

Colorado Parks and Wildlife  
Habitat Partnership Program  
NORTH FORK OF THE GUNNISON



## 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

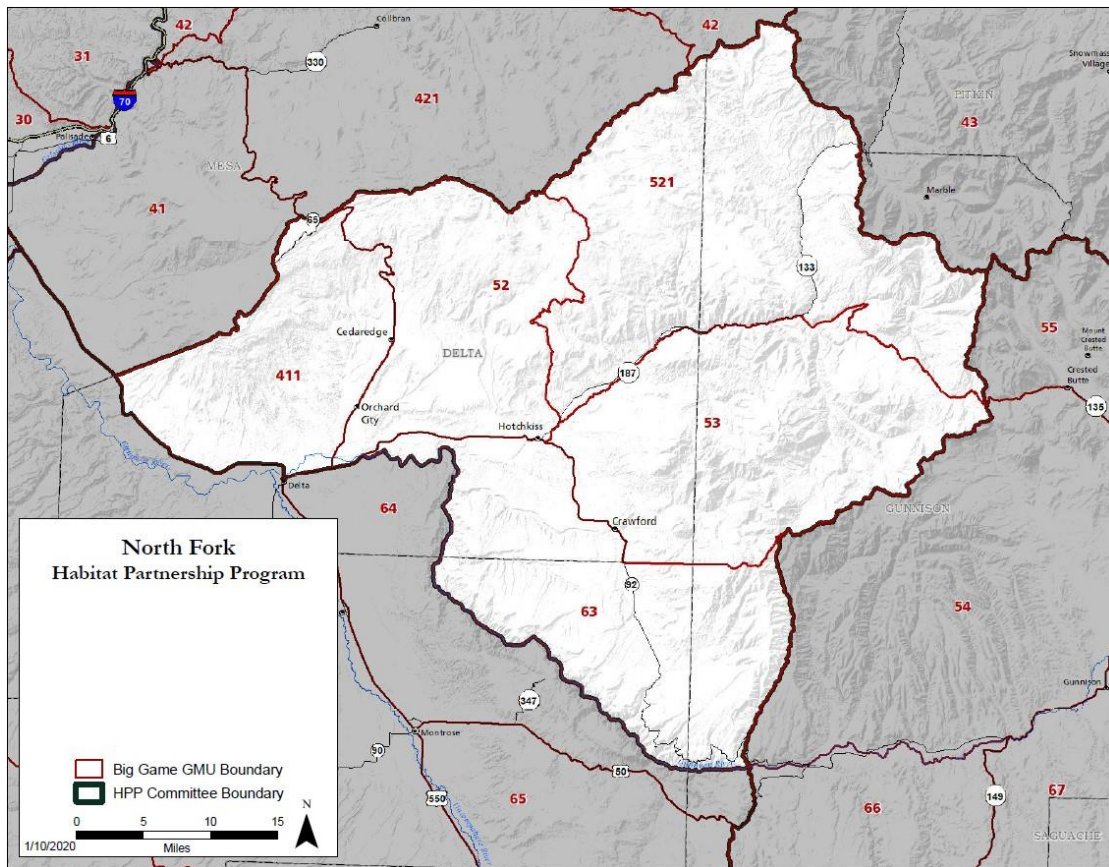
Executive Summary.....	2
Map: North Fork HPP Area.....	2
Committee Members.....	3
Introduction.....	4
-HPP Orientation	
HPP Statute.....	5
Committee Objectives.....	6
Area Description.....	7
-Map: Land Ownership	
-Habitat Description	
Big Game Population Summary.....	8
-Maps: Deer, Elk, and Moose Ranges	
-Impact Areas & Map	
-Game Management Objectives	
Project Types & Priorities.....	17
Operating Guidelines.....	18
-Management Strategies	
Budget Guidelines.....	20
Current and Foreseeable Issues.....	20

# EXECUTIVE SUMMARY

The North Fork of the Gunnison Habitat Partnership Program Committee (NFGHPP) was formed in 1989 to help resolve big game conflicts with agriculture. 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, changes in land use, and loss of habitat due to residential and recreational 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 NORTH FORK HPP AREA



# COMMITTEE MEMBERS

- |   |                             |
|---|-----------------------------|
| 1. Jess Campbell, livestock grower representative | Started HPP Term: Feb. 1990 |
| 2. Ross Allen, livestock grower representative    | Started HPP Term: Feb. 1990 |
| 3. Steve Kossler, livestock grower representative | Started HPP Term: Feb. 1990 |
| 4. Adam Gall, sportsman representative            | Started HPP Term: Apr. 2017 |
| 5. Ken Holsinger, BLM representative              | Started HPP Term: Mar. 2015 |
| 6. Vacant - USFS representative                   | Started HPP Term:           |
| 7. Cody Purcell, CPW representative               | Started HPP Term: Mar. 2015 |

# INTRODUCTION

Game damage has always been an issue in the North Fork area, and historically was higher than in other parts of Colorado. In the 1950's and 1960's, deer were the main cause of conflicts with agriculture, with elk minimally involved until they first started showing up in the valley bottoms in the late 1970's. Elk increasingly impacted orchards, and conflicts reached a peak during the severe winter of 1983-84. In response, the Colorado Division of Wildlife (CDOW) fenced all the orchards in the North Fork Valley and around Cedaredge. This shifted the winter elk damage to haystacks and hay fields, which resulted in increased game damage complaints.

In response to increasing statewide game damage claims, the CDOW implemented the Habitat Partnership Program (HPP) to help create partnerships among landowners and the agency and cooperatively resolve big game conflicts with agricultural operations. The North Fork of the Gunnison Habitat Partnership Program Committee (NFGHPP) was formed in November 1989, making it the first HPP committee in the state. With the help of an advisory liaison committee, the NFGHPP committee developed a comprehensive Habitat Management Plan to help steer committee work and funding decisions towards resolving local big game conflicts. In the decades since the committee began its work, many complex issues have been resolved with both short and long-term solutions that benefit landowners, sportsmen, and wildlife.

The future conservation and enhancement of wildlife habitat is a cooperative effort between private landowners, state and federal government, and other partners. To that end, the NFGHPP committee will become involved, and if appropriate, provide funding for any endeavor that will improve big game habitat in the North Fork Valley and help resolve wildlife conflicts with agriculture and/or assist Colorado Parks and Wildlife in meeting game management objectives.

## 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.

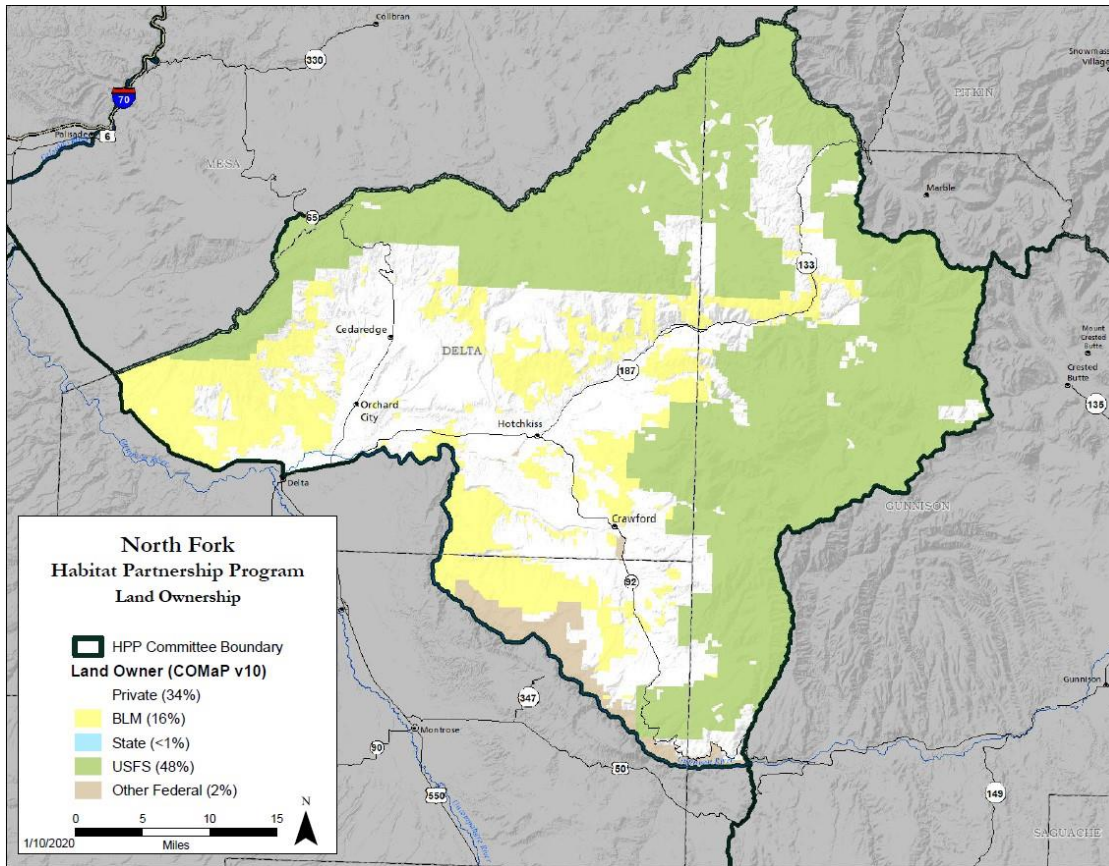
# COMMITTEE OBJECTIVES

The NFGHPP committee is designed to be an ongoing program that will facilitate cooperation and partnership between private landowners, wildlife and habitat managers, and sportsmen working to reduce big game damage to fences and forage. The committee objectives are as follows:

1. To improve communication and encourage an atmosphere of cooperation among CPW, agricultural producers and other private landowners, public land management agencies, sportsmen, and local governments.
2. To ensure local public involvement in identifying conflict areas, and prioritizing short-term and long-term solutions to these problems.
3. To ensure that private land habitat issues are considered in the management plans for big game populations; and to make recommendations to stakeholders that encourage appropriate management actions for lands and populations that will reduce conflicts and help sustain individual operations and viable big game herds.
4. To increase public access and hunting opportunity in a manner that helps redistribute or increase harvest of conflict-causing animals.
5. To increase landowner tolerance of big game presence and impacts.
6. To help improve big game habitat, distribution and population sizes in accordance with CPW management objectives.
7. To facilitate funding partnerships that increase the committee's ability to implement projects on a cohesive, landscape scale.
8. To increase effectiveness of habitat manipulation projects and implement a landscape-scale philosophy by increasing the scope and connectivity of projects; and by soliciting and coordinating habitat treatments which incorporate public and private land, creating a link between past and future treatments on a landscape scale.

# AREA DESCRIPTION

The NFGHPP area includes GMUs 411, 52, 521, 53 and 63, which totals 1.13 million acres. The area is bounded on the north by the Delta-Mesa and Gunnison-Mesa County lines; on the east by Gunnison-Pitkin County line, White River-Gunnison National Forest Boundary, Ruby Range Summit, Gunnison River-North Fork of Gunnison River divide, Curecanti Pass and Curecanti Creek, Smith Fork-Curecanti Creek divide, and Smith Fork-Dyer Creek divide; and on the south and west by the Gunnison River and Highway 50. The North Fork Valley is a narrow river valley with a variety of agricultural operations including cattle and sheep production, fruit production, and forage production. Private land ownership is more fragmented than in other agricultural areas. The uplands above the riverbottom corridor are a mix of private and BLM lands, with higher elevation lands being predominately National Forest.





## HABITAT DESCRIPTION

Elevations range from 5,000-ft in the valley floor to 11,000-ft at the top of Grand Mesa, and above 13,000-ft in the Ruby Range. Annual precipitation averages approximately 8-13 inches in the lower areas around Hotchkiss and Delta, and at higher elevations, snowfall can total 250-300 inches. The vegetation is typical of these elevations, transitioning from high desert shrub types including adobe scrub, pinyon-juniper, sage, and oakbrush at lower elevations into mountain shrub, aspen, and spruce forests up to high elevation alpine tundra. Most of the public lands are steep, rocky, or consist of soils that are not suitable for agriculture. These areas produce limited vegetation for winter forage, resulting in most of the important winter range being situated on lower elevation private agricultural lands. These operations tend to be irrigated cropland and grassland with half-shrub mixtures and grass/alfalfa meadows that produce pasture and hay for livestock.

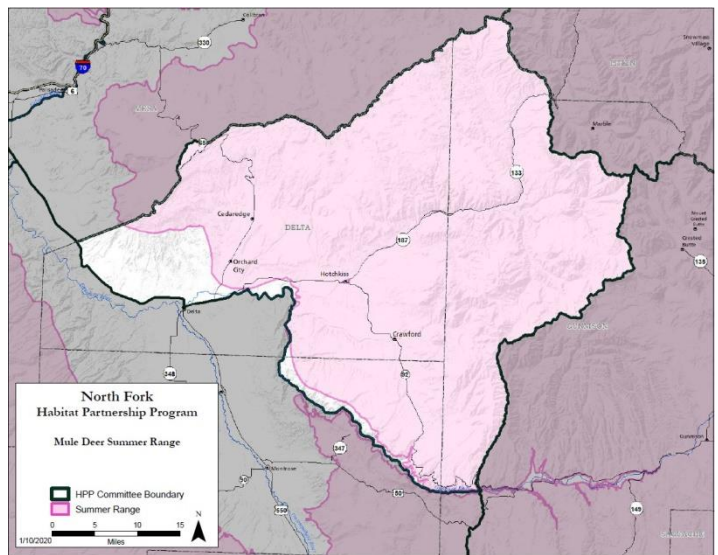
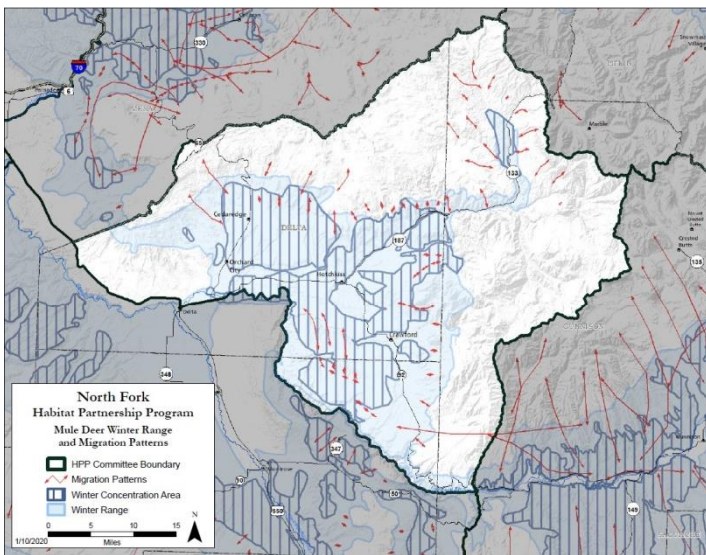
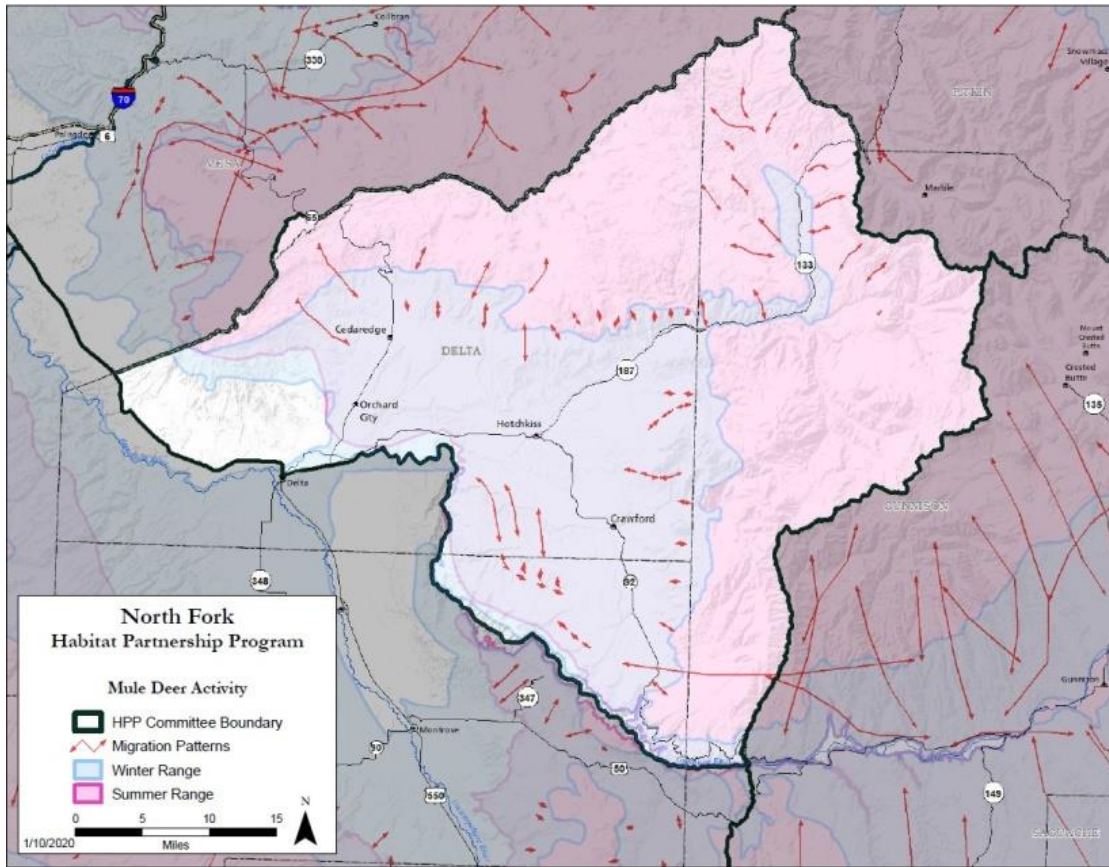
Much of the habitat within the committee area is in a late seral stage, with vegetative communities that are dense and unproductive with low vigor. There is a significant lack of age-structure diversity amongst the mountain shrub and aspen communities on summer range, and accelerated sagebrush mortality on winter range. Extended drought conditions and overgrazing on the remaining winter forage by big game has exacerbated these issues.

## BIG GAME POPULATION SUMMARY

**DEER** - The NFGHPP committee area includes two deer DAUs: D20 (North Fork Gunnison River herd) and D51 (South Grand Mesa herd). Following statewide trends, the estimated deer population in the North Fork Valley declined from historic highs that existed prior to the 1980s. This decline slowed in the late 1980s and has been relatively stable since the 2000s. Antlerless licenses were not issued from 1998 to 2005 in an attempt to increase deer numbers; however beginning in 2005 a small number of private land only tags were issued to help alleviate game damage issues and current antlerless allocations remain at that low level. While population numbers have been consistent since then, both D20 and D51 were below population objectives for the 2000s and 2010s. Antlered license allocations decreased steadily from 2008-2017, and have remained at that reduced level. In 2018, the population objectives for both DAUs were reduced to be more in line with the current numbers.

As indicated by the observed population trend, the North Fork Valley cannot support the numbers of deer that it did several decades ago. This is likely due to several factors including overall habitat decline and increasing development and recreation demands. However, the public would generally like to see this deer herd increase in size. In the context of harvest-based population management where antlerless licenses are manipulated to affect population growth, options to increase this population are non-existent until other limiting factors are addressed.

# DEER RANGE MAPS

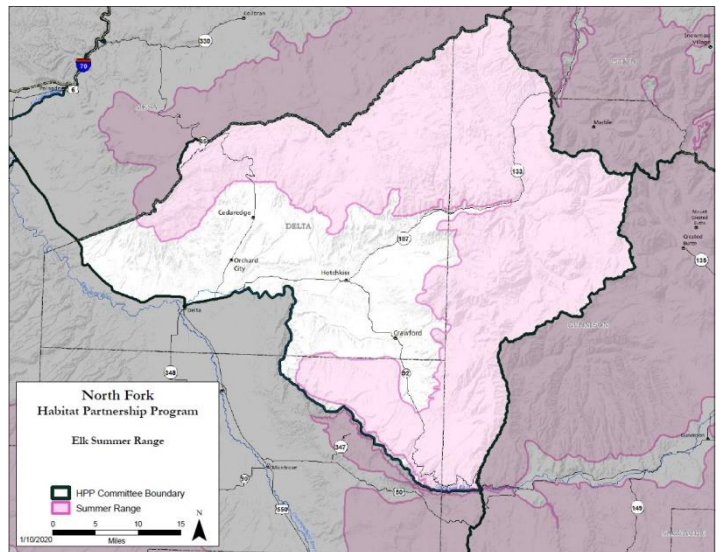
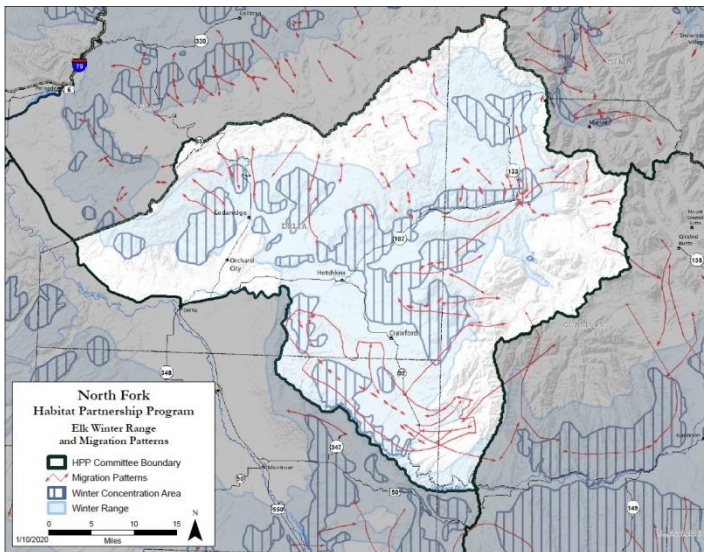
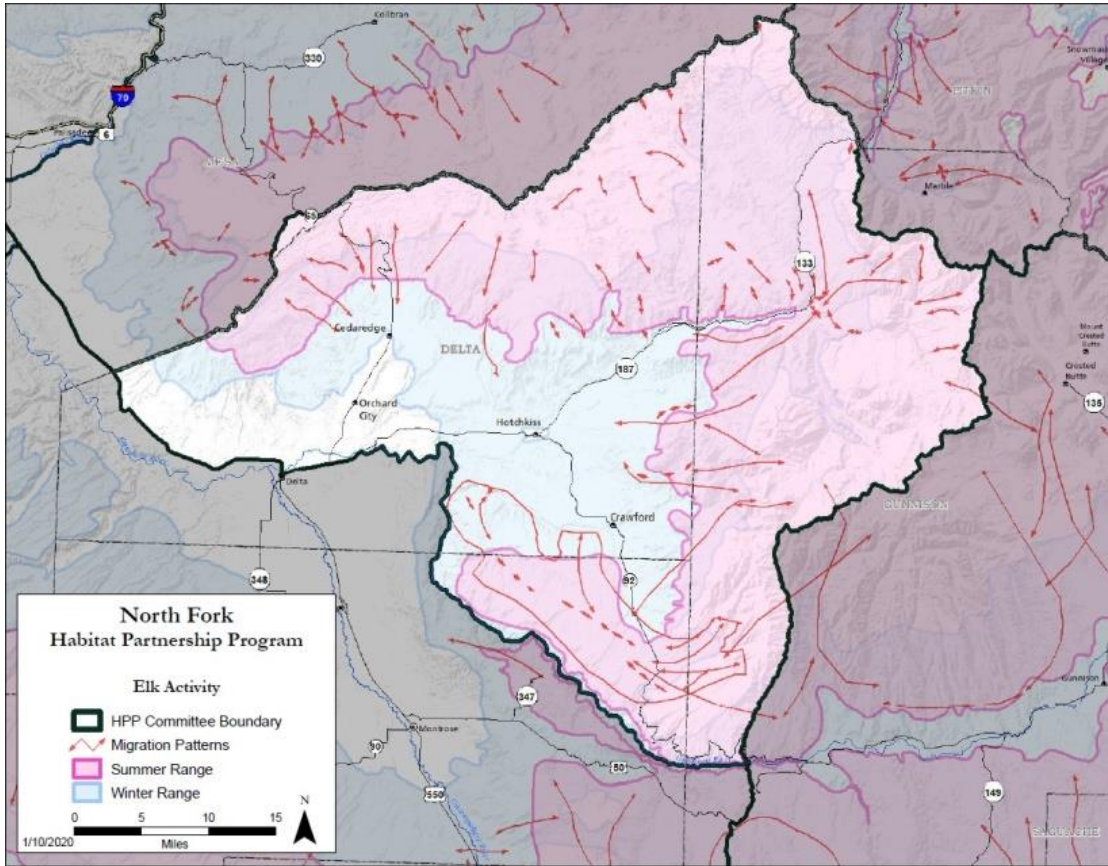


**ELK** - The NFGHPP committee shares the E14 (Grand Mesa) elk herd with the Grand Mesa HPP committee. The herd includes GMUs 41, 42, 52, 411, 421, and 521; however only GMUs 411, 52, and 521 are within the NFGHPP committee area. The NFGHPP committee also shares the E5 (West Elk) elk herd with the Gunnison Basin HPP committee. E5 GMUs include 53, 54, and 63; however only GMUs 53 and 63 are within the committee area. Thus, comprehensive management of elk conflicts in the North Fork Valley represents a joint effort with both the Grand Mesa and Gunnison Basin HPP committees.

Following statewide trends, there was dramatic growth in these herds during the 1980's, peaking in 1989. Hunting license allocations were increased in response, and the population has been steadily decreasing since the early 1990s. This decrease was intentionally slowed in the 2010s. The E14 population is currently estimated at 13,300, with a population objective of 15,000-19,000 elk. This is the lowest number of elk in E14 in over 40 years, and that Herd Management Plan is currently due for revision. The E5 population is currently estimated at 7,150 elk, with a population objective of 7,800 - 8,800 elk.

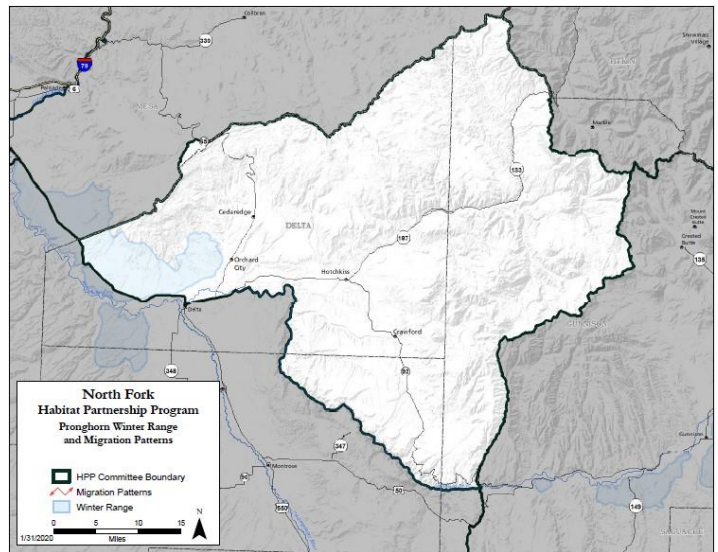
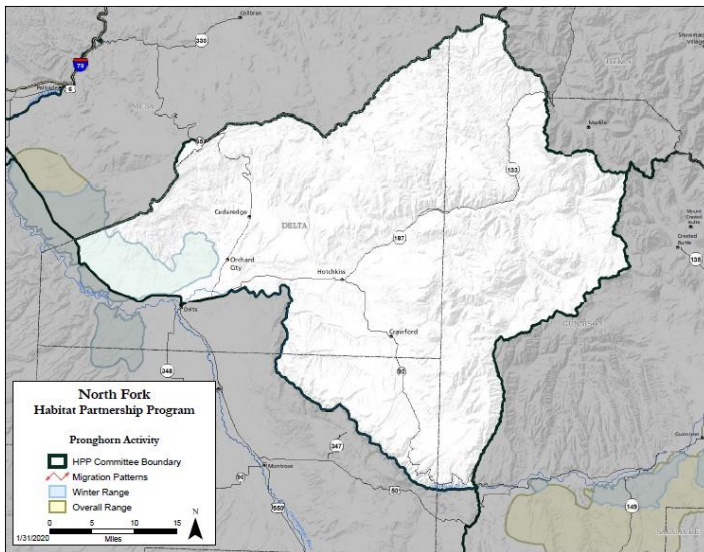
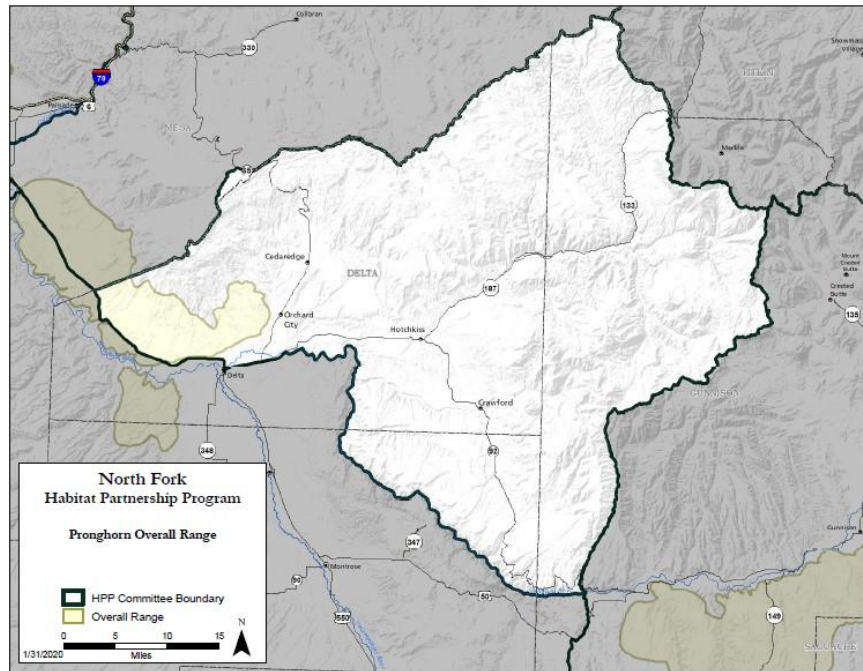
While the overall elk population in the North Fork Valley has declined in the last several decades, the committee does not believe that there has been a corresponding decrease in game damage complaints due to poor distribution on public lands and increased concentrations of big game on private agricultural lands.

# ELK RANGE MAPS



**PRONGHORN** - There is a very small population of pronghorn in the lower elevations of GMU 411. The herd had been productive and sustained hunting until the severe drought conditions of the early 2000s. Since then, drought conditions, hemorrhagic diseases, noxious weed encroachment, loss of shrub cover, and decreased water availability have contributed to low fawn survival and population decline to the point that hunting was closed 2012. To date there have been no known pronghorn conflicts with agriculture in the committee area, and given the very limited overlap of pronghorn range with the committee area, it is unlikely that pronghorn will cause conflicts in the future.

## PRONGHORN 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. To date, moose conflicts have been minimal and within the ability of the NFGHPP committee to mitigate.

## MOOSE RANGE MAPS

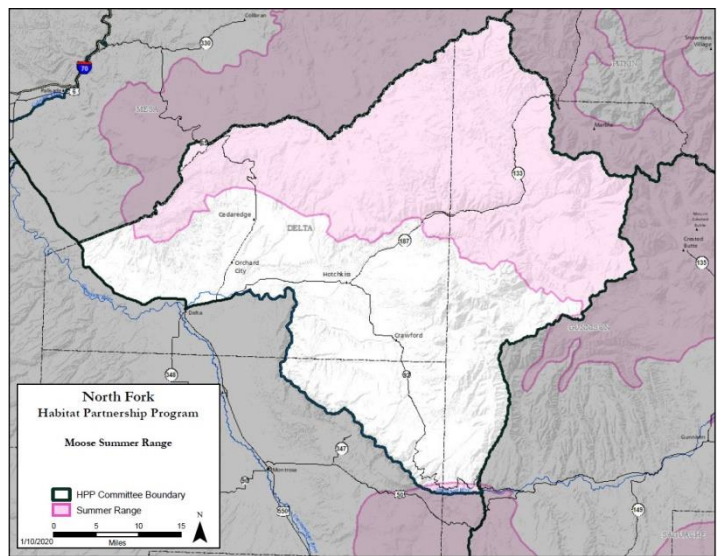
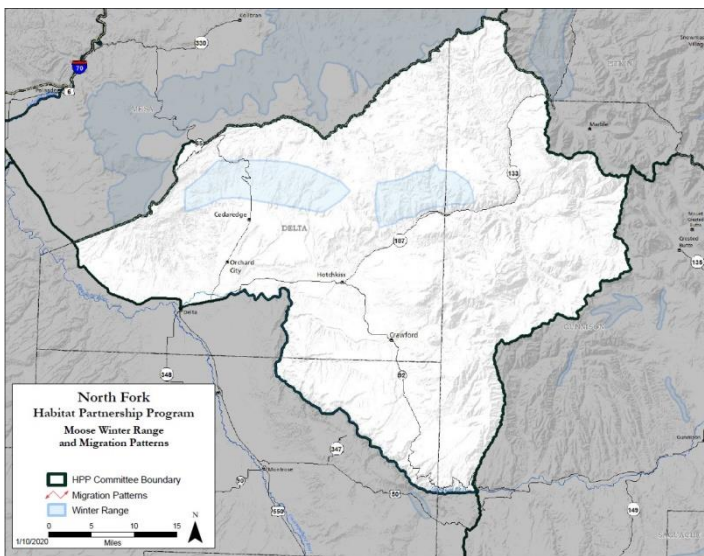
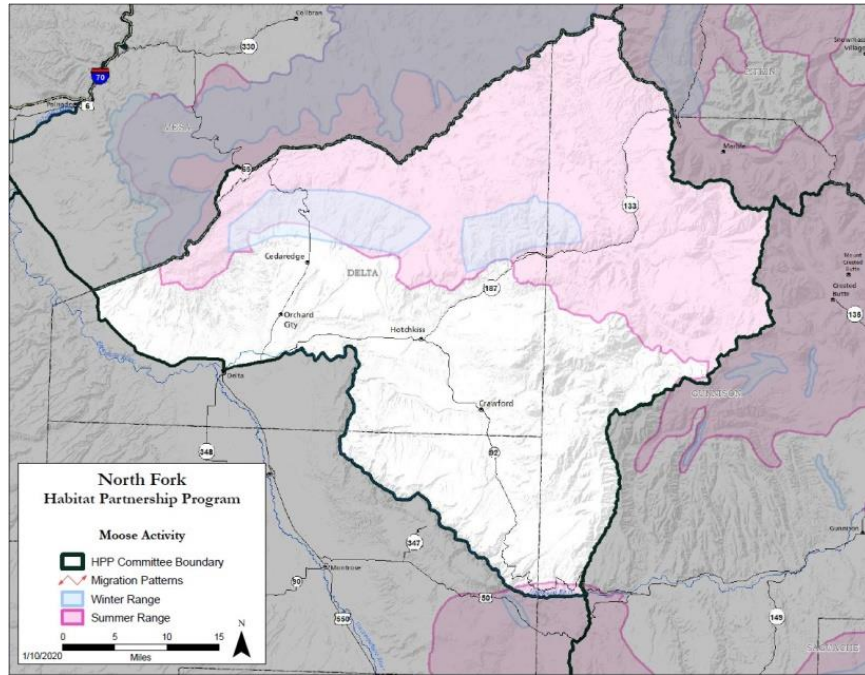


Table 1. Data Analysis Unit Summary for North Fork HPP Area

<b>Management Herd</b>	<b>1990s Population Average</b>	<b>2000s Population Average</b>	<b>2010 - 2018 Population Average</b>	<b>Current Population Management Objective</b>
Deer - North Fork (D20)	13,700	9,400	7,100	7,500-9,500
<i>Game Management Units: 53, 63</i>				
Deer - S. Grand Mesa (D51)	9,800	8,700	8,100	8,000-10,000
<i>Game Management Units: 52, 411, 521</i>				
Elk - West Elk Mountains (E5)	10,900	9,800	7,981	7,800 - 8,800
<i>Game Management Units: 53, 54, 63 (54 is not in NFGHPP area)</i>				
Elk - Grand Mesa (E14)	18,200	17,000	15,700	15,000 - 19,000
<i>Game Management Units: 41, 42, 52, 421, 411, 521 (41, 42, 421 not in NFGHPP area)</i>				
Pronghorn - Delta (A27)	200	100	125	*
<i>Game Management Units: 41, 411, and 62 (only 411 is within NFGHPP area)</i>				
<i>*This population is too small to support hunting and does not have an HMP or population model</i>				
Moose - Grand Mesa/ Crystal River Valley (M5)	NA	150 in 2009	508	300-400
<i>Game Management Units: 52, 53, 63, 411, 521 (M5 includes GMUs 41, 42, 43, 54, and 421; however these units are not in the NFGHPP area)</i>				

# IMPACT AREAS

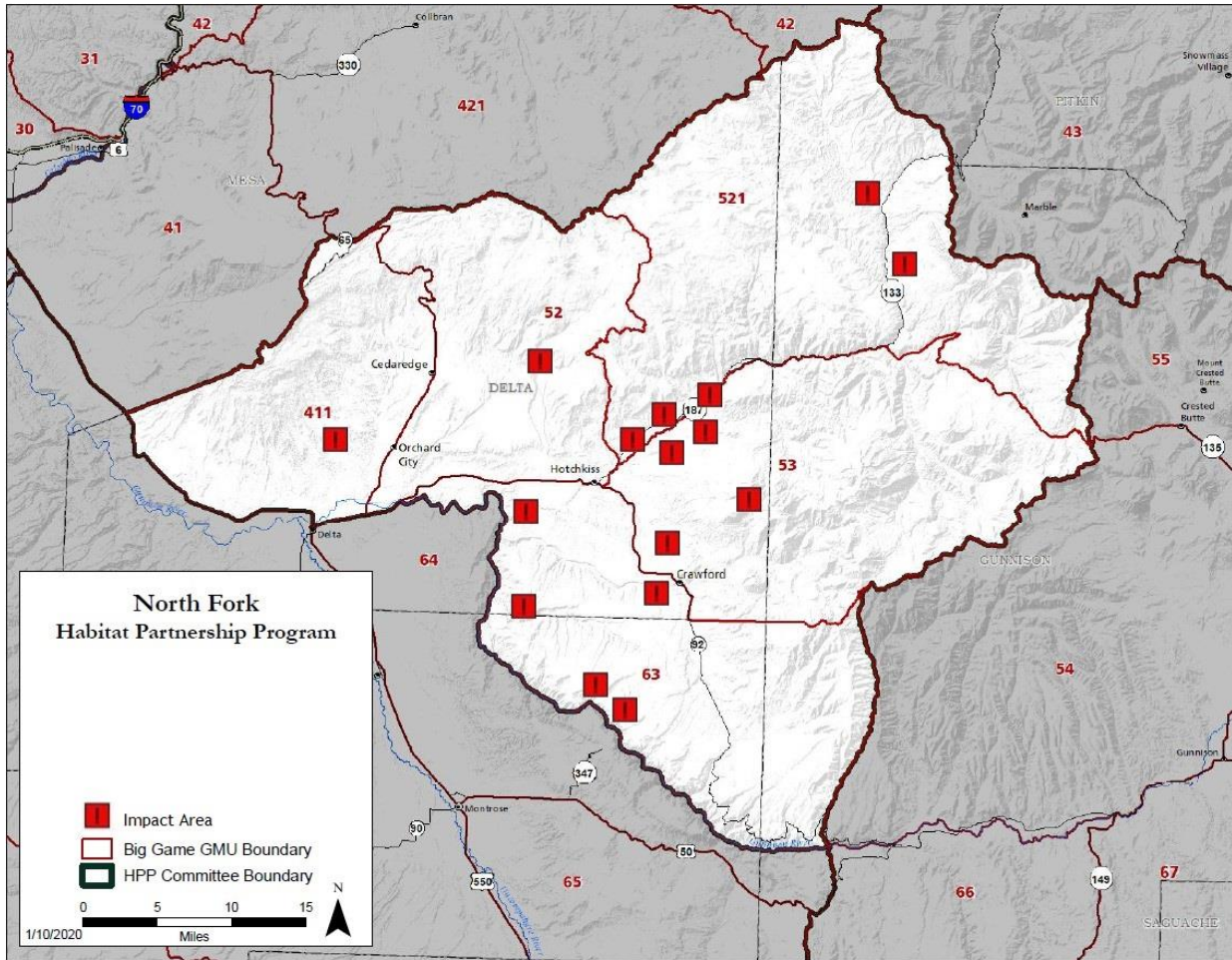
Minimal conflicts with elk existed prior to 1970. In the severe winters of the late 1970s and early 1980s, elk started to move down onto the valley floor. This led directly to the first game damage problems due to elk in the North Fork Valley. These conflicts continued through the 1980s, with elk becoming the primary cause of conflict with agriculture. Game damage by mule deer has also historically been an issue in the North Fork Valley, albeit to a lesser extent than elk damage. The generally mild winters from the late 1990s to the present led to an overall decrease in big game conflicts, although there remains a threat of serious conflicts based on the severity of the winter.

Big game conflicts with agriculture within the committee area are likely to be caused by poor distribution of animals on the range (overlapping ranges and periods of grazing) rather than an overabundance of animals. Key drivers of poor distribution include:

1. Recreation: Public land recreation heavily impacts big game habitat use and movements, and causes high concentrations of big game animals on private lands or refuge areas. Focal points for recreation-related impacts include Jumbo Mountain, Kebler Pass, and many of the lower elevation BLM lands where outdoor activities are accessible for much of the winter.
2. The timing and availability of over-the-counter rifle hunting licenses also pressures elk from public lands onto private lands, and the increasing popularity of early season archery and muzzleloader hunting can also push big game onto private lands sooner and more rapidly than historic hunting pressure had done in the past.
3. Development: Significant swaths of private property are continually being subdivided into smaller parcels, and subsequently developed into housing. This fragmentation of winter range is compounded by the concurrent loss of agricultural acres, as irrigated pastures are converted into residential landscapes that do not produce forage and may become reservoirs for invasive and noxious weeds. Given these factors, the remaining winter range lands have become increasingly important for big game, and conflicts result from high concentrations of wintering deer and elk.
4. Refuge Areas: The committee area includes portions of Black Canyon National Park, which is a significant refuge area where elk that cause conflicts on nearby private lands can shelter to avoid hazing, damage hunts, or regular public land hunting.
5. High Fencing: The NFGHPP area has remnants of historic elk farm high fencing, and an unusually large number of high-fence agricultural operations such as orchards. High fences present a significant barrier to big game movements and disrupt migration corridors. Normal levels of big game damage to fences and forage are exacerbated when deer and elk have difficulty passing through an area.



# IMPACT AREAS MAP



While these areas are currently targeted for conflict resolution work, conflicts exist throughout the NFGHPP 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.

## 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 implemented on public lands, private lands, or a combination of both wherever the committee believes the project has the best chance to effectively reduce or eliminate big game conflicts, or to 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.

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. Partnership with other agencies, organizations and individuals will be encouraged to maximize benefits and funding. Projects should have at least a 50% funding match.
3. Projects that mitigate big game conflicts with agriculture will have higher priority than those that achieve big game management objectives.
4. No project will be undertaken which will compound an existing game damage problem.
5. Proactive, long-term solutions that will reduce existing conflicts and help prevent recurring conflicts in the future will have the highest priority. However, some projects may be designed to alleviate or compensate losses which can't otherwise be prevented.
6. Fencing projects shall be designed to reduce fence damage and facilitate wildlife movements. Boundary fences between private and public lands will not be considered high priority.
7. Operations that are smaller than one acre in size, or those that do not represent significant habitat or numbers of big game animals, will not be approved.
8. Hunting access on private lands will generally be required.

## PROJECT MONITORING AND EVALUATION

Comprehensive project monitoring is critical for the long-term sustainability of HPP. To provide documentation, determine treatment effectiveness, and 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. At a minimum, applicant must agree to allow the Committee and the local Wildlife Manager or biologist access to the project site(s) to evaluate and monitor success of treatment(s) supported through this cooperative funding. Before-and-after photos and other measurable data will be required as part of the application evaluation phase, as well as follow-up inspection and monitoring.

# 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 and public 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 to 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 operating budget for HPP is based on 5% of the total annual revenues from big game license sales in HPP areas. The HPP State Council allocates annual funding to the local HPP committees. Additional funds are also available through the HPP State Council for special projects or unforeseen opportunities that are beyond the capacity of the local committee. These funds supplement the existing budget and allow committees to occasionally participate in larger-scale special projects.

The NFGHPP committee has developed a target budget allocation that emphasizes solutions to immediate fence and forage conflicts with big game, but also allows for adaptive, long-term strategies. It is important to acknowledge that the budget is intended to be flexible. While these are desired allocations based upon the priority level for different types of projects, the committee retains the ability to shift funds as needed between categories to effectively resolve big game conflicts.

Habitat Manipulation .....	70%
Game Damage .....	10%
Fencing .....	10%
Other (-Includes research/monitoring, conservation easements, etc) .....	10%
<b><u>TOTAL ALLOCATION</u></b> .....	<b>100%</b>

## 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 management objectives. These may include, but are not limited to, the following:

### RECREATION

Many forms of outdoor recreation take place on public lands in important big game habitats, and have increasingly become year-round activities. Recreation on winter ranges is particularly concerning, and has severe negative impacts on big game at the population level. Motorized and non-motorized recreation influences big game distribution and movement patterns, as human activity pushes deer and elk onto private land refuges where conflicts occur with agricultural operations. As recreational access on public lands continues to expand and the number of users increases, wildlife conflicts will be exacerbated in existing areas and begin to occur in new areas.

## DEVELOPMENT

Portions of the NFGHPP area are experiencing housing and road development as the human population continues to expand. Much of this development is occurring in big game winter range and replaces former agricultural fields, as well as impacting river bottoms and other big game habitat resources. Subdivisions, including those with larger or dispersed individual parcels, result in significant habitat fragmentation and loss. Continuing these patterns of human development will change big game movement, distribution, and conflict potential throughout the committee area.

## OIL & GAS

The North Fork Valley has experienced oil and gas development in the past and, along with mining and coal operations in the area, have the potential to expand and increase conflicts and habitat issues with big game.

## AGRICULTURAL CHANGES

The committee area is experiencing a small shift in agricultural practices to include conversion of pastures and traditional crops to more novel products, including hemp and hobby livestock. While the committee may not participate in conflicts directly related to hemp production, the loss of acres previously involved in forage production could shift or concentrate conflicts in other areas.

## GUNNISON SAGE GROUSE

This HPP area currently has populations of Gunnison Sage Grouse that require additional levels of monitoring and project compliance to minimize potential impacts. The committee recognizes the importance of Gunnison Sage Grouse and will ensure that no HPP projects are detrimental to them.

## DISEASE

Chronic Wasting Disease (CWD) has been detected within the NFGHPP area. However, given the prevalence of the disease within Colorado and its evident spread towards the southwest, it is possible that CWD will become endemic in this area in the future. CWD and other big game diseases may impact CPW management objectives for deer and elk.