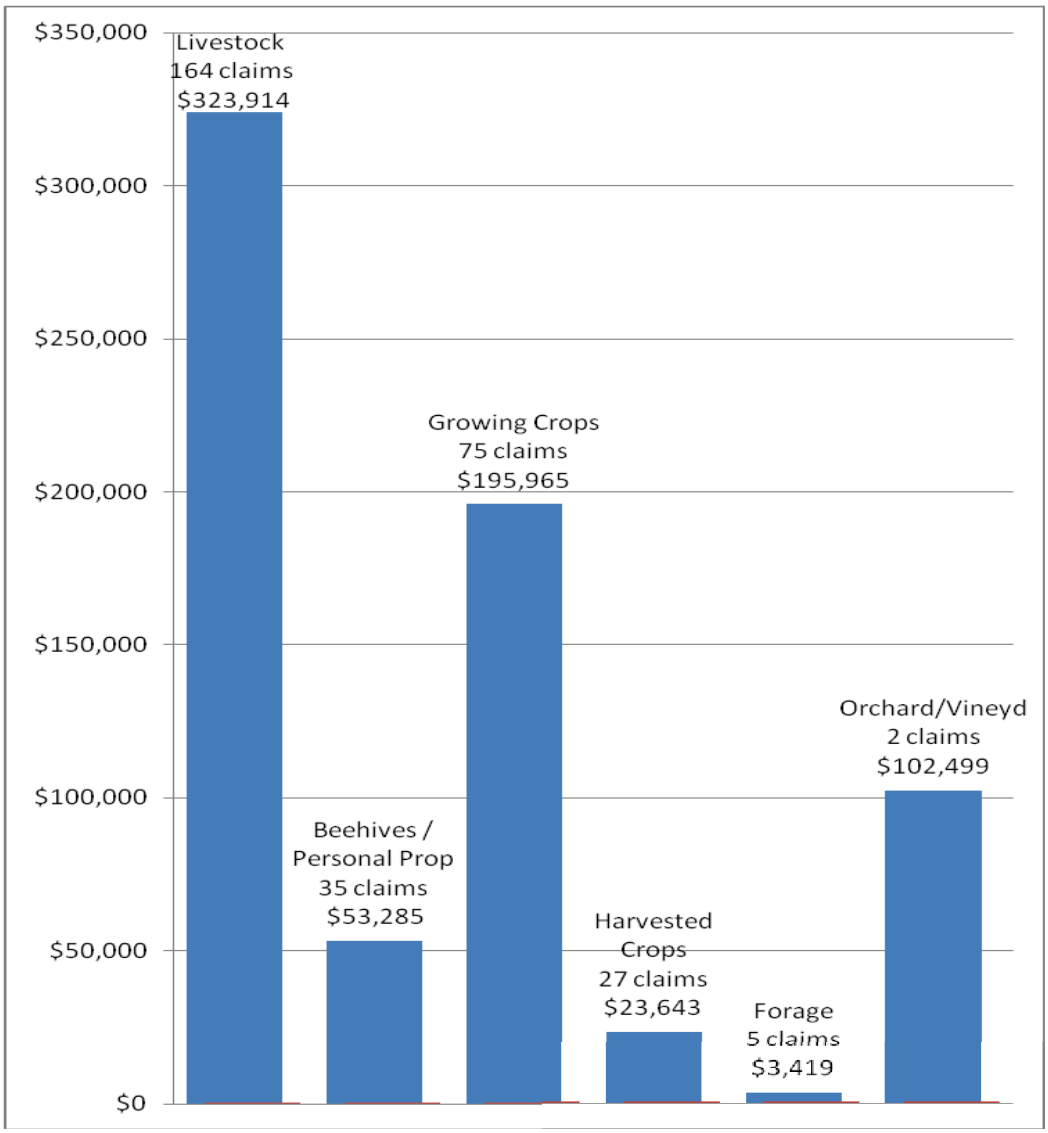
In FY09-10, the Colorado Division of Wildlife paid-out $702,724 to settle 308 claims. 7 claims were denied; 2 claims were partially denied (total dollar value of $22,660).

8 Year OVERVIEW of Game Damage Claims



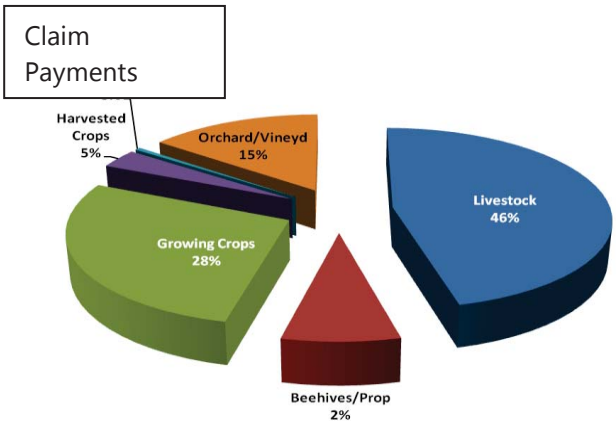
Dollar amounts do not include operating/administrative costs

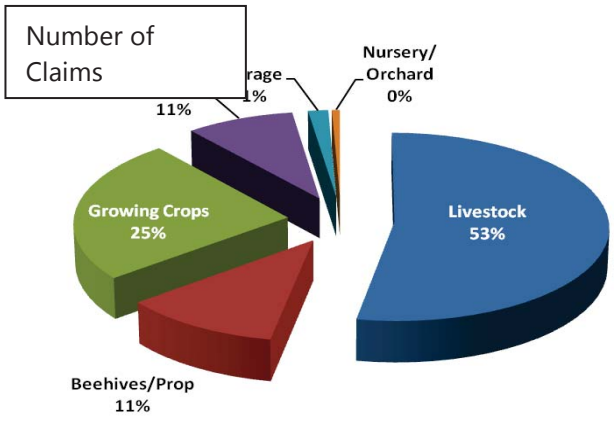
FY 09-10 Game Damage Claims - **Summary by Damage Target**



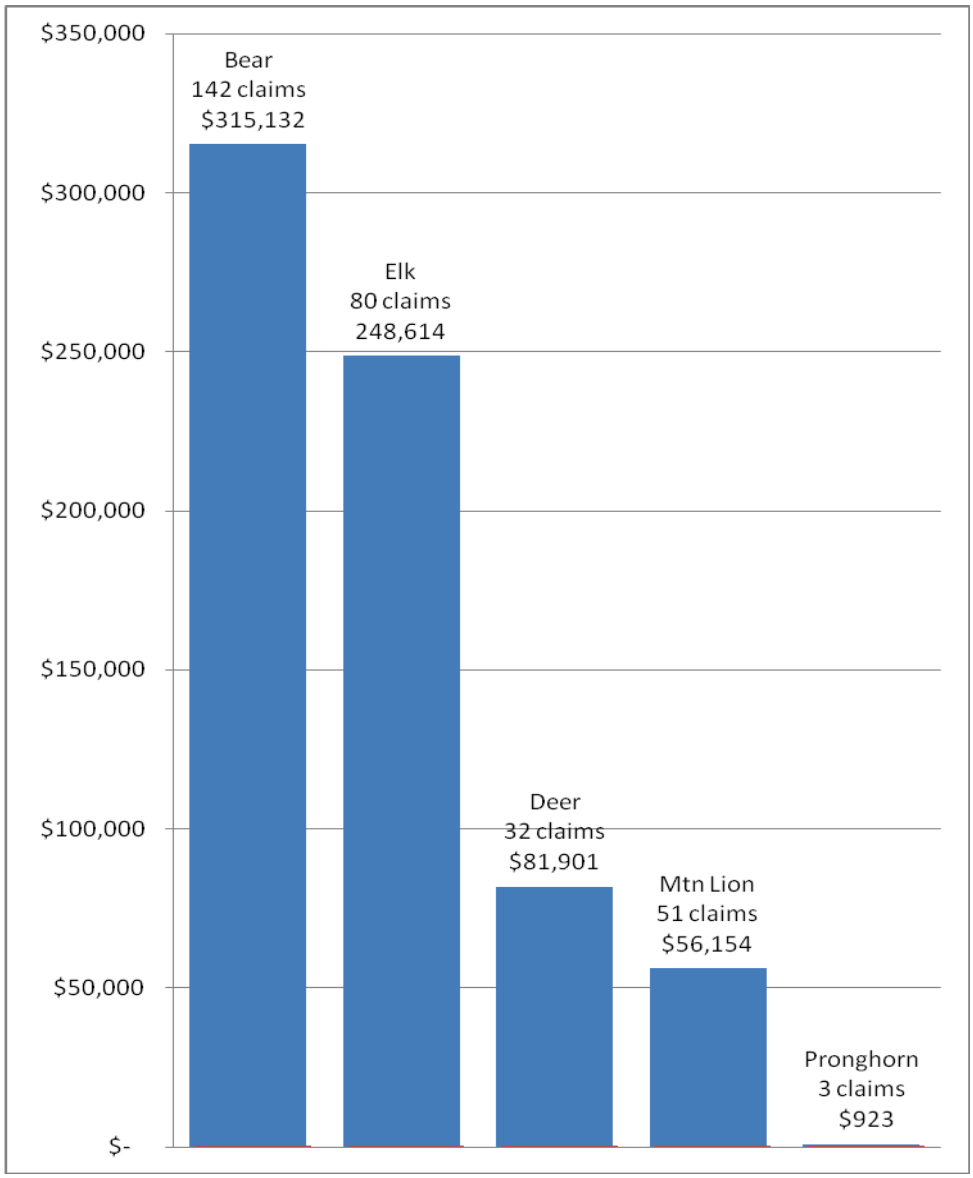
Dollar amounts do not include operating/administrative costs

Same data in pie chart views:



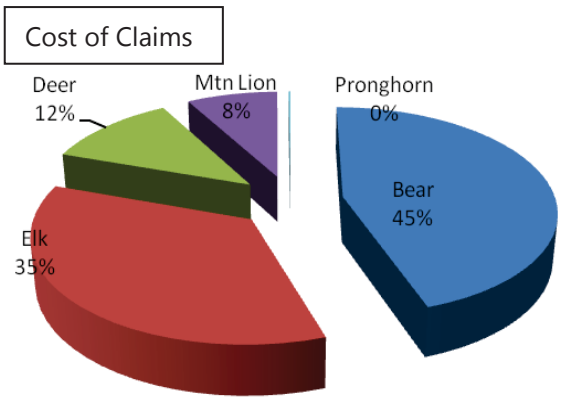


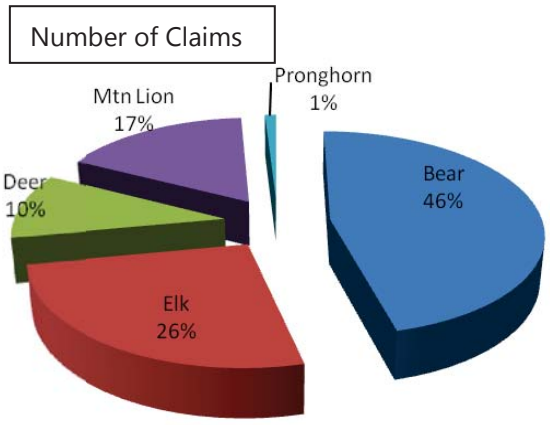
FY 09-10 Game Damage Claims - **Summary by Species**



Dollar amounts do not include operating/administrative costs

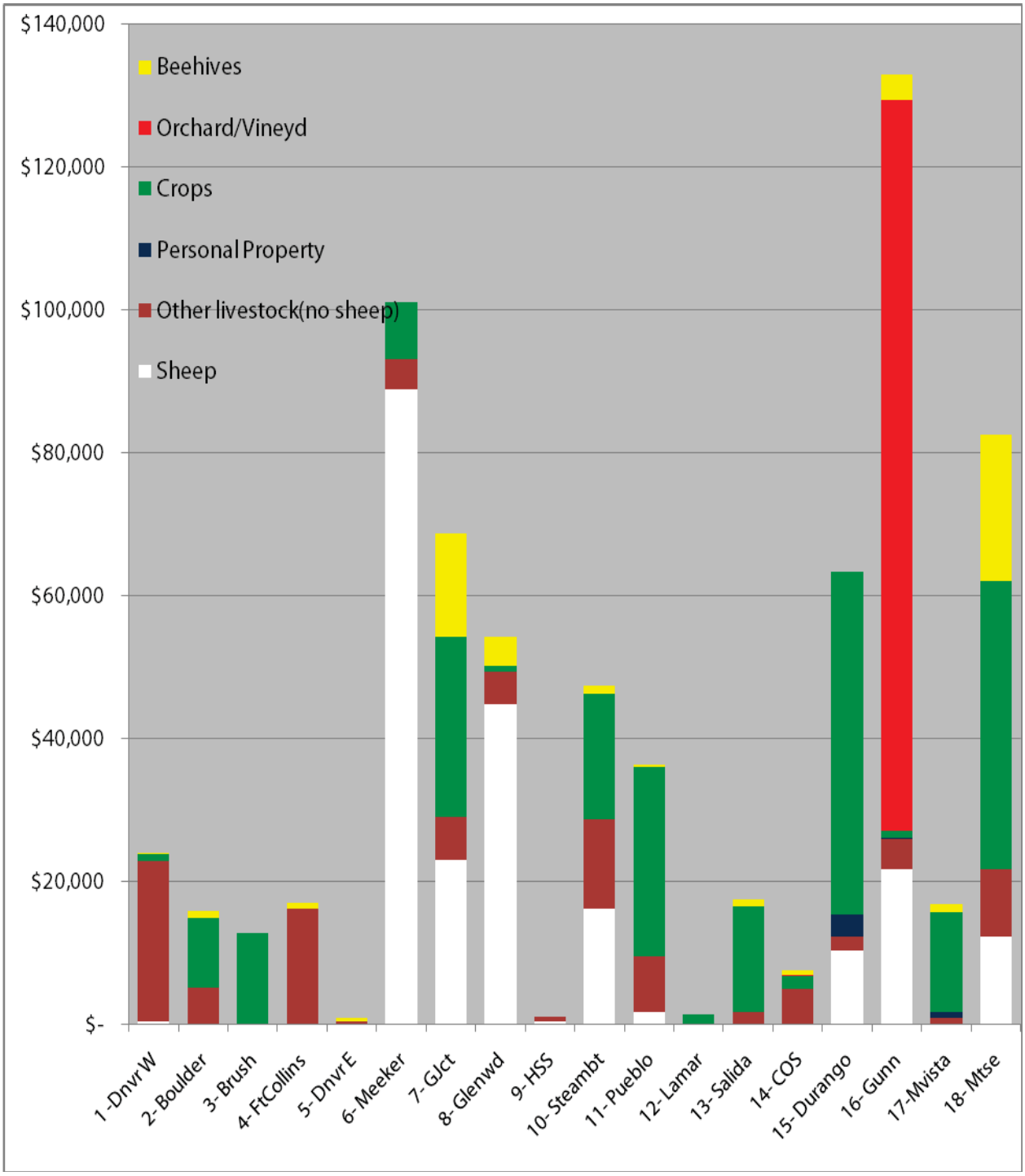
Same data in pie chart views:





FY 09-10 Game Damage Claims - **Summary by Area Office**

Each Area Office is further analyzed under 'Payments by Area' section



FY 09-10 Game Damage Claims – **Payments by Area**

Area Office	Damage Target	# of Claims Processed	Amount Paid	TOTAL
1	growing crops	2	$ 1,085.77	**$ 24,128.21**
	livestock/beehives/personal property	10	$ 23,042.44	
2	growing crops	2	$9,718.39	**$ 15,946.89**
	harvested crops	1	$ 100.00	
	livestock/beehives/personal property	7	$6,128.50	
3	growing crops	2	$12,885.16	**$ 12,885.16**
4	livestock/beehives/personal property	4	$ 17,140.42	**$ 17,140.42**
5	livestock/beehives/personal property	6	$ 1,007.36	**$ 1,007.36**
6	growing crops	6	$ 6,996.87	**$ 101,034.84**
	harvested crops	3	$970.26	
	livestock/beehives/personal property	19	$93,067.71	
7	growing crops	6	$ 24,376.64	**$ 68,843.66**
	harvested crops	2	$760.00	
	livestock/beehives/personal property	21	$ 43,707.02	
8	harvested crops	1	$ 740.00	**$ 54,268.44**
	livestock/beehives/personal property	15	$ 53,528.44	
9	livestock/beehives/personal property	3	$ 1,205.20	**$ 1,205.20**

10	growing crops	3	$ 8,473.06	**$ 47,385.26**
	harvested crops	9	$ 9,046.13	
	livestock/beehives/personal property	13	$ 29,866.07	
11	growing crops	8	$ 26,629.37	**$ 36,399.74**
	livestock/beehives/personal property	20	$ 9,770.37	
12	growing crops	1	$ 1,451.00	**$ 1,451.00**
13	growing crops/forage	12	$ 14,829.31	**$ 17,564.72**
	livestock/beehives/personal property	7	$ 2,735.41	
14	vineyard	1	$ 180.00	**$ 7,682.91**
	harvested crops	1	$ 1,720.77	
	livestock/beehives/personal property	8	$ 5,782.14	
15	growing crops	14	$ 39,026.87	**$ 63,371.37**
	harvested crops	6	$ 8,930.00	
	livestock/beehives/personal property	17	$ 15,414.50	
16	growing crops	1	$ 450.00	**$ 132,940.57**
	harvested crops	2	$ 590.50	
	livestock/beehives/personal property	15	$ 29,580.85	
	orchard	1	$ 102,319.22	
17	growing crops/forage	7	$ 13,131.84	**$ 16,947.49**
	harvested crops	2	$ 785.00	
	livestock/beehives/personal property	4	$ 3,030.65	

18	growing crops	16	$ 40,329.06	**$ 82,521.10**
	livestock/beehives/personal property	30	$ 42,192.04	
		308 claims	**TOTAL PAID**	**$ 702,724.34**

FY 09-10 Game Damage Claims – **Denied Claims**

Area	Damage Type		Species	BASIS FOR DENIAL	Denied Amount
1	Personal Property	Apple Trees	Bear	Apple trees did not meet the definition of orchard. Claimant provided insufficient evidence to verify these 2 apple trees were used in production of a commercial agricultural product.	$525.00
5	Livestock	Sheep	Mountain Lion	Initial notification did not take place until after claimant found an 'old' carcass, or remains of carcass (fur) in their pasture. Contact was 31 days after 'damage' occurred. Claimant said it had been over a month since the lamb was missing, when they found it. No evidence left to determine cause of death.	$140.00
5	Livestock	Goats	Mountain Lion	DWM counseled Claimant on 2 previous occasions when he filed claims to night pen the goats in the shed he has in his goat pen. The 5 goats in this claim were killed at night and the animals were not penned in the shed during night-time hours.	$200.00
5	Livestock	Cattle	Unknown	Claimant stated on his GD-3 form that the presence of a dead cow (leg bones/head) and bear scat demonstrated a black bear was responsible for the damage. DWM conducted an on-site investigation and found a cow head, leg bones part of a spinal column. DWM observed both black bear and coyote scat in the area and concluded there was a lack of physical evidence to determine what caused the damage.	$2,500.00
11	Personal Property	Dumpster Fencing	Bear	Damaged fence is not related to production of raw agricultural products. The fence surrounds communal human trash dumpsters.	$400.00
15	Personal Property	Beehives	Bear	Claimant did not meet his duty to mitigate damage. Materials provided by the Division to protect his beehives were not used.	$5,918.25
18	Personal Property	Camp Trailer	Bear	The logging of timber from public and private lands does not meet any of the definitions of raw agricultural products. Hence, the camp trailer is not considered personal property used in the production of raw agricultural products.	$5,000.00

FY 09-10 Game Damage Claims – **Partially Denied Claims**

Area	Damage Type		Species	BASIS FOR DENIAL	Denied Amount
15	Growing Crops	Sunflowers	Elk / Mule Deer	Claimant filed a $9,063.43 damage claim. He declined the area settlement offer for $6,207.86. The settlement offer was based on the FSA certified crop adjustor's analysis. The DOW hired the adjustor to assist in determining the amount of big game damage and other factors responsible for difference between actual/estimated production. The WC declined to award him the disputed balance of $2,855.57. He did receive the $6,207.86. Disputed amount arose from: (a)Failure to mitigate: Claimant was not able to patrol field on nightly basis. Claimant had several volunteers work kill permit – only on weekends. DOW informed claimant they needed to increase use of kill permit. (b)Did not prove big game did amount of damage claimed: Big game damage was mainly restricted to edges of field. Damage in middle of field was minimal to non-existent. Weather factors affected germination and growth throughout the fields. Several agricultural practices were identified that if done would have improved yield or because they were done improperly may have lowered yields. Claimant revised original claim to accept crop adjuster's max yield production (hence, reduction in claim amount). However, claimant insists entire difference between estimated/actual production is attributed to big game	Original claim = $9063.43 DOW settlement offer & payment = $6207.86 **Amount denied = $2,855.57**
15	Growing Crops	Sunflowers	Elk / Mule Deer	Claimant filed a $13,227.70 damage claim. He declined the area settlement offer for $8,106.69 based on the FSA certified crop adjustor's analysis. The WC declined to award him the disputed balance of $5,121.01. He did receive the $8,106.69. Disputed amount arose from: *Issues identical to the previous claim*.	Original claim = $13,227.70 DOW settlement offer & payment = $8,106.69 **Amount**

					denied = $5,121.01
			TOTAL VALUE OF DENIED + partially denied CLAIMS		**$22,659.83**

FY09-10 Game Damage Preventive Materials REPORT

The Game Damage Program filled 220 requests for Preventive Materials throughout the state. Over 19 miles of fencing were delivered. Deliveries required traveling over 57,000 miles.

Area offices received pyrotechnics & wood elk panels to provide landowners with immediate relief from big game damage.

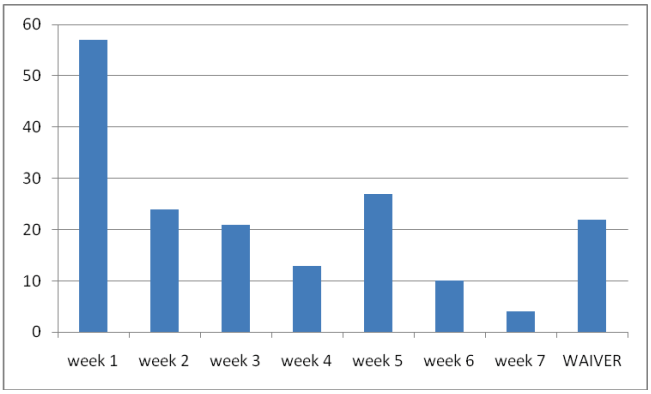
Habitat Partnership Program (HPP) requested materials for cooperative habitat projects with landowners who did not meet the qualifications for game damage permanent materials.

Facility Type		Number	FY09-10
Apiary		87	$85,286
Commercial Garden		5	$7,383
Nursery		8	$25,029
Orchard		10	$28,942
Vineyard		4	$6,727
Stackyard		101	$128,783
Growing Crops (chemical deterrents)		5	$6,500
TEMPORARY MATERIALS *for distribution by area offices*	Pyro-Technics		$48,058
	Wood Elk Panels		$80,060
Habitat Partnership Program (HPP)			$95,948
		215	**$512,716**

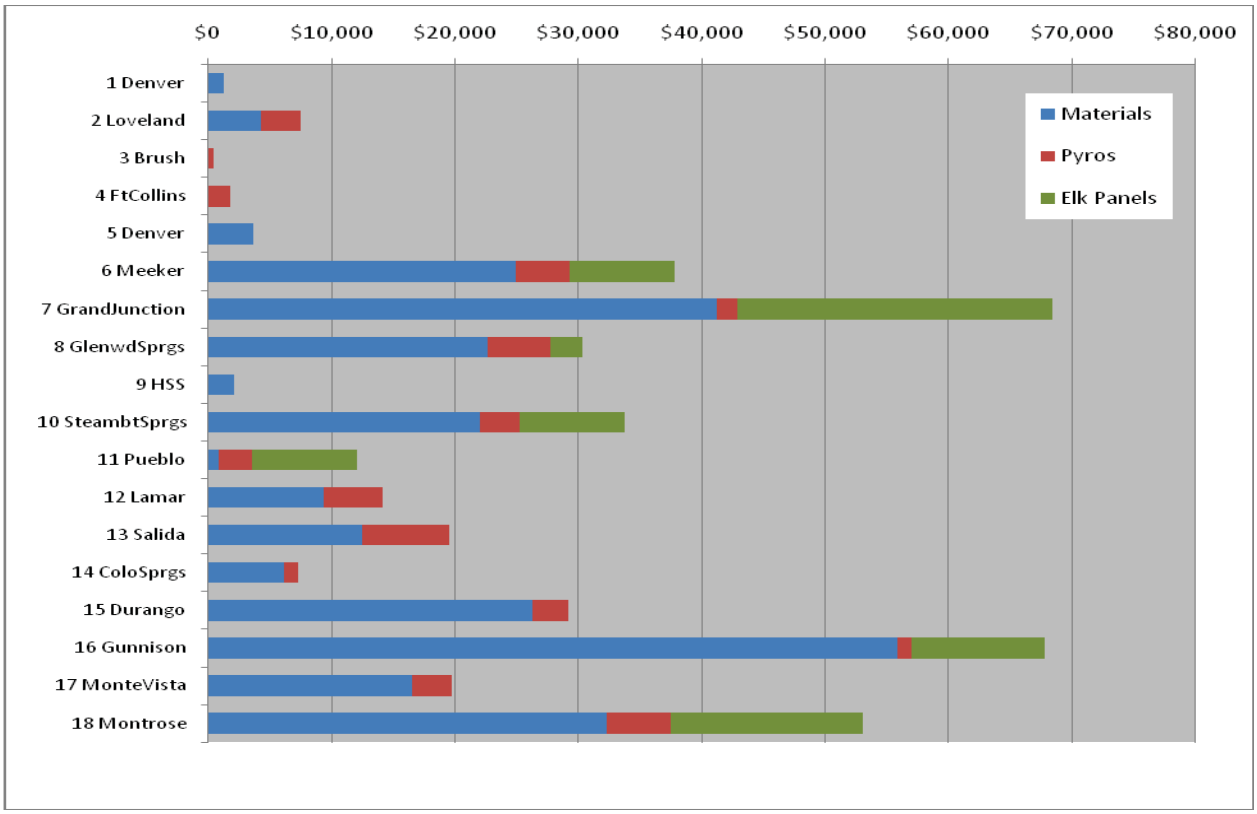
DELIVERY TIME SPANS

Effective July 1, 2009: new delivery deadlines were enacted by Senate Bill 09-024. Delivery was required within 45 days of notification.

22 deliveries fell outside the mandated deadline. All 22 delivery deadlines were waivered by the landowner for either weather or convenience issues.



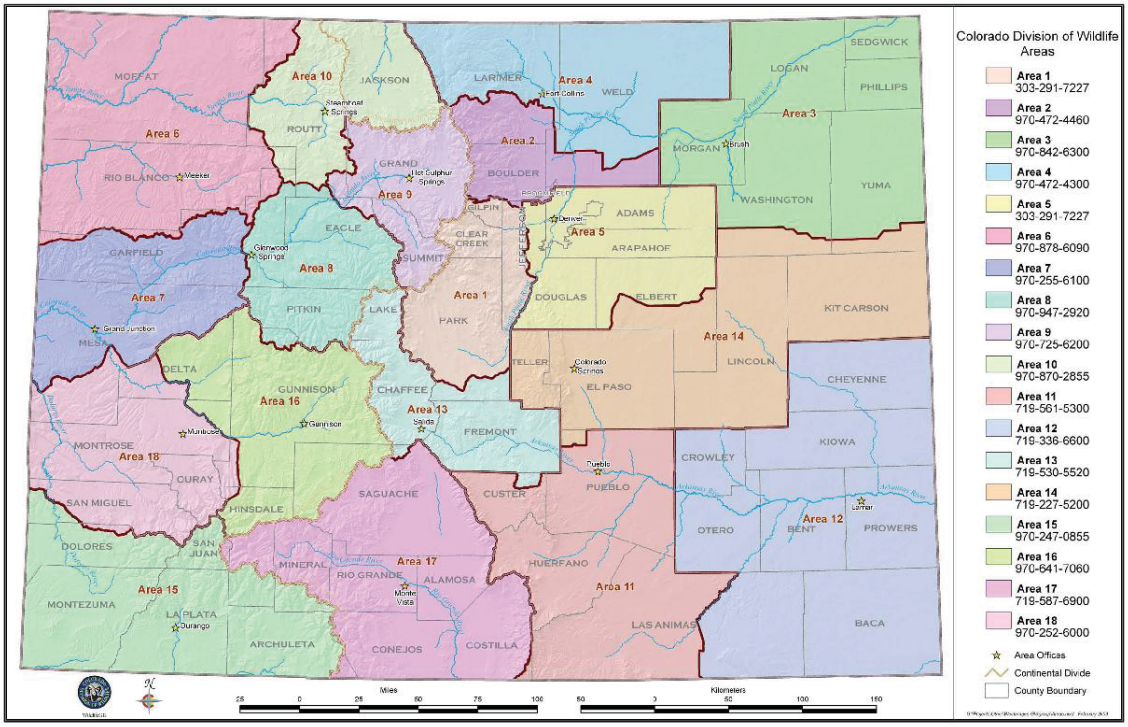
FY09-10 - Distribution of Materials to Area Offices



Dollar amounts do not include operating/administrative costs

Refer to map on page 14

CDOW MAPS FOR REFERENCE



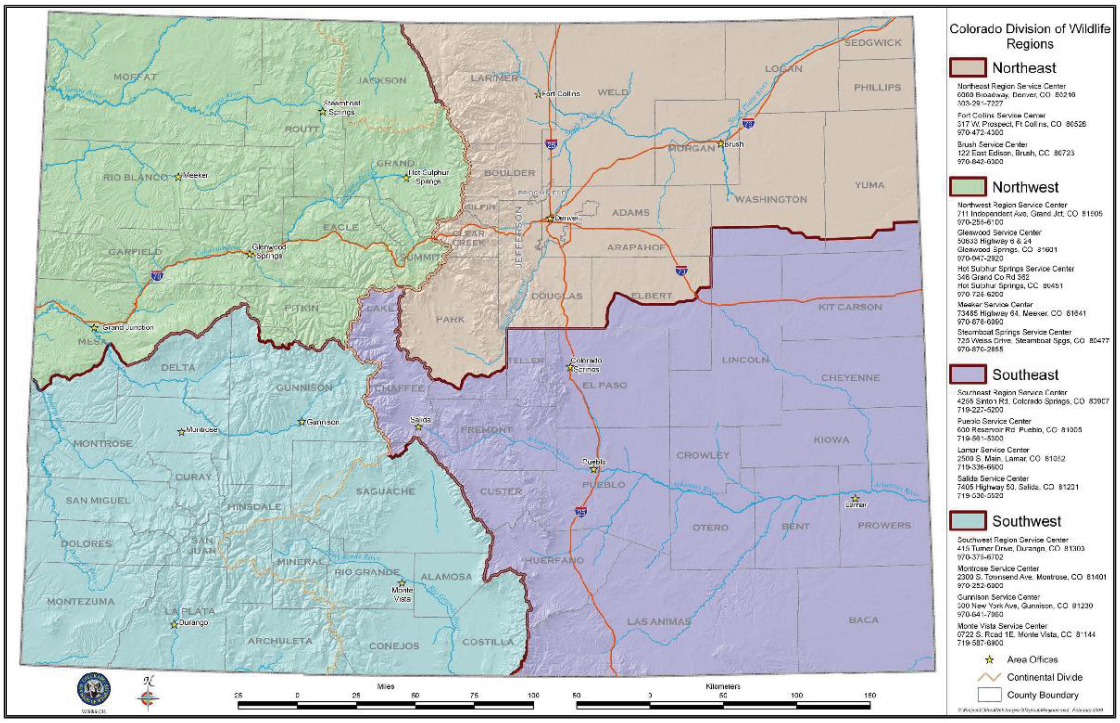


Table 1. 2009 POSTHUNT DAU POPULATION ESTIMATES VERSUS OBJECTIVES

ELK

Colorado Division of Wildlife
(DRAFT 12/28/10)

DAUs > 10% Below Population Target
DAUs > 10% Above Population Target

DAU								POPULATION				
DAU	Name	GMUs	Region	Area	DAU Plan	Mgmt Type	APR	Obj Min (Provisional)	Obj Max (Provisional)	Target	2009 Post Est. (09 Mod)	2009 Post % of Objective
E4	Poudre River	7, 8, 9, 19, 191	NE	4	2009	Lim	4 pt	3600	4200	4200	3800	90%
E9	St. Vrain	20	NE	2	2007	Lim	Spike	2200	2600	2400	2130	89%
E18	Kenosha Pass	50, 500, 501	NE	1,13	2007	Lim	Spike	1800	2200	2000	2600	130%
E38	Clear Creek	29, 38	NE	2	2006	Mix	P Spike	1000	1400	1200	1170	98%
E39	Mt Evans	39, 46, 391, 461	NE	1	1998	Lim	Spike	2500	2500	2500	2410	96%
E51	Castle Rock	51, 104, 105, 106, 110, 111	NE	5,14	None	Mix	Spike	1200	1200	1200	1690	141%
			NE Subtotal					**12300**	**14100**	**13500**	**13800**	**102%**
E1	Cold Springs	2, 201	NW	6	None	Lim	Spike	950	950	950	1990	209%
E2	Bear's Ears	3, 4, 5, 14, 214, 301, 441	NW	6, 10	2008	OTC	4 pt	15000	18000	16500	17670	107%
E3	North Park	6, 16, 17, 161, 171	NW	10	2008	OTC	4 pt	4000	4500	4500	9970	222%
E6	White River	11, 12, 13, 23, 24, 25, 26, 33, 34, 131, 211, 231	NW	, 8, 9, 1	2005	OTC	4 pt	32000	39000	38000	42890	113%
E7	Gore Pass	15, 27	NW	9	2004	OTC	4 pt	3500	4500	4500	4220	94%
E8	Troublesome Creek	18, 181	NW	9	1998	OTC	4 pt	2700	2700	2700	3970	147%
E10	Yellow Creek	21, 22, 30, 31, 32	NW	6,7	2006	OTC	4 pt	8000	10000	9000	11760	131%
E12	Piney River	35, 36	NW	8	1988	OTC	4 pt	2950	2950	2950	3780	128%
E13	Williams Fork River	28, 37, 371	NW	9	1998	OTC	4 pt	3000	3000	3000	4740	158%
E14	Grand Mesa	41, 42, 52, 411, 421, 521	NW	7,16	2010	OTC	4 pt	15000	19000	17000	18120	107%
E15	Avalanche Creek	43, 471	NW	8	1988	OTC	4 pt	3300	3300	3300	4240	128%
E16	Frying Pan River	44, 45, 47, 444	NW	8	None	OTC	4 pt	5100	5100	5100	7200	141%
E19	Glade Park	40	NW	7	2010	Lim	P Spike	2800	3800	3200	3300	103%
E21	Rangely - Blue Mountain	10	NW	6	None	Lim	Spike	1200	1200	1200	3920	327%
E47	Green River	1	NW	6	None	Lim	Spike	170	170	170	170	100%
			NW Subtotal					**99670**	**118170**	**112070**	**137940**	**123%**
E17	Collegiate Range	48, 56, 481, 561	SE	13	2006	Lim	Spike	2000	2200	2200	3260	148%
E22	Buffalo Peaks	49, 57, 58	SE	13	2006	Lim	Spike	3150	3500	3500	3360	96%
E23	Eleven Mile	59, 511, 512, 581, 591	SE	13,14	None	OTC	P Spike	1200	1200	1200	2260	188%
E27	Sangre de Cristo	86, 691, 861	SE	11	2005	OTC	4 pt	1450	1650	1650	1680	102%
E28	Grape Creek	69, 84	SE	11	2005	Lim	Spike	1400	1600	1500	2300	153%
E33	Trinchera	83, 85, 140, 851	SE	11,17	None	OTC	4 pt	14000	16000	16000	19280	121%
E45	Elkhart	132, 139, 148	SE	12	None	OTC	Spike	50	50	50	50	100%
E46	Cedarwood	128	SE	11	None	Lim	Spike	300	300	300	170	57%
E53	Apishipa	133, 134, 135, 141, 142	SE	11,12	None	OTC	Spike	250	250	250	490	196%
E54	Chacuaco	136, 137, 138, 143, 144, 147	SE	12	None	OTC	Spike	100	100	100	670	670%
			SE Subtotal					**23900**	**26850**	**26750**	**33520**	**125%**
E11	Sand Dunes	82	SW	17	2010	OTC	4 pt	3000	4000	3000	5060	169%
E20	Uncompahgre	61, 62	SW	18	2006	Mix	P Spike	8500	9500	9500	11410	120%
E24	Disappointment Creek	70, 71, 72, 73, 711	SW	15,18	2006	OTC	4 pt	17000	19000	19000	20460	108%
E25	Lake Fork	66, 67	SW	16	2001	Lim	4 pt	3500	4500	4000	4230	106%
E26	Saquache	68, 681	SW	17	2008	OTC	4 pt	3500	4500	4100	4250	104%
E30	Hermosa	74, 741	SW	15	2010	OTC	4 pt	5000	6000	5000	4930	99%
E31	San Juan	75, 77, 78, 751, 771	SW	15	2007	OTC	4 pt	17000	21000	19000	17710	93%
E32	Lower Rio Grande	80, 81	SW	15	2007	OTC	4 pt	6000	7000	7000	6850	98%
E34	Upper Rio Grande	76, 79	SW	17	2010	Lim	P Spike	4000	5500	4700	4920	105%
E35	Cimarron	64, 65	SW	18	2007	OTC	4 pt	5000	5500	5500	5200	95%
E40	Paradox	60	SW	18	2008	OTC	4 pt	900	1100	1100	1040	95%
E41	Sapinero	54	SW	16	2001	OTC	4 pt	3000	3500	3500	7260	207%
E43	Fossil Ridge	55, 551	SW	16	2001	OTC	4 pt	3000	3500	3500	5000	143%
E52	Coal Creek / Fruitland	53, 63	SW	16	2005	OTC	4 pt	2200	2400	2400	3400	142%
E55	Northern San Luis Valley Floor	682, 791	SW	17	None	Lim	4 pt	0	0	0	300	
			SW Subtotal					**81600**	**97000**	**91300**	**102020**	**112%**
E99	Misc GMUs											
STATEWIDE TOTAL or AVG								**217470**	**256120**	**243620**	**287280**	**118%**

4 Pt = 4 point antler restiction on bulls
Spike = No antler point restriction on bulls
P Spike = Some GMUs in the DAU are 4 Pt and some are Spike
Lim = All elk licenses are limited in the DAU
OTC = Over the counter licenses
Mix = Some Gmus in the DAU are Lim and some are OTC.

Table 2. 2009 POSTHUNT DAU POPULATION ESTIMATES VERSUS OBJECTIVES

DEER

Colorado Division of Wildlife
(DRAFT 12/28/10)

DAUs > 10% Below Population Target
DAUs > 10% Above Population Target

DAU							POPULATION				
DAU	Name	GMUs	Region	Area	DAU Plan	Mgmt Type	Obj Min (Provisional)	Obj Max (Provisional)	Target	2009 Post Est. (09 Mod)	2009 Post % of Objective
D4	Red Feather	7, 8, 9, 19, 191	NE	4	2007	4th	10000	12000	11000	8760	80%
D5	Table Lands North	87, 88, 89, 90, 95	NE	3,4	2007	P	2400	2700	2600	2170	83%
D10	Big Thompson	20	NE	2	2002	4th	5000	5000	5000	5180	104%
D17	Bailey	39, 46, 51, 391, 461	NE	1	2006	4th	7500	8300	7900	7680	97%
D27	Boulder	29, 38	NE	2	None	4th	6800	6800	6800	7260	107%
D38	South Park	50, 500, 501	NE	1,13	None		2450	2450	2450	2910	119%
D44	South Platte River	91, 92, 94, 96, 951	NE	2,4	2001	P	2000	2000	2000	3580	179%
D49	Bijou Creek	104, 105, 106	NE	5,14	2009	P	5500	6500	6000	5530	92%
D54	South Tablelands	93, 97, 98, 99, 100	NE	3	2007	P	2900	3100	3000	3170	106%
D55	Arickaree	101, 102	NE	3	2006	P	1900	2100	2000	2040	102%
			NE Subtotal				46450	50950	48750	48280	99%
D1	Little Snake	1, 2	NW	6	None		13500	13500	13500	1560	12%
D2	Bear's Ears	3, 4, 5, 14, 214, 301, 441	NW	6,10	1992	4th	37800	37800	37800	35950	95%
D3	North Park	6, 16, 17, 161, 171	NW	10	2002	4th	5400	6400	5400	4200	78%
D6	Rangely	10	NW	6	None	4th	7000	7000	7000	3970	57%
D7	White River	11, 12, 13, 22, 23, 24, 131, 211, 231	NW	6,8	1992	4th	67500	67500	67500	61450	91%
D8	State Bridge	15, 35, 36, 45	NW	8,9	2009	4th	13500	16500	15000	14800	99%
D9	Middle Park	18, 27, 28, 37, 181, 371	NW	9	2009	4th	10500	12500	11500	12280	107%
D11	Bookcliffs	21, 30	NW	6,7	2005		10000	12000	11000	12090	110%
D12	North Grand Mesa	41, 42, 421	NW	7	2010	4th	17000	23000	20000	20750	104%
D13	Maroon Bells	43, 47, 471	NW	8	1988	4th	11100	11100	11100	6410	58%
D14	Red Table Mountain	44	NW	8	None	4th	7000	7000	7000	1950	28%
D18	Glade Park	40	NW	7	2010		6500	8500	7500	5700	76%
D41	Logan Mountain	31, 32	NW	7	None		16500	16500	16500	7960	48%
D42	Rifle Creek	33	NW	7	2007	4th	7700	9400	8400	8320	99%
D43	Sweetwater Creek	25, 26, 34	NW	8	1994	4th	8100	8100	8100	4690	58%
D53	Basalt	444	NW	8	1995	4th	5300	5300	5300	3940	74%
			NW Subtotal				244400	262100	252600	206020	82%
D15	Cottonwood Creek	48, 56, 481, 561	SE	13	2006		8200	10700	9500	5630	59%
D16	Cripple Creek	49, 57, 58, 581	SE	13	2007		16000	20000	16000	16730	105%
D28	Arkansas River	122, 125, 126, 127, 130, 132, 137, 138, 139, 146	SE	12	1999	P	3600	3600	3600	3890	108%
D32	Trinidad	85, 140, 851	SE	11	2008		9800	10800	9800	5830	59%
D33	Mesa de Maya	143, 144, 145	SE	12	1999	P	2350	2350	2350	2290	97%
D34	Wet Mountain	69, 84, 86, 691, 861	SE	11	2005		16500	17500	17000	13010	77%
D45	Las Animas	128, 129, 133, 134, 135, 136, 141, 142, 147	SE	11,12	None	P	3400	3400	3400	6830	201%
D46	Big Sandy	107, 112, 113, 114, 115, 120, 121	SE	14	1999	P	2500	2500	2500	3250	130%
D47	South Republican	103, 109, 116, 117	SE	14	1999	P	2000	2000	2000	2330	117%
D48	Chico Basin	110, 111, 118, 119, 123, 124	SE	11,14	1999	P	1800	1800	1800	1950	108%
D50	Rampart	59, 511, 512, 591	SE	14	2008	4th	4000	5000	4500	5040	112%
			SE Subtotal				70150	79650	72450	66780	92%
D19	Uncompahgre	61, 62	SW	18	2006	4th	36000	38000	36000	21910	61%
D20	Crawford	53	SW	16	2008	4th	5500	6500	6000	5260	88%
D21	West Elk	54	SW	16	2007		6500	7500	7000	4040	58%
D22	Taylor River	55, 551	SW	16	2007		6500	7500	7500	3980	53%
D23	La Sal	60	SW	18	2008	4th	2500	3000	3000	1650	55%
D24	Groundhog	70, 71, 711	SW	15,18	1998	4th	34000	34000	34000	22310	66%
D25	Powderhorn Creek	66, 67	SW	16	2007		4500	5500	5500	4460	81%
D26	Saquache	68, 681, 682	SW	17	2008	4th	4000	5000	4000	4070	102%
D29	Mesa Verde	72, 73	SW	15	1998	4th	11000	11000	11000	6350	58%
D30	San Juan	75, 77, 78, 751, 771	SW	15	1996	4th	27000	27000	27000	26050	96%
D31	Trinchera	83	SW	17	2010	4th	2000	2500	2200	2220	101%
D35	Lower Rio Grande	80, 81	SW	17	2007	4th	6000	7000	6000	5170	86%
D36	Upper Rio Grande	76, 79, 791	SW	17	2010	4th	2000	2500	2500	2420	97%
D37	Sand Dunes	82	SW	17	2010	4th	1500	2000	1700	1680	99%
D39	Fruitland Mesa	63	SW	16	2008	4th	7000	8000	7500	5460	73%
D40	Cimarron	64, 65	SW	18	2007	4th	13500	15000	15000	8430	56%
D51	South Grand Mesa	52, 411, 521	SW	16	2008	4th	10500	11500	11000	8650	79%
D52	Hermosa	74, 741	SW	15	2010	4th	4000	6000	5000	5460	109%
			SW Subtotal				184000	199500	191900	139570	73%
STATEWIDE TOTAL or AVG							545000	592200	565700	460650	81%

P = Plains Unit
4th = 4th deer season in 2009

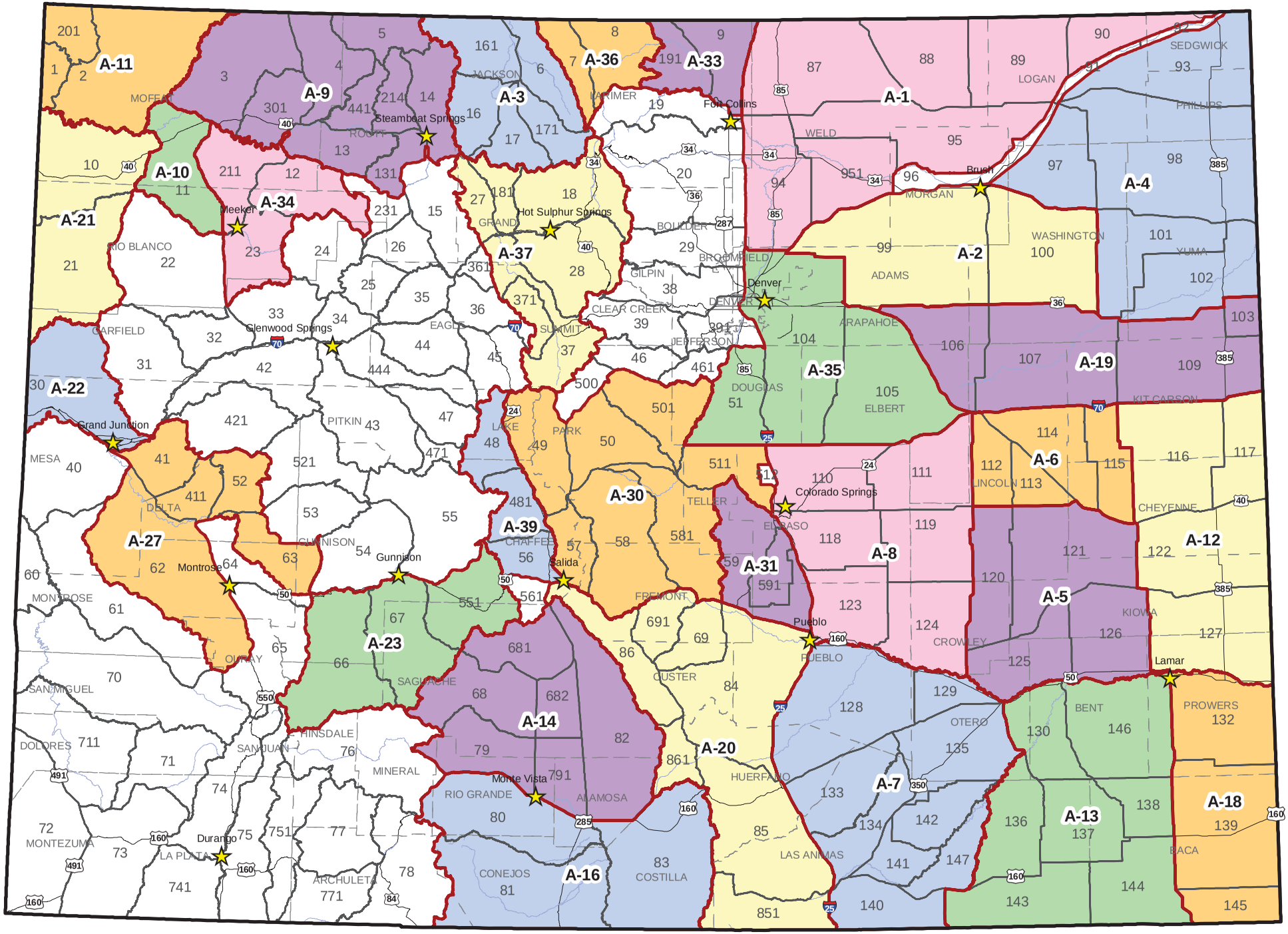
Table 3. 2009 POSTHUNT DAU POPULATION ESTIMATES VERSUS OBJECTIVES

PRONGHORN

Colorado Division of Wildlife
(DRAFT 12/28/10)

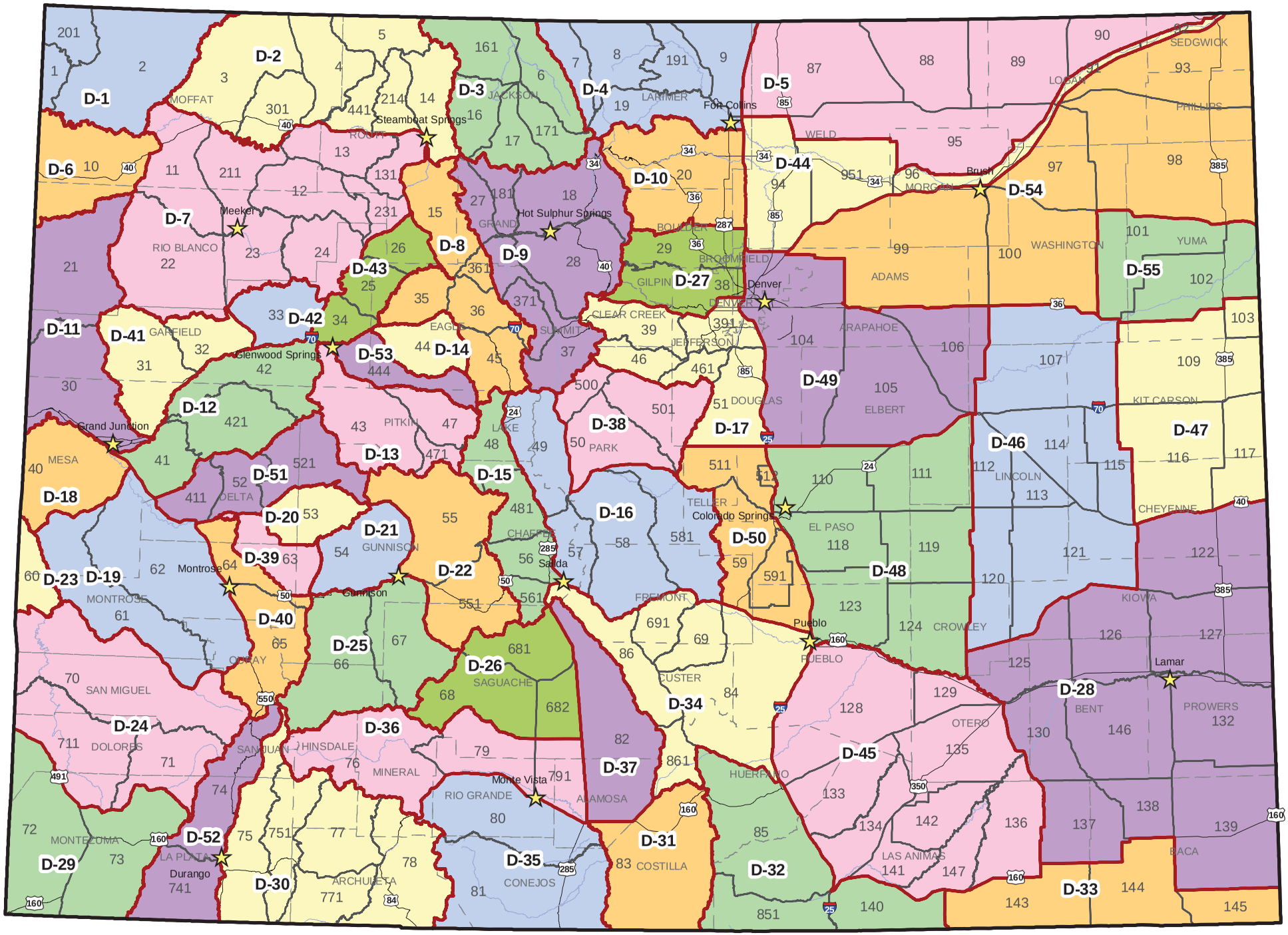
DAUs > 10% Below Population Target
DAUs > 10% Above Population Target

DAU						POPULATION				
DAU	Name	GMUs	Region	Area	DAU Plan	Obj Min (Provisional)	Obj Max (Provisional)	Target	2009 Post Est. (09 Mod)	2009 Post % of Objective
A1	Escarpment	87,88,89,90,94,95,951	NE	4	None	5600	5600	5600	7030	126%
A2	Hardpan	99,100	NE	2,3,5	2007	1400	1600	1500	1260	84%
A4	Sandhills	93,97,98,101,102	NE	3	2006	550	650	600	430	72%
A30	South Park	49,50,57,58,501,511,581	NE	1,13	None	750	750	750	1090	145%
A33	Cherokee	9, 19, 191	NE	4	2009	1000	1200	1100	1200	109%
A35	Kiowa Creek	51,104,105	NE	5	None	3200	3200	3200	4840	151%
A36	Laramie River	7,8	NE	4	2009	550	650	600	620	103%
			NE Subtotal			13050	13650	13350	16470	123%
A3	North Park	6,16,17,161,171	NW	10	2004	1500	1600	1500	1620	108%
A9	Great Divide	3,4,5,13,14,214,301,441	NW	6,10	1995	15800	15800	15800	12790	81%
A10	Maybell	11	NW	6	None	1400	1400	1400	2340	167%
A11	Sand Wash	1,2,201	NW	6	None	3200	3200	3200	1230	38%
A21	Dinosaur	10,21	NW	6	None	300	300	300		0%
A34	Axial Basin	12,23,211	NW	6	None	300	300	300	530	177%
A37	Middle Park	18,27,28,37,181,371	NW	9	1999	630	630	630	500	79%
			NW			23130	23230	23130	19010	82%
A5	Haswell	120,121,125,126	SE	12	2006	2400	3000	2700	4510	167%
A6	Hugo	112,113,114,115	SE	14	1998	2500	2500	2500	3120	125%
A7	Thatcher	128,129,133,134,135,140,141,142,147	SE	11	None	6500	6500	6500	8760	135%
A8	Yoder	110,111,118,119,123,124	SE	11,14	1998	4500	4500	4500	9780	217%
A12	Cheyenne	116,117,122,127	SE	12,14	2006	1100	1350	1200	3080	257%
A13	Tobe	130,136,137,138,143,144,146	SE	12	2006	1400	1700	1550	2070	134%
A18	Two Buttes	132,139,145	SE	12	2006	300	500	400	780	195%
A19	Last Chance	103,106,107,109	SE	5,14	1999	2000	2000	2000	1930	97%
A20	Wet Mountain	69,84,85,86,691,851,861	SE	11	None	2000	2000	2000	2160	108%
A31	Ft Carson	59,591	SE	14	2000	200	200	200	230	115%
A39	Collegiate	48,56,481	SE	13	None	150	150	150	120	80%
			SE Subtotal			23050	24400	23700	36540	154%
A14	San Luis Valley - North	68,79,82,681,682,791	SW	17	2008	2000	2500	2300	2400	104%
A16	San Luis Valley - South	80,81,83	SW	17	2008	1000	1500	1000	930	93%
A23	Gunnison Basin	66,67,551	SW	16	None	450	450	450	300	67%
A27	Delta	41,52,62,63,411	SW	7,18	None	350	350	350	60	17%
			SW Subtotal			3800	4800	4100	3690	90%
A99	Misc GMUs									
STATEWIDE TOTAL or AVG						63030	66080	64280	75710	118%



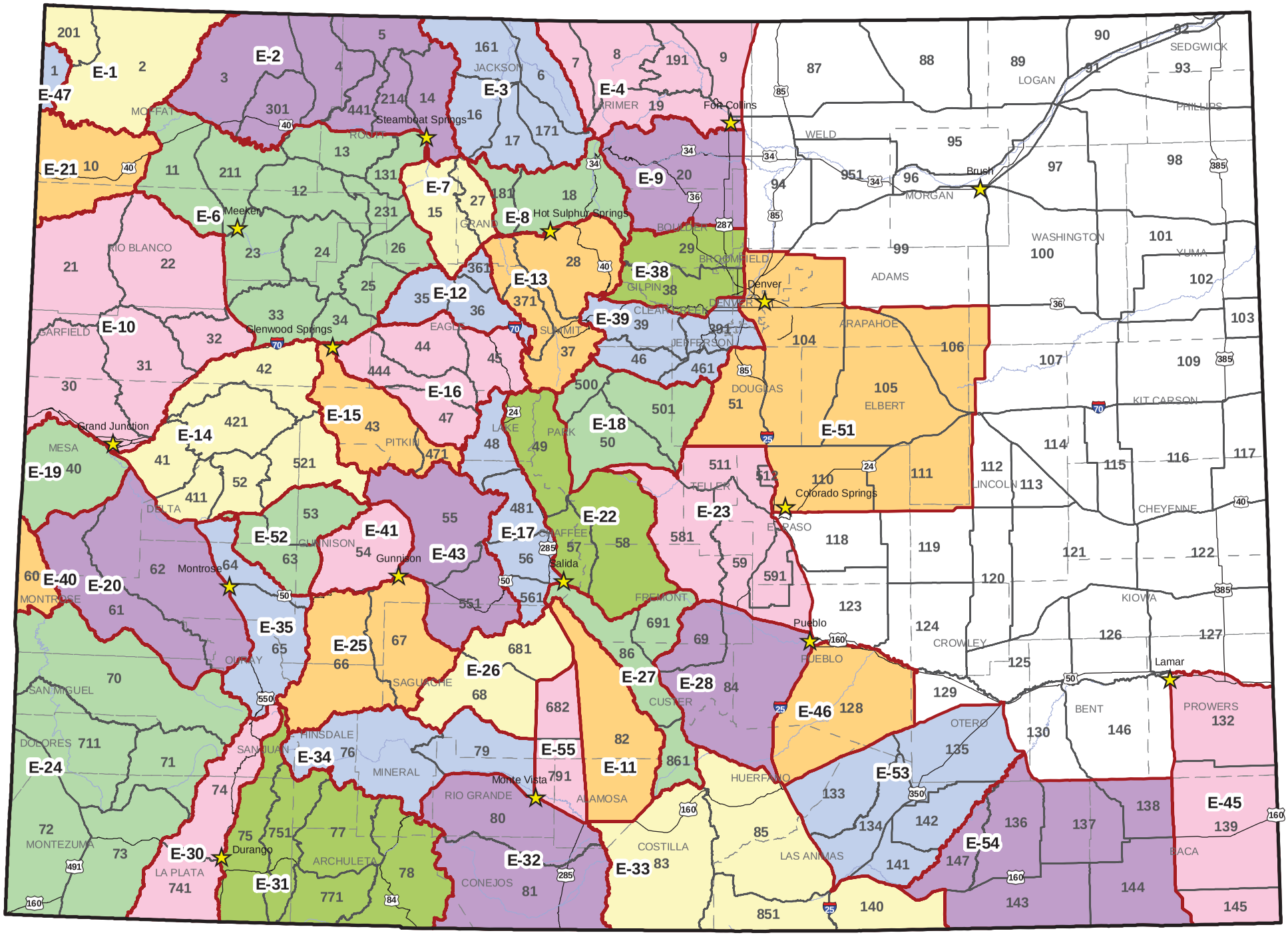
COLORADO DIVISION OF WILDLIFE - Pronghorn DAUs

April 2010



COLORADO DIVISION OF WILDLIFE - Deer DAUs

April 2010



COLORADO DIVISION OF WILDLIFE - Elk DAUs

April 2010