

Colorado Parks and Wildlife
Habitat Partnership Program
Grand Mesa



DISTRIBUTION MANAGEMENT PLAN



Approved - Colorado Parks and Wildlife Commission: May 7, 2020
This plan is valid for 10 years from approval date.

2020 - 2030

TABLE OF CONTENTS

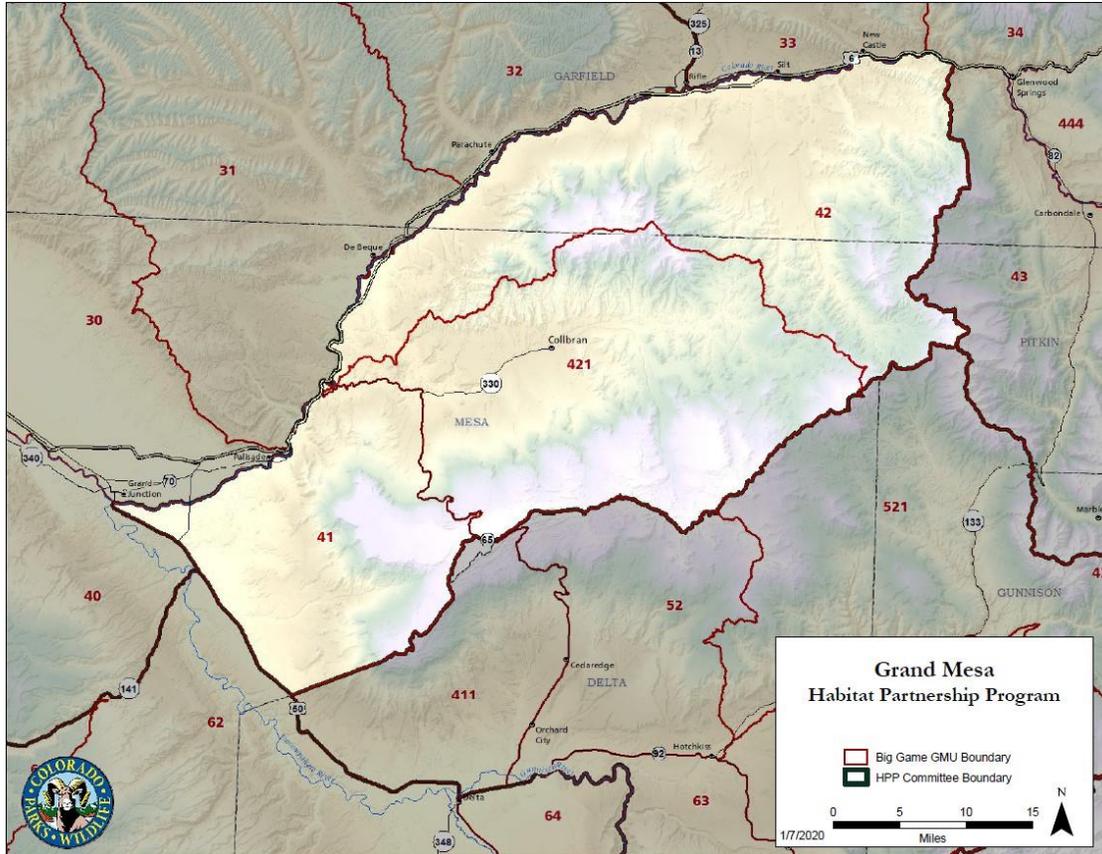
Executive Summary.....	2
Map: Grand Mesa HPP Area.....	2
Committee Members.....	3
Introduction.....	4
-HPP Orientation	
HPP Statute.....	5
Committee Objectives & Strategies.....	6
Area Description.....	7
-Map: Land Ownership	
-Habitat Description	
Big Game Population Summary.....	9
-Maps: Deer, Elk, and Moose Ranges	
-Impact Areas & Map	
-Game Management Objectives	
Project Types & Priorities.....	17
Operating Guidelines.....	18
-Management Strategies	
Budget Guidelines.....	20
Current and Foreseeable Issues.....	21

EXECUTIVE SUMMARY

The Grand Mesa Habitat Partnership Program Committee (GMHPP) was formed in 1995 to help resolve local wildlife conflicts with agriculture, and serves the western and northern slopes of the Grand Mesa. The committee area includes a mix of private, federal, and state lands; and consists of a variety of habitat types and land use patterns. Wildlife conflicts with agriculture in the committee area are attributed primarily to elk and mule deer, and occur mainly on lower elevations on pasture land, hay stacks, and fences. Agricultural operations and the loss of habitat for residential, recreational, and energy development have resulted in specific impact areas that the committee has identified as high priority zones. However, projects will be implemented wherever the committee believes they can effectively reduce or eliminate big game conflicts and assist CPW in achieving management objectives.

Operating guidelines have been established to help direct funding decisions and project implementation, and to ensure that the committee’s policies and procedures are clear and consistent for all applicants. Management strategies relative to the committee’s objectives have been developed, and most projects will fall into the prescribed categories for big game conflict resolution or management objectives. The updated budget guidelines reflect the desired funding allocation and prioritization of projects.

MAP OF GRAND MESA HPP AREA



COMMITTEE MEMBERS

- | | |
|---|-----------------------------|
| 1. Harley Metz, sportsman representative | Started HPP Term: Aug. 2006 |
| 2. Paul Bernklau, livestock grower representative | Started HPP Term: Jan. 1999 |
| 3. John Walter, livestock grower representative | Started HPP Term: Feb. 2004 |
| 4. Don Fulton, livestock grower representative | Started HPP Term: July 2007 |
| 5. Heidi Plank, BLM representative | Started HPP Term: May 2012 |
| 6. Robert Mosher - USFS representative | Started HPP Term: Mar. 2020 |
| 7. Kirk Oldham, CPW representative | Started HPP Term: Jan. 2018 |

INTRODUCTION

The Grand Mesa Habitat Partnership Program Committee (GMHPP) covers the western and northern slopes of the Grand Mesa: Plateau Valley, Battlement Mesa, Silt, and east to South Canyon Creek. Wild ungulate herds include elk, mule deer, rocky mountain bighorn sheep, and moose. Game damage situations in the GMHPP area are attributed almost exclusively to elk and mule deer, and occur mainly on lower elevations on pasture land, hay stacks, and fences. Historically, this would lead landowners to demand that wildlife managers reduce herds, remove game, and reimburse property owners for losses.

Since its inception in 1995, Grand Mesa HPP (GMHPP) has been actively addressing conflict issues by helping to fund habitat treatment projects that increase forage; fencing projects to mitigate wildlife damage to fences; water development projects to improve the distribution of livestock and wildlife; and distribution management hunts to target conflict-causing animals on private lands. These approaches have been successful in mitigating conflicts and building relationships with landowners. Through this plan, the committee intends to build on its historic success by continuing to proactively and progressively respond to changes in conflicts, distribution, and game management objectives. The committee's core philosophy continues to be that HPP is a cooperative program between private landowners, USFS, CPW, BLM and sportsmen to provide solutions to fence and forage conflict situations.

HPP ORIENTATION

HPP was initially started to resolve fence and forage conflicts caused to agricultural operators by deer, elk, pronghorn and moose. While the law governing HPP was broadened in 2002 (“...reduce wildlife conflicts... assist in meeting game management objectives”) in 2017 the State Council and the NW Region Manager reaffirmed the intent and focus of HPP.

This direction provides for HPP participation, whether by local committees or the State Council, to be limited to those conflict resolution projects or game management objective projects that involve deer, elk, pronghorn and moose.

HPP STATUTE - (C.R.S. 33-1-110)

(8) (a) The habitat partnership program is hereby created to assist the division of parks and wildlife by working with private land managers, public land management agencies, sports persons, and other interested parties to reduce wildlife conflicts, particularly those associated with forage and fence issues, and to assist the division of parks and wildlife in meeting game management objectives through duties as deemed appropriate by the director.

(b) The director, with the approval of the commission, shall have the authority to appoint a "habitat partnership committee", referred to in this section as a "committee", in any area of the state where conflicts between wildlife and private land owners and managers engaged in the management of public and private land exist.

(c) A committee shall consist of the following members: One sports person who purchases big game licenses on a regular basis in Colorado; three persons representing livestock growers in the area of the state in which the committee is being established; one person from each of the federal agencies that has land management responsibilities in such area of the state; and one person from the Colorado division of parks and wildlife. All persons on any such committee shall be residents of the state of Colorado.

(d) The duties of a committee are the following:

(I) To develop big game distribution management plans to resolve rangeland forage, growing hay crop, harvested crop aftermath grazing, and fence conflicts subject to commission approval;

(II) To monitor program effectiveness and to propose to the council changes in guidelines and land acquisition planning and review as appropriate;

(III) To request for the committee, on an annual basis, funds from the council consistent with the distribution management plan developed by any such committee;

(IV) To expend funds allocated by the council or acquired from other sources as necessary to implement distribution management plans;

(V) To make an annual report of expenditures and accomplishments of the committee to the council by August 15 of each year;

(VI) To nominate a person to act as a representative of agricultural livestock growers or crop producers to the habitat partnership council for the area of the state where such committee is organized;

(VII) To reduce wildlife and land management conflicts as the conflicts relate to big game forage and fence issues and other management objectives.

(e) The committee shall be authorized to procure from land owners, land managers, or other providers, materials or services necessary for carrying out activities identified in the distribution management plans pursuant to subparagraph (IV) of paragraph (d) of this subsection (8); except that all such procurements shall be certified as within the scope of the activities and funding levels authorized in such distribution management plans before any such procurement may be authorized.

COMMITTEE OBJECTIVES & STRATEGIES

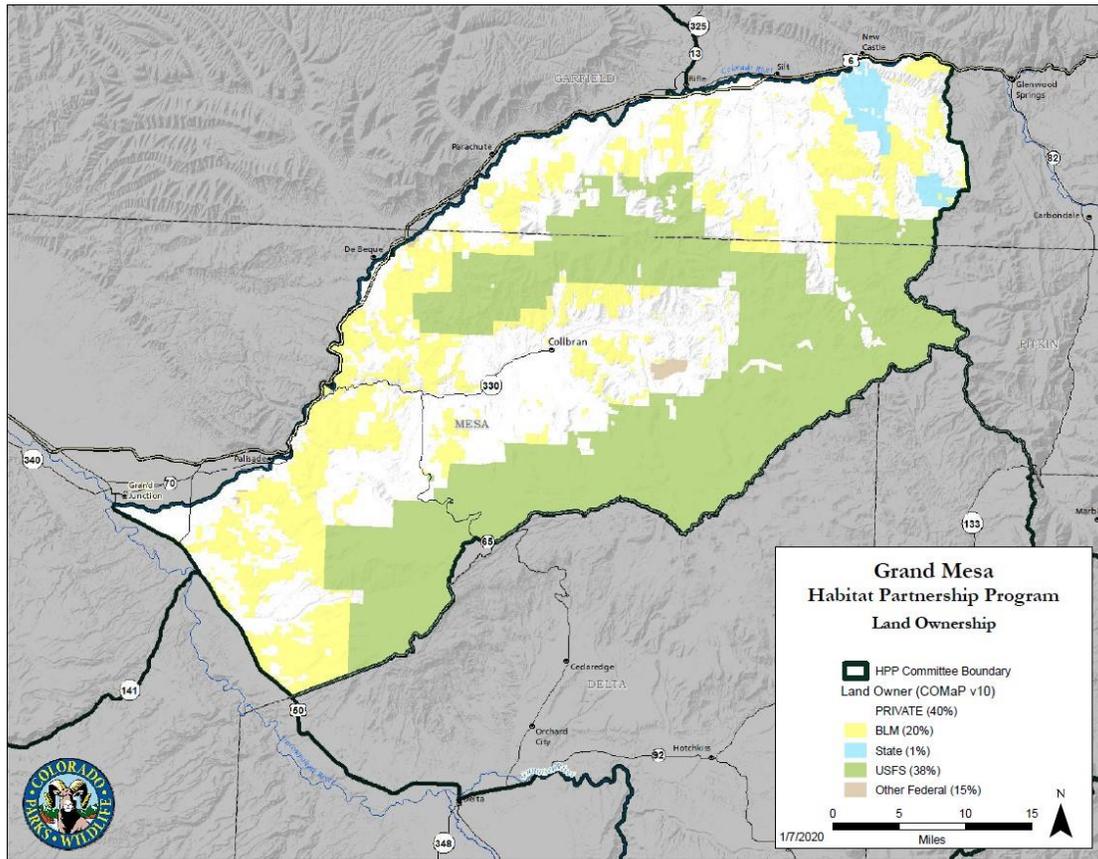
1. Resolve or reduce big game fence and forage conflicts, and increase tolerance for big game on public and private lands.
 - a. Distribution of fence repair vouchers and implementation of fencing projects.
 - b. Implementation and management of dispersal hunts.
 - c. Provide information to landowners about agricultural and land management practices, as well as other available programs and funding sources.
 - d. Distribution of fertilizer and herbicide vouchers, and implement habitat manipulation and restoration projects, especially those that help hold big game off of hay fields.
 - e. Identify potential properties for conservation easements, habitat manipulation projects and other long term management strategies.
2. Facilitate communication and develop partnerships between landowners, CPW, sportsmen, and other habitat/land managers.
 - a. Host regular committee meetings at varying locations throughout the Grand Mesa.
 - b. Promote landowner and committee member participation in the annual statewide HPP meeting.
 - c. Increase public awareness of the GMHPP, its purpose, and the process by which landowners and land managers can become involved.
 - d. Continue to plan and conduct tours of HPP projects.
 - e. Solicit public involvement and collaboration in identifying conflicts between big game and livestock, and in recommending short-term and long-term conflict solutions.
 - f. Ensure that private land habitat issues and agricultural interests are considered in the management plans for big game populations.
3. Increase effectiveness of habitat manipulation projects and implement a landscape-scale philosophy by increasing the scope and connectivity of projects.
 - a. Develop and maintain a map depicting past, ongoing and prospective habitat projects.
 - b. Solicit and coordinate habitat treatments which incorporate public and private land, creating a link between past and future treatments on a landscape scale.
 - c. Increase percentage of external matching funds contributed to HPP projects.
4. Improve distribution of grazing animals on public and private lands.
 - a. Plan and implement cooperative water developments and habitat improvement projects across the committee area.
 - b. Plan and coordinate distribution management hunts.
 - c. Hazing of animals in problematic areas, when approved by DWM and AWM.
5. Expend allotted funds in the most productive manner using the best information available.
 - a. Evaluate and monitor completed projects.
 - b. Research and implement current best management practices.
 - c. Coordinate efforts with other HPP committees as well as state and federal agencies.

- d. Monitor strategies and successes from other HPP committees, CPW, and other habitat and land management agencies.
 - e. Increase percentage of external matching funds contributed to HPP projects.
6. Evaluate and monitor the effectiveness of GMHPP.
- a. Conduct informal surveys among area DWMs and committee members to assess the level of current big game conflicts compared to historic complaints.
 - b. Evaluate projects with a combination of photo points, site visits, and implementation of the appropriate monitoring technique.
 - c. Require cooperators to provide before and after photographs of HPP project areas. Projects will be evaluated to determine their long-term effectiveness.
 - d. Evaluate cost effectiveness of projects with consideration to the duration or longevity of the project and its impacts on habitat.
 - e. Continue to plan and conduct tours of HPP projects.
 - f. Collaborate with other HPP committees for effective monitoring strategies.
7. Improve big game habitat, distribution, and population sizes in accordance with CPW herd management objectives.
- a. Implement habitat and range improvement projects that will help increase or maintain herd population numbers.
 - b. Implement distribution management hunts to disperse unfavorably high concentrations of animals on private land winter range.
 - c. Allocate funding for research or monitoring projects that help inform the committee and wildlife managers on patterns of big game habitat use.
 - d. Solicit habitat improvement projects in areas with suboptimal habitat or unusually low wildlife utilization.
 - e. Allocate funding for conservation easement projects that help preserve important summer, transitional, or winter ranges for big game; or that increase hunting access.

AREA DESCRIPTION

The Grand Mesa HPP area is bounded on the west by Highway 50; on the north by the Colorado River; on the east by South Canyon Creek, the divide between Roaring Fork-Crystal River and Baldy Creek-Divide Creek drainages and the common point of Mesa-Pitkin-Gunnison County lines; and on the south by the Mesa County line. Deer and elk summering on the Grand Mesa and Battlement Mesa have historically migrated to the lower elevations of the Plateau Valley and the Colorado River, resulting in winter damages to stacked hay, alfalfa aftermath, pasture, and fences. While these patterns persist today, the distribution of wild ungulates has changed over time. The many changes to the landscape, including subdivisions, oil and gas exploration and production, fire suppression, and increased recreation have all had significant impacts on wildlife distribution

across the GMHPP area. Additionally, many of the public lands within the GMHPP area have reached a climax successional stage, providing less nutritional forage base for ungulates.



HABITAT DESCRIPTION

The main topographic feature of the committee area is the Grand Mesa, which is a high flat-topped mountain. Elevations vary from the tops of the Grand Mesa at approximately 11,000 feet in the central portion of the area, to the Colorado River at approximately 4,600 feet near Grand Junction. Annual precipitation ranges from approximately 40 inches on Grand Mesa to about 8 inches in the desert country near Grand Junction. Much of the annual precipitation is in the form of snow.

Vegetation in this area varies according to the wide range of elevations. The high precipitation on the Grand Mesa allows for very different vegetative communities than does the significantly lower precipitation received in the valleys. Vegetative communities transition into each other in response to slope and aspect. Higher elevations with considerably more moisture are composed of aspen and spruce-fir forests. Oak brush communities are found just below the aspen/spruce/fir zone. Pinyon-juniper woodlands are situated on the drier intermediate and low slopes throughout the committee area. Snowberry occurs in open areas in the oak brush at intermediate and higher elevations, and various species of sagebrush exist throughout the area. Desert shrub types, including greasewood and sagebrush, are found along drainages at the lower elevations. Irrigated cropland and grassland with half-shrub mixtures and grass/alfalfa meadows are propagated in the valleys. Irrigated crops include corn and grains such as wheat, barley, and oats. Alfalfa and grass are grown for pasture and hay.

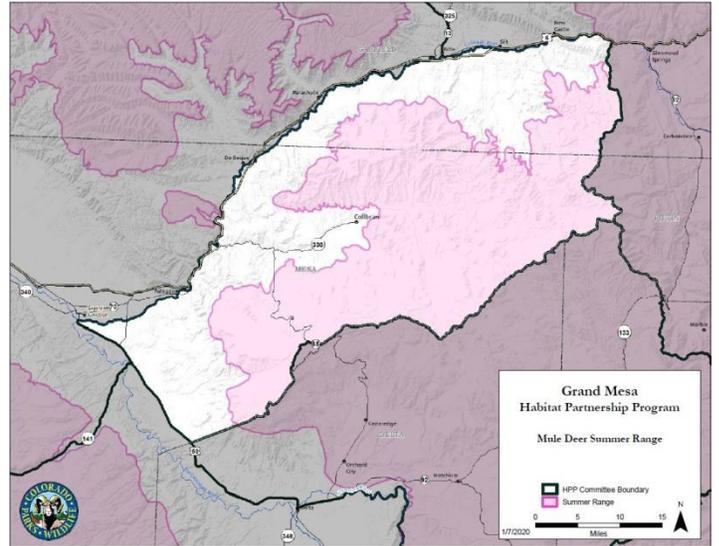
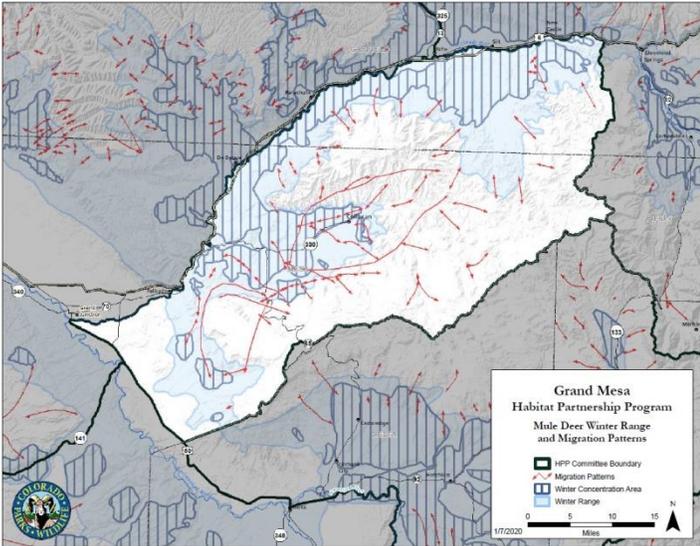
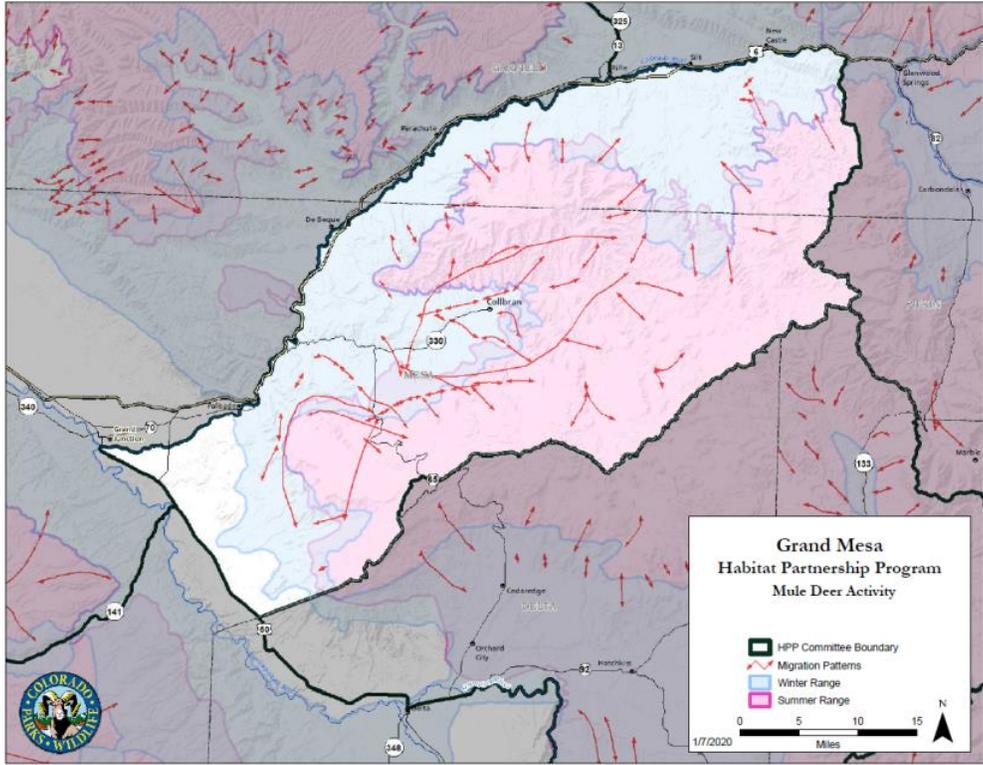
BIG GAME POPULATION SUMMARY

DEER - The committee area includes all of the geographical Data Analysis Unit (DAU) D-12, which includes GMUs 41, 42, and 421; and is approximately 1,475 square miles in size. CPW has conducted aerial sex and age composition surveys in D-12 since the late 1970's. The deer population was relatively high in D-12 from the early 1980's through the early 1990's, with population estimates fluctuating between 30-40,000 animals. In the early 1990's those numbers fell dramatically to around 20,000 deer, but have stabilized around 16,500 for the most recent three-year average. The decline of this herd mirrored the falling numbers in most mule deer populations throughout Colorado and the Western U.S.

Early records in the 1980's show that total buck:doe ratios were around 17 bucks:100 does. Between 1994 and 2006, the objectives for the Grand Mesa North deer herd were 29,500 animals and 20 bucks:100 does. These ratios have generally increased to recent levels of 20-25 bucks:100 does, in large part due to totally limited buck licenses implemented in 1995. The current objective is a population of 17,000-23,000 animals with 25-30 bucks:100 does; however this is due for revision. In a similar fashion to the population trends over the past forty years, fawn:doe ratios have also declined dramatically. The numbers observed in the 1980's averaged 75 fawns:100 does, whereas recent surveys show numbers stabilizing around 45 fawns:100 does for the three-year average. Public land antlerless hunting was limited in 1998 in an attempt to increase the population, and low numbers of antlerless licenses are currently issued primarily to prevent damage situations on private land.

The primary issues in D-12 are habitat quality and quantity, particularly on winter ranges where energy development, urban and exurban encroachment, and recreation negatively impact critical habitat. Lower than objective fawn:doe and buck:doe ratios are also of concern. These ratios may be due to density-dependence related to winter range declines.

DEER RANGE MAPS

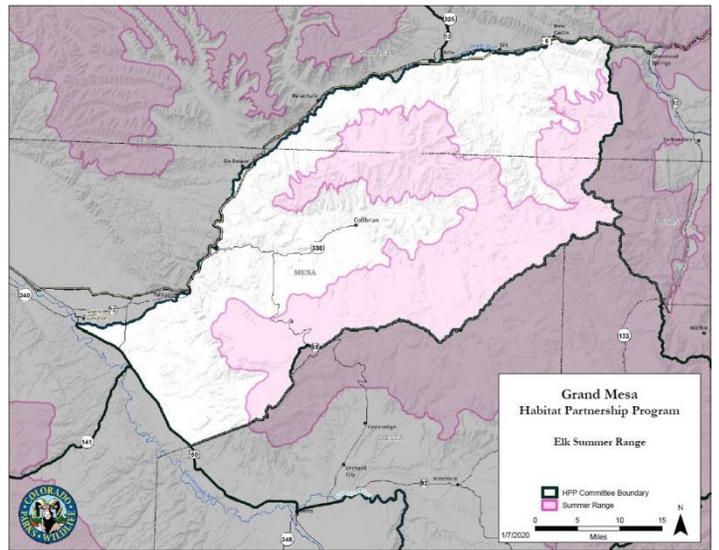
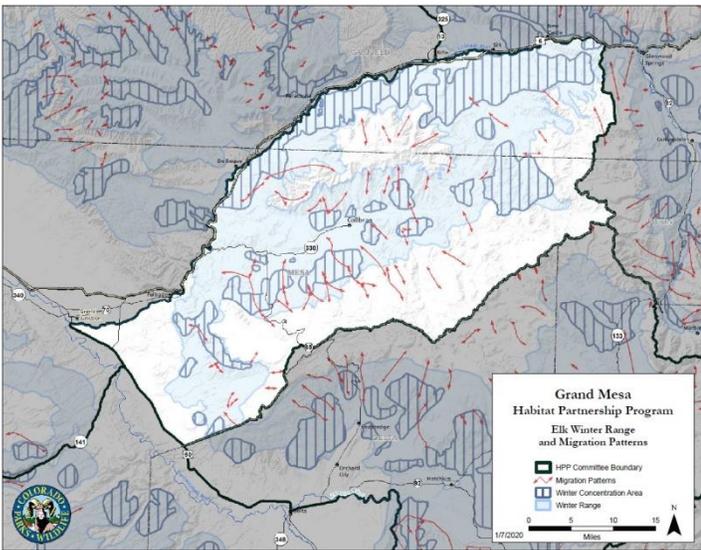
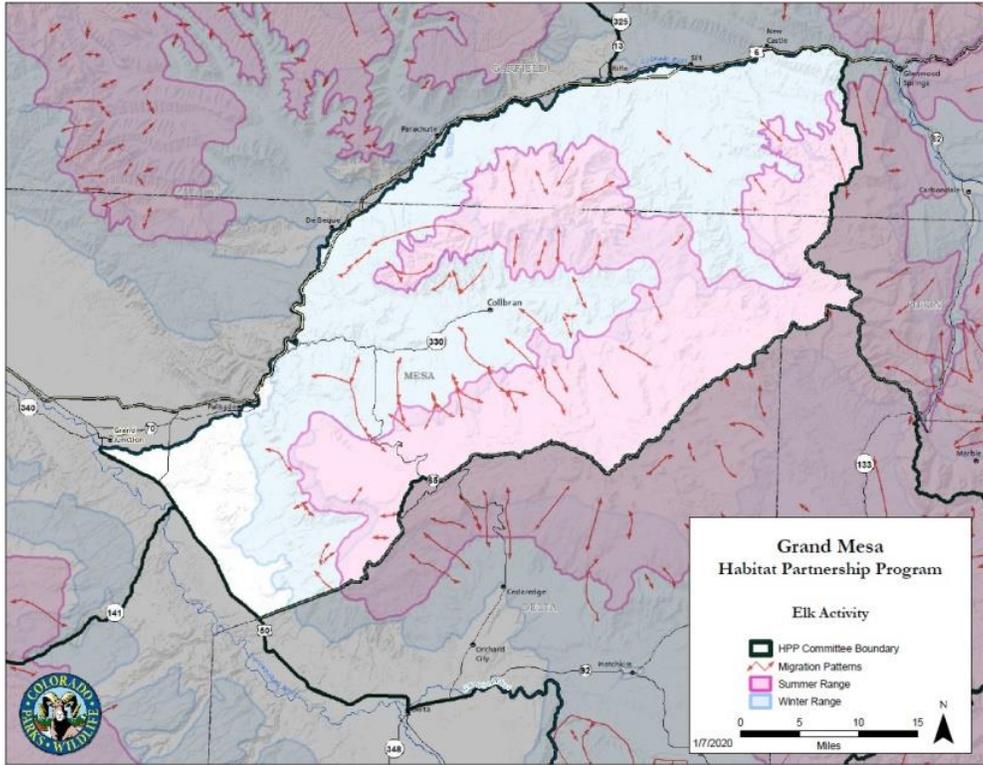


ELK - The committee area is comprised of the northern half of DAU E-14. The DAU includes GMUs 41, 42, 52, 411, 421, and 521; however only GMUs 41, 42, and 421 are within the committee area. Elk are found throughout DAU E-14 with the general exceptions of the largest human population areas, and the desert-like lowlands in the valley bottoms. Elk herds move across the remainder of the DAU during the year, utilizing different areas during different seasons. Elk summer primarily in the highest elevations near the center of the DAU. There are approximately 1,326 square miles identified as summer range, making up 56% of E-14's total area. The quality of summer range is important for elk to ensure they recover from winter weight loss; for cows to support late fetal development and lactation; and for allowing animals to head into winter in good body condition. In the spring, they tend to follow the retreating snowline and subsequent green-up in vegetation higher in elevation as it becomes available. Winter range is often considered to be more important to elk than summer range because it is generally more limited due to weather conditions; however summer range is increasingly an area of concern due to the increase in recreation and other activities in sensitive winter recovery and calving areas.

Due to heavy accumulations of snow on the GMUG National Forest, both deer and elk winter at lower elevations. There are approximately 1,413 square miles identified as winter range within DAU E-14, which is 59% of the total 2,385 square miles of the DAU. These areas surround the Grand Mesa at lower elevations and comprise critical habitat for the animals to escape harsh conditions and find forage. Favorable snow depths, slope and aspect, and winter temperatures make these areas suitable for wintering big game. These lower elevations are also more susceptible to the fragmentation and destruction of habitat in northern portions of the range as the result of increasing energy development. Big game avoid areas of high activity associated with oil and gas development, causing direct habitat loss, particularly in winter range. Recreation also displaces animals from traditional wintering areas. Elk are often found at higher elevations than mule deer due to their ability to forage in deeper snow conditions. However, during severe winters both deer and elk winter at lower elevations where snow levels are usually manageable.

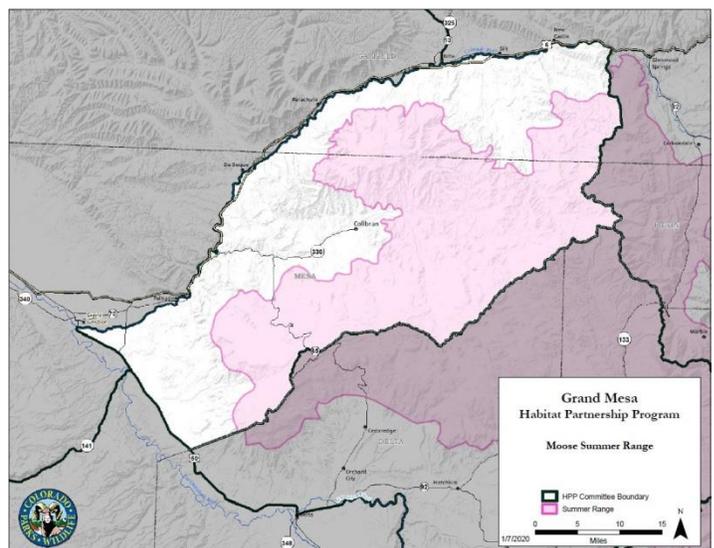
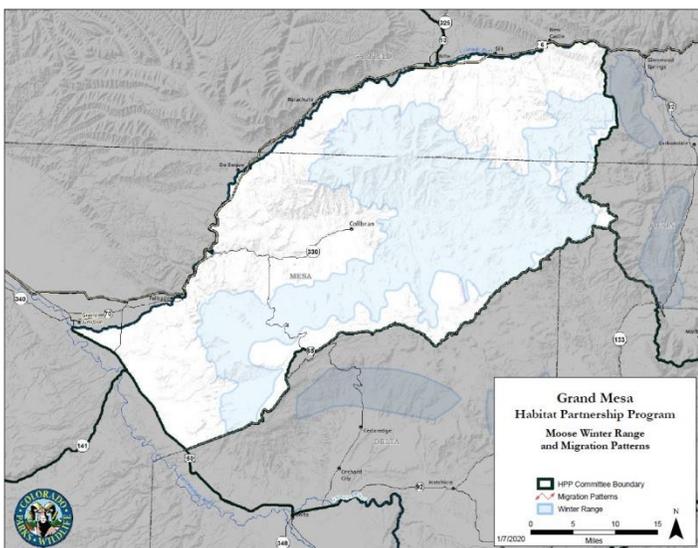
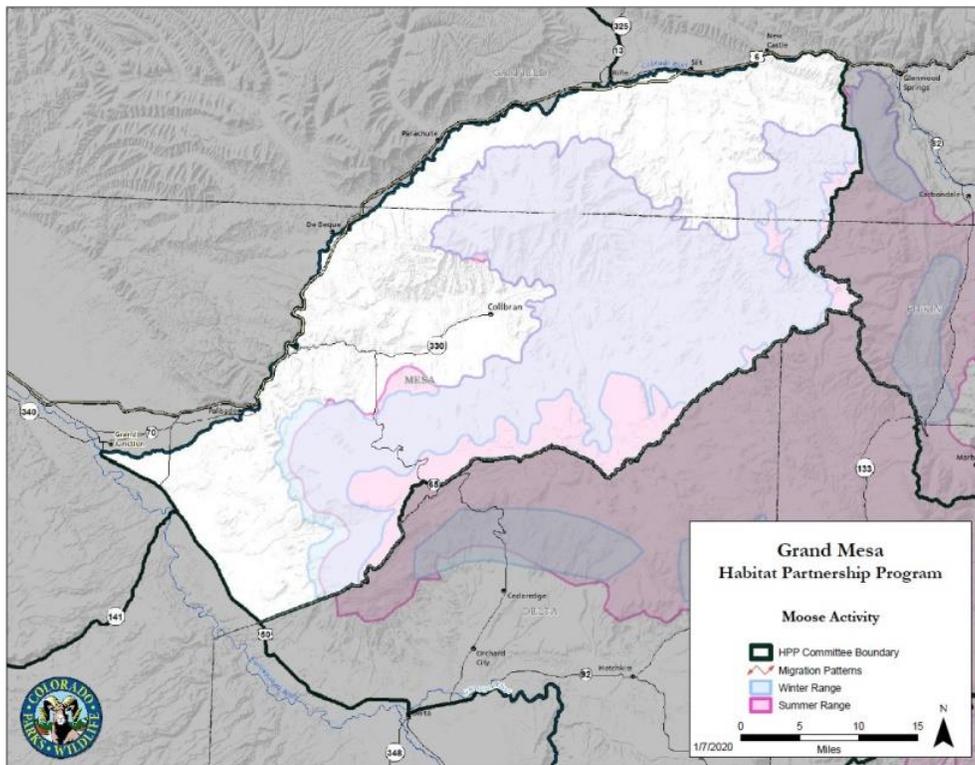
CPW has conducted aerial sex and age composition surveys in E-14 since the late 1970's. Early records in the 1980's had population estimates just under 20,000 animals, with bull:cow ratios as low as 4.3 bulls:100 cows. These ratios have increased to recent levels of 25-30 bulls:100 cows, in large part due to antler point restrictions set in place in the 1980's. In the 1990's and 2000's, the population objective for the Grand Mesa elk herd was at 10,500 animals, but has since been increased to 15,000-19,000 animals. (This herd management plan is due for revision, and population objectives may change in the near future.) In the late 2000s and early 2010s the elk population maintained around 18,000 animals; however the current population is estimated at 13,300. This is the lowest number of elk in E-14 in over 40 years. While the population has declined, the committee does not believe that there has been a corresponding decrease in game damage complaints due to poor overall distribution and increased concentrations of big game on private lands. Current calf:cow ratios sit at 39:100 cows. This is slightly lower than the average calf:cow ratio of 48.3 achieved between 1980 and 2008. Since that time, the calf:cow ratio has been consistently declining, possibly due to decreased habitat quality resulting in a density - dependent situation.

ELK RANGE MAPS



MOOSE - Moose were successfully transplanted to the Grand Mesa in 2005. The population is difficult to estimate due to its spread across 10 GMUs, including 5 GMUs outside of the committee area. 30 hunting licenses were issued for the 2019 hunting season. Prior to transplantation, discussions with local ranchers revealed concerns about potential game damage conflicts with moose. However, to date no moose conflicts have been noted, and it is unlikely that they will be a source of conflicts in the future.

MOOSE RANGE MAPS



DAU SUMMARY TABLE

Data Analysis Unit Summary for Grand Mesa HPP Area

Management Herd	1990s Population Average	2000s Population Average	2010 - 2018 Population Average	Current Population Management Objective
Deer - Grand Mesa N. (D12)	9,711	8,481	9,357	10,000-11,500
<i>Game Management Units: 41, 42, 421</i>				
Elk - Grand Mesa (E14)	18,172	17,016	15,670	15,000-19,000
<i>Game Management Units: 41, 42, 421 (E14 also includes GMUs 411, 52, and 521; however these units are not in the GMHPP area.)</i>				
Moose - Grand Mesa/ Crystal River Valley (M5)	NA	150 in 2009	508	300-400
<i>Game Management Units: 41, 42, 421 (M5 includes GMUs 411, 43, 52, 521, 53, 54, and 63; however these units are not in the GMHPP area.)</i>				

IMPACT AREAS

The committee has mapped historic impact areas, and continually updates newly identified areas of conflict for the Grand Mesa HPP. Private property impacts are the primary concern in this area; however, historically there have been concerns about forage allocation and water availability on BLM and USFS allotments. Over the last two decades, increased oil and gas exploration and production activities and other land use changes to both public and private lands has led to dramatic changes in big game distribution. The increased fragmentation to historic winter ranges, migration corridors, and production areas has aggravated existing impact areas and created new ones. This is primarily due to locally increased concentrations, and is not thought to be a reflection of an increased population. Additionally, recreation has changed the patterns and timing of big game movements, resulting in refuge situations where deer and elk spend more time on private lands throughout the year. This increases the potential for wildlife conflicts over a longer period of time, as well as reduces the number of big game animals that are accessible to public land hunters.

Historically, conflicts ranged from Plateau Creek at its junction with Buzzard Creek, and Buzzard Creek from Harrison Creek downstream; private lands in the valley mainly below the south side canal to highway 330; and west past the towns of Molina and Mesa to the BLM lands at Chalk Mountain. Inholdings of public lands (BLM and CPW) and large properties such as the Hawxhurst Ranch and Parker Basin Ranch have acted as tolerance areas, but have not been sufficient to avoid conflicts in the valley.

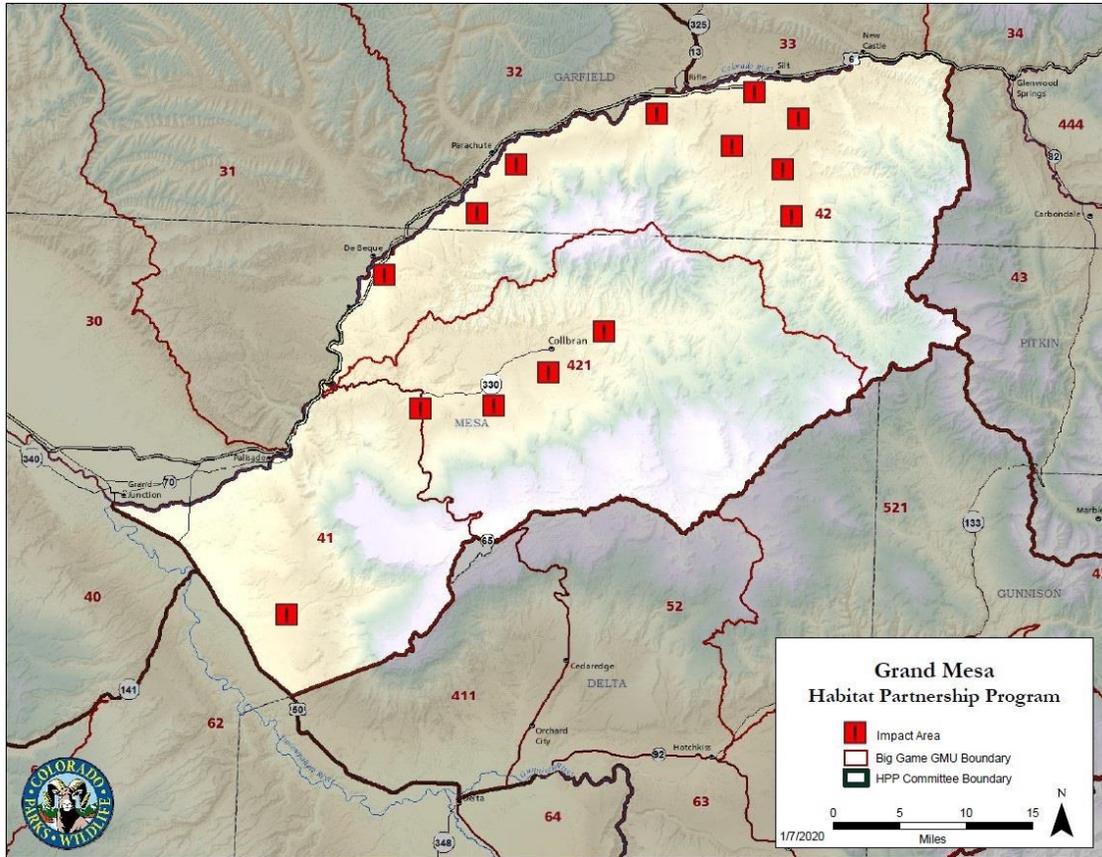
Many of the historic conflicts along the Kannah Creek drainage have been resolved through HPP efforts. However, the area still represents important big game range that would benefit from public land habitat improvements.

Elk are the main culprits of conflicts in the Parachute area of Unit 42. Private lands along the Colorado River from the Blue Stone area near DeBeque have historically wintered elk that have eaten pasture and stacked hay, and caused damages to fences. Many landowners in the Wallace Creek drainage have tolerated elk feeding on their lands, but fence damage still occurs. The Battlement Mesa area is increasingly becoming urbanized. Conflict with big game includes damage to haystacks, ornamental plantings of trees, shrubs, and gardens. The Rulison and Holmes Mesa areas have fence and forage conflicts with wintering elk on private hay fields located on the mesas below the Battlements.

In the Silt area of Unit 42, the majority of conflict occurs in the Divide Creeks, Dry Hollow, and dispersed subdivisions along the Colorado River Corridor. Garfield Creek at the east end of the unit has very few conflicts due to the 13,000+ acres in CPW ownership that winters the bulk of the elk in the Garfield and Baldy Creek areas. Elk from the Divide Creek drainages typically funnel down into the heart of the ranch country, creating most of the conflicts. Further west in the Mamm Creeks and Beaver Creek drainages, conflicts include fence damage and spring forage damage.

Resolving conflicts in these zones is a priority for the Grand Mesa HPP committee. Projects within the targeted zones where the most severe conflicts occur will be given higher priority in funding decisions. However, while these areas are currently targeted for conflict resolution work, conflicts exist throughout the Grand Mesa committee area. It is likely that patterns of land ownership and land use will continue to change, resulting in new conflicts and challenges in the future. These may affect which areas the committee considers to be higher priority impact areas.

IMPACT AREAS MAP



GAME MANAGEMENT OBJECTIVES

In addition to resolving wildlife conflicts, HPP is also statutorily directed to “assist the division in meeting game management objectives....” This assistance will be directed towards a) maintaining/increasing the population in a given area primarily by habitat manipulation projects; b) maintaining/decreasing the population in a given area primarily by pursuing hunting opportunities; and c) participating in research activities aimed at habitat, population, disease, and/or movement factors that influence big game populations.

PROJECT TYPES & PRIORITIES

PROJECT TYPES (TO INCLUDE, BUT NOT LIMITED TO):

Habitat Manipulation:

- Prescribed burning
- Water developments
- Weed control, including herbicide vouchers
- Fertilization
- Seeding
- Hand thinning
- Mechanical (chaining, roller chopping, hydro axing, etc.)

Fencing Projects:

- Fence vouchers for fence repair materials
- Construction of new fences (usually > ¼ mile in length)
- Landowner reimbursement for purchased fencing materials
- Prototype or experimental fence designs
- Wildlife crossings or retrofitting fences to be more wildlife-friendly

Game Damage Projects:

- Stackyards- materials and/or labor
- Distribution hunts
- Hunt coordinators for distribution hunts, youth hunts, etc.
- Forage purchases
- Baiting

Information/Education Projects:

- Seminars
- Workshops
- Brochures
- Electronic media: websites, etc.
- Comment letters
- Travel management: signage, temporary fencing, etc.

Research/Monitoring Projects:

- Habitat
- Population
- Inventory
- Movement

Conservation Easements (transaction costs only)

Archaeological Clearances (and other NEPA required clearances)

HPP projects may be undertaken on public lands, private lands or a combination of both as needed wherever the local committee believes the project has the best chance to effectively reduce, minimize or eliminate the big game/livestock conflict or assist CPW in meeting big game management objectives.

OPERATING GUIDELINES

In an effort to be consistent and fair to all applicants, the committee has established operating guidelines that detail priorities, eligibility requirements, project rules and limits, and other policies. The committee retains the authority to review and update these guidelines as necessary to meet the changing needs of the area; however, these standard rules should apply to most HPP projects and will be enforced by the committee with few exceptions. Projects that mitigate big game conflicts with agriculture will have higher priority than those that achieve big game management objectives. Project applications should adequately address the following:

1. Has the applicant/landowner acted in good faith and cooperation with CPW? To maximize program effectiveness, applicants or landowners with a history of misconduct related to the HPP program shall be ineligible for program participation.
2. The committee will place the highest priority on habitat improvement projects on private lands where big game is tolerated or encouraged; and on large-scale projects over smaller or more localized improvements.
3. Projects should address recurring conflicts that involve a significant number of big game animals, or enhance habitat conditions on a landscape scale to improve distribution or overall population numbers of big game animals.
4. Projects on private, BLM, USFS, or state-managed lands that will also reduce or eliminate conflicts on adjacent private lands will be given higher priority.
5. Applicants/landowners should preferably allow some type of hunting access on private properties.
6. Landowners must be willing to provide a 50%-50% financial match. Projects with other cooperator funds or partnership opportunities will be given higher priority.

Monitoring projects are critical for the long term sustainability of HPP. To provide documentation, determine treatment effectiveness, and be able to convey results, monitoring will be done on all projects. Specific monitoring methodology shall be matched to the treatment. Monitoring data will be submitted to the local HPP committee and administrative assistant.

MANAGEMENT STRATEGIES

Management strategies were developed to achieve the committee's objectives. Strategies primarily involve resolving big game conflicts through habitat manipulation, fencing, and game damage projects; or achieving big game management objectives through information and education, research and monitoring, or conservation easements. Most HPP projects will fall into one of the following management strategy categories.

1. **HABITAT MANIPULATION:** Improving habitat on private, public, and tribal lands attracts big game away from impact areas; improves big game distribution; holds big game for longer periods of time on public lands; or improves forage abundance, availability, or palatability such that it reduces competition between big game and livestock.
2. **FENCING PROJECTS:** Repair of existing fences and/or construction of new fences help alleviate ongoing big game damage, and offset the financial burden to landowners. Fence projects should result in the reduction of damage claims, overall habitat improvement, and improved distribution of big game. Fences will be wildlife-friendly to HPP specifications. Maintenance will be responsibility of the landowner.
3. **GAME DAMAGE PROJECTS:** Providing stackyards for landowners otherwise ineligible for them and using hunt coordinators and forage purchases address pending damage problems that CPW may be financially liable for.
4. **INFORMATION AND EDUCATION:** Producing and distributing informative materials helps public land agencies and private land managers educate the public and provides information about the programs, agencies, conflicts and user responsibilities. Travel management may include signage or education on closures or activities that will benefit big game.
5. **RESEARCH & MONITORING:** Projects will include, but not be limited to, those focusing on habitat condition, populations, inventory and movement patterns; or those that assist CPW in meeting management objectives. While these types of projects may be funded, the committee's primary focus will be on conflict resolution between big game and livestock.
6. **CONSERVATION EASEMENTS:** Conservation easements help protect a property's conservation values, particularly agricultural productivity, wildlife habitat, and hunting access. Improving access to public and private lands improves harvest of big game animals in impact areas, and helps disperse problem animals.

BUDGET GUIDELINES

The budget for the State HPP program is based on 5% of total annual revenues for big game license sales in the HPP areas. The Statewide HPP Council allocates funding to the individual HPP committees. The Grand Mesa HPP budget was developed to best meet the goals and objectives outlined earlier in the plan, while maintaining the flexibility to deal with emergencies and take advantage of opportunities. Additional funds are also available through the Statewide HPP Council and the HPP Coordinator for special projects or unforeseen opportunities outside of the capacity of the local committees. These dollars supplement our existing budget and allow us to take on special projects from time to time.

The Grand Mesa HPP Committee has developed a budget allocation in line with our vision, which allows for short-term strategies to deal with immediate fence and forage conflicts caused by big game, but also provides options for adaptive, long-term management strategies leading to the establishment of healthy and sustainable habitat on public and private lands.

Habitat Manipulation.....	55%
Fencing & Game Damage.....	25%
Information & Education.....	5%
Conservation Easements.....	10%
Research.....	5%
<u>TOTAL ALLOCATION</u>	100%

It is important to acknowledge that the budget allocation is based on past projects, future projects that are likely to be proposed, and committee preference in funding certain project types. While these are desired and/or likely allocations, the committee retains the ability to shift funds as needed between categories as projects and opportunities arise or as situations dictate.

CURRENT & FORESEEABLE ISSUES

The committee anticipates that multiple factors will influence big game populations and distribution in the future, which will drive conflicts with agriculture and may change CPW management objectives. These may include, but are not limited to, the following:

RECREATION

With growing residential populations throughout the committee area, increased scope and timing of recreation on public lands has changed historic patterns of big game movement and habitat use. These changes result in conflicts that manifest in new areas or during different times of the year when traditional management strategies may be less effective. These trends will likely continue and will impact how and where the committee implements projects.

DEVELOPMENT

The committee area has experienced residential growth with subsequent loss of agricultural spaces and habitat connectivity. This concentrates big game and the associated conflicts onto the remaining properties that provide big game habitat, and increases the potential for conflicts and the overall impact of big game damages on those landowners. Additionally, these changes have impacted hunting access and related activities in the committee area.

OIL & GAS

Oil and gas development has long been an economic driver within the committee area, and likely has significant impacts on wildlife. Energy development operations are typically located within big game transition and winter range, and can displace wintering wildlife from non-impact areas, exacerbate current problems, and create new game damage issues. While there has been an overall slowdown on energy development in recent years, changes in technology and future energy demands may result in the area becoming heavily utilized once again, resulting in new or increased conflicts on nearby private lands.

DISEASE

Chronic Wasting Disease (CWD) has been detected within the Grand Mesa HPP area at low, inconsistent levels in deer; and extremely low, isolated incidences in elk. Given the prevalence of the disease within Colorado and its continued spread towards the southwest, it is possible that CWD may become more common in this area in the future. CWD and other big game diseases may impact CPW management objectives for deer and elk.