



New Mexico
Department of Game & Fish



U.S. Department of Agriculture
U.S. Forest Service
Cibola National Forest



U.S. Department of the Interior
Bureau of Land Management
Albuquerque Field Office

New Mexico
Habitat Stamp Program
CENTRAL REGION
2010-2014
HABITAT IMPROVEMENT PLAN

Revised 4-26-2007



PLAN RATIONALE

In conjunction with citizens, State Game and Fish personnel have met with their federal habitat partners in the BLM and USFS to design habitat improvement plans for each of the five HSP regions of the state.

In an attempt to focus funds and resources, the plans follow the three-step format of:

- 1. Identifying wildlife species of management concern in an area;**
- 2. Listing the species' limiting habitat factors in that area; and**
- 3. Designing management actions to alleviate the identified limiting factors.**

Each plan will be monitored annually at a Citizen Advisory Committee meeting and updated as necessary.

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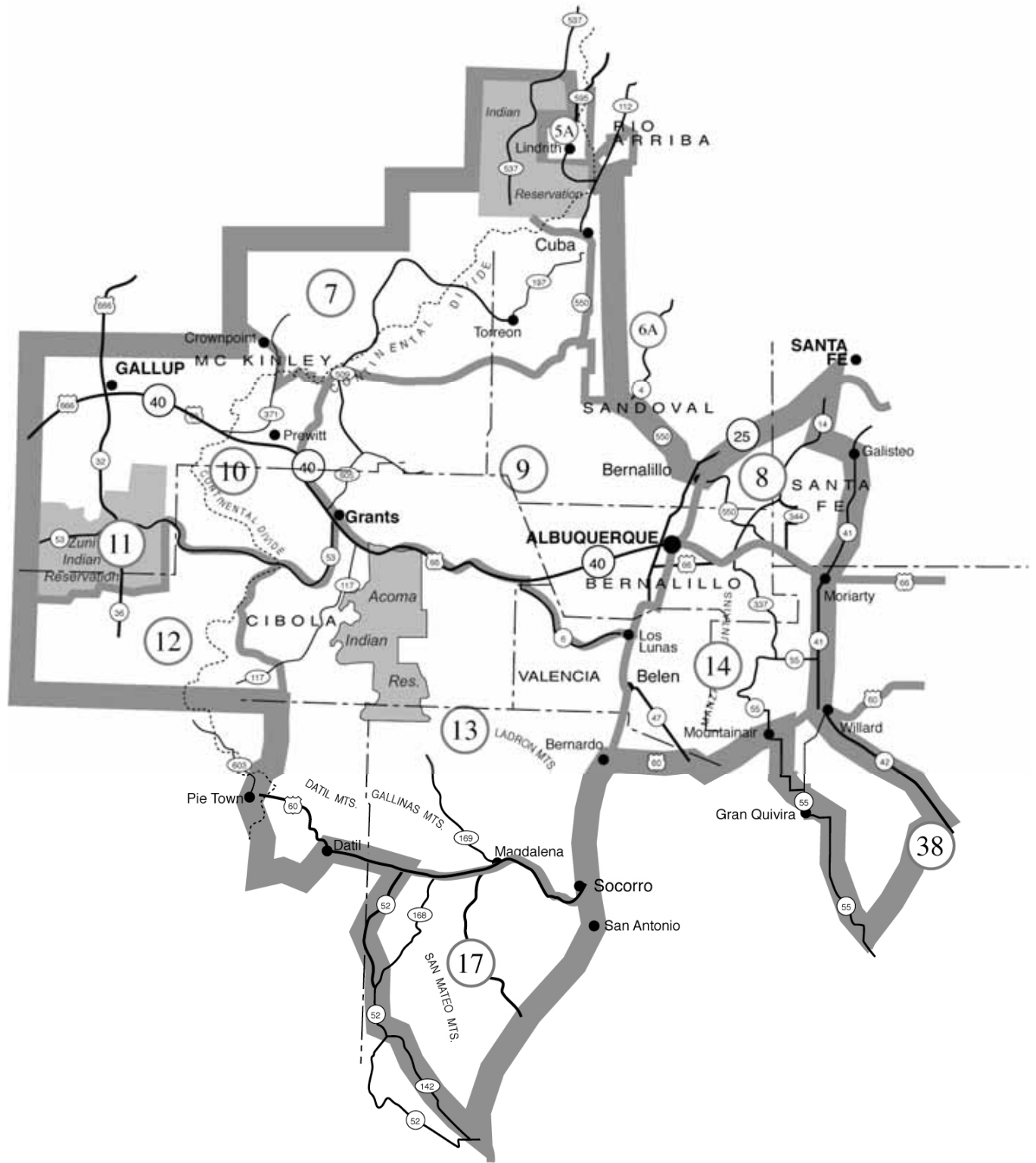
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CENTRAL HABITAT STAMP REGION



CENTRAL REGION Game Management Units

UNIT NUMBER	RESPONDING AGENCY
6	All BLM in the Cuba and Tent Rocks areas
7	All BLM in the Upper Rio Puerco area
8	All USFS in Sandia Mountains
9	USFS in Mt. Taylor and BLM in Ignacio Chavez areas
10	All USFS in Zuni Mountains
12/13	USFS in Magdalena and BLM in El Malpais and Mesa Gallina areas
14	All USFS in Manzano Mountains
17	All USFS in San Mateo Mountains
38	All USFS in the Corona area

CWCS Application

STATEWIDE APPLICATION

New Mexico's Comprehensive Wildlife Conservation Strategy (CWCS) is a planning document that identifies the challenges affecting management of those species and their associated "key" habitats with "greatest need". The key habitats addressed statewide include *riparian* (vegetation associated with perennially wet areas), *ephemeral* (vegetation associated with periodically wet areas), *aquatic* (reservoirs and streams). As such, the Habitat Stamp Program shall consider management actions statewide on the following key habitats:

1. *riparian/ephemeral*
2. *aquatic*

ECOREGIONS and THEIR ASSOCIATED KEY UPLAND HABITATS

The CWCS also addresses New Mexico's upland (or terrestrial) habitats by dividing the state into nine "ecoregions." Each ecoregion being further divided into *key terrestrial* habitats. The Central Habitat Stamp Program Region as it associates with the CWCS, falls primarily in the *New Mexico Mountains* ecoregion and features the following key upland habitat:

3. *Western Rocky Mtn. Montane Mixed Conifer Forest*

WILDLIFE SPECIES IN GREATEST NEED OF MANAGEMENT

For each key habitat (statewide and regional), the CWCS identifies the indicative wildlife species for that habitat type. Since, over half the vertebrate species in New Mexico rely wholly or in part on *riparian*, *ephemeral*, and *aquatic* key habitats, indicative species are numerous. Because they are so numerous, the wildlife associated with these key habitats will be managed in this plan as a suite of species.

In the Central HSP Region, the game species identified by the CWCS with the greatest need of management are:

- Rocky Mtn. Montane Mixed Conifer Forest*
- Band-tailed Pigeon

- Abert’s Squirrel
- Beaver
- Black Bear
- Mule Deer

CENTRAL HSP REGION Management Species per Game Unit

The Habitat Stamp Program’s mission is to diversify habitats to benefit wildlife for the enjoyment of people. In fulfilling this mission, program cooperators plan habitat improvements primarily for game species, with the knowledge that the resulting diversified habitats benefit an entire suite of game and non-game wildlife as identified in the CWCS.

GAME MANAGEMENT UNITS									
SPECIES (*CWCS)	6	7	8	9	10	12/13	14	17	38
Mule Deer*	E	E	E	E	E	E	E	F	E
Elk	F	F		F	F	F		F	F
Turkey			F	F	F	F	F	F	F
Quail				F				E	F
Black Bear*			F		F		F		
Bighorn Sheep							F		
Beaver*	F				F	F		F	
Abert’s Squirrel*			F	F	F	F	F	F	
Band-tailed Pigeon*	F			F	F		F	F	F
Riparian Species*	F		F		F	F	F		
Aquatic Species*			F		F		F		

Definitions:

Emphasis Specie: The population of wildlife that is targeted for HSP funds and project work, unless amended.

Featured Species: Those wildlife populations that frequent and are of secondary, but management interest of HSP cooperators.

CENTRAL HSP REGION Limiting Habitat Factors

A fundamental principle to managing wildlife is that any population needs the correct arrangement of food, water, shelter, and space. If any part of these habitat factors is limiting at any point in time, the wildlife population will either die or move to an area that provides the habitat components. While there is a common understanding of limiting food, water, and shelter; there is less so on what is meant by “space.” Here space is related to the density of a population of wildlife. Space becomes a limiting factor when the population is too sparse to effectively reproduce or too crowded to thrive.

Unit 6 LIMITING FACTORS (Controllable by HSP)											
LIMITING FACTOR	Mule Deer (Emp)	Elk	Turkey	Quail/Dove	Bear	BH Sheep	Beaver	Abert Squirrel	BT Pigeon	Riparian Spp.	Aquatic Spp.
No limiting factors during this period		X							X		
Adverse human impacts during critical periods	X										
Human/wildlife conflicts		X									
Obstructive fencing											
Lack of water availability	X						X			X	
Lack of quality forage	X										
Lack of rearing cover											
Lack of escape cover											
Poor riparian condition	X						X			X	
Eroding soils	X									X	
Loss of habitat due to encroachment by woody vegetation											
Limited population distribution							X				

Unit 8 LIMITING FACTORS (Controllable by HSP)											
LIMITING FACTOR	Mule Deer (Emp)	Elk	Turkey	Quail/Dove	Bear	BH Sheep	Beaver	Abert Squirrel	BT Pigeon	Riparian Spp.	Aquatic Spp.
availability											
Lack of quality forage	X		X		X						
Lack of rearing cover											
Lack of escape cover			X								
Poor riparian condition	X		X		X						
Eroding soils											X
Loss of habitat due to encroachment by woody vegetation	X		X		X						
Limited population distribution			X								

Unit 9 LIMITING FACTORS (Controllable by HSP)											
LIMITING FACTOR	Mule Deer (Emp)	Elk	Turkey	Quail/Dove	Bear	BH Sheep	Beaver	Abert Squirrel	BT Pigeon	Riparian Spp.	Aquatic Spp.
No limiting factors during this planning period		X							X		
Adverse human impacts during critical periods	X		X	X							
Human/wildlife conflicts											
Obstructive fencing	X										
Lack of water availability	X		X	X				X			
Lack of quality forage	X		X	X							
Lack of rearing cover	X		X	X				X			
Lack of escape cover			X	X							
Poor riparian condition	X			X							

Unit 9 LIMITING FACTORS (Controllable by HSP)											
LIMITING FACTOR	Mule Deer (Emp)	Elk	Turkey	Quail/Dove	Bear	BH Sheep	Beaver	Abert Squirrel	BT Pigeon	Riparian Spp.	Aquatic Spp.
Eroding soils	X										
Loss of habitat due to encroachment by woody vegetation	X		X					X			
Limited population distribution											

Unit 10 LIMITING FACTORS (Controllable by HSP)											
LIMITING FACTOR	Mule Deer (Emp)	Elk	Turkey	Quail/Dove	Bear	BH Sheep	Beaver	Abert Squirrel	BT Pigeon	Riparian Spp.	Aquatic Spp.
No limiting factors during this period		X			X			X	X		
Adverse human impacts during critical periods	X		X								X
Human/wildlife conflicts		X			X						
Obstructive fencing											
Lack of water availability	X										X
Lack of quality forage	X		X				X				
Lack of rearing cover	X		X								
Lack of escape cover			X								
Poor riparian condition	X		X				X			X	X
Eroding soils			X							X	X
Loss of habitat due to encroachment by woody vegetation	X		X								
Limited population distribution							X				

Unit 12/13 LIMITING FACTORS (Controllable by HSP)											
LIMITING FACTOR	Mule Deer (Emp)	Elk	Turkey	Quail/Dove	Bear	BH Sheep	Beaver	Abert Squirrel	BT Pigeon	Riparian Spp.	Aquatic Spp.
No limiting factors during this period		X									
Adverse human impacts during critical periods	X		X								
Human/wildlife conflicts		X									
Obstructive fencing											
Lack of water availability	X		X					X			
Lack of quality forage	X		X				X				
Lack of rearing cover			X					X			
Lack of escape cover											
Poor riparian condition	X	X	X				X			X	
Eroding soils										X	
Loss of habitat due to encroachment by woody vegetation	X	X	X					X			
Limited population distribution			X				X				

Unit 14 LIMITING FACTORS (Controllable by HSP)											
LIMITING FACTOR	Mule Deer (Emp)	Elk	Turkey	Quail/Dove	Bear	BH Sheep	Beaver	Abert Squirrel	BT Pigeon	Riparian Spp.	Aquatic Spp.
No limiting factors during this period									X		
Adverse human impacts during critical periods	X					X					X

Unit 14 LIMITING FACTORS (Controllable by HSP)											
LIMITING FACTOR	Mule Deer (Emp)	Elk	Turkey	Quail/Dove	Bear	BH Sheep	Beaver	Abert Squirrel	BT Pigeon	Riparian Spp.	Aquatic Spp.
Human/wildlife conflicts					X	X					
Obstructive fencing						X					
Lack of water availability	X		X		X	X					X
Lack of quality forage	X		X								
Lack of rearing cover								X			
Lack of escape cover						X					
Poor riparian condition	X		X		X						
Eroding soils	X		X		X						
Loss of habitat due to encroachment by woody vegetation	X		X		X	X		X		X	X
Limited population distribution			X			X		X			

Unit 17 LIMITING FACTORS (Controllable by HSP)											
LIMITING FACTOR	Mule Deer (Emp)	Elk	Turkey	Quail/Dove	Bear	BH Sheep	Beaver	Abert Squirrel	BT Pigeon	Riparian Spp.	Aquatic Spp.
No limiting factors during this period		X									
Adverse human impacts during critical periods											
Human/wildlife conflicts											
Obstructive fencing											
Lack of water availability			X	X			X	X			

Unit 38 LIMITING FACTORS (Controllable by HSP)											
LIMITING FACTOR	Mule Deer (Emp)	Elk	Turkey	Quail/Dove	Bear	BH Sheep	Beaver	Abert Squirrel	BT Pigeon	Riparian Spp.	Aquatic Spp.
Poor riparian condition											
Eroding soils	X										
Loss of habitat due to encroachment by woody vegetation		X		X							
Limited population distribution			X								

STATEWIDE HSP
Project Types to Address Limiting Factors
 (units of accomplishments defined)

PROJECT TYPES AND PROJECT SUB-TYPES <i>(new items in italics)</i>	Accomp. Units
PROJECT TYPE 1. Maintain integrity and safety of existing habitat improvements	
PROJECT SUB-TYPES A. Maintain existing program structures to extend their usefulness. B. <i>Maintain existing vegetative treatments to optimize benefits to wildlife.</i>	structures acres
PROJECT TYPE 2. Improve upland vegetative health and diversity.	
PROJECT SUB-TYPES A. Apply fire to improve forage quantity and/or quality. B. Apply herbicides to forage quantity and/or quality. C. Mechanically treat vegetation to improve forage quantity and/or quality. D. <i>Treat vegetation to increase woody structural diversity.</i> E. <i>Treat vegetation to reduce or create fuels.</i> F. <i>Treat woody vegetation to improve timber performance.</i>	acres
PROJECT TYPE 3. Improve functionality of riparian and ephemeral habitats.	
PROJECT SUB-TYPES A. Install barriers to protect function of springs, seasonally wet areas, or earthen tanks. B. Plant vegetation to enhance function of riparian and ephemeral habitats.	acres acres acres

<p align="center">PROJECT TYPES AND PROJECT SUB-TYPES <i>(new items in italics)</i></p>	<p align="center">Accomp. Units</p>
<p>C. Apply herbicides to remove or retard invasive vegetation from riparian, ephemeral habitats, or earthen tanks.</p> <p>D. Other</p> <p>E. <i>Install structures to facilitate irrigating/natural wetting of seasonally wet areas or earthen tanks.</i></p>	<p>acres</p> <p>structures</p>
<p>PROJECT TYPE 4. Improve aquatic habitats.</p>	
<p>PROJECT SUB-TYPES</p> <p>A. Install barriers to fish movement to protect native fish populations.</p> <p>B. Install in-stream structures to diversify habitats.</p> <p>C. Remove sediment, stabilize impoundment, seal reservoir, or improve spillway to restore function of aquatic habitat.</p> <p>D. Other</p> <p>E. <i>Install mechanical devices to improve water quality.</i></p>	<p>barriers</p> <p>structures</p> <p>acres</p> <p>miles</p> <p>devises</p>
<p>PROJECT TYPE 5. Increase availability and distribution of year-round water.</p>	
<p>PROJECT SUB-TYPES</p> <p>A. Install artificial structures to provide ground level water sources where free-water is lacking.</p> <p>B. Manipulate sites to improve free-water availability at naturally occurring water sources.</p> <p>C. Construct earthen tank or remove sediment, stabilize impoundment, seal reservoir, or improve spillway to provide a water source.</p> <p>E. Other</p>	<p>structures</p> <p>sites</p> <p>tank</p> <p>structures</p>
<p>PROJECT TYPE 6. Reintroduce or supplement native species into suitable habitat.</p>	
<p>PROJECT SUB-TYPES</p> <p>A. Augment existing population to improve performance.</p> <p>B. <i>Reintroduce populations extirpated from habitat.</i></p>	<p>animals</p> <p>animals</p>
<p>PROJECT TYPE 7. <i>Limit adverse impacts of man-made structures and human/wildlife interactions.</i> (formally “Road Management”)</p>	
<p>PROJECT SUB-TYPES</p> <p>A. Install barriers to limit human access and disturbance in critical habitats or migration corridors by adherence to land agencies’ travel management plans.</p> <p>B. Obliterate or realign roads to limit human access and disturbance in critical habitats or migration corridors by adherence to land agencies’ travel management plans.</p> <p>E. Other</p> <p>F. <i>Remove or modify fences to bring them into agency standards for safe passage of wildlife.</i></p> <p>G. <i>Install structures to facilitate movement of wildlife.</i></p>	<p>barriers</p> <p>miles</p> <p>structures</p> <p>miles</p> <p>structures</p>

PROJECT TYPES AND PROJECT SUB-TYPES <i>(new items in italics)</i>		Accomp. Units
<p><i>H. Attract wildlife away from or discourage use of conflict areas.</i></p> <p><i>I. Remove feral horses or other livestock to minimize adverse interactions with wildlife.</i></p> <p><i>J. Assist compliance efforts by funding increased patrol.</i></p>	<p>projects</p> <p>animals</p> <p>hours</p>	
PROJECT TYPE 8. Enhance beneficial uses and enjoyment of wildlife resources. (formally “Fence Modifications”)		
<p>PROJECT SUB-TYPES</p> <p><i>E. Improve or install roadways or trails to improve sporting satisfaction.</i></p> <p><i>F. Install cattleguards, fishing platforms, parking lots, toilets, or other structures to improve sporting satisfaction.</i></p> <p><i>G. Install fencing to improve domestic grazing management practices that benefit wildlife habitat.</i></p> <p><i>H. Provide educational opportunities concerning program work for citizen advisors, administrators, public, and media.</i></p> <p><i>I. Install signs to inform public of program activities.</i></p>	<p>miles</p> <p>structures</p> <p>miles</p> <p>episodes</p> <p>signs</p>	
PROJECT TYPE 9. Improve health and functionality of watersheds.		
<p>PROJECT SUB-TYPES</p> <p>A. Install structures to minimize erosion.</p>	<p>structures</p>	
PROJECT TYPE 10. Inventory/monitor wildlife populations, habitats, or project work to assess needs or achievement of HSP Strategic Project Sub-Types.		
<p>PROJECT SUB-TYPES</p> <p><i>A. Pre-monitor habitat improvements to obtain baseline data.</i></p> <p><i>B. Post-monitor habitat improvements to determine effectiveness.</i></p> <p><i>C. Monitor emphasis and secondary species populations.</i></p> <p><i>D. Purchase equipment to promote program activities.</i></p>	<p>surveys</p> <p>surveys</p> <p>surveys</p> <p>items</p>	
PROJECT TYPE 11. Provide shelter for wildlife benefit. (formally “Miscellaneous”)		
<p>PROJECT SUB-TYPES</p> <p>A. Install nest structures, brush piles, tree protectors, escape ramps, or other structures to improve wildlife survival and performance.</p> <p>D. Remove vertical vegetation or structures to improve escape cover or use of area by wildlife.</p>	<p>structures</p> <p>acres</p>	

CENTRAL HSP REGION Habitat Improvement Landscape Plans 2010-2014

Landscape Scale Habitat Improvement Spatial Plans:

USFS

Existing:

East Magdalena Deer Habitat Improvement Plan

Sargent and Durfee Watersheds Turkey Habitat Improvement Plan

Proposed:

Bluewater 25,000 ac.

Thunderbird 5,000 ac.

Tajique

Military Withdrawal 17,000 ac.

Monzanita Mtns. 5,000 ac.

BLM:

Proposed:

Elk Springs

IC Grant

Chain of Craters

Cebolla Canyon