### **PROJECT SPONSORS:**

**Crook County Natural Resource District (CCNRD)** 

Address: P.O. Box 1070 / 117 South 21st Street in Sundance, WY 82729

Phone: 307.283.2870 extension #100 Email: anderson.ccnrd@gmail.com

Weston County Natural Resource District (WCNRD)

Address: 1225 Washington Blvd # 3 in Newcastle, WY 82701

Phone: 307.746.3264 extension #111 Email: ccarter.wcnrd@gmail.com

Financial & technical support for this project is provided by the Crook County Natural Resource District, Weston County Natural Resource District, Wyoming Wildlife & Natural Resource Trust, Muley Fanatics Foundation, Rocky Mountain Elk Foundation, Wyoming Game & Fish Department, Wyoming State Forestry Division, & the Natural Resources Conservation Service.

We have targeted specific areas in Crook & Weston Counties. Applicants with eligible property within the red delineated boundary may qualify for this funding opportunity. Others may apply, but will be ranked separately if funding is available. Please fill out the following information to the best of your knowledge.

	Applicant Name:
The state of the s	Parcel Name:
reactive (Hulett	Mailing Address:
The state of the s	City:
Crook Nanonal Forest	State & ZIP:
Cabin Gree	Phone #:
Pine Haven	Email Address:
Moorcroft	
FOREST	<b>Project Location Information (if known):</b>
Upton	Coordinates:
	Township:
Weston Newcastle	Range:
	Section(s):
30.2 13.4	Physical Address of Property:

Landowners/Land Managers: Please fill out questions 1-16 to the best of your knowledge			
1) How many acres are you interested in improving/thinning in the project area?			
2) Is your proposed project area within the mapped targeted boundary on the previous page?			
3) Do you have a Forest Management Plan?			
4) Have you previously conducted any wildlife habitat improvements or logging, thinning or other forest health improvement projects on your property?			
If "yes", please elaborate on project, acres, year & location:			
5) Is the proposed project adjacent to or near a previously completed or planned project?			
6) Do you have a neighbor who has a nearby wildlife or thinning project planned or completed?			
7) Do you have plans to commercially log the project area within the next year?			
8) Are there any perennial streams or riparian zones within the project area?			
9) Do you know of any tree diseases or infestations on your property?			
10) What wildlife species will benefit from this project?  Mule Deer  Elk  Sage-Grouse Other	:		
11) What is your main goal to improve wildlife habitat?  Enhance Meadows  Thin Overly I	Dense I	Forests	
12) Do you have mesic/wet or meadow areas with conifer encroachment within the project area?			
13) Will you conduct the work yourself? YES NO If yes, explain experience:			
14) Are you willing to salvage smaller timber as post-and-pole and/or firewood?			
15) Would you be willing to submit 3 contractor bids prior to implementing treatments?			
16) Have you ever cancelled a contract with the CCNRD or WCNRD?			
A Resource Practitioner will set up a time to visit your property and fill out questions 17-21			
17) What is the average DBH of the <i>majority</i> of the trees?  3" or less  4"- 6"  7"- 9"	10" or greater		
18) What is the average tree stand density? 500 stems/acre 501-1,000 1,001 - 2,000 2.	00 2,001 or great		
19) How will you treat your slash?  Pile/Burn  Lop/Scatter	Masticate		
20) What tree species are present?  Ponderosa Pine Juniper Oak	Aspe	en	
21) Is this project in a crucial range or core wildlife area?  Crucial Range	Core A	Area	

### HABITAT IMPROVEMENT SPECIFICATIONS AND STANDARDS

The following information was created by wildlife and forestry practitioners to successfully implement projects with the Northeast Wyoming Habitat Improvement Partnership. Landowner/land manager objectives will be considered in project designs, but must meet or exceed the overall benefits listed in the goals and objectives, as well as specifications and standards.

Location: Crook & Weston Counties, Wyoming

Treatment Types: Meadow Enhancement, Conifer Encroachment, Thinning

Goals & Objectives: The objective of this partnership is to mitigate mutual resource concerns across jurisdictional boundaries throughout northeastern Wyoming by creating more resilient and sustainable ecosystems. The goal is to improve mule deer and sage-grouse habitats by implementing non-commercial thinning to increase understory standing biomass. Thinning treatments benefit mule deer and sage-grouse habitats by providing structural diversity and by increasing the variety and biomass of forages. Projects will follow guidance provided by wildlife and forestry practitioners to ensure specifications and standards implemented are beneficial to wildlife habitat improvement.

**Summary of Project:** These landscape-scale projects will result in healthier ecological lands with more diverse species composition, increased structural and age diversity of plant communities, and improved riparian and wildlife habitats. Thinning noncommercial sized trees will increase the quantity and quality of forage and improve forest stands by balancing structural stage diversity; reducing meadow encroachment will diversify forbs and grasses; and removing juniper and pine from sagebrush-steppe habitats will decrease raptor perches and predator shelters.

#### **Treatment Specifications:**

Meadow enhancement projects will provide excellent foraging areas for ungulates and other species. These open areas should be at least 0.5 acres in size.

Open forest stands (less than 60  $\rm ft^2/acre$ ) should be created in more mesic locations to encourage understory growth of deciduous trees and shrubs. In locations where wildfire control is a concern, fire-resistant hardwoods will be encouraged to remain in open stands of pine (less than 60  $\rm ft^2/acre$ ) that foster understory growth.

Sagebrush grassland and riparian/mesic encroachment treatments should remove juniper and pine species if encroachment is negatively impacting desirable native species.

Stands or individual trees of a desirably unique nature or that exhibit old growth characteristics are strongly encouraged to remain.

Thinning projects should leave at least 1 or 2 large snags per acre, and most snags less than 6-inches diameter breast height (DBH) should be retained, as these provide foraging sites for cavity nesting birds. (DBH is diameter at breast height and is measured at 4.5 feet from the ground on the uphill side of the tree.) Avoid removing standing snags which provide habitat for cavity nesting birds and avoid removing trees that are used for turkey roosting.

#### **Leave Trees:**

- When selecting "leave trees" or trees to keep, practitioners will be encouraged to choose straight stems, cone shaped crowns, single top (not forked), small diameter limbs, branches projecting horizontally from the stem, free of insect and disease problems, dominance in height growth relative to other trees in the stand, and free of damage.
- Leave trees should be spaced far enough apart that the branches of the trees do not touch the branches of the other leave trees. An average tree spacing of stems will vary due to size of trees and how much their crown spreads.
- Undamaged deciduous trees (e.g. aspen) are considered "leave" trees for the purpose of this project.
- Landowner objectives regarding "leave" trees will be considered in project design.

### **Trees to Remove:**

- When choosing trees to remove, practitioners will be encouraged to select split or deformed tops; porcupine damage; insect damage; crooked trunks; height noticeably less than average for the stand.
- General rule: 2-inch DBH trees need a 10-foot by 10-foot average spacing, 5-inch diameter trees need an average spacing of 12-foot by 12-foot between the trunks, and 7- inch DBH trees need an average spacing of 15-foot by 15-foot between trees.
- Poor quality Ponderosa pine trees in the 1-inch to 9-inch DBH range should be removed. Poor quality trees in the 9-inch to 17-inch diameter range may be removed to improve spacing as long as there is not a 10-foot merchantable log in the tree.
- Rocky Mountain juniper or Eastern red cedar trees within 8-feet of Ponderosa pine leave trees should be removed to reduce competition and fire hazard.

### **Slash Treatment Specifications:**

- Thinning slash shall be masticated (chipped/shredded) and spread, piled and burned, or lopped and scattered. Cut stumps should be not exceed more than a 6-inch height on the uphill side. Mastication slash shall not exceed an average depth of 3-inches. Slash piles shall not be located closer than 30-feet to leave trees, shall not be placed in waterways, and shall not block roads or trails. Burned piles should be spread, dragged or disked, and replanted with seed mixes designed to benefit wildlife by providing perennial food sources or cover (please contact your local Natural Resource District for recommendations). Leaving smaller slash piles (less than eight-foot diameter) of untreated slash in some areas can be beneficial for creating foraging locations along with hiding, denning and nesting cover for a variety mammals, reptiles, amphibians, and birds.
- Lop and scatter may be allowed on steep terrain or certain locations as deemed necessary by practitioners, but may be an increased fire hazard. Thinning slash that is lopped and scattered shall not exceed a height of more than 18- inches above the ground.
- Thinning trees after October 1<sup>st</sup> and before May 1<sup>st</sup> will minimize the spread of pine engraver beetle (*Ips pini*) from slash. Timeframes may be adjusted based on annual precipitation. Please contact your local state forester for additional information.
- Noxious weed control should occur where slash piles have been treated and where soils are disturbed by silvicultural activities.

#### **Inspections, Operation and Maintenance:**

Inspect the area periodically during and after treatment activities to ensure that objectives are achieved and resource damage is minimized (e.g., assessment of insects/disease, storm damage, etc.). The results of inspections shall determine the need for additional treatments. Projects will be inspected and approved by the CCNRD, WCNRD, Wyoming Game and Fish Department, Wyoming State Forestry Division, or Natural Resources Conservation Service staff.