

CONSERVATION Showcase

Skimpy Forage and Fire Threats No More

If you are a rancher in New Mexico, chances are that lack of water is a problem. Further, if you live in the mountains in New Mexico, it is likely that forage is skimpy and catastrophic fires are a threat.

Good conservation on a watershed basis in the Sacramento Mountains by Michael Coleman is tackling all of these problems, and enhancing incredible wildlife habitat to boot!

In April 2002, a wildfire took off 20 miles southeast of Cloudcroft burning 15,000-plus acres. Known as the Penasco Fire, some of the land it torched was on the Coleman Ranch that is private land surrounded by national forest.

Following the fire, a number of homeowners downstream from the Coleman Ranch found themselves under the pall of potential flooding during summer monsoons because the landscape was denuded. The USDA-Natural Resource Conservation Service (NRCS) responds to such emergencies through its Emergency Watershed Protection Program (EWP) by installing conservation measures that seek to mitigate flash floods and protect human life and property.

The Coleman Ranch encompasses the head of several watersheds in high country above a church camp, the community of Mayhill, and the Penasco River valley. An agreement was worked out with the U.S. Forest Service to re-seed burned areas of the Coleman Ranch, with NRCS assistance, as quickly as possible to stabilize the soil and minimize runoff during summer storms.

The experience with NRCS following the Penasco Fire launched the relationship NRCS has with



Coleman, so when the Otero County Soil & Water Conservation District (SWCD) needed a site to validate whether forest stand improvement thinning affected stream flow in a positive manner – it was a natural to call him.

Many in the community have come together to help the Otero County SWCD secure funding from the State of New Mexico to do hydrogeologic mapping and studies in the Sacramento Mountains. It has been an example of cooperative conservation in action supporting the scientific work of the New Mexico Bureau of Geology & Mineral Resources at New Mexico Institute of Mining & Technology – as the



research is seeking to identify water recharge areas and document conservation practices that maximize water production.

The exciting work of the many involved is only beginning. But, the Otero County SWCD is already documenting how spring flow falls dramatically during the day when the trees are pulling water and increases at night when they are not.

Meanwhile, with the assistance of the NRCS Environmental Quality Incentives Program (EQIP) and Wildlife Habitat Incentives Program (WHIP), Coleman has been able to do forest stand improvement thinning and install water sources for wildlife – including one water source that uses a solar pump. The result of this work is better forage for wildlife (which comes from forest stand improvement thinning), reduced risk of catastrophic wildfires, and, if the scientists prove their theories, increased water yields in the aquifers and through springs.

Like many who launch into forest stand improvement thinning, there was some hesitancy on the Coleman Ranch. Cutting trees, at first blush, may not be a popular idea. But when those involved

looked at old photos from the early 1900s showing the scattered tree cover that was not overgrown it seemed worth a try – and the result has been amazing.

The ranch now has areas that randomly boast small open meadows, healthy tree populations, and enhancement of the more diverse sites. The weaker, less robust trees were thinned. The few deciduous trees that provide better wildlife forage were preserved and are now less threatened by conifers. And, cradled in this rustic landscape are tremendous populations of elk, wild turkey, deer, and predators such as mountain lion, and coyotes – along with a booming population of various birdlife.

The Coleman Ranch stands out as an excellent example for ranchers who are struggling with a shortage of water and forage – problems that apply to many in New Mexico.

For more information about these and other conservation measures, contact your nearest NRCS field office by going to www.nm.nrcs.usda.gov/contact or checking you local phone book under government listings.