## Ninemile Ranger District, Lolo National Forest 2018-2019 Collaborative Accomplishments with the Montana Chapter of the Wild Sheep Foundation (WSF).

FS Agreement 18-C0-11011600-082

In the fall of 2018 and spring of 2019, the Montana Chapter WSF funded several units in the Petty Creek Big Game Ecosystem Maintenance Burning (EMB) project on the Ninemile Ranger District, Lolo National Forest. In partnership with the Montana Department of Fish, Wildlife, and Parks, the Forest Service identified the Petty Creek Big Game EMB Project area for prescribed burning and thinning treatments to provide forage opportunities for big game habitat, including elk, bighorn sheep, mule deer, whitetail deer, wild turkey, and upland game birds. The Petty Creek bighorn sheep herd currently consists of about 150 sheep, which is at or slightly over the objectives set forth in the 2005 Bighorn Sheep Management Plan (MT FWP). The herd is experiencing positive growth, with moderate to high lamb recruitment (roughly 35-55 lambs: 100 ewes over the last 10 years).

The Ed's Creek and French Gulch Units received aerial and hand ignition prescribed burning treatments to provide excellent habitat for bighorn sheep and other multitude of species on public lands for the long-term health of the herds, for continuing to provide excellent hunting opportunities on public lands in Petty Creek, and for reducing the need for sheep to seek forage on private lands in the valley bottom where interactions with domestic sheep could be a concern.

The prescribed burning increased both habitat availability and suitability for the Petty Creek bighorn sheep herd. The treatments maintained and enhanced the growth of grasses, forbs, and shrubs in steep, rocky terrain to provide more nutritious bighorn sheep forage, reduced conifer encroachment in foraging locations, and provided increased sight distances which allows bighorn sheep to be alerted to potential predators. French Gulch, in particular, is an important lambing location for the bighorn sheep herd and the prescribed burning treatments were key in providing habitat and sight distances for the herd.

Personnel from the Ninemile Ranger District fire/fuels crew, Lolo Interagency Hotshot Crew, Frenchtown Rural Fire Department, and Minuteman Aviation were all key members to the success of implementing both of these units. A media release was sent to the Missoulian Newspaper describing our combined efforts with the WSF on these units.

In summary, the prescribed burning treatments have maintained and improved bighorn sheep habitat in the Petty Creek bighorn sheep herd's range. Open sight distances near areas of escape terrain, providing vigorous native grasses and shrubs for forage on south-facing slopes, and providing areas of suitable hiding and thermal cover on north-facing slopes are some of the achieved objectives. This habitat improvement optimally will allow the herd to continue to thrive and grow, to utilize public lands, and to provide wildlife viewing and hunting opportunities for the public.

Table 1: 2018-2019 Petty Creek Big Game Ecosystem Maintenance Burning Project Summary

PETTY CREEK BIG GAME PRESCRIBED BURNING					
MONTANA CHAPTER OF THE WILD SHEEP FOUNDATION FUNDED \$2,500					
UNIT	LOCATION	COMPLETED	ACRES	COST	COST/ACRE
Ed's Ridge 2	Ed's Creek	5/1-5/2019	160 Acres	\$36,910.69	\$231/Acre
Prescribed Burning					
French Gulch Hand	French Gulch	10/9,10,&	151 Acres	\$5,100.89	\$34/Acre
Pile Burning		29/2018			
TOTAL UNITS		TOTAL DAYS	TOTAL ACRES	TOTAL COST	COMBINED
					COST/ACRE
2		8 Days	311 Acres	\$42,011.58	\$135/Acre

The Montana Chapter of the Wild Sheep Foundation, National Wild Sheep Foundation, Rocky Mountain Elk Foundation, Mule Deer Foundation, National Wild Turkey Federation, and Upland Game Bird Enhancement Program have all contributed funding towards implementation of units in the Petty Creek Big Game Ecosystem Maintenance Project.

Please reference the attachments to view pre and post photo plots of the treated units. Let me know if you need any more information, thank you for the support, and we look forward to collaborating on future treatment areas with the Montana Chapter of the Wild Sheep Foundation.